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(54) **EXTENDED WEB ENABLED MULTI-FEATURED BUSINESS TO BUSINESS COMPUTER SYSTEM FOR RENTAL VEHICLE SERVICES**

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(73) Assignee: **THE CRAWFORD GROUP, INC.**, St. Louis, MO (US)

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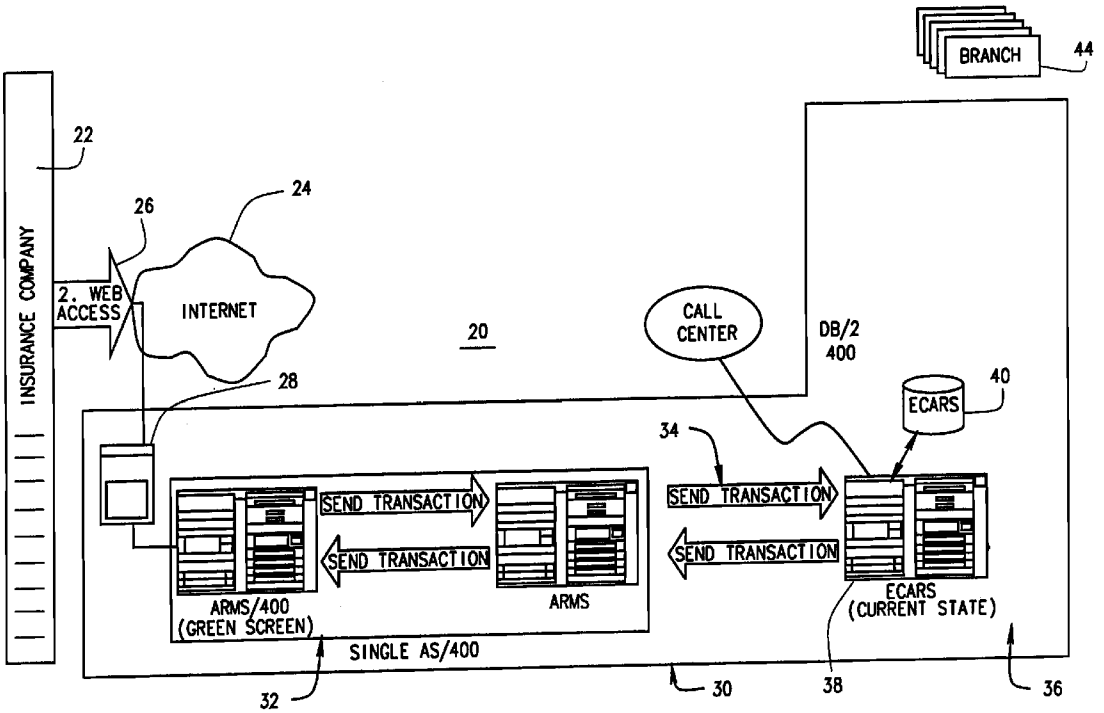
USPC **705/5**

(57) **ABSTRACT**

A method and apparatus are disclosed for use in connection with managing rental vehicle reservations where different parties can be empowered to perform various management actions on the reservations. In this way, the workload with respect to reservation management can be spread over multiple parties. In a disclosed embodiment, the different parties can be parties such as insurance companies, repair facilities, assist companies, credit hire companies, lawyers, and fleet management companies.



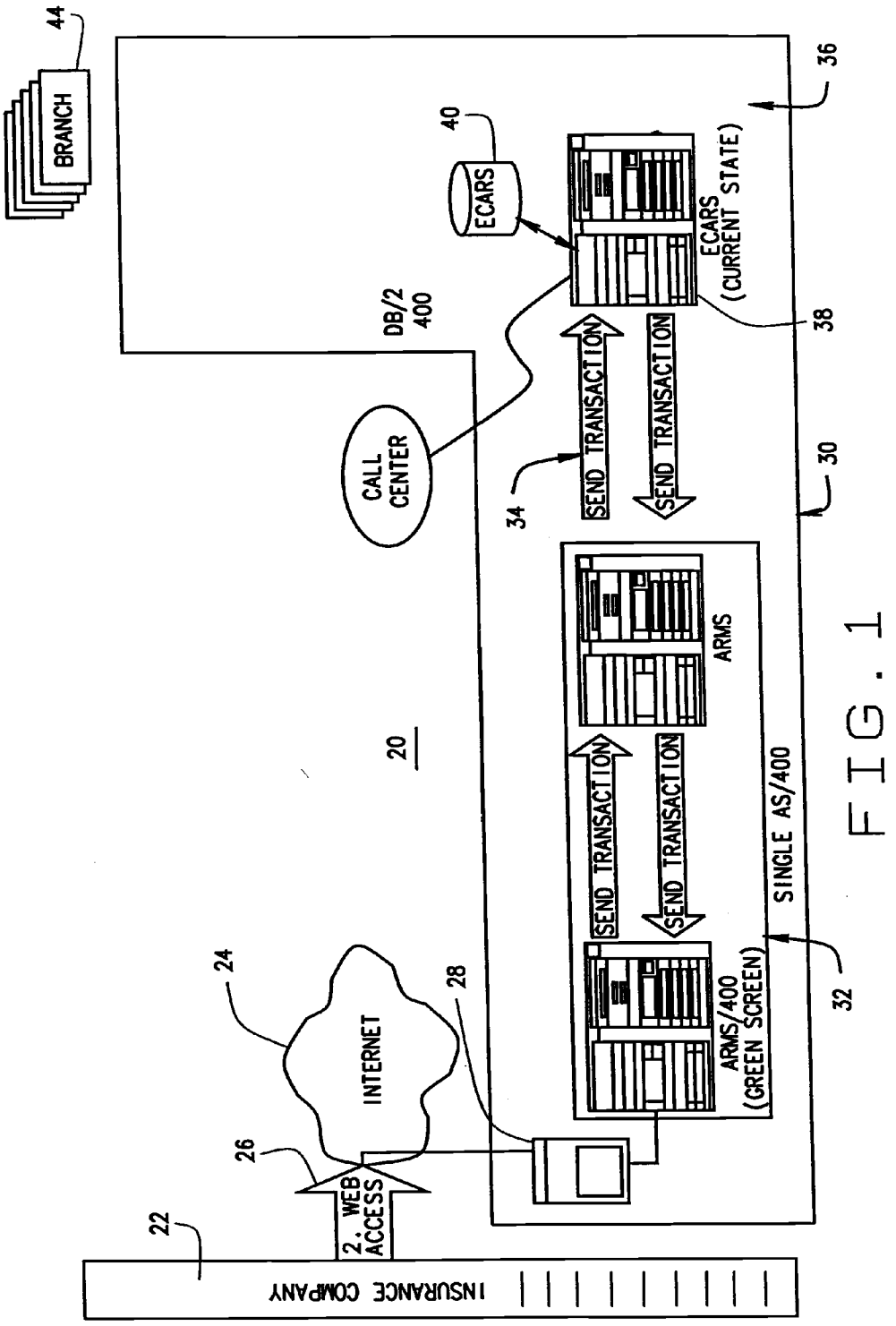

44
BRANCH
36
40
ECARS
ECARS (CURRENT STATE)
38
DB/2 400
CALL CENTER
SEND TRANSACTION
SEND TRANSACTION
34
30
ARMS
20
SEND TRANSACTION
SEND TRANSACTION
SINGLE AS/400
32
24
INTERNET
28
ARMS/400 (GREEN SCREEN)
26
2. WEB ACCESS
22
INSURANCE COMPANY

FIG. 1

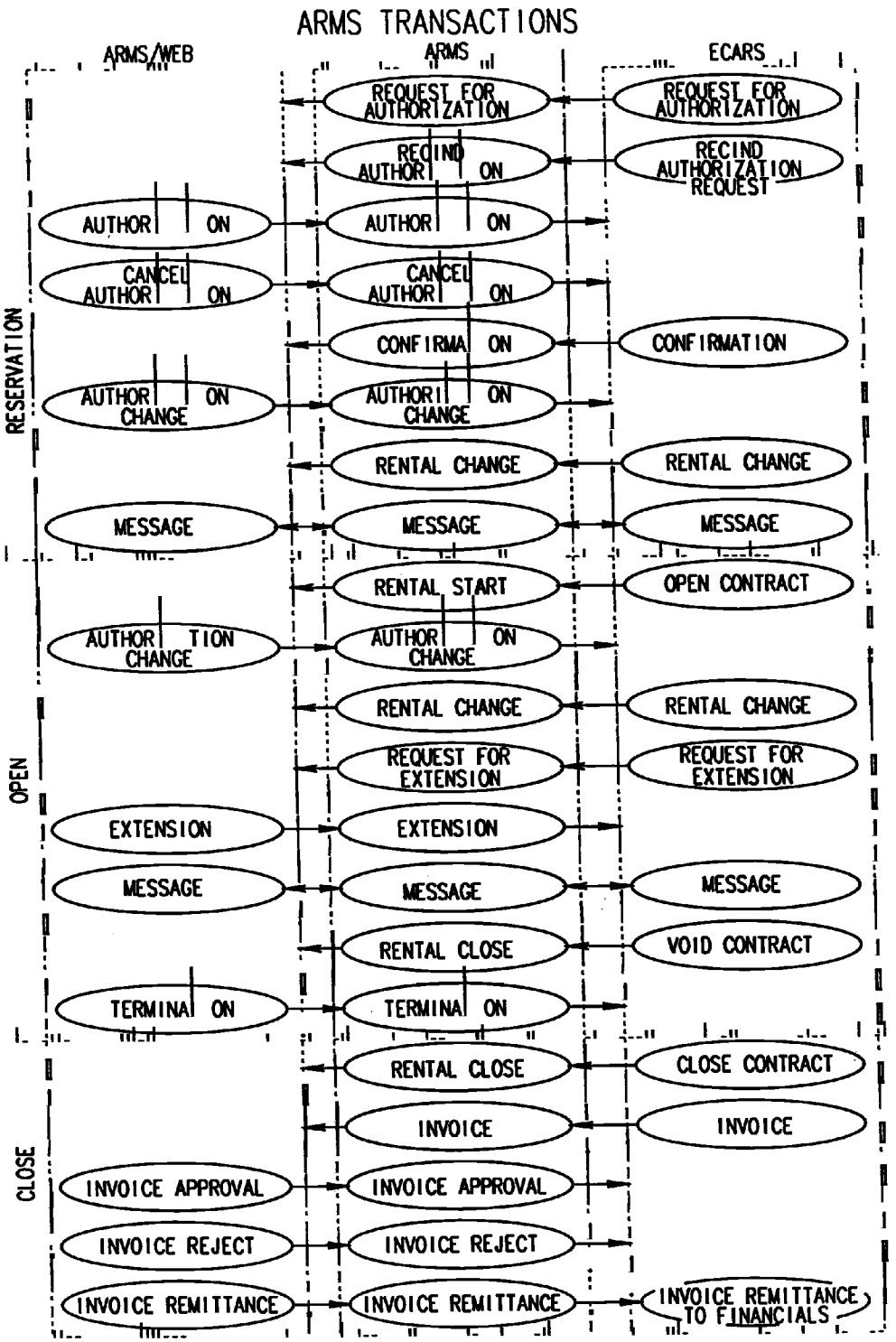

ARMS TRANSACTIONS
ARMS/WEB
ARMS
ECARS
RESERVATION
OPEN
CLOSE
REQUEST FOR AUTHORIZATION
RECIND AUTHORIZATION
AUTHOR ON
CANCEL AUTHOR ON
CONFIRMATION
AUTHOR ON CHANGE
RENTAL CHANGE
MESSAGE
RENTAL START
OPEN CONTRACT
AUTHOR TION CHANGE
REQUEST FOR EXTENSION
EXTENSION
VOID CONTRACT
TERMINATION
CLOSE CONTRACT
INVOICE
INVOICE APPROVAL
INVOICE REJECT
INVOICE REMITTANCE
INVOICE REMITTANCE TO FINANCIALS

FIG. 2

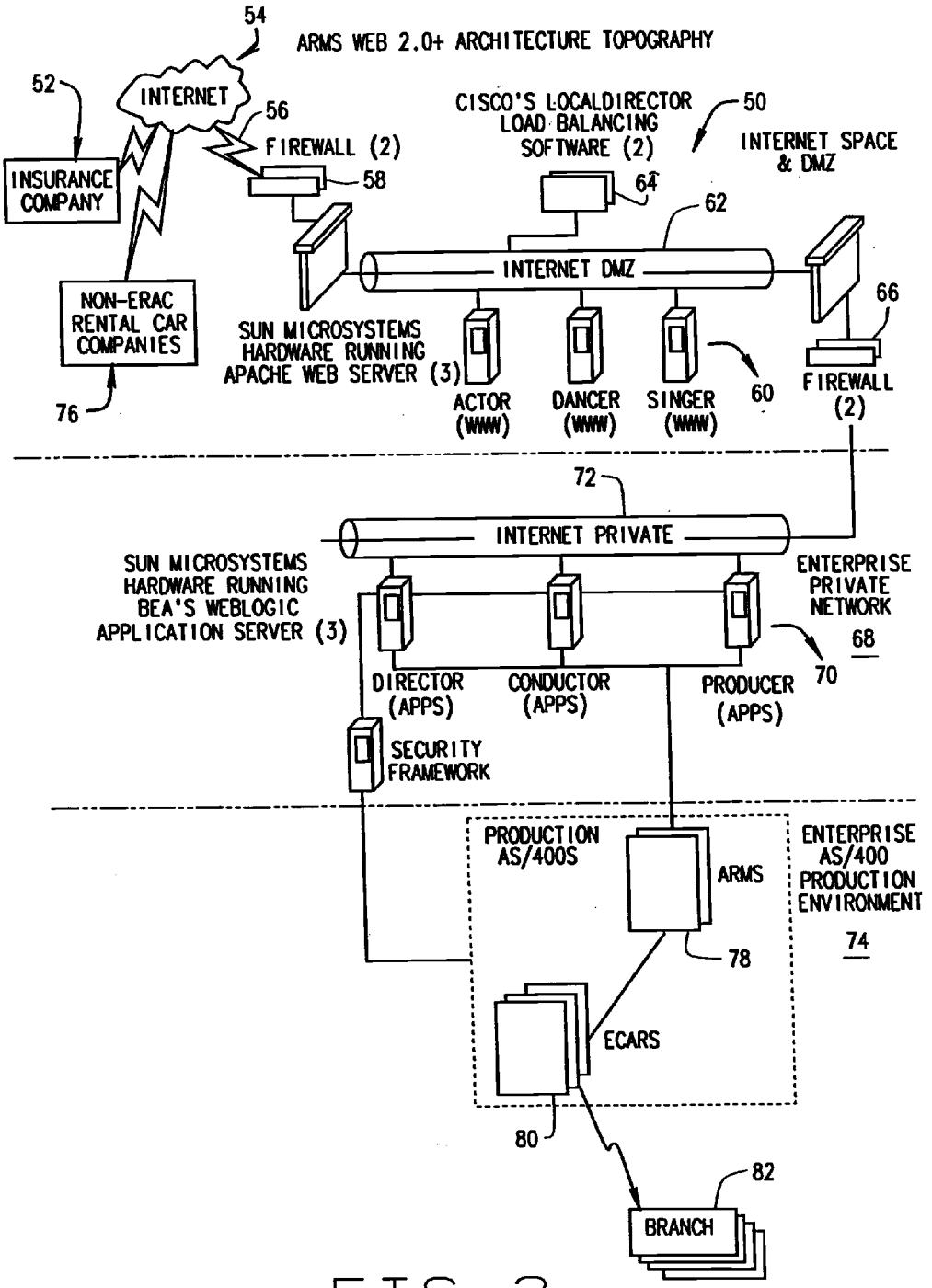

54
ARMS WEB 2.0+ ARCHITECTURE TOPOGRAPHY
52
INTERNET
56
FIREWALL (2)
58
CISCO'S LOCALDIRECTOR LOAD BALANCING SOFTWARE (2)
50
INTERNET SPACE & DMZ
64
62
INSURANCE COMPANY
INTERNET DMZ
NON-ERAC RENTAL CAR COMPANIES
76
SUN MICROSYSTEMS HARDWARE RUNNING APACHE WEB SERVER (3)
ACTOR (WWW)
DANCER (WWW)
SINGER (WWW)
60
66
FIREWALL (2)
72
INTERNET PRIVATE
SUN MICROSYSTEMS HARDWARE RUNNING BEA'S WEBLOGIC APPLICATION SERVER (3)
ENTERPRISE PRIVATE NETWORK
68
70
DIRECTOR (APPS)
CONDUCTOR (APPS)
PRODUCER (APPS)
SECURITY FRAMEWORK
PRODUCTION AS/400S
ARMS
ENTERPRISE AS/400 PRODUCTION ENVIRONMENT
74
78
ECARS
80
82
BRANCH

FIG. 3

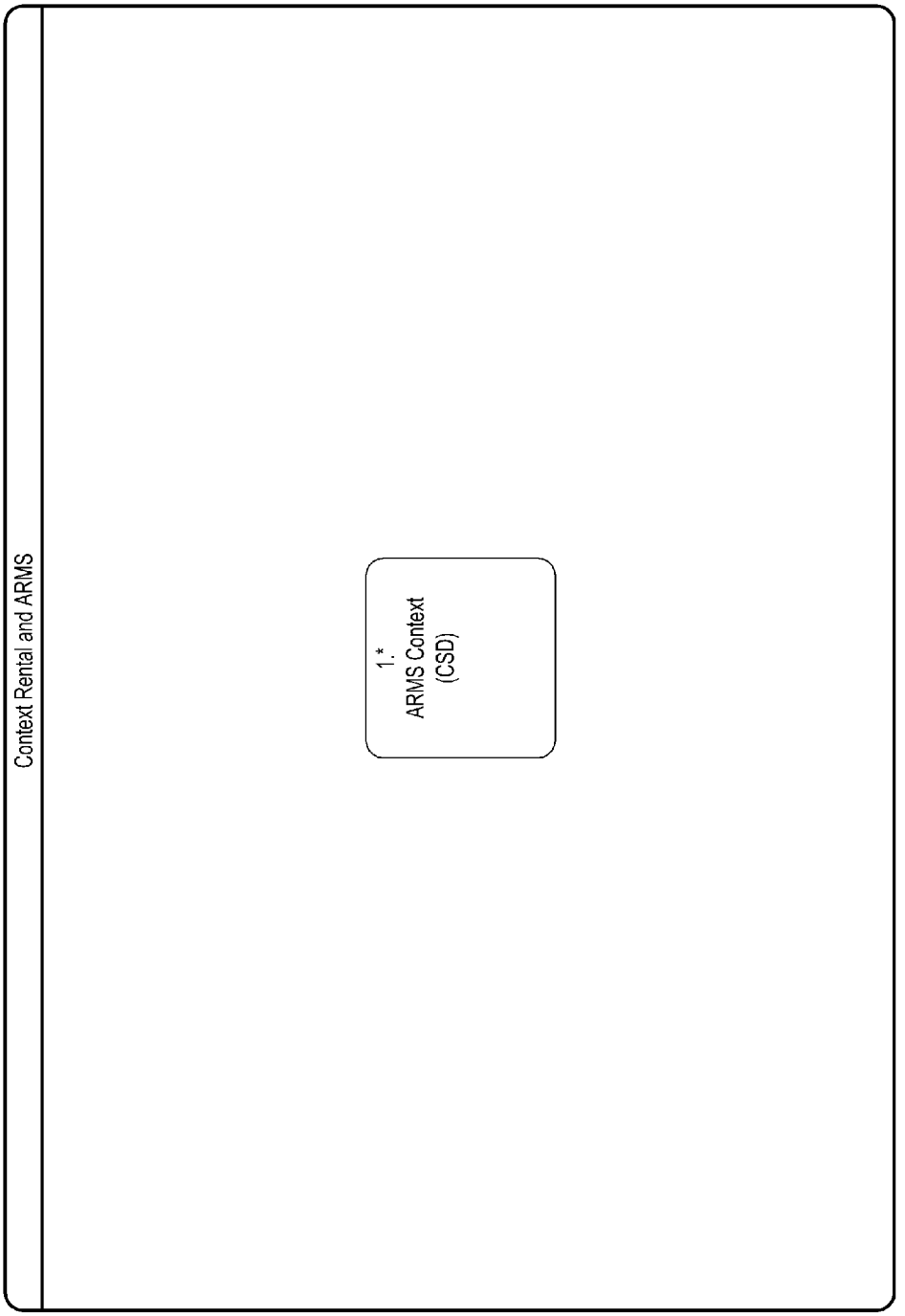


FIG. 4

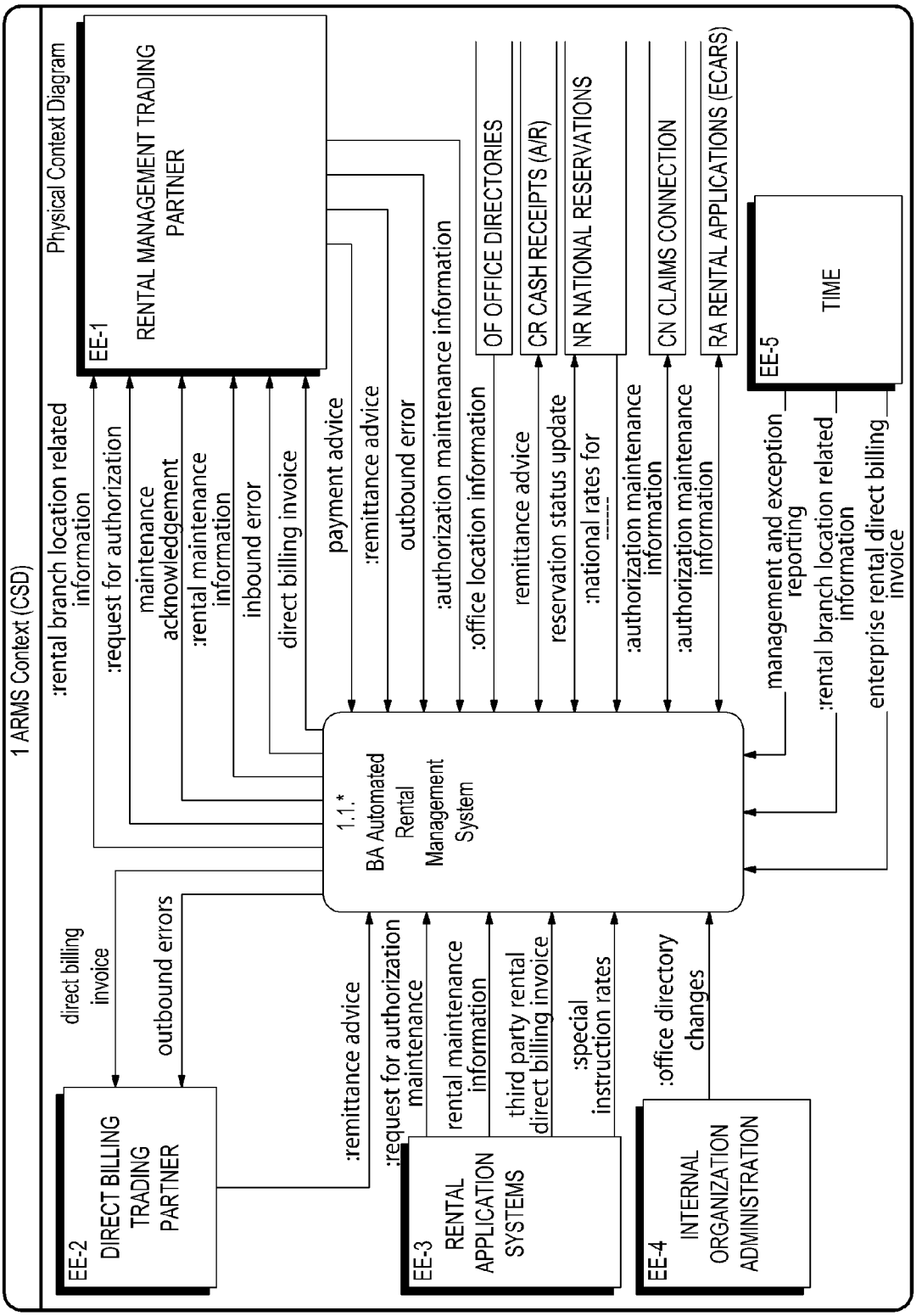

1 ARMS Context (CSD)
Physical Context Diagram
EE-1
RENTAL MANAGEMENT TRADING PARTNER
EE-2
DIRECT BILLING TRADING PARTNER
EE-3
RENTAL APPLICATION SYSTEMS
EE-4
INTERNAL ORGANIZATION ADMINISTRATION
EE-5
TIME
1.1.*
BA Automated Rental Management System
OF OFFICE DIRECTORIES
CR CASH RECEIPTS (A/R)
NR NATIONAL RESERVATIONS
CN CLAIMS CONNECTION
RA RENTAL APPLICATIONS (ECARS)
:rental branch location related information
:request for authorization
maintenance acknowledgement
:rental maintenance information
inbound error
direct billing invoice
payment advice
:remittance advice
outbound error
:authorization maintenance information
:office location information
remittance advice
reservation status update
:national rates for
:authorization maintenance information
:authorization maintenance information
management and exception reporting
:rental branch location related information
enterprise rental direct billing invoice
direct billing invoice
outbound errors
:remittance advice
:request for authorization maintenance
rental maintenance information
third party rental direct billing invoice
:special instruction rates
:office directory changes

FIG. 5

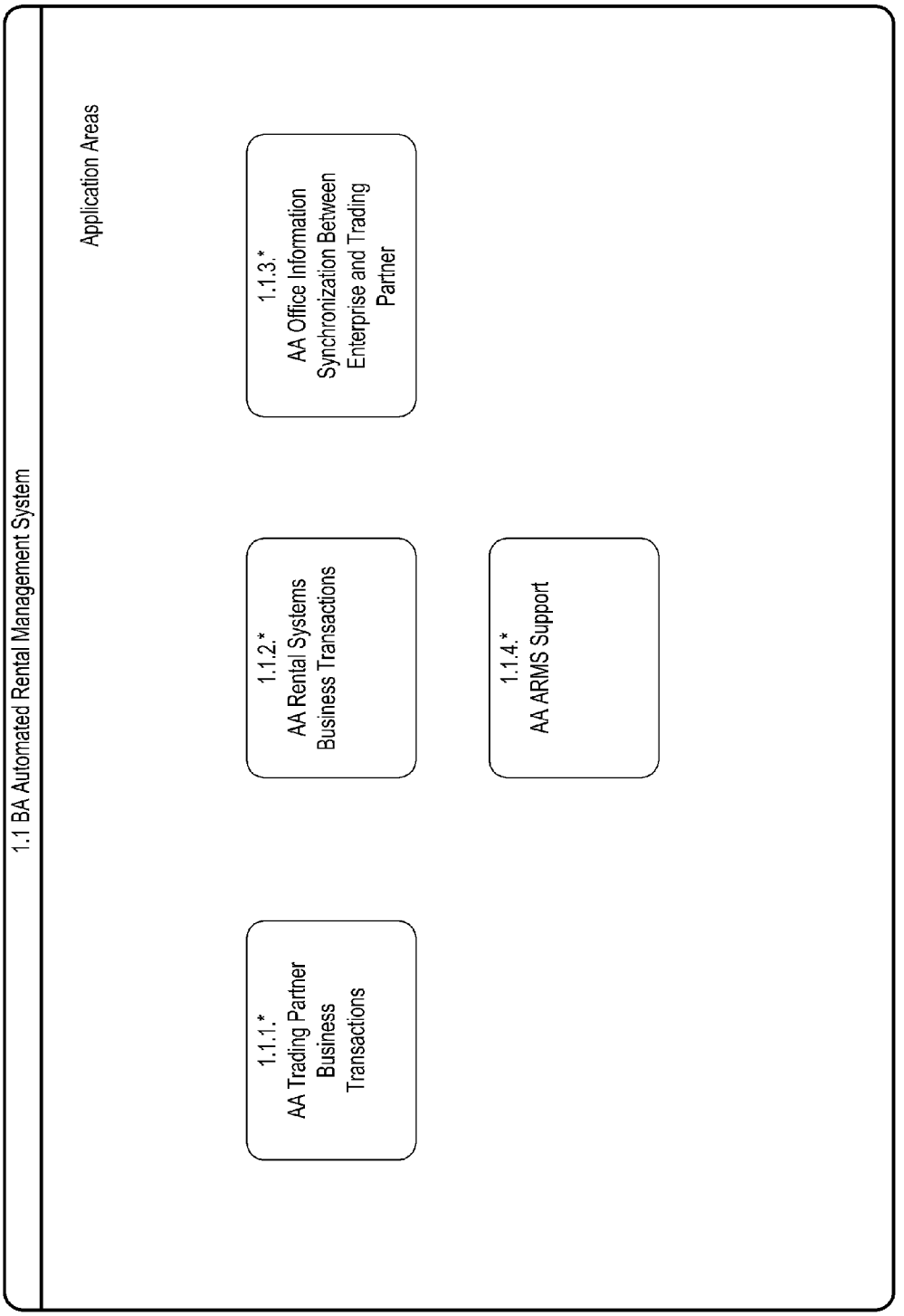

1.1 BA Automated Rental Management System
Application Areas
1.1.1.*
AA Trading Partner
Business
Transactions
1.1.2.*
AA Rental Systems
Business Transactions
1.1.3.*
AA Office Information
Synchronization Between
Enterprise and Trading
Partner
1.1.4.*
AA ARMS Support

FIG. 6

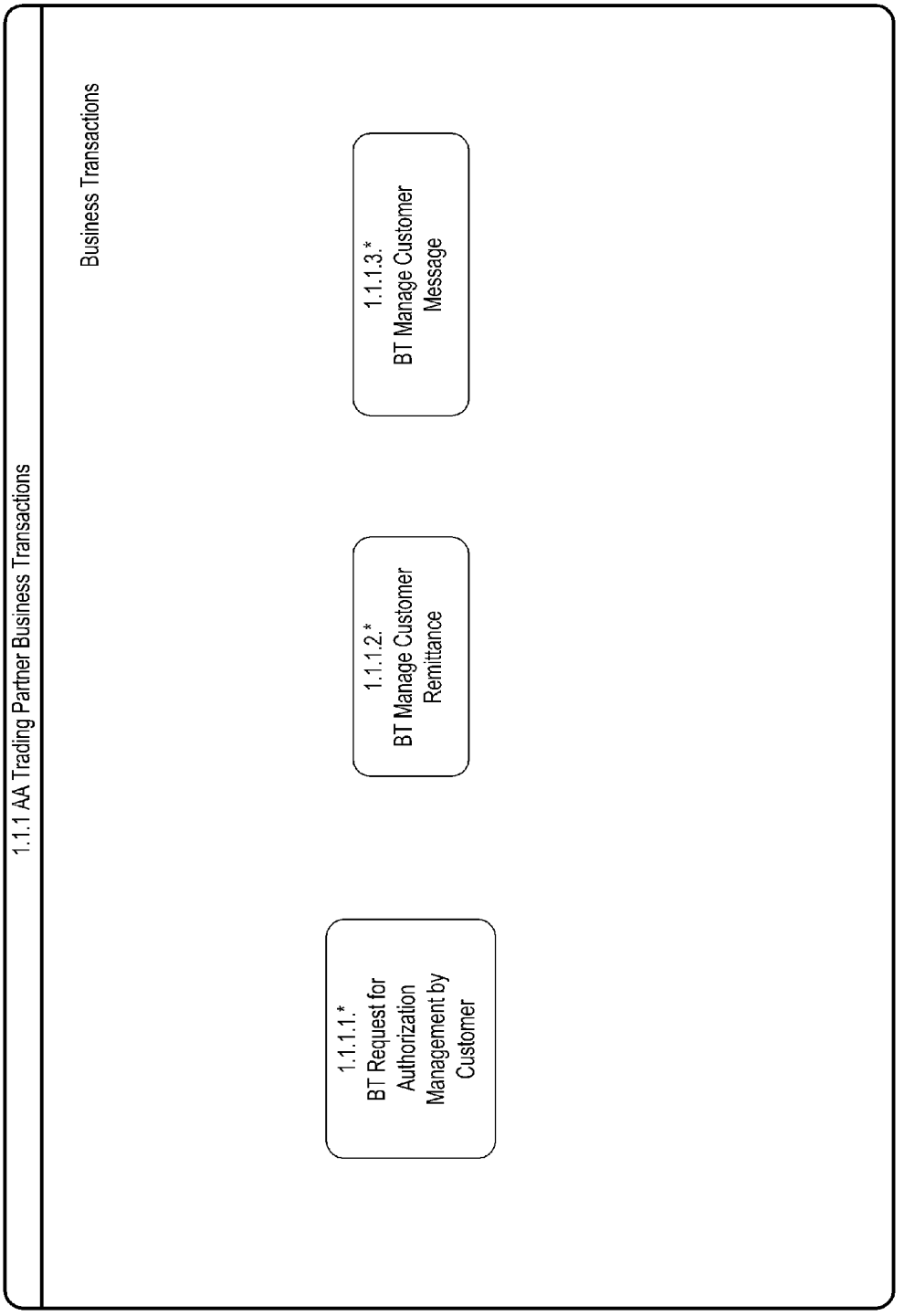

1.1.1 AA Trading Partner Business Transactions
Business Transactions
1.1.1.1.* BT Request for Authorization Management by Customer
1.1.1.2.* BT Manage Customer Remittance
1.1.1.3.* BT Manage Customer Message

FIG. 7

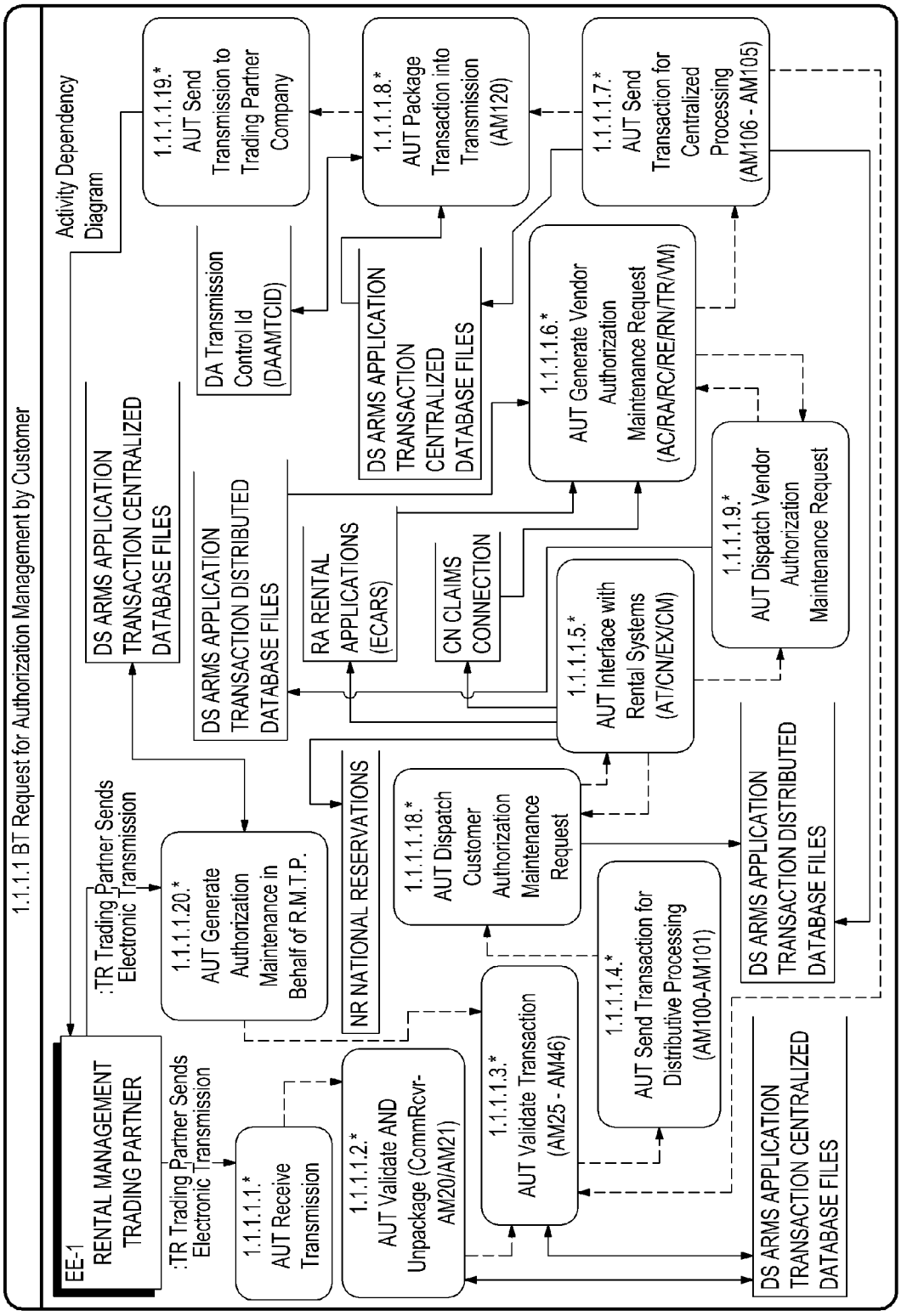

1.1.1.1 BT Request for Authorization Management by Customer
Activity Dependency Diagram
EE-1
RENTAL MANAGEMENT TRADING PARTNER
:TR Trading Partner Sends Electronic Transmission
1.1.1.1.1.* AUT Receive Transmission
1.1.1.1.2.* AUT Validate AND Unpackage (CommRcvr-AM20/AM21)
1.1.1.1.3.* AUT Validate Transaction (AM25 - AM46)
1.1.1.1.4.* AUT Send Transaction for Distributive Processing (AM100-AM101)
1.1.1.1.5.* AUT Interface with Rental Systems (AT/CN/EX/CM)
1.1.1.1.6.* AUT Generate Vendor Authorization Maintenance Request (AC/RA/RC/RE/RN/TR/VM)
1.1.1.1.7.* AUT Send Transaction for Centralized Processing (AM106 - AM105)
1.1.1.1.8.* AUT Package Transaction into Transmission (AM120)
1.1.1.1.9.* AUT Dispatch Vendor Authorization Maintenance Request
1.1.1.1.18.* AUT Dispatch Customer Authorization Maintenance Request
1.1.1.1.19.* AUT Send Transmission to Trading Partner Company
1.1.1.1.20.* AUT Generate Authorization Maintenance in Behalf of R.M.T.P.
:TR Trading Partner Sends Electronic Transmission
DS ARMS APPLICATION TRANSACTION CENTRALIZED DATABASE FILES
DS ARMS APPLICATION TRANSACTION DISTRIBUTED DATABASE FILES
DA Transmission Control Id (DAAMTCID)
DS ARMS APPLICATION TRANSACTION CENTRALIZED DATABASE FILES
RA RENTAL APPLICATIONS (ECARS)
CN CLAIMS CONNECTION
NR NATIONAL RESERVATIONS
DS ARMS APPLICATION TRANSACTION DISTRIBUTED DATABASE FILES
DS ARMS APPLICATION TRANSACTION CENTRALIZED DATABASE FILES

FIG. 8

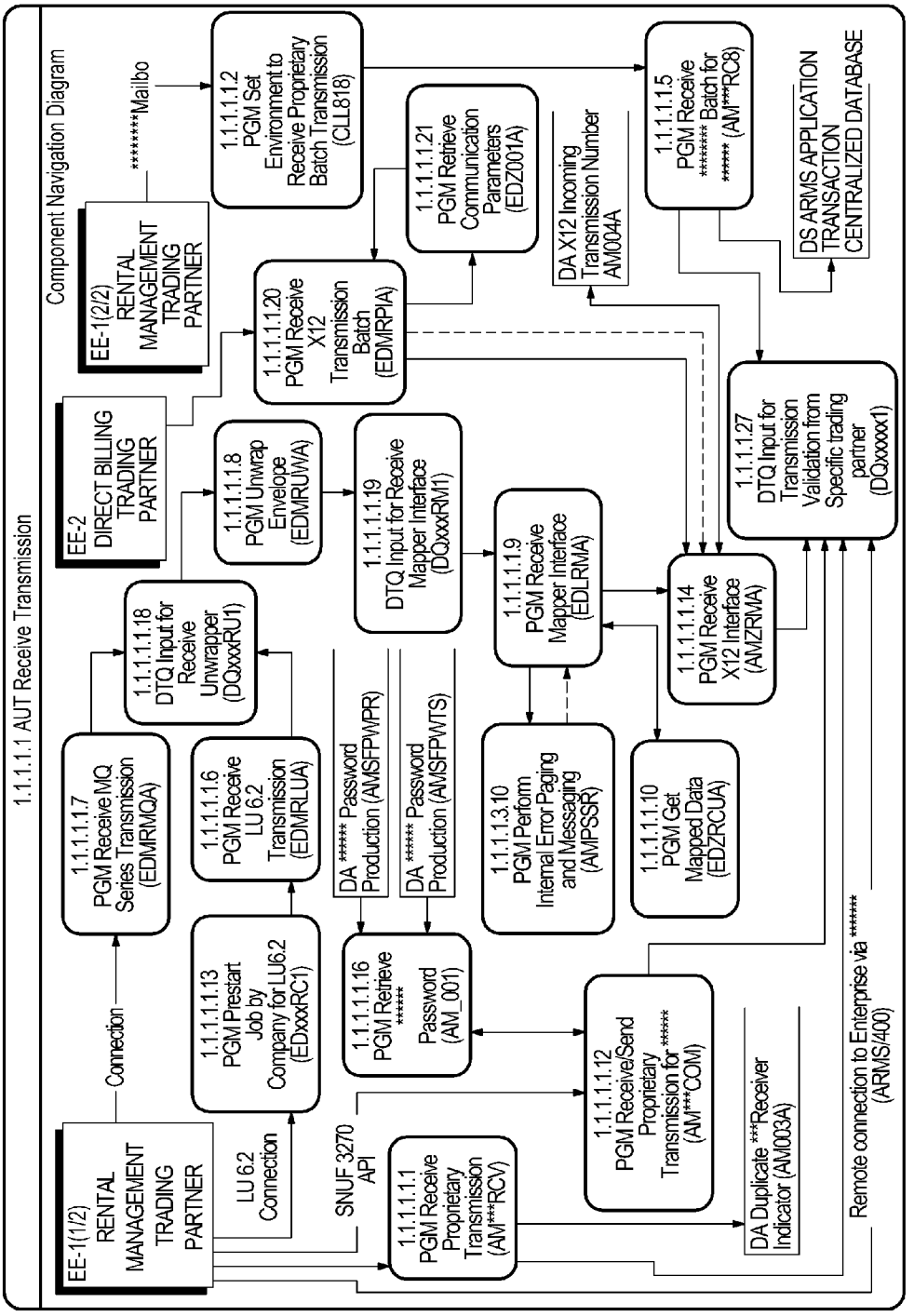

1.1.1.1.1 AUT Receive Transmission
Component Navigation Diagram
EE-1(1/2) RENTAL MANAGEMENT TRADING PARTNER
EE-1(2/2) RENTAL MANAGEMENT TRADING PARTNER
EE-2 DIRECT BILLING TRADING PARTNER
Connection
LU 6.2 Connection
SNUF 3270 API
********Mailbo
1.1.1.1.1.1 PGM Receive Proprietary Transmission (AM***RCV)
1.1.1.1.1.7 PGM Receive MQ Series Transmission (EDMRMQA)
1.1.1.1.1.13 PGM Prestart Job by Company for LU6.2 (EDxxxRC1)
1.1.1.1.1.6 PGM Receive LU 6.2 Transmission (EDMRLUA)
1.1.1.1.1.18 DTQ Input for Receive Unwrapper (DQxxxRU1)
1.1.1.1.1.8 PGM Unwrap Envelope (EDMRUWA)
1.1.1.1.1.19 DTQ Input for Receive Mapper Interface (DQxxxRM1)
1.1.1.1.1.9 PGM Receive Mapper Interface (EDLRMA)
1.1.1.1.1.14 PGM Receive X12 Interface (AMZRMA)
1.1.1.1.1.2 PGM Set Environment to Receive Proprietary Batch Transmission (CLL818)
1.1.1.1.1.20 PGM Receive X12 Transmission Batch (EDMRPIA)
1.1.1.1.1.21 PGM Retrieve Communication Parameters (EDZ001A)
1.1.1.1.1.5 PGM Receive ******** Batch for ****** (AM***RC8)
1.1.1.1.27 DTQ Input for Transmission Validation from Specific trading partner (DQxxxxx1)
DA X12 Incoming Transmission Number AM004A
DS ARMS APPLICATION TRANSACTION CENTRALIZED DATABASE
DA ****** Password Production (AMSFPWPR)
DA ****** Password Production (AMSFPWTS)
1.1.1.1.1.16 PGM Retrieve ****** Password (AM_001)
1.1.1.3.10 PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.1.10 PGM Get Mapped Data (EDZRCUA)
1.1.1.1.1.12 PGM Receive/Send Proprietary Transmission for ****** (AM***COM)
DA Duplicate ***Receiver Indicator (AM003A)
Remote connection to Enterprise via ******* (ARMS/400)

FIG. 9

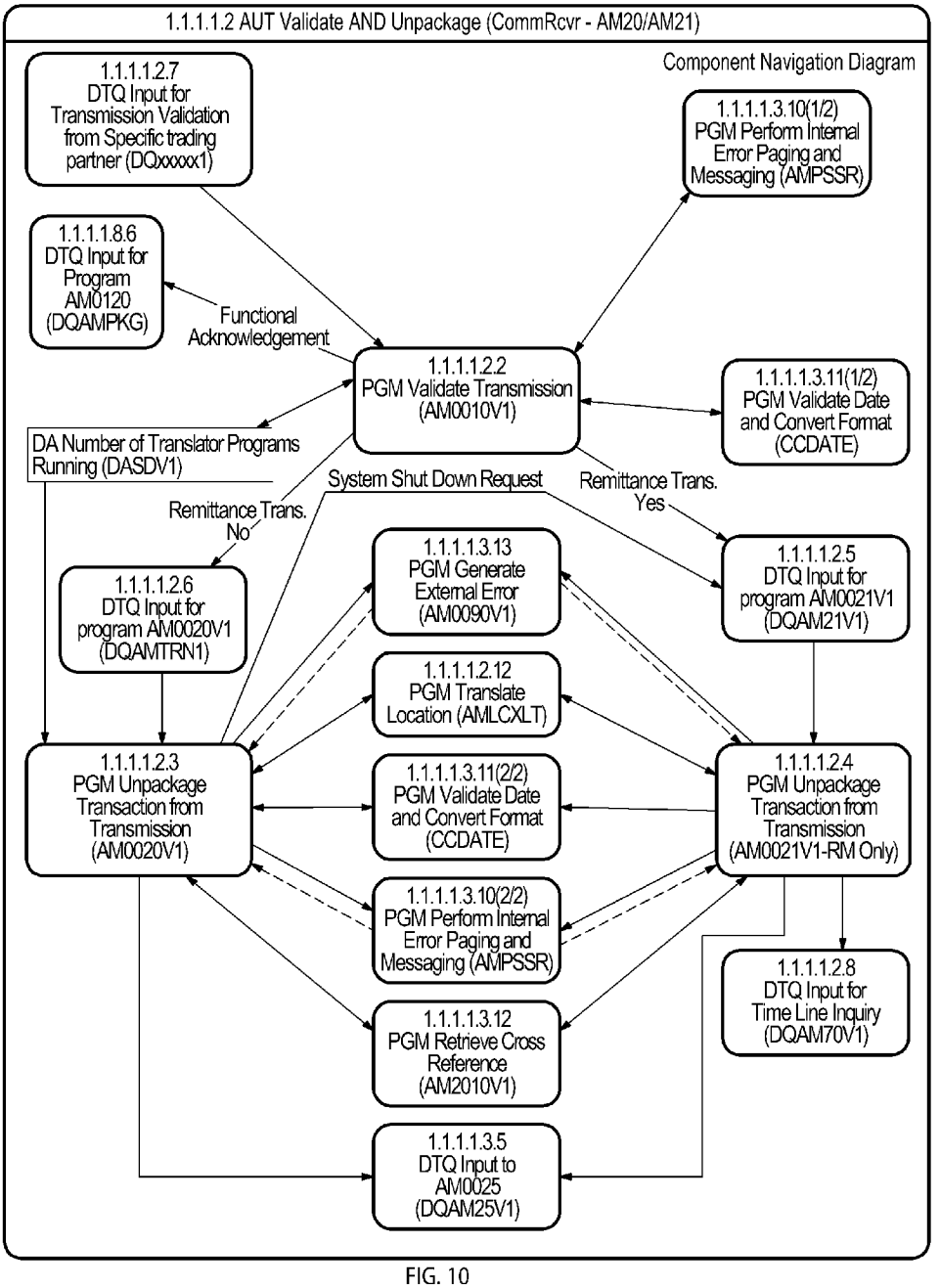
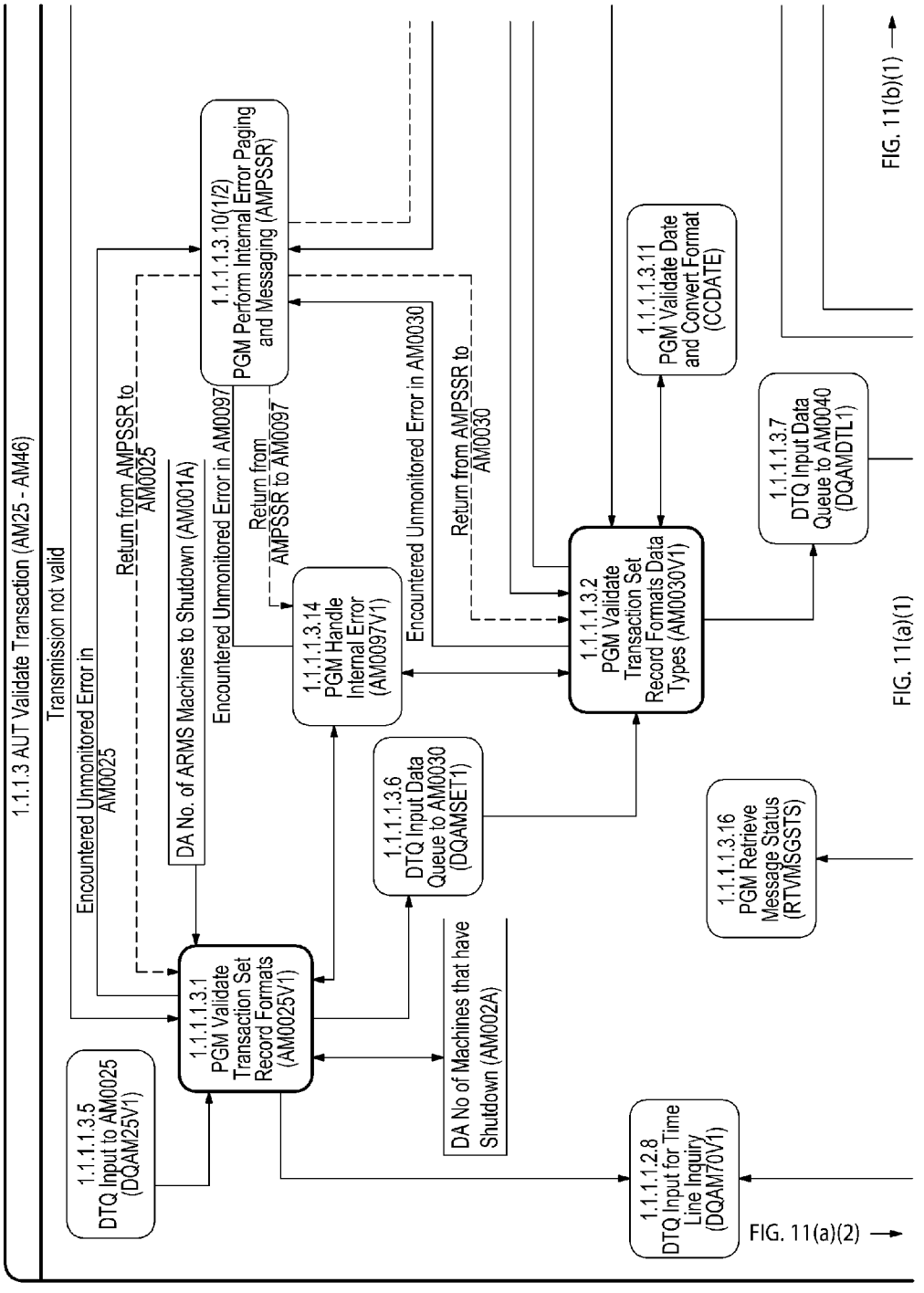

1.1.1.1.2 AUT Validate AND Unpackage (CommRcvr - AM20/AM21)
Component Navigation Diagram
1.1.1.1.2.7 DTQ Input for Transmission Validation from Specific trading partner (DQxxxxx1)
1.1.1.1.3.10(1/2) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.8.6 DTQ Input for Program AM0120 (DQAMPKG)
Functional Acknowledgement
1.1.1.1.2.2 PGM Validate Transmission (AM0010V1)
1.1.1.1.3.11(1/2) PGM Validate Date and Convert Format (CCDATE)
DA Number of Translator Programs Running (DASDV1)
System Shut Down Request
Remittance Trans. Yes
Remittance Trans. No
1.1.1.1.2.5 DTQ Input for program AM0021V1 (DQAM21V1)
1.1.1.1.3.13 PGM Generate External Error (AM0090V1)
1.1.1.1.2.6 DTQ Input for program AM0020V1 (DQAMTRN1)
1.1.1.1.2.12 PGM Translate Location (AMLCXLT)
1.1.1.1.2.3 PGM Unpackage Transaction from Transmission (AM0020V1)
1.1.1.1.3.11(2/2) PGM Validate Date and Convert Format (CCDATE)
1.1.1.1.2.4 PGM Unpackage Transaction from Transmission (AM0021V1-RM Only)
1.1.1.1.3.10(2/2) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.2.8 DTQ Input for Time Line Inquiry (DQAM70V1)
1.1.1.1.3.12 PGM Retrieve Cross Reference (AM2010V1)
1.1.1.1.3.5 DTQ Input to AM0025 (DQAM25V1)

FIG. 10


1.1.1.3 AUT Validate Transaction (AM25 - AM46)
Transmission not valid
1.1.1.1.3.5 DTQ Input to AM0025 (DQAM25V1)
1.1.1.1.3.1 PGM Validate Transaction Set Record Formats (AM0025V1)
Encountered Unmonitored Error in AM0025
Return from AMPSSR to AM0025
DA No. of ARMS Machines to Shutdown (AM001A)
DA No of Machines that have Shutdown (AM002A)
1.1.1.1.3.6 DTQ Input Data Queue to AM0030 (DQAMSET1)
1.1.1.1.3.14 PGM Handle Internal Error (AM0097V1)
Encountered Unmonitored Error in AM0097
Return from AMPSSR to AM0097
1.1.1.1.3.10(1/2) PGM Perform Internal Error Paging and Messaging (AMPSSR)
Encountered Unmonitored Error in AM0030
Return from AMPSSR to AM0030
1.1.1.1.3.2 PGM Validate Transaction Set Record Formats Data Types (AM0030V1)
1.1.1.1.3.11 PGM Validate Date and Convert Format (CCDATE)
1.1.1.1.3.7 DTQ Input Data Queue to AM0040 (DQAMDTL1)
1.1.1.1.3.16 PGM Retrieve Message Status (RTVMSGSTS)
1.1.1.1.2.8 DTQ Input for Time Line Inquiry (DQAM70V1)
FIG. 11(a)(2)
FIG. 11(a)(1)
FIG. 11(b)(1)

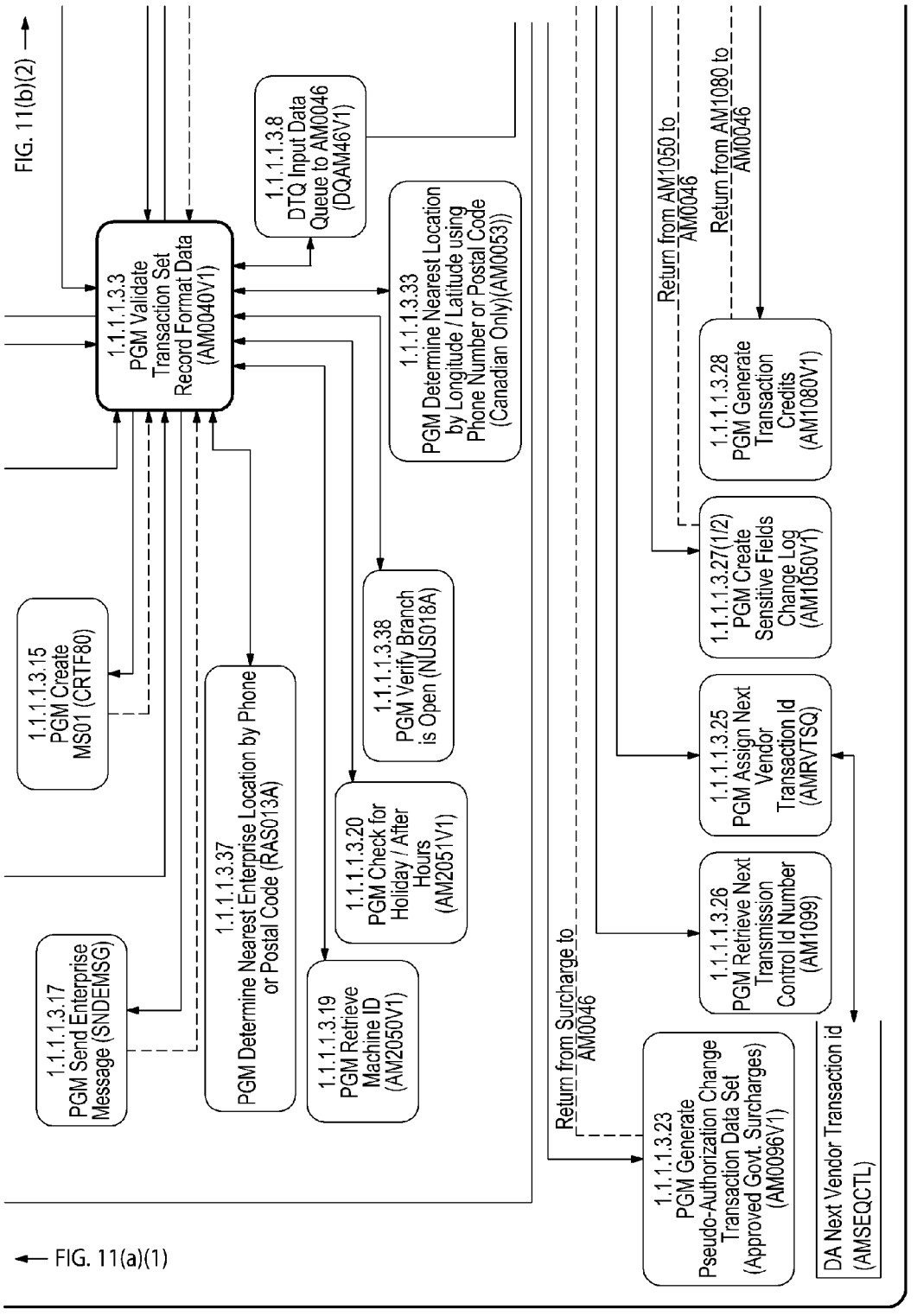
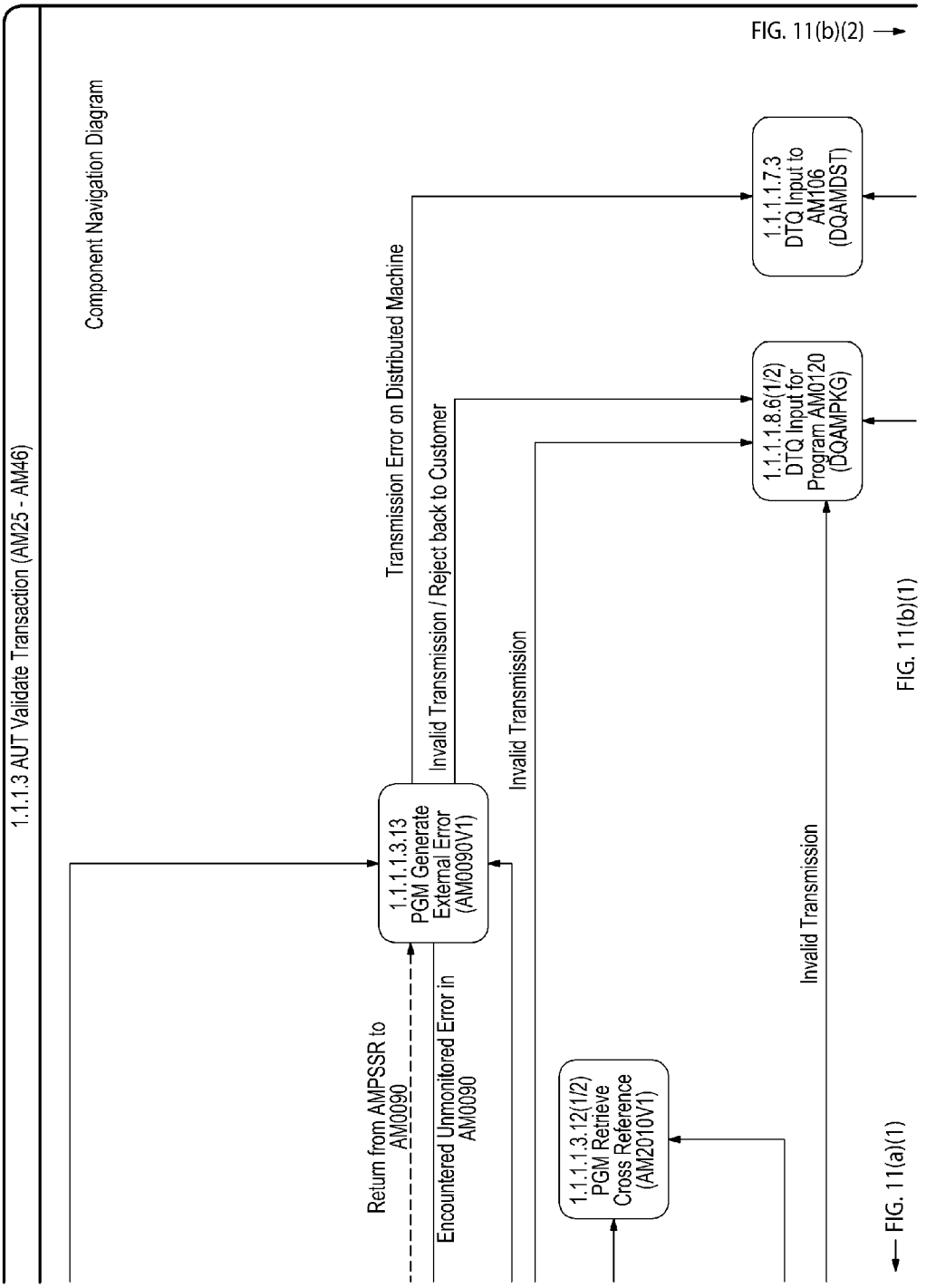


FIG. 11(b)(2)
1.1.1.1.3.3
PGM Validate
Transaction Set
Record Format Data
(AM0040V1)
1.1.1.1.3.8
DTQ Input Data
Queue to AM0046
(DQAM46V1)
1.1.1.1.3.33
PGM Determine Nearest Location
by Longitude / Latitude using
Phone Number or Postal Code
(Canadian Only)(AM0053))
1.1.1.1.3.15
PGM Create
MS01 (CRTF80)
1.1.1.1.3.38
PGM Verify Branch
is Open (NUS018A)
1.1.1.1.3.37
PGM Determine Nearest Enterprise Location by Phone
or Postal Code (RAS013A)
1.1.1.1.3.20
PGM Check for
Holiday / After
Hours
(AM2051V1)
1.1.1.1.3.17
PGM Send Enterprise
Message (SNDEMSG)
1.1.1.1.3.19
PGM Retrieve
Machine ID
(AM2050V1)
Return from Surcharge to
AM0046
Return from AM1050 to
AM0046
Return from AM1080 to
AM0046
1.1.1.1.3.27(1/2)
PGM Create
Sensitive Fields
Change Log
(AM1050V1)
1.1.1.1.3.28
PGM Generate
Transaction
Credits
(AM1080V1)
1.1.1.1.3.25
PGM Assign Next
Vendor
Transaction Id
(AMRVTSQ)
1.1.1.1.3.26
PGM Retrieve Next
Transmission
Control Id Number
(AM1099)
1.1.1.1.3.23
PGM Generate
Pseudo-Authorization Change
Transaction Data Set
(Approved Govt. Surcharges)
(AM0096V1)
DA Next Vendor Transaction id
(AMSEQCTL)
FIG. 11(a)(1)
FIG. 11(a)(2)


1.1.1.3 AUT Validate Transaction (AM25 - AM46)
Component Navigation Diagram
FIG. 11(b)(2)
1.1.1.1.3.13
PGM Generate
External Error
(AM0090V1)
Transmission Error on Distributed Machine
Invalid Transmission / Reject back to Customer
Invalid Transmission
Return from AMPSSR to AM0090
Encountered Unmonitored Error in AM0090
1.1.1.1.3.12(1/2)
PGM Retrieve
Cross Reference
(AM2010V1)
1.1.1.1.8.6(1/2)
DTQ Input for
Program AM0120
(DQAMPKG)
1.1.1.1.7.3
DTQ Input to
AM106
(DQAMDST)
Invalid Transmission
FIG. 11(b)(1)
FIG. 11(a)(1)

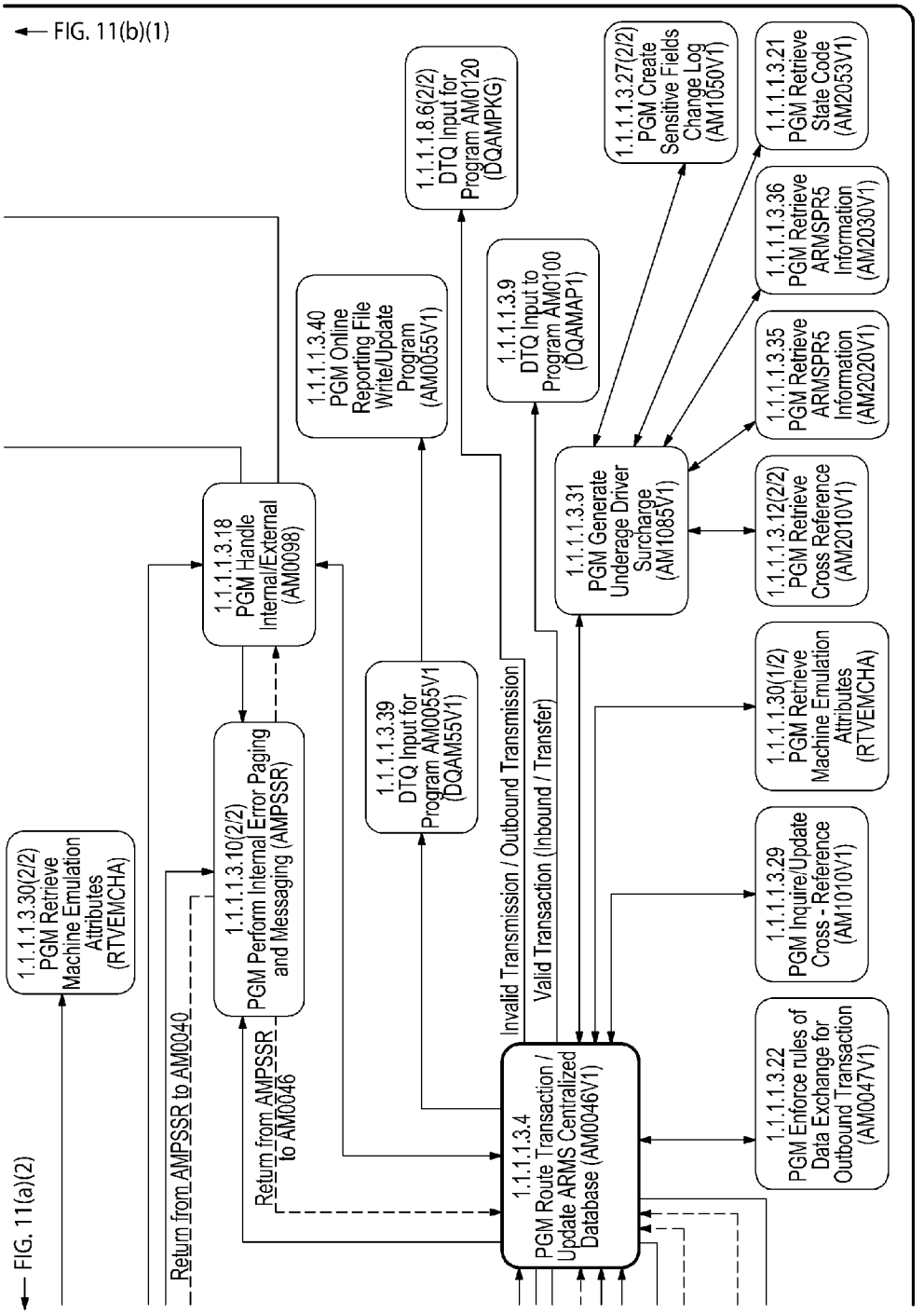


FIG. 11(b)(1)
FIG. 11(a)(2)
1.1.1.1.3.30(2/2) PGM Retrieve Machine Emulation Attributes (RTVEMCHA)
Return from AMPSSR to AM0040
1.1.1.1.3.10(2/2) PGM Perform Internal Error Paging and Messaging (AMPSSR)
Return from AMPSSR to AM0046
1.1.1.1.3.18 PGM Handle Internal/External (AM0098)
1.1.1.1.3.40 PGM Online Reporting File Write/Update Program (AM0055V1)
1.1.1.1.3.39 DTQ Input for Program AM0055V1 (DQAM55V1)
1.1.1.1.8.6(2/2) DTQ Input for Program AM0120 (DQAMPKG)
1.1.1.1.3.9 DTQ Input to Program AM0100 (DQAMAP1)
Invalid Transmission / Outbound Transmission
Valid Transaction (Inbound / Transfer)
1.1.1.1.3.4 PGM Route Transaction / Update ARMS Centralized Database (AM0046V1)
1.1.1.1.3.22 PGM Enforce rules of Data Exchange for Outbound Transaction (AM0047V1)
1.1.1.1.3.29 PGM Inquire/Update Cross - Reference (AM1010V1)
1.1.1.1.3.30(1/2) PGM Retrieve Machine Emulation Attributes (RTVEMCHA)
1.1.1.1.3.31 PGM Generate Underage Driver Surcharge (AM1085V1)
1.1.1.1.3.12(2/2) PGM Retrieve Cross Reference (AM2010V1)
1.1.1.1.3.27(2/2) PGM Create Sensitive Fields Change Log (AM1050V1)
1.1.1.1.3.35 PGM Retrieve ARMSPR5 Information (AM2020V1)
1.1.1.1.3.36 PGM Retrieve ARMSPR5 Information (AM2030V1)
1.1.1.1.3.21 PGM Retrieve State Code (AM2053V1)
FIG. 11(b)(2)

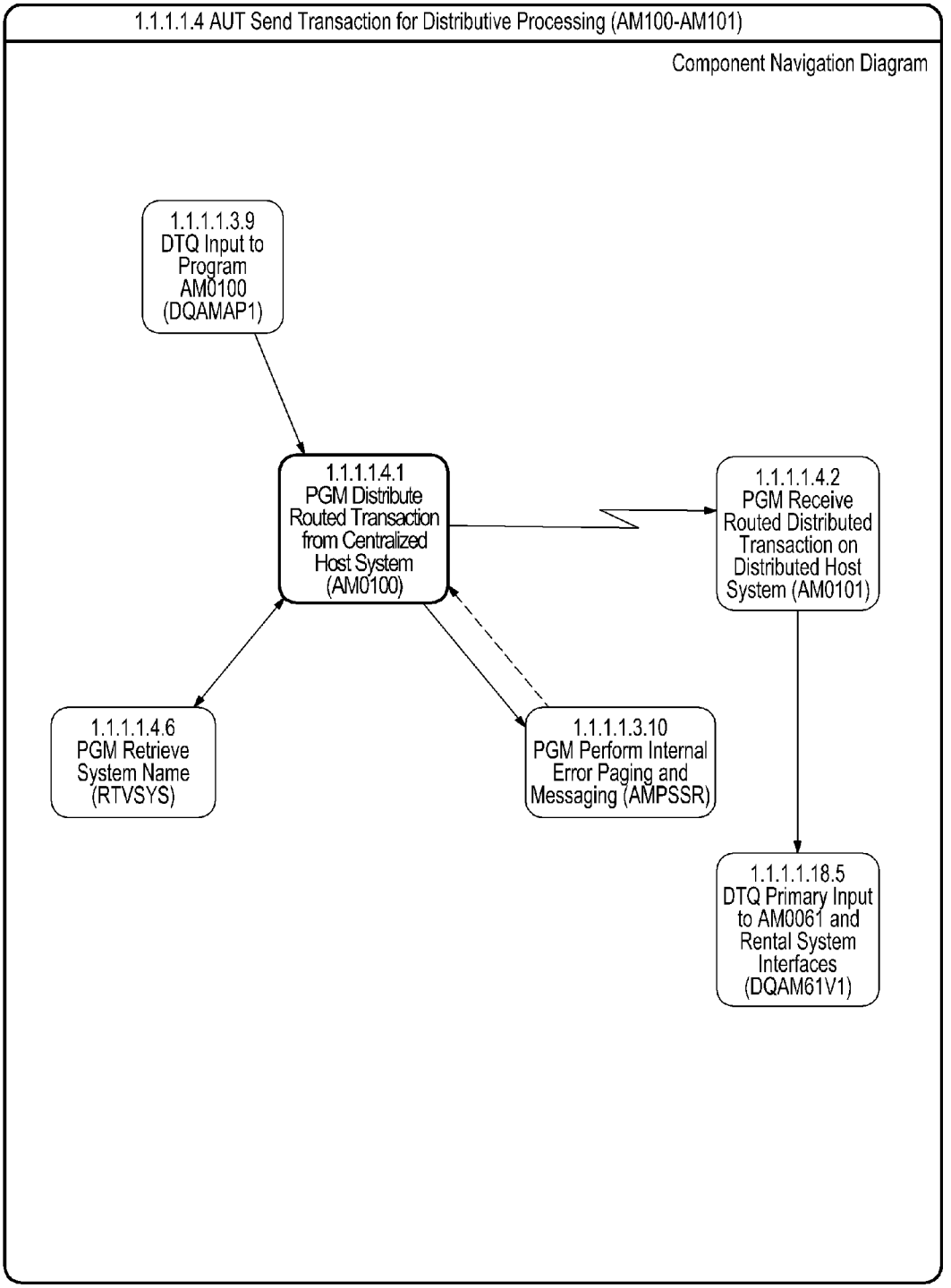

1.1.1.1.4 AUT Send Transaction for Distributive Processing (AM100-AM101)
Component Navigation Diagram
1.1.1.1.3.9 DTQ Input to Program AM0100 (DQAMAP1)
1.1.1.1.4.1 PGM Distribute Routed Transaction from Centralized Host System (AM0100)
1.1.1.1.4.2 PGM Receive Routed Distributed Transaction on Distributed Host System (AM0101)
1.1.1.1.4.6 PGM Retrieve System Name (RTVSYS)
1.1.1.1.3.10 PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.18.5 DTQ Primary Input to AM0061 and Rental System Interfaces (DQAM61V1)

FIG. 12

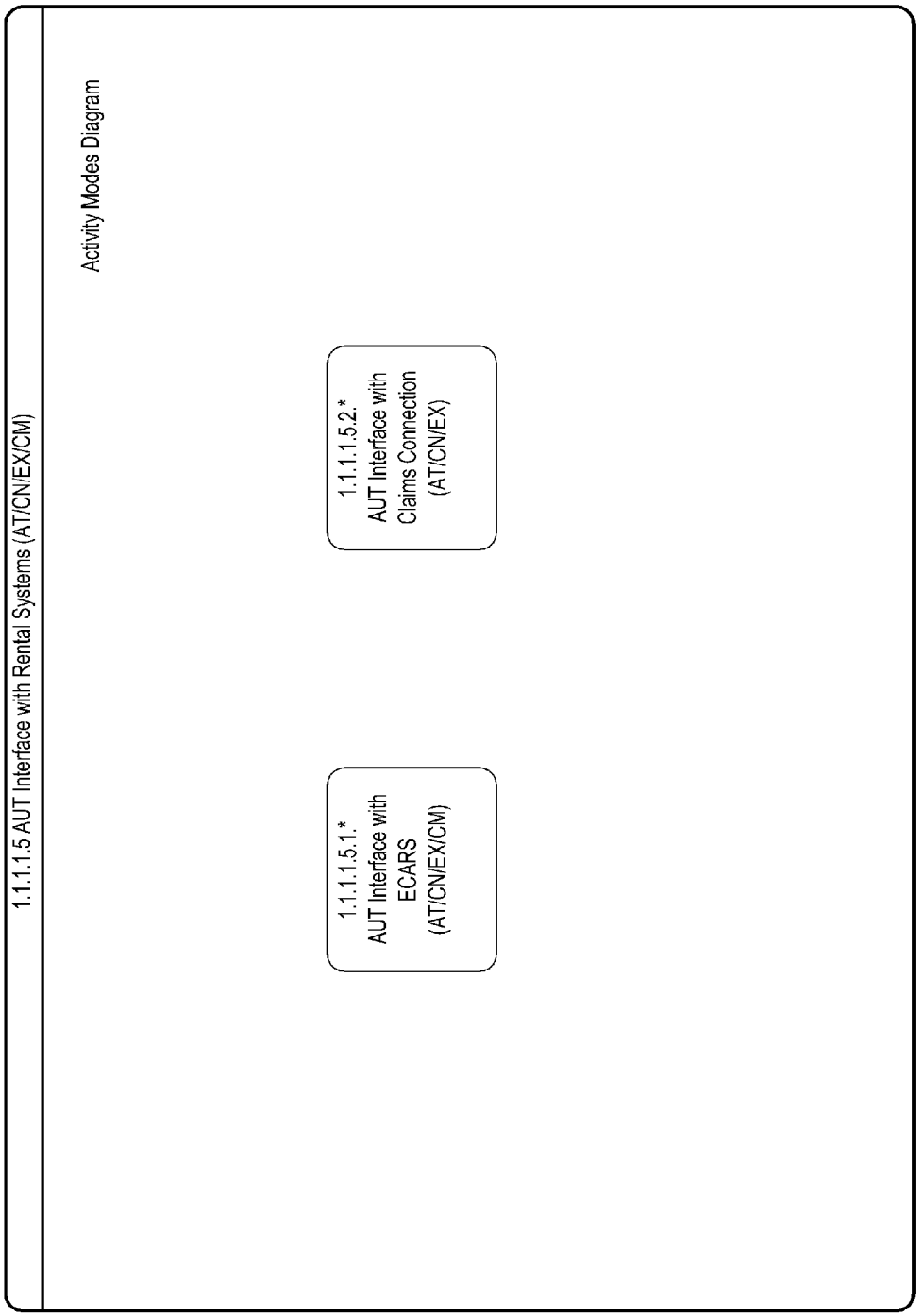

1.1.1.1.5 AUT Interface with Rental Systems (AT/CN/EX/CM)
Activity Modes Diagram
1.1.1.1.5.1.*
AUT Interface with
ECARS
(AT/CN/EX/CM)
1.1.1.1.5.2.*
AUT Interface with
Claims Connection
(AT/CN/EX)

FIG. 13

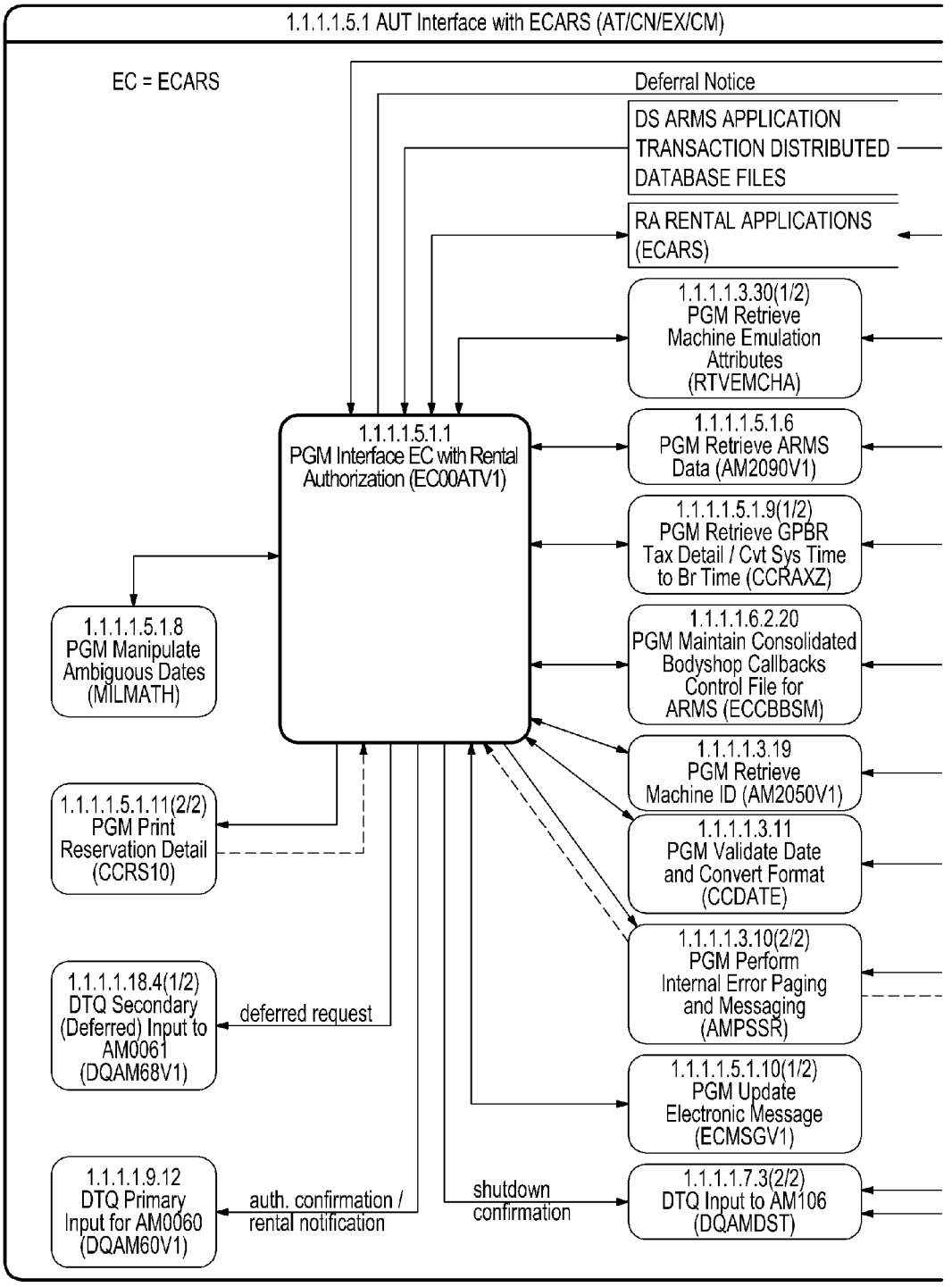

1.1.1.1.5.1 AUT Interface with ECARS (AT/CN/EX/CM)
EC = ECARS
Deferral Notice
DS ARMS APPLICATION TRANSACTION DISTRIBUTED DATABASE FILES
RA RENTAL APPLICATIONS (ECARS)
1.1.1.1.3.30(1/2) PGM Retrieve Machine Emulation Attributes (RTVEMCHA)
1.1.1.1.5.1.1 PGM Interface EC with Rental Authorization (EC00ATV1)
1.1.1.1.5.1.6 PGM Retrieve ARMS Data (AM2090V1)
1.1.1.1.5.1.9(1/2) PGM Retrieve GPBR Tax Detail / Cvt Sys Time to Br Time (CCRAXZ)
1.1.1.1.5.1.8 PGM Manipulate Ambiguous Dates (MILMATH)
1.1.1.1.6.2.20 PGM Maintain Consolidated Bodyshop Callbacks Control File for ARMS (ECCBBSM)
1.1.1.1.3.19 PGM Retrieve Machine ID (AM2050V1)
1.1.1.1.5.1.11(2/2) PGM Print Reservation Detail (CCRS10)
1.1.1.1.3.11 PGM Validate Date and Convert Format (CCDATE)
1.1.1.1.3.10(2/2) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.18.4(1/2) DTQ Secondary (Deferred) Input to AM0061 (DQAM68V1)
deferred request
1.1.1.1.5.1.10(1/2) PGM Update Electronic Message (ECMSGV1)
1.1.1.1.9.12 DTQ Primary Input for AM0060 (DQAM60V1)
auth. confirmation / rental notification
shutdown confirmation
1.1.1.1.7.3(2/2) DTQ Input to AM106 (DQAMDST)

FIG. 14(a)

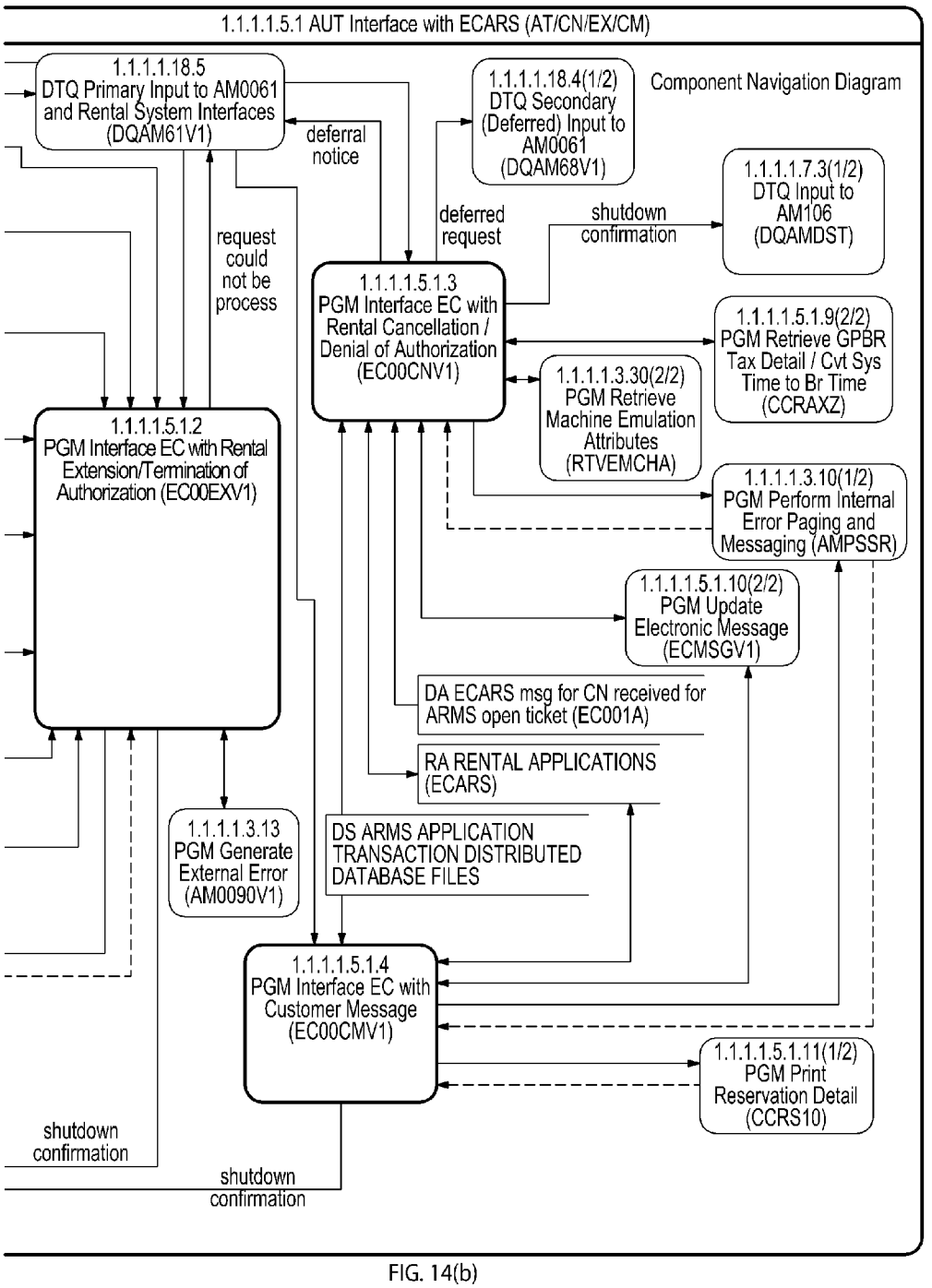

1.1.1.1.5.1 AUT Interface with ECARS (AT/CN/EX/CM)
1.1.1.1.18.5 DTQ Primary Input to AM0061 and Rental System Interfaces (DQAM61V1)
deferral notice
1.1.1.1.18.4(1/2) DTQ Secondary (Deferred) Input to AM0061 (DQAM68V1)
Component Navigation Diagram
1.1.1.1.7.3(1/2) DTQ Input to AM106 (DQAMDST)
deferred request
shutdown confirmation
request could not be process
1.1.1.1.5.1.3 PGM Interface EC with Rental Cancellation / Denial of Authorization (EC00CNV1)
1.1.1.1.5.1.9(2/2) PGM Retrieve GPBR Tax Detail / Cvt Sys Time to Br Time (CCRAXZ)
1.1.1.1.3.30(2/2) PGM Retrieve Machine Emulation Attributes (RTVEMCHA)
1.1.1.1.5.1.2 PGM Interface EC with Rental Extension/Termination of Authorization (EC00EXV1)
1.1.1.1.3.10(1/2) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.5.1.10(2/2) PGM Update Electronic Message (ECMSGV1)
DA ECARS msg for CN received for ARMS open ticket (EC001A)
RA RENTAL APPLICATIONS (ECARS)
1.1.1.1.3.13 PGM Generate External Error (AM0090V1)
DS ARMS APPLICATION TRANSACTION DISTRIBUTED DATABASE FILES
1.1.1.1.5.1.4 PGM Interface EC with Customer Message (EC00CMV1)
1.1.1.1.5.1.11(1/2) PGM Print Reservation Detail (CCRS10)
shutdown confirmation
shutdown confirmation

FIG. 14(b)

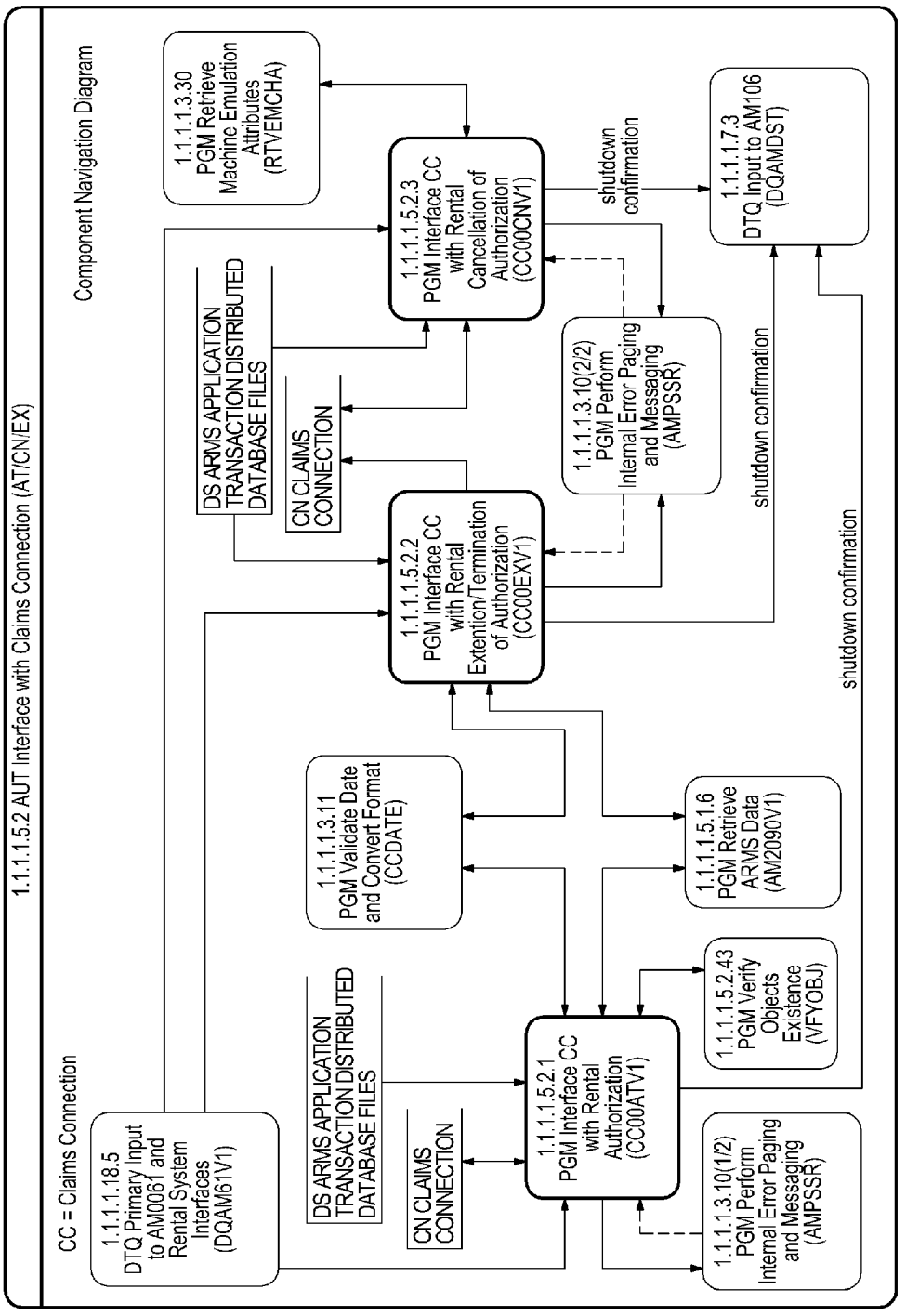

1.1.1.1.5.2 AUT Interface with Claims Connection (AT/CN/EX)
Component Navigation Diagram
CC = Claims Connection
1.1.1.1.18.5 DTQ Primary Input to AM0061 and Rental System Interfaces (DQAM61V1)
DS ARMS APPLICATION TRANSACTION DISTRIBUTED DATABASE FILES
CN CLAIMS CONNECTION
1.1.1.1.5.2.1 PGM Interface CC with Rental Authorization (CC00ATV1)
1.1.1.1.3.10(1/2) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.3.11 PGM Validate Date and Convert Format (CCDATE)
1.1.1.1.5.2.43 PGM Verify Objects Existence (VFYOBJ)
1.1.1.1.5.1.6 PGM Retrieve ARMS Data (AM2090V1)
1.1.1.1.5.2.2 PGM Interface CC with Rental Extention/Termination of Authorization (CC00EXV1)
1.1.1.1.3.10(2/2) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.5.2.3 PGM Interface CC with Rental Cancellation of Authorization (CC00CNV1)
1.1.1.1.3.30 PGM Retrieve Machine Emulation Attributes (RTVEMCHA)
1.1.1.1.7.3 DTQ Input to AM106 (DQAMDST)
shutdown confirmation
shutdown confirmation
shutdown confirmation

FIG. 15

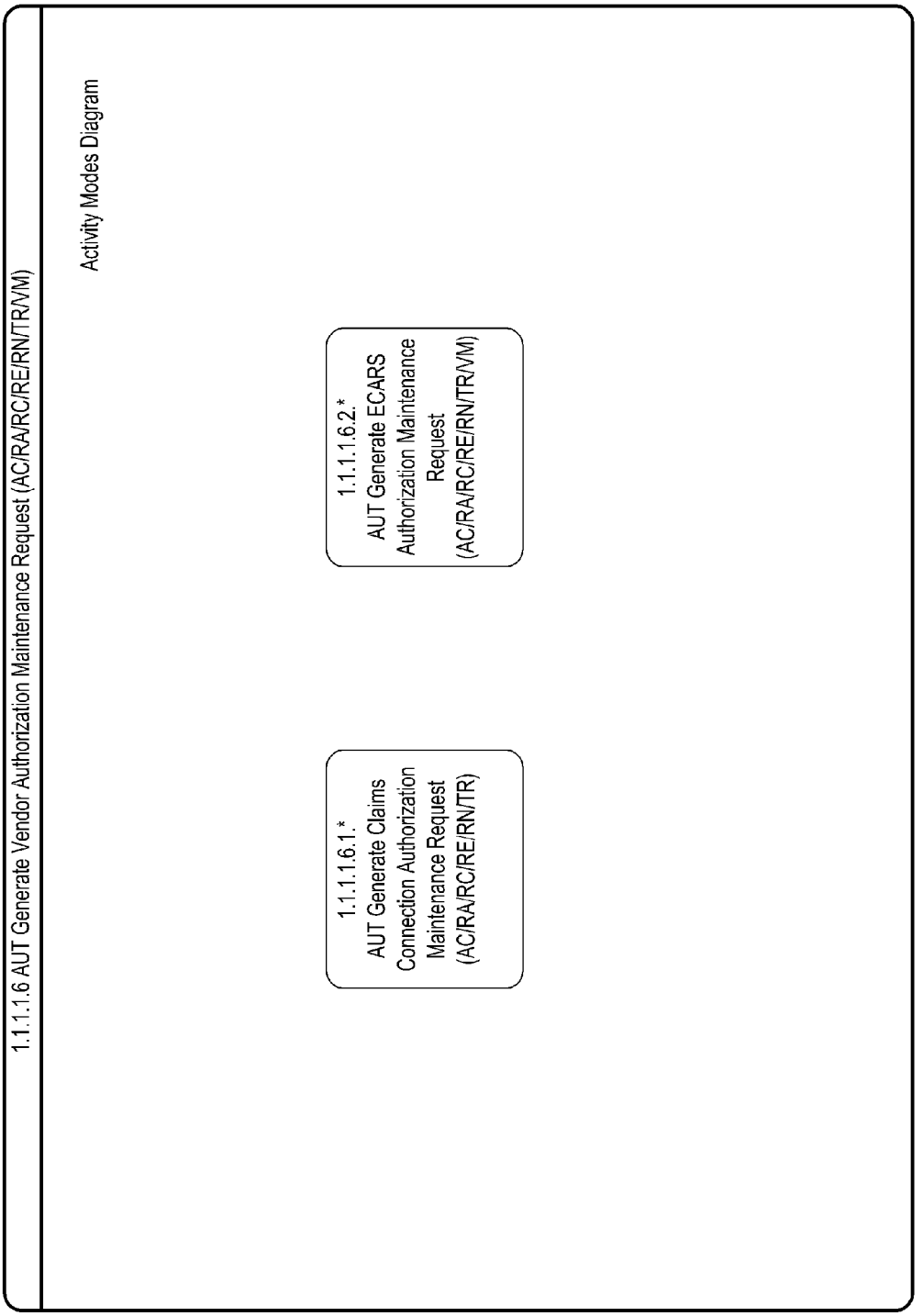

1.1.1.1.6 AUT Generate Vendor Authorization Maintenance Request (AC/RA/RC/RE/RN/TR/VM)
Activity Modes Diagram
1.1.1.1.6.1.*
AUT Generate Claims Connection Authorization Maintenance Request (AC/RA/RC/RE/RN/TR)
1.1.1.1.6.2.*
AUT Generate ECARS Authorization Maintenance Request (AC/RA/RC/RE/RN/TR/VM)

FIG. 16

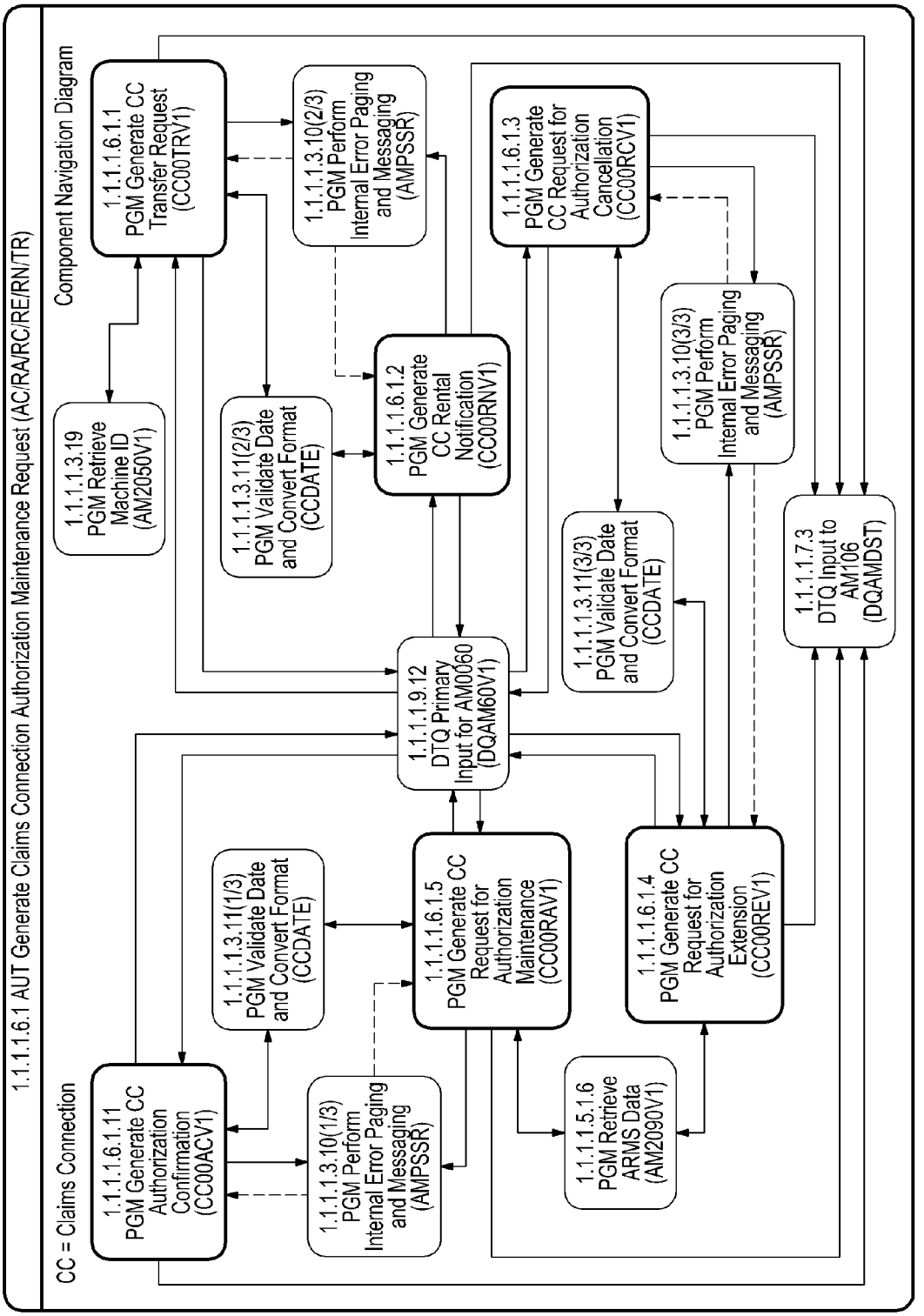

1.1.1.1.6.1 AUT Generate Claims Connection Authorization Maintenance Request (AC/RA/RC/RE/RN/TR)
Component Navigation Diagram
CC = Claims Connection
1.1.1.1.6.1.1 PGM Generate CC Transfer Request (CC00TRV1)
1.1.1.1.3.10(2/3) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.6.1.3 PGM Generate CC Request for Authorization Cancellation (CC00RCV1)
1.1.1.1.3.19 PGM Retrieve Machine ID (AM2050V1)
1.1.1.1.3.11(2/3) PGM Validate Date and Convert Format (CCDATE)
1.1.1.1.6.1.2 PGM Generate CC Rental Notification (CC00RNV1)
1.1.1.1.3.10(3/3) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.3.11(3/3) PGM Validate Date and Convert Format (CCDATE)
1.1.1.1.7.3 DTQ Input to AM106 (DQAMDST)
1.1.1.1.9.12 DTQ Primary Input for AM0060 (DQAM60V1)
1.1.1.1.3.11(1/3) PGM Validate Date and Convert Format (CCDATE)
1.1.1.1.6.1.5 PGM Generate CC Request for Authorization Maintenance (CC00RAV1)
1.1.1.1.6.1.4 PGM Generate CC Request for Authorization Extension (CC00REV1)
1.1.1.1.6.1.11 PGM Generate CC Authorization Confirmation (CC00ACV1)
1.1.1.1.3.10(1/3) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.5.1.6 PGM Retrieve ARMS Data (AM2090V1)

FIG. 17

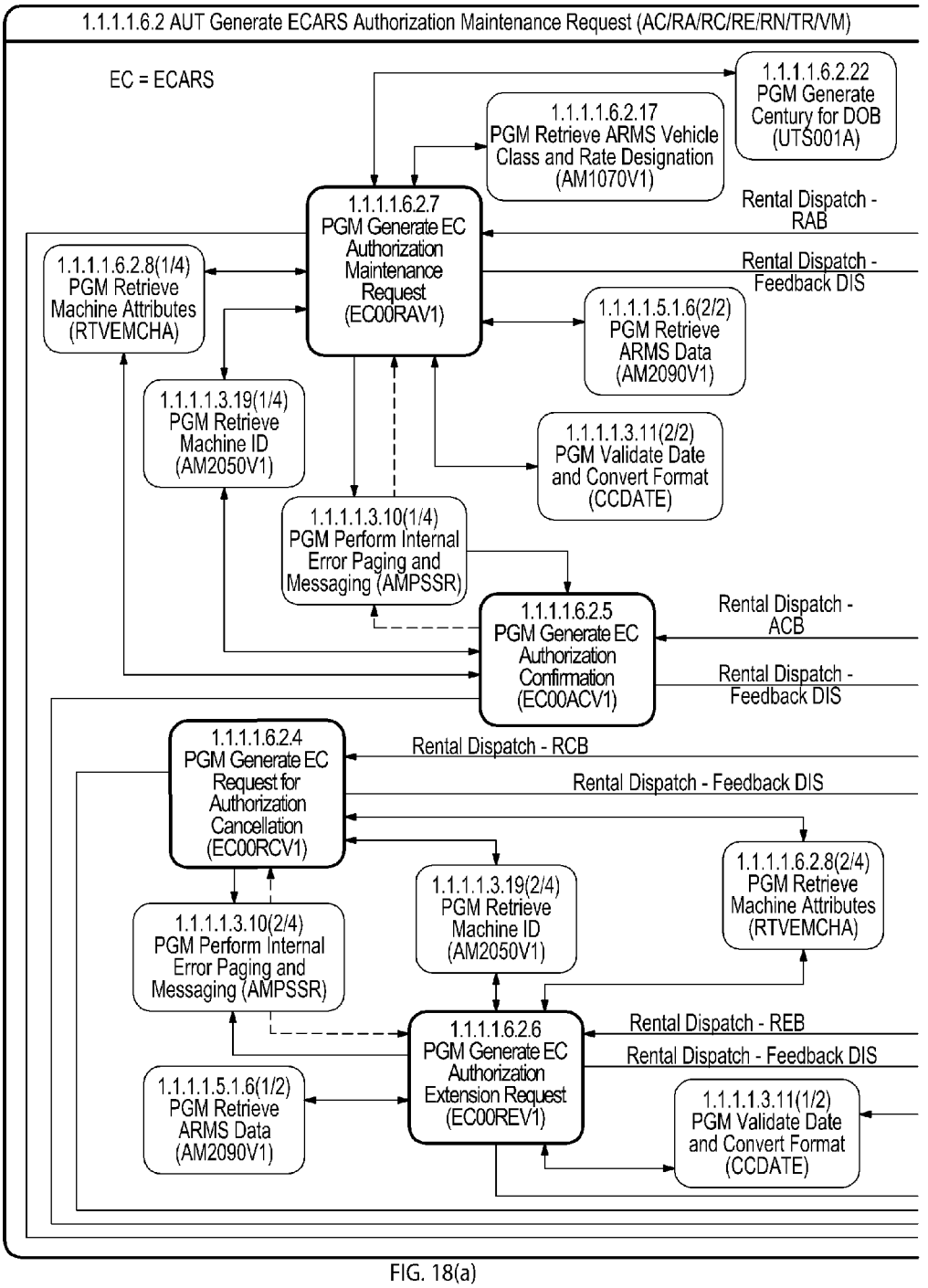

1.1.1.1.6.2 AUT Generate ECARS Authorization Maintenance Request (AC/RA/RC/RE/RN/TR/VM)
EC = ECARS
1.1.1.1.6.2.22 PGM Generate Century for DOB (UTS001A)
1.1.1.1.6.2.17 PGM Retrieve ARMS Vehicle Class and Rate Designation (AM1070V1)
1.1.1.1.6.2.7 PGM Generate EC Authorization Maintenance Request (EC00RAV1)
Rental Dispatch - RAB
Rental Dispatch - Feedback DIS
1.1.1.1.6.2.8(1/4) PGM Retrieve Machine Attributes (RTVEMCHA)
1.1.1.1.5.1.6(2/2) PGM Retrieve ARMS Data (AM2090V1)
1.1.1.1.3.19(1/4) PGM Retrieve Machine ID (AM2050V1)
1.1.1.1.3.11(2/2) PGM Validate Date and Convert Format (CCDATE)
1.1.1.1.3.10(1/4) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.6.2.5 PGM Generate EC Authorization Confirmation (EC00ACV1)
Rental Dispatch - ACB
Rental Dispatch - Feedback DIS
1.1.1.1.6.2.4 PGM Generate EC Request for Authorization Cancellation (EC00RCV1)
Rental Dispatch - RCB
Rental Dispatch - Feedback DIS
1.1.1.1.6.2.8(2/4) PGM Retrieve Machine Attributes (RTVEMCHA)
1.1.1.1.3.19(2/4) PGM Retrieve Machine ID (AM2050V1)
1.1.1.1.3.10(2/4) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.6.2.6 PGM Generate EC Authorization Extension Request (EC00REV1)
Rental Dispatch - REB
Rental Dispatch - Feedback DIS
1.1.1.1.5.1.6(1/2) PGM Retrieve ARMS Data (AM2090V1)
1.1.1.1.3.11(1/2) PGM Validate Date and Convert Format (CCDATE)

FIG. 18(a)

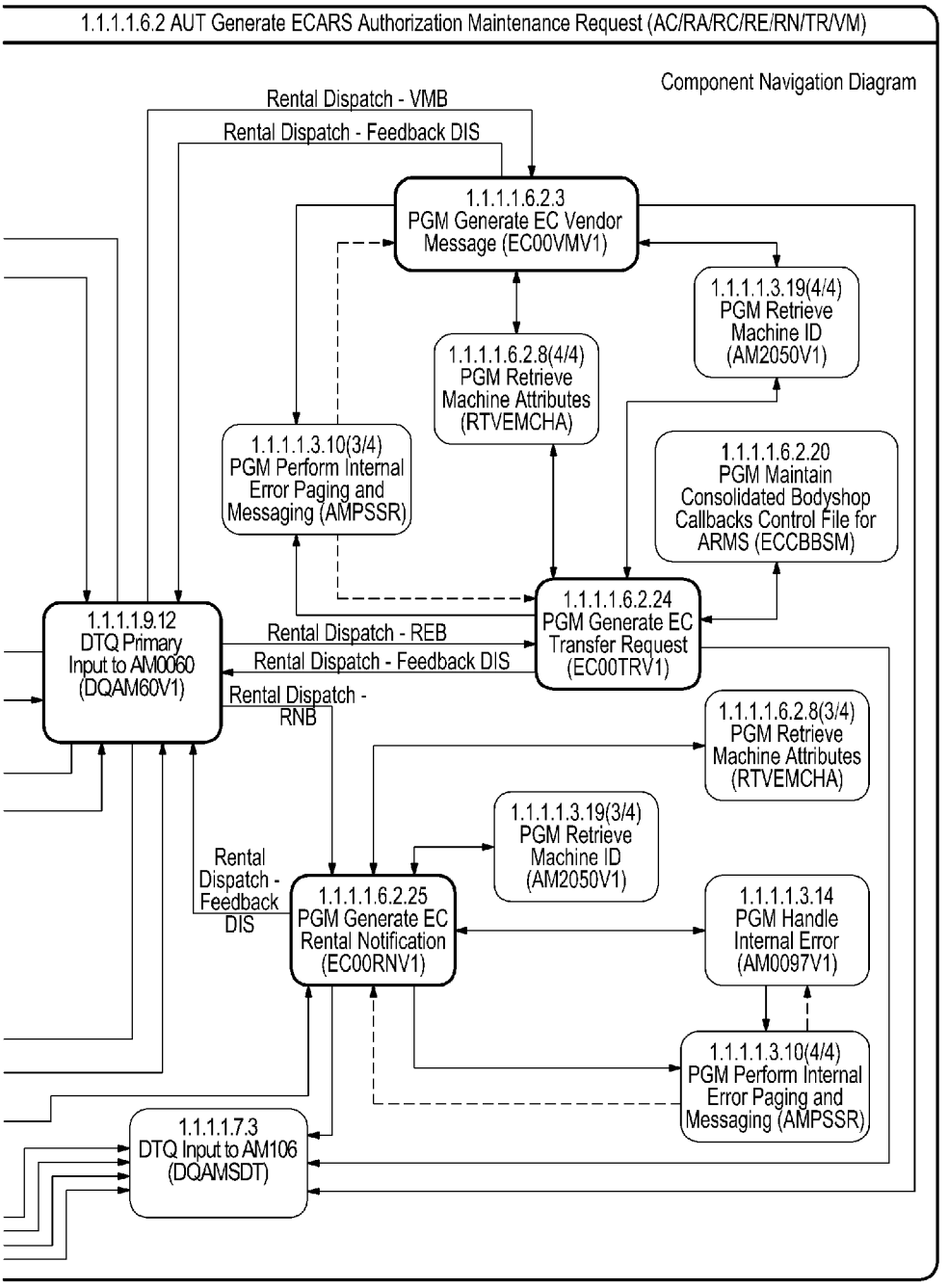

1.1.1.1.6.2 AUT Generate ECARS Authorization Maintenance Request (AC/RA/RC/RE/RN/TR/VM)
Component Navigation Diagram
Rental Dispatch - VMB
Rental Dispatch - Feedback DIS
1.1.1.1.6.2.3 PGM Generate EC Vendor Message (EC00VMV1)
1.1.1.1.3.19(4/4) PGM Retrieve Machine ID (AM2050V1)
1.1.1.1.6.2.8(4/4) PGM Retrieve Machine Attributes (RTVEMCHA)
1.1.1.1.3.10(3/4) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.6.2.20 PGM Maintain Consolidated Bodyshop Callbacks Control File for ARMS (ECCBBSM)
1.1.1.1.6.2.24 PGM Generate EC Transfer Request (EC00TRV1)
1.1.1.1.9.12 DTQ Primary Input to AM0060 (DQAM60V1)
Rental Dispatch - REB
Rental Dispatch - Feedback DIS
Rental Dispatch - RNB
1.1.1.1.6.2.8(3/4) PGM Retrieve Machine Attributes (RTVEMCHA)
1.1.1.1.3.19(3/4) PGM Retrieve Machine ID (AM2050V1)
Rental Dispatch - Feedback DIS
1.1.1.1.6.2.25 PGM Generate EC Rental Notification (EC00RNV1)
1.1.1.1.3.14 PGM Handle Internal Error (AM0097V1)
1.1.1.1.3.10(4/4) PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.7.3 DTQ Input to AM106 (DQAMSDT)

FIG. 18(b)

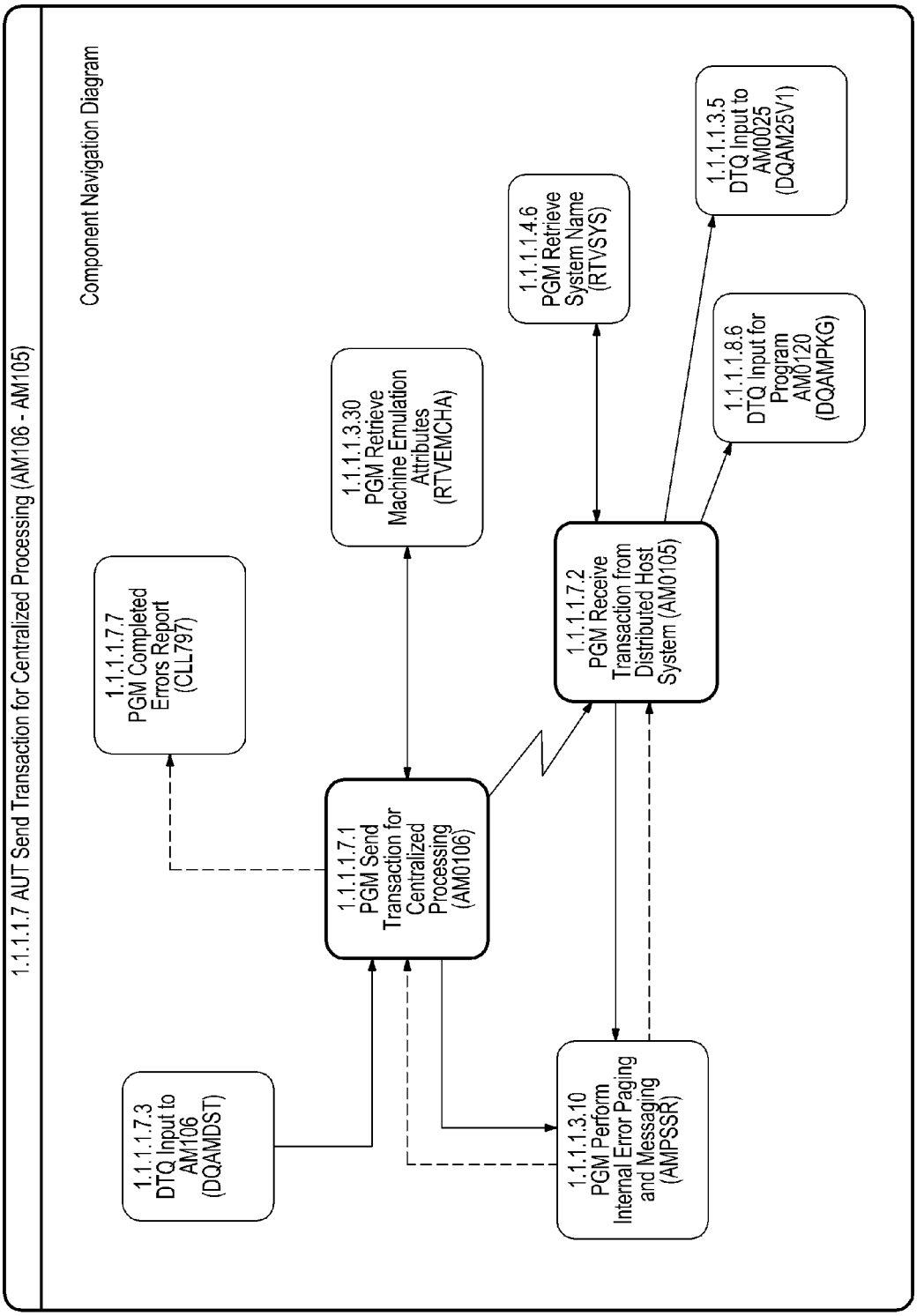

1.1.1.1.7 AUT Send Transaction for Centralized Processing (AM106 - AM105)
Component Navigation Diagram
1.1.1.1.7.3 DTQ Input to AM106 (DQAMDST)
1.1.1.1.7.7 PGM Completed Errors Report (CLL797)
1.1.1.1.7.1 PGM Send Transaction for Centralized Processing (AM0106)
1.1.1.1.3.30 PGM Retrieve Machine Emulation Attributes (RTVEMCHA)
1.1.1.1.7.2 PGM Receive Transaction from Distributed Host System (AM0105)
1.1.1.1.4.6 PGM Retrieve System Name (RTVSYS)
1.1.1.1.3.10 PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.8.6 DTQ Input for Program AM0120 (DQAMPKG)
1.1.1.1.3.5 DTQ Input to AM0025 (DQAM25V1)

FIG. 19

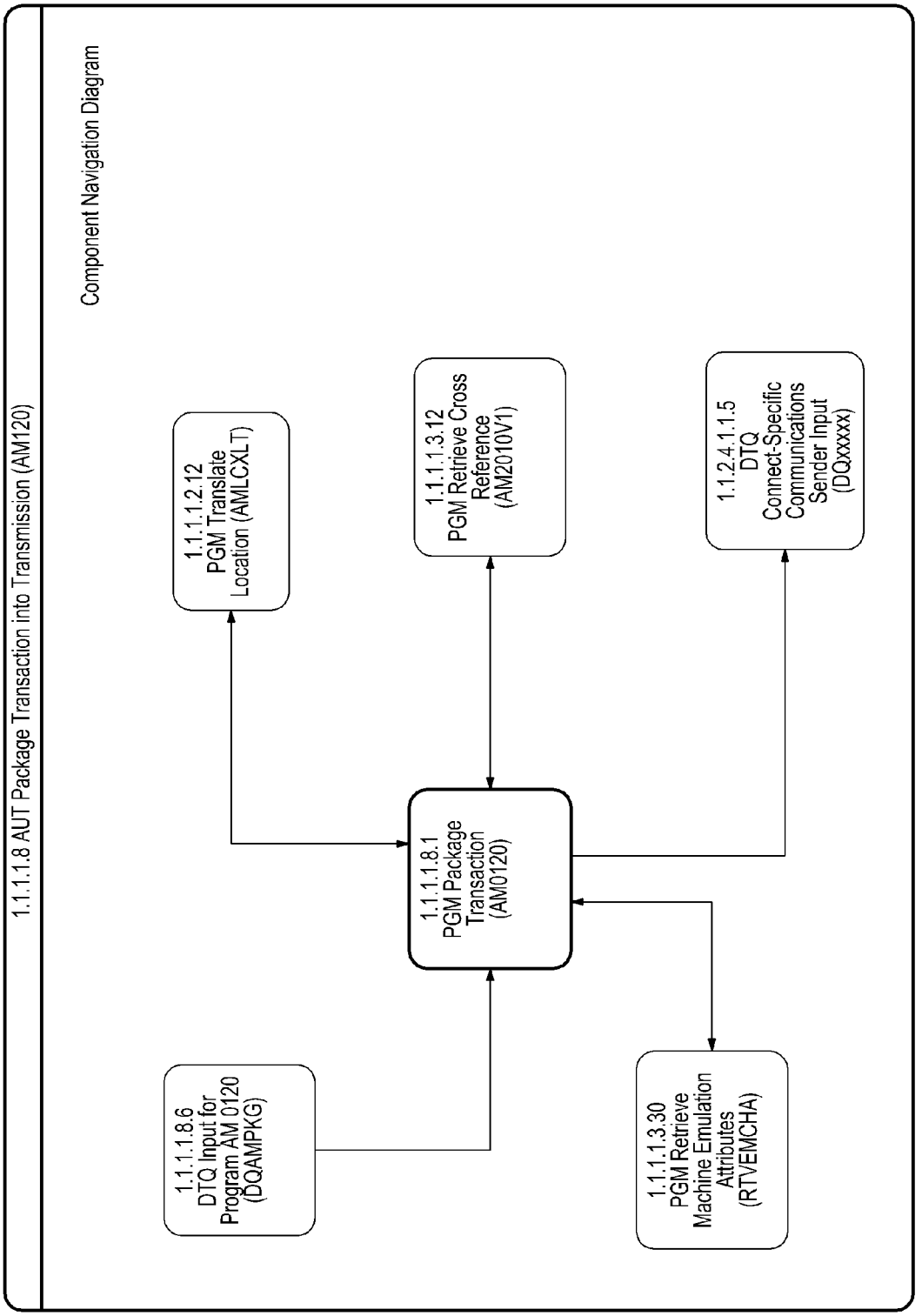

1.1.1.1.8 AUT Package Transaction into Transmission (AM120)
Component Navigation Diagram
1.1.1.1.8.6
DTQ Input for
Program AM 0120
(DQAMPKG)
1.1.1.1.2.12
PGM Translate
Location (AMLCXLT)
1.1.1.1.8.1
PGM Package
Transaction
(AM0120)
1.1.1.1.3.12
PGM Retrieve Cross
Reference
(AM2010V1)
1.1.1.1.3.30
PGM Retrieve
Machine Emulation
Attributes
(RTVEMCHA)
1.1.2.4.1.1.5
DTQ
Connect-Specific
Communications
Sender Input
(DQxxxxx)

FIG. 20

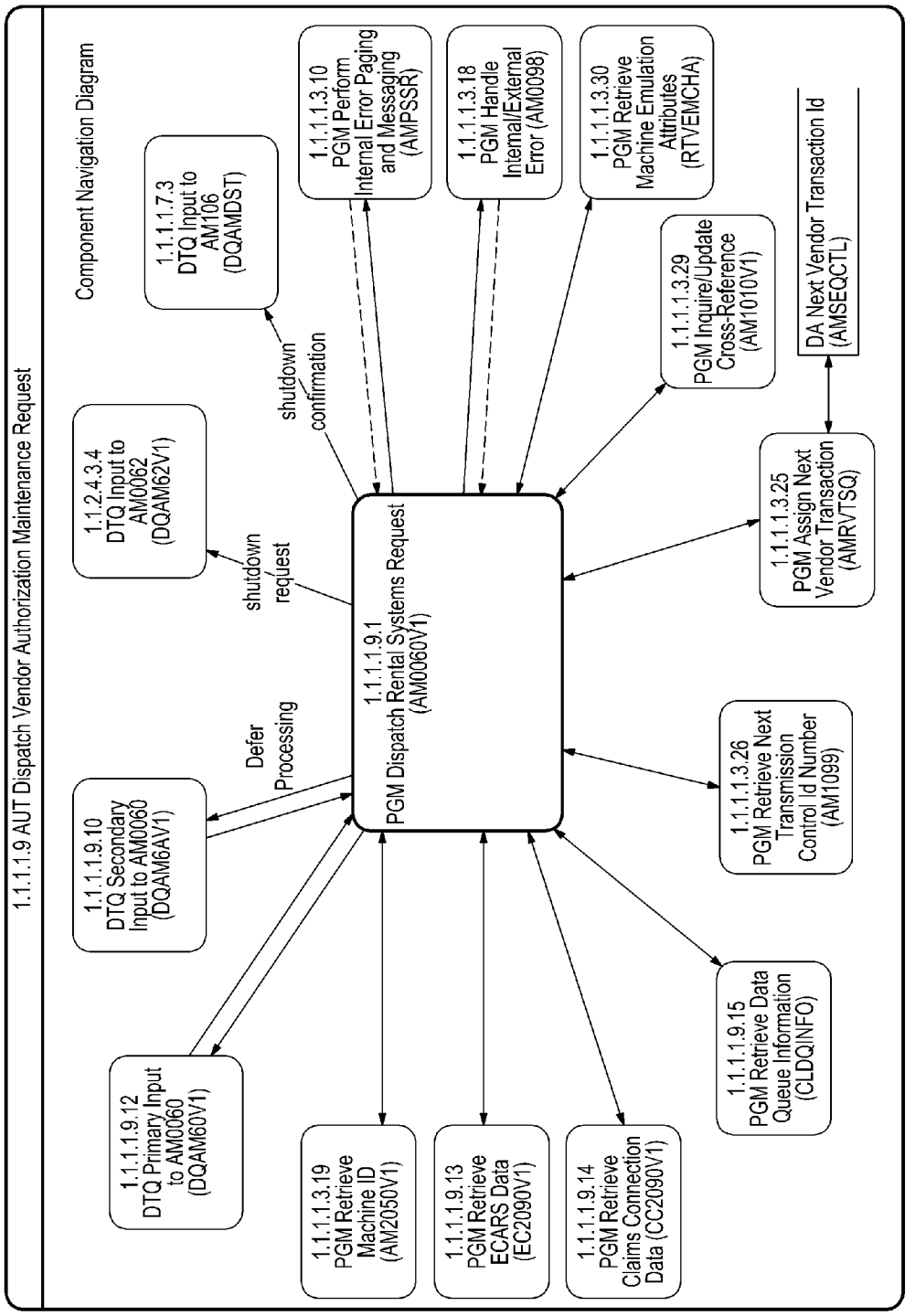

1.1.1.1.9 AUT Dispatch Vendor Authorization Maintenance Request
Component Navigation Diagram
1.1.1.1.9.1 PGM Dispatch Rental Systems Request (AM0060V1)
1.1.1.1.9.10 DTQ Secondary Input to AM0060 (DQAM6AV1)
1.1.1.1.9.12 DTQ Primary Input to AM0060 (DQAM60V1)
1.1.2.4.3.4 DTQ Input to AM0062 (DQAM62V1)
1.1.1.1.7.3 DTQ Input to AM106 (DQAMDST)
1.1.1.1.3.10 PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.3.18 PGM Handle Internal/External Error (AM0098)
1.1.1.1.3.30 PGM Retrieve Machine Emulation Attributes (RTVEMCHA)
1.1.1.1.3.29 PGM Inquire/Update Cross-Reference (AM1010V1)
1.1.1.1.3.25 PGM Assign Next Vendor Transaction (AMRVTSQ)
DA Next Vendor Transaction Id (AMSEQCTL)
1.1.1.1.3.26 PGM Retrieve Next Transmission Control Id Number (AM1099)
1.1.1.1.9.15 PGM Retrieve Data Queue Information (CLDQINFO)
1.1.1.1.9.14 PGM Retrieve Claims Connection Data (CC2090V1)
1.1.1.1.9.13 PGM Retrieve ECARS Data (EC2090V1)
1.1.1.1.3.19 PGM Retrieve Machine ID (AM2050V1)
Defer Processing
shutdown request
shutdown confirmation

FIG. 21

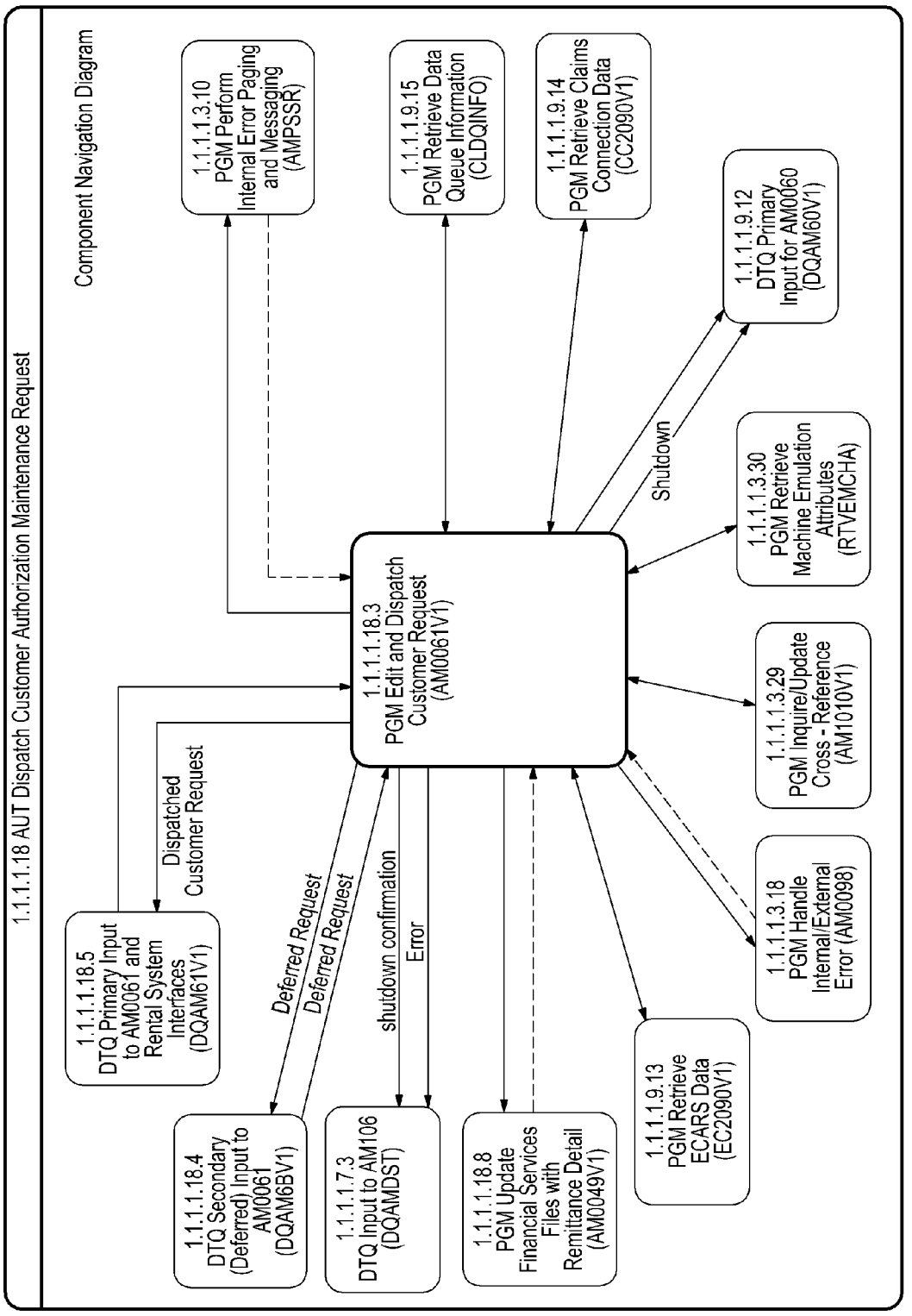

1.1.1.1.18 AUT Dispatch Customer Authorization Maintenance Request
Component Navigation Diagram
1.1.1.1.18.3 PGM Edit and Dispatch Customer Request (AM0061V1)
1.1.1.1.18.5 DTQ Primary Input to AM0061 and Rental System Interfaces (DQAM61V1)
Dispatched Customer Request
1.1.1.1.18.4 DTQ Secondary (Deferred) Input to AM0061 (DQAM6BV1)
Deferred Request
Deferred Request
1.1.1.1.7.3 DTQ Input to AM106 (DQAMDST)
shutdown confirmation
Error
1.1.1.1.18.8 PGM Update Financial Services Files with Remittance Detail (AM0049V1)
1.1.1.1.9.13 PGM Retrieve ECARS Data (EC2090V1)
1.1.1.1.3.18 PGM Handle Internal/External Error (AM0098)
1.1.1.1.3.29 PGM Inquire/Update Cross - Reference (AM1010V1)
1.1.1.1.3.30 PGM Retrieve Machine Emulation Attributes (RTVEMCHA)
Shutdown
1.1.1.1.9.12 DTQ Primary Input for AM0060 (DQAM60V1)
1.1.1.1.9.14 PGM Retrieve Claims Connection Data (CC2090V1)
1.1.1.1.9.15 PGM Retrieve Data Queue Information (CLDQINFO)
1.1.1.1.3.10 PGM Perform Internal Error Paging and Messaging (AMPSSR)

FIG. 22

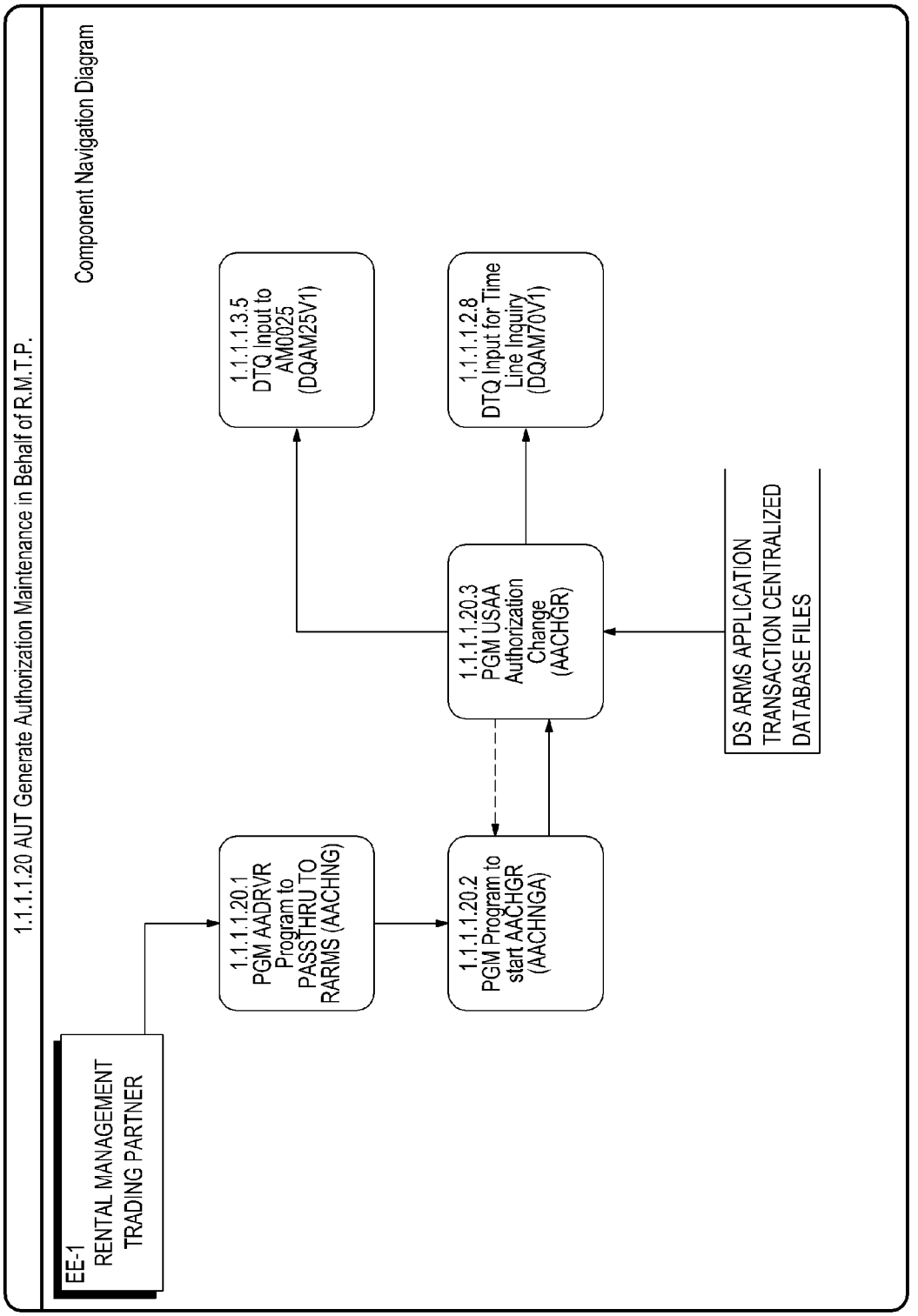

1.1.1.1.20 AUT Generate Authorization Maintenance in Behalf of R.M.T.P.
Component Navigation Diagram
EE-1
RENTAL MANAGEMENT
TRADING PARTNER
1.1.1.1.20.1
PGM AADRVR
Program to
PASSTHRU TO
RARMS (AACHNG)
1.1.1.1.20.2
PGM Program to
start AACHGR
(AACHNGA)
1.1.1.1.20.3
PGM USAA
Authorization
Change
(AACHGR)
1.1.1.1.3.5
DTQ Input to
AM0025
(DQAM25V1)
1.1.1.1.2.8
DTQ Input for Time
Line Inquiry
(DQAM70V1)
DS ARMS APPLICATION
TRANSACTION CENTRALIZED
DATABASE FILES

FIG. 23

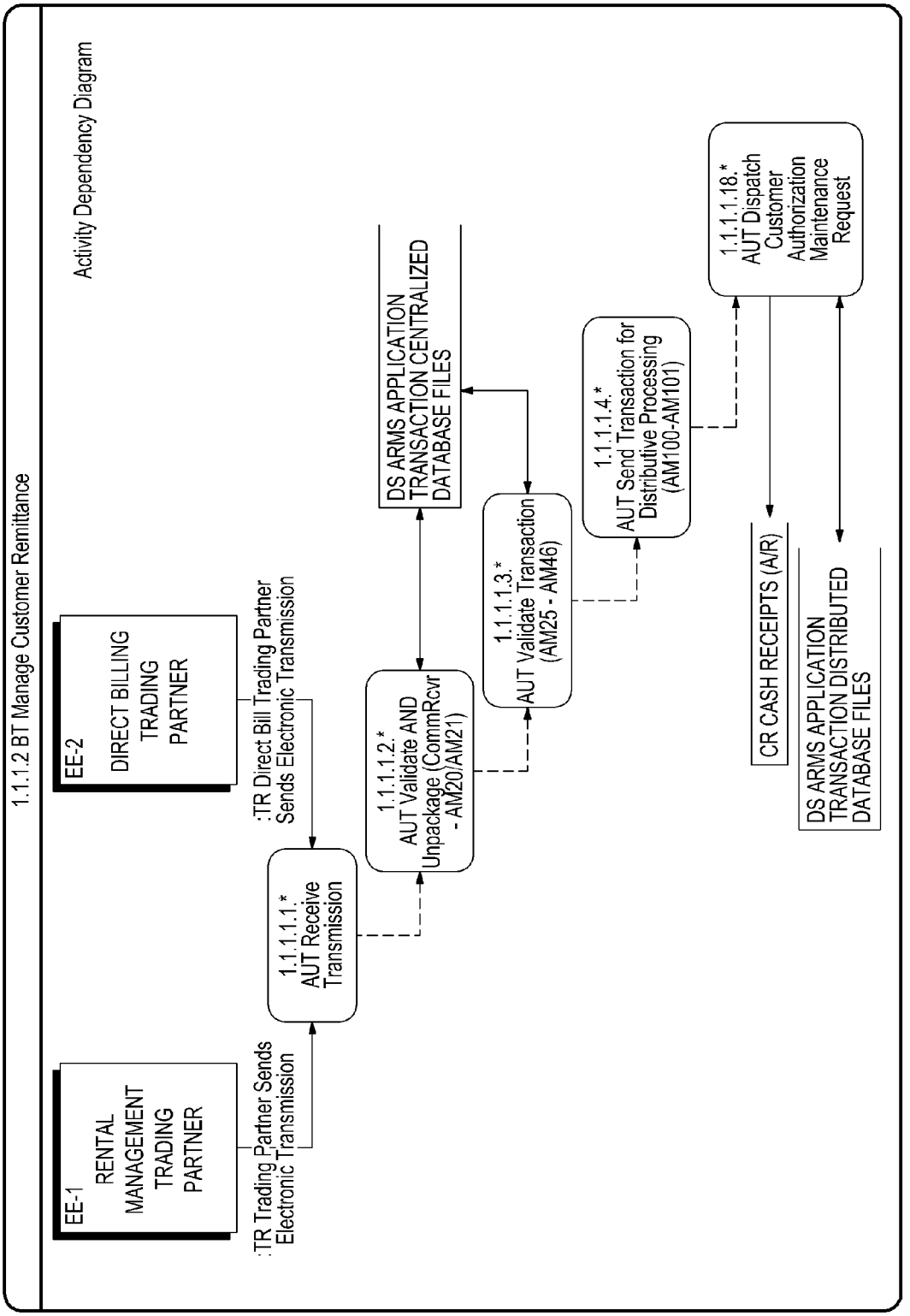

1.1.1.2 BT Manage Customer Remittance
Activity Dependency Diagram
EE-1
RENTAL MANAGEMENT TRADING PARTNER
EE-2
DIRECT BILLING TRADING PARTNER
:TR Trading Partner Sends Electronic Transmission
:TR Direct Bill Trading Partner Sends Electronic Transmission
1.1.1.1.1.* AUT Receive Transmission
1.1.1.1.2.* AUT Validate AND Unpackage (CommRcvr - AM20/AM21)
DS ARMS APPLICATION TRANSACTION CENTRALIZED DATABASE FILES
1.1.1.1.3.* AUT Validate Transaction (AM25 - AM46)
1.1.1.1.4.* AUT Send Transaction for Distributive Processing (AM100-AM101)
1.1.1.1.18.* AUT Dispatch Customer Authorization Maintenance Request
CR CASH RECEIPTS (A/R)
DS ARMS APPLICATION TRANSACTION DISTRIBUTED DATABASE FILES

FIG. 24

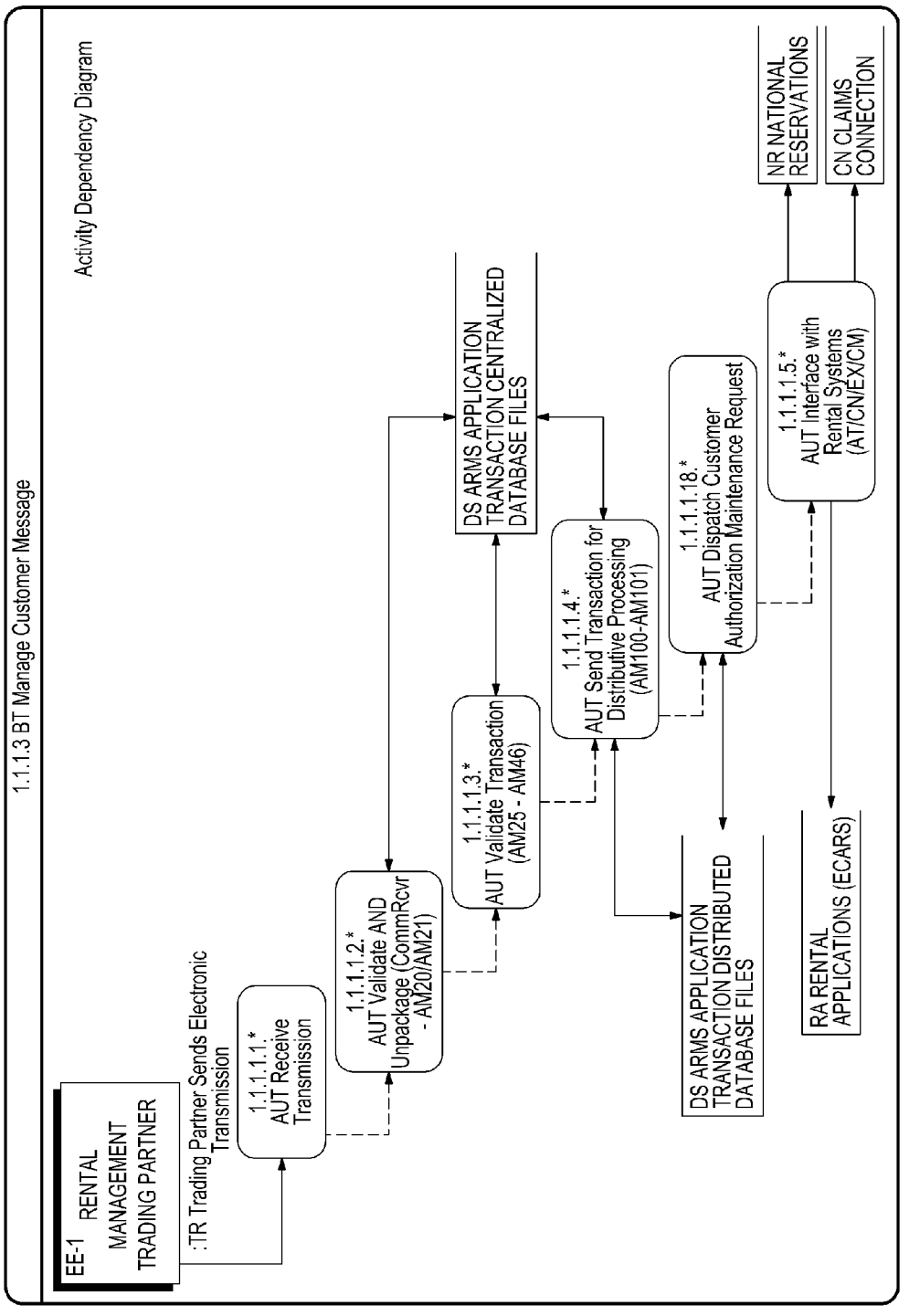

1.1.1.3 BT Manage Customer Message
Activity Dependency Diagram
EE-1 RENTAL MANAGEMENT TRADING PARTNER
:TR Trading Partner Sends Electronic Transmission
1.1.1.1.1.* AUT Receive Transmission
1.1.1.1.2.* AUT Validate AND Unpackage (CommRcvr - AM20/AM21)
1.1.1.1.3.* AUT Validate Transaction (AM25 - AM46)
1.1.1.1.4.* AUT Send Transaction for Distributive Processing (AM100-AM101)
1.1.1.1.18.* AUT Dispatch Customer Authorization Maintenance Request
1.1.1.1.5.* AUT Interface with Rental Systems (AT/CN/EX/CM)
DS ARMS APPLICATION TRANSACTION CENTRALIZED DATABASE FILES
DS ARMS APPLICATION TRANSACTION DISTRIBUTED DATABASE FILES
RA RENTAL APPLICATIONS (ECARS)
NR NATIONAL RESERVATIONS
CN CLAIMS CONNECTION

FIG. 25

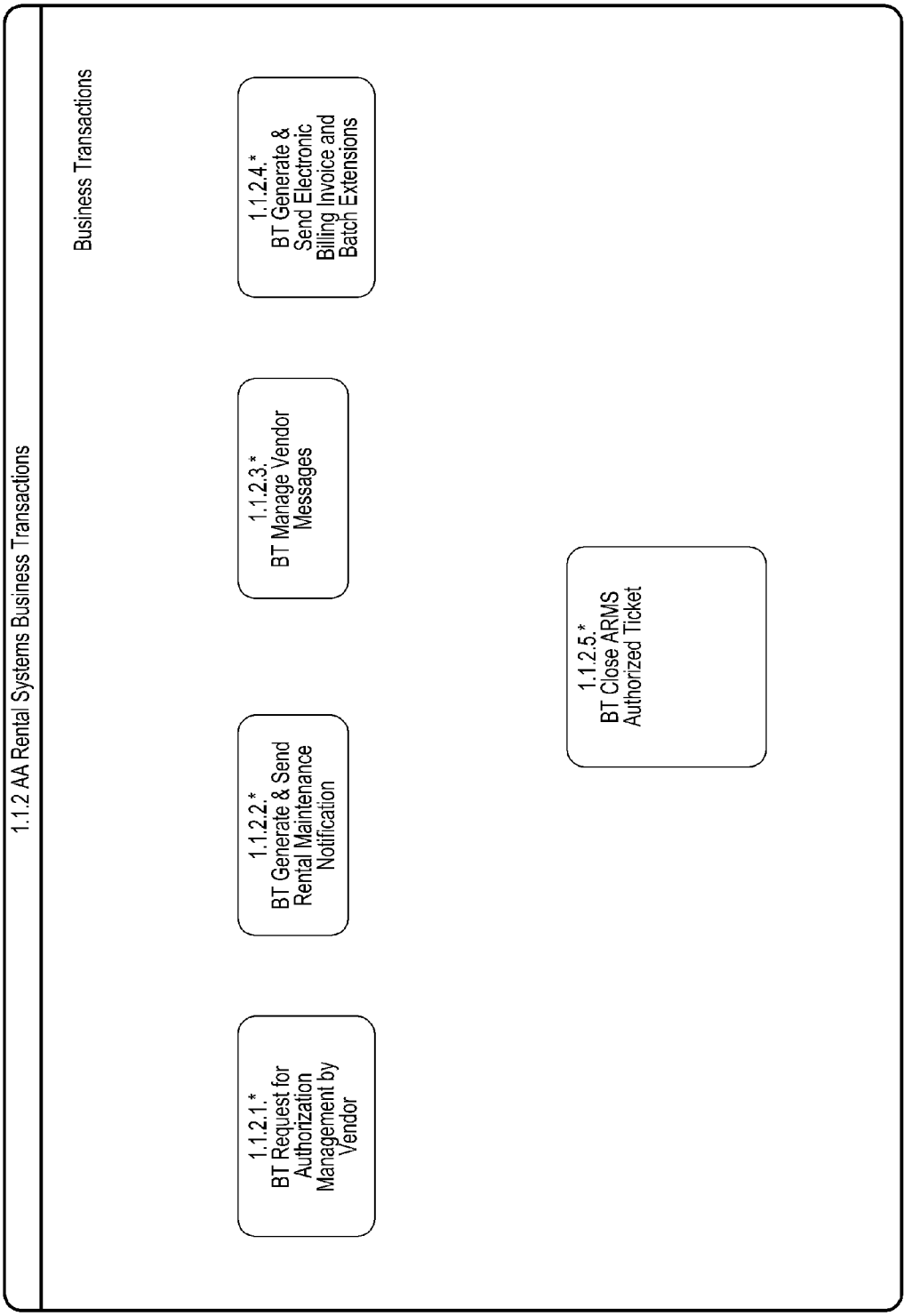

1.1.2 AA Rental Systems Business Transactions
Business Transactions
1.1.2.1.*
BT Request for Authorization Management by Vendor
1.1.2.2.*
BT Generate & Send Rental Maintenance Notification
1.1.2.3.*
BT Manage Vendor Messages
1.1.2.4.*
BT Generate & Send Electronic Billing Invoice and Batch Extensions
1.1.2.5.*
BT Close ARMS Authorized Ticket

FIG. 26

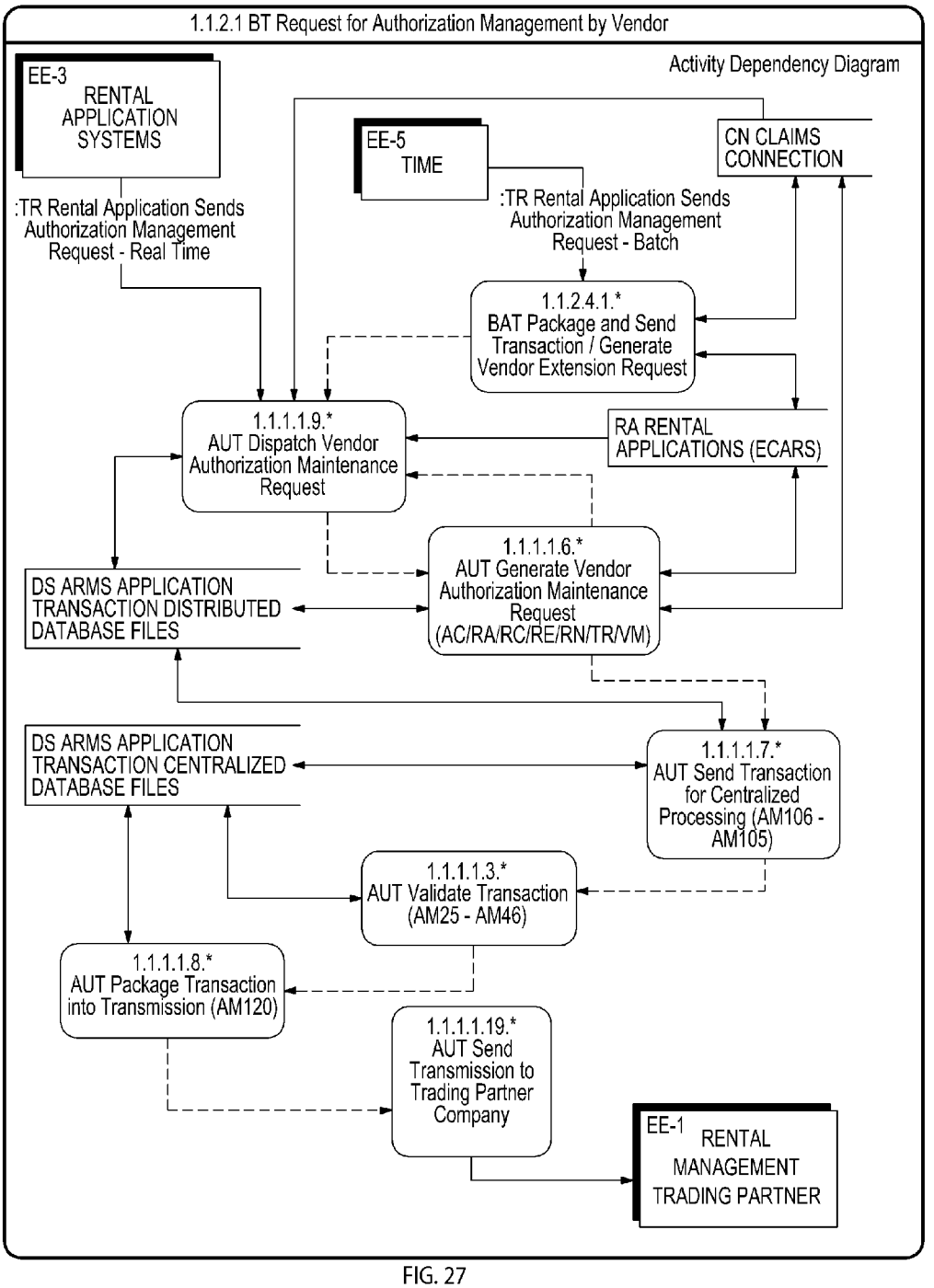

1.1.2.1 BT Request for Authorization Management by Vendor
Activity Dependency Diagram
EE-3
RENTAL APPLICATION SYSTEMS
EE-5
TIME
CN CLAIMS CONNECTION
:TR Rental Application Sends Authorization Management Request - Real Time
:TR Rental Application Sends Authorization Management Request - Batch
1.1.2.4.1.*
BAT Package and Send Transaction / Generate Vendor Extension Request
1.1.1.1.9.*
AUT Dispatch Vendor Authorization Maintenance Request
RA RENTAL APPLICATIONS (ECARS)
1.1.1.1.6.*
AUT Generate Vendor Authorization Maintenance Request (AC/RA/RC/RE/RN/TR/VM)
DS ARMS APPLICATION TRANSACTION DISTRIBUTED DATABASE FILES
DS ARMS APPLICATION TRANSACTION CENTRALIZED DATABASE FILES
1.1.1.1.7.*
AUT Send Transaction for Centralized Processing (AM106 - AM105)
1.1.1.1.3.*
AUT Validate Transaction (AM25 - AM46)
1.1.1.1.8.*
AUT Package Transaction into Transmission (AM120)
1.1.1.1.19.*
AUT Send Transmission to Trading Partner Company
EE-1
RENTAL MANAGEMENT TRADING PARTNER

FIG. 27

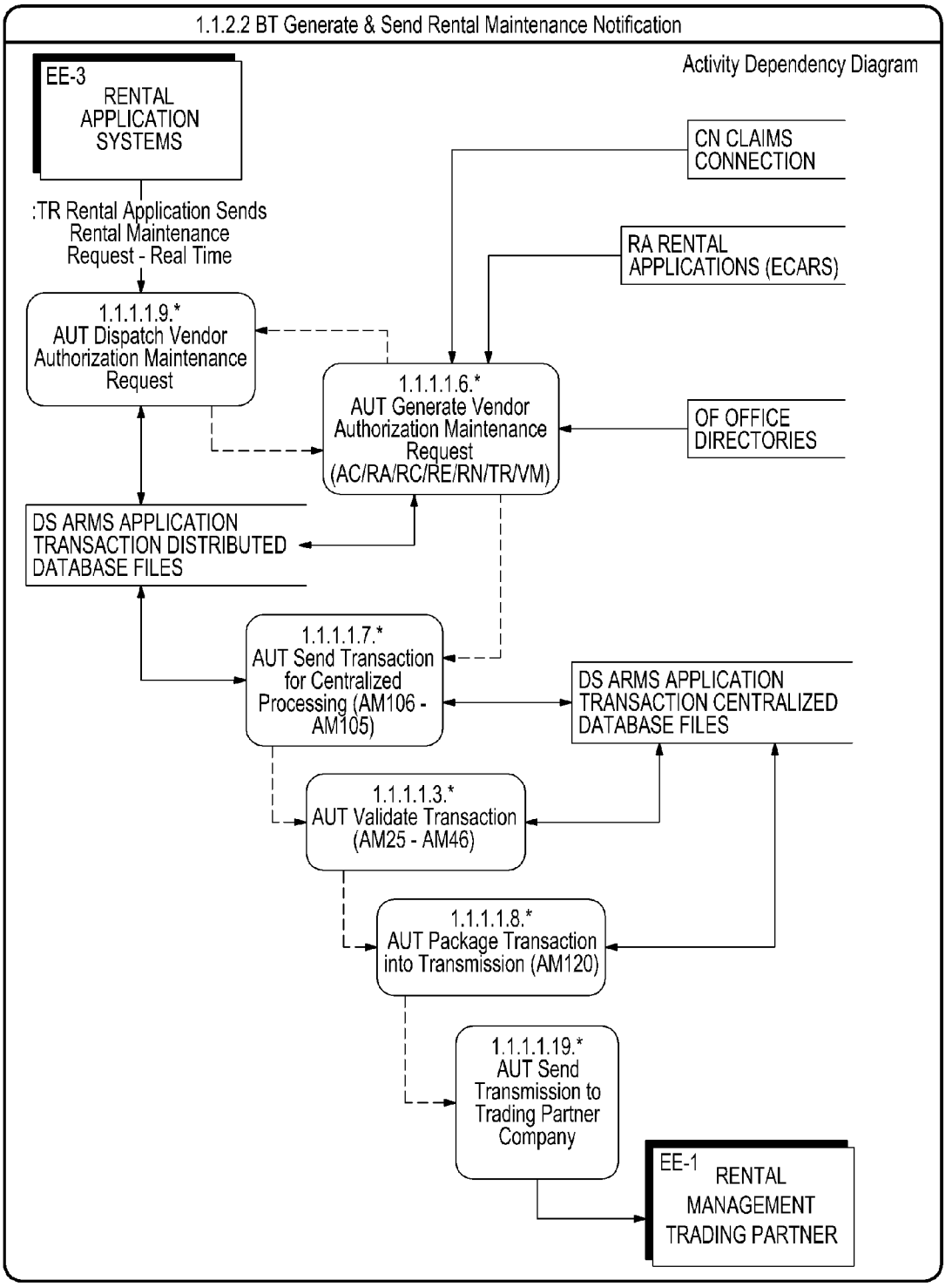

1.1.2.2 BT Generate & Send Rental Maintenance Notification
Activity Dependency Diagram
EE-3
RENTAL APPLICATION SYSTEMS
:TR Rental Application Sends Rental Maintenance Request - Real Time
CN CLAIMS CONNECTION
RA RENTAL APPLICATIONS (ECARS)
OF OFFICE DIRECTORIES
1.1.1.1.9.* AUT Dispatch Vendor Authorization Maintenance Request
1.1.1.1.6.* AUT Generate Vendor Authorization Maintenance Request (AC/RA/RC/RE/RN/TR/VM)
DS ARMS APPLICATION TRANSACTION DISTRIBUTED DATABASE FILES
1.1.1.1.7.* AUT Send Transaction for Centralized Processing (AM106 - AM105)
DS ARMS APPLICATION TRANSACTION CENTRALIZED DATABASE FILES
1.1.1.1.3.* AUT Validate Transaction (AM25 - AM46)
1.1.1.1.8.* AUT Package Transaction into Transmission (AM120)
1.1.1.1.19.* AUT Send Transmission to Trading Partner Company
EE-1
RENTAL MANAGEMENT TRADING PARTNER

FIG. 28

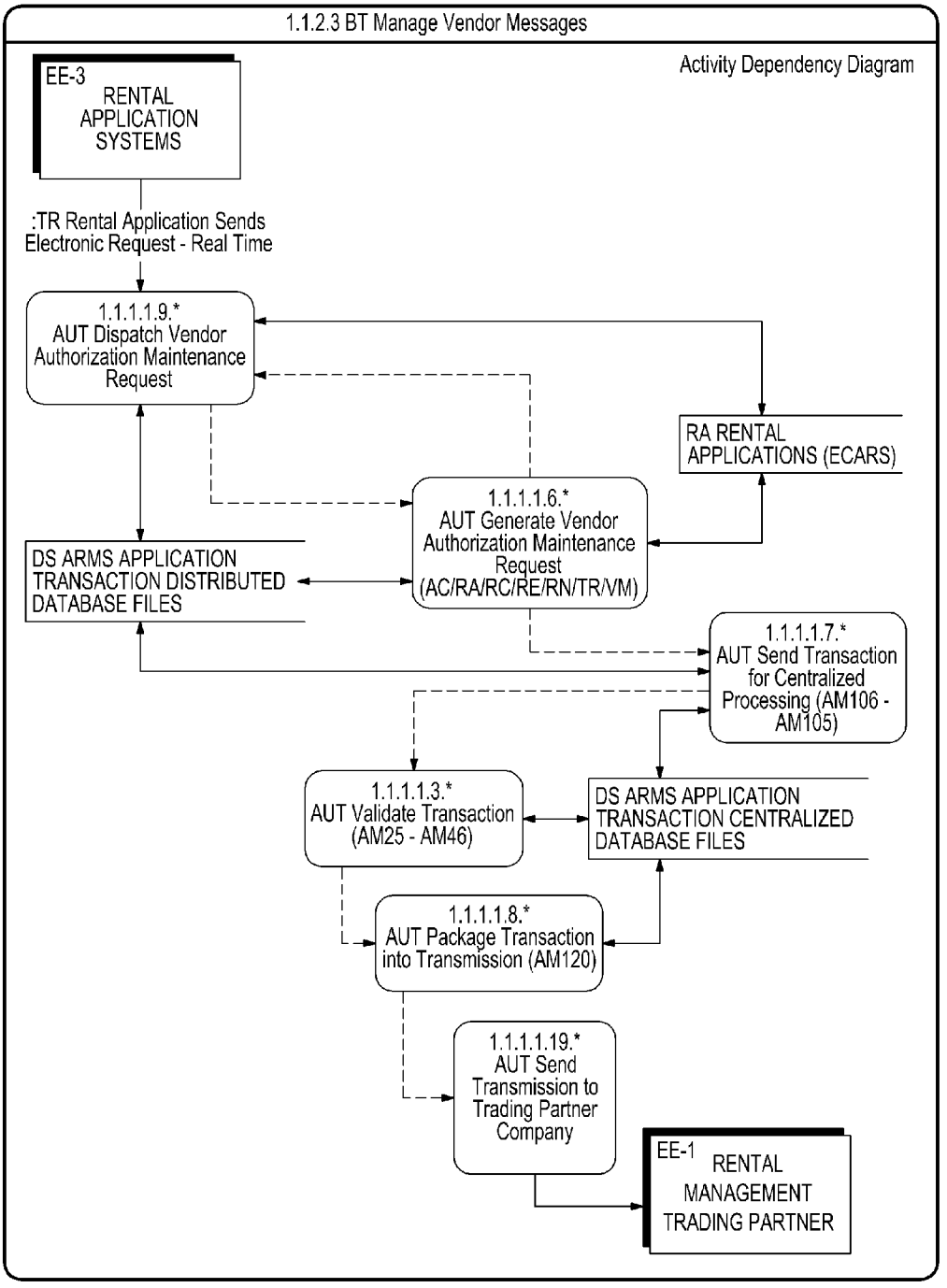

1.1.2.3 BT Manage Vendor Messages
Activity Dependency Diagram
EE-3
RENTAL APPLICATION SYSTEMS
:TR Rental Application Sends Electronic Request - Real Time
1.1.1.1.9.* AUT Dispatch Vendor Authorization Maintenance Request
RA RENTAL APPLICATIONS (ECARS)
1.1.1.1.6.* AUT Generate Vendor Authorization Maintenance Request (AC/RA/RC/RE/RN/TR/VM)
DS ARMS APPLICATION TRANSACTION DISTRIBUTED DATABASE FILES
1.1.1.1.7.* AUT Send Transaction for Centralized Processing (AM106 - AM105)
1.1.1.1.3.* AUT Validate Transaction (AM25 - AM46)
DS ARMS APPLICATION TRANSACTION CENTRALIZED DATABASE FILES
1.1.1.1.8.* AUT Package Transaction into Transmission (AM120)
1.1.1.1.19.* AUT Send Transmission to Trading Partner Company
EE-1
RENTAL MANAGEMENT TRADING PARTNER

FIG. 29

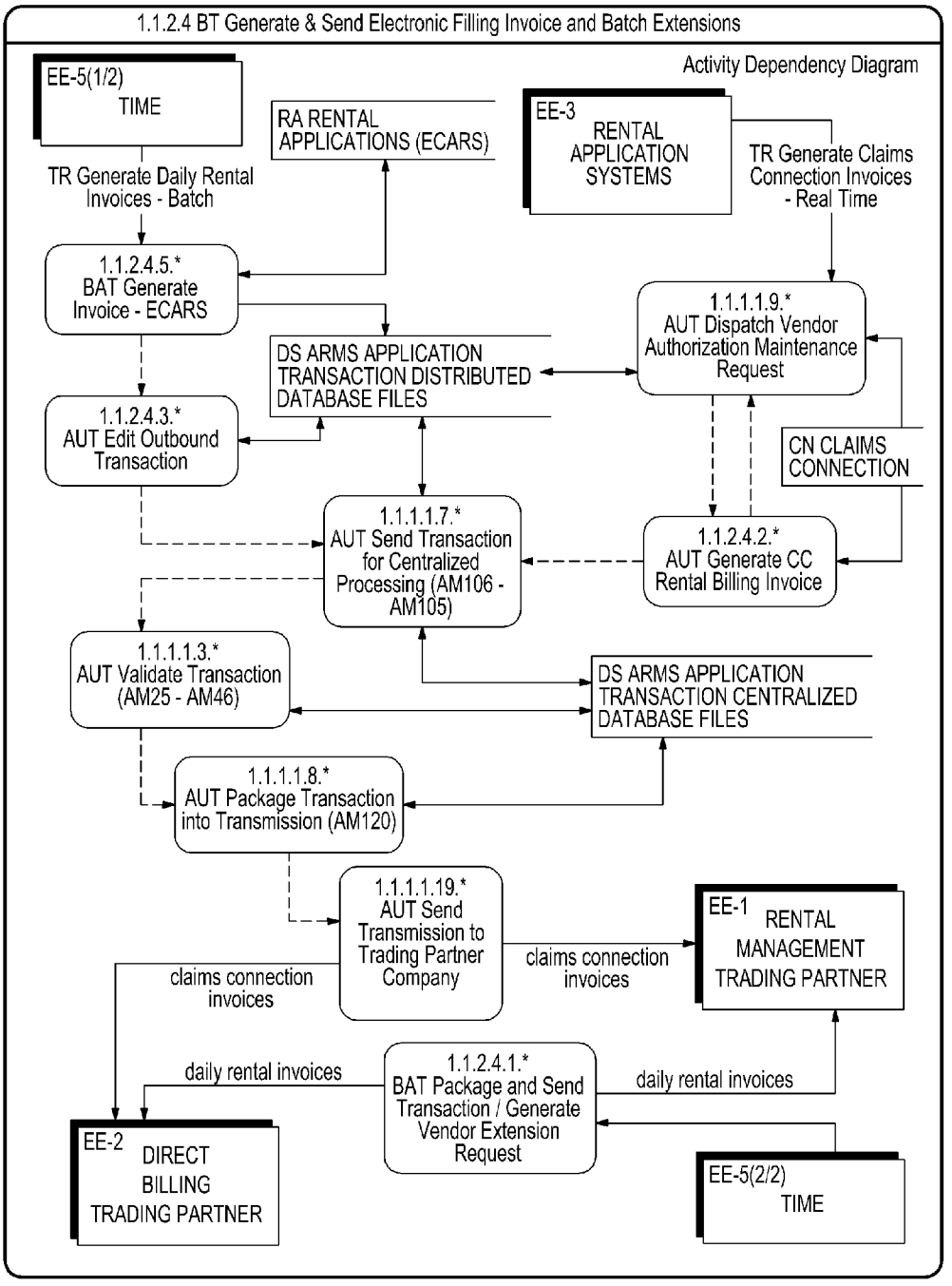

1.1.2.4 BT Generate & Send Electronic Filling Invoice and Batch Extensions
Activity Dependency Diagram
EE-5(1/2) TIME
RA RENTAL APPLICATIONS (ECARS)
EE-3 RENTAL APPLICATION SYSTEMS
TR Generate Daily Rental Invoices - Batch
TR Generate Claims Connection Invoices - Real Time
1.1.2.4.5.* BAT Generate Invoice - ECARS
1.1.1.1.9.* AUT Dispatch Vendor Authorization Maintenance Request
DS ARMS APPLICATION TRANSACTION DISTRIBUTED DATABASE FILES
1.1.2.4.3.* AUT Edit Outbound Transaction
CN CLAIMS CONNECTION
1.1.1.1.7.* AUT Send Transaction for Centralized Processing (AM106 - AM105)
1.1.2.4.2.* AUT Generate CC Rental Billing Invoice
1.1.1.1.3.* AUT Validate Transaction (AM25 - AM46)
DS ARMS APPLICATION TRANSACTION CENTRALIZED DATABASE FILES
1.1.1.1.8.* AUT Package Transaction into Transmission (AM120)
1.1.1.1.19.* AUT Send Transmission to Trading Partner Company
EE-1 RENTAL MANAGEMENT TRADING PARTNER
claims connection invoices
claims connection invoices
daily rental invoices
1.1.2.4.1.* BAT Package and Send Transaction / Generate Vendor Extension Request
daily rental invoices
EE-2 DIRECT BILLING TRADING PARTNER
EE-5(2/2) TIME

FIG. 30

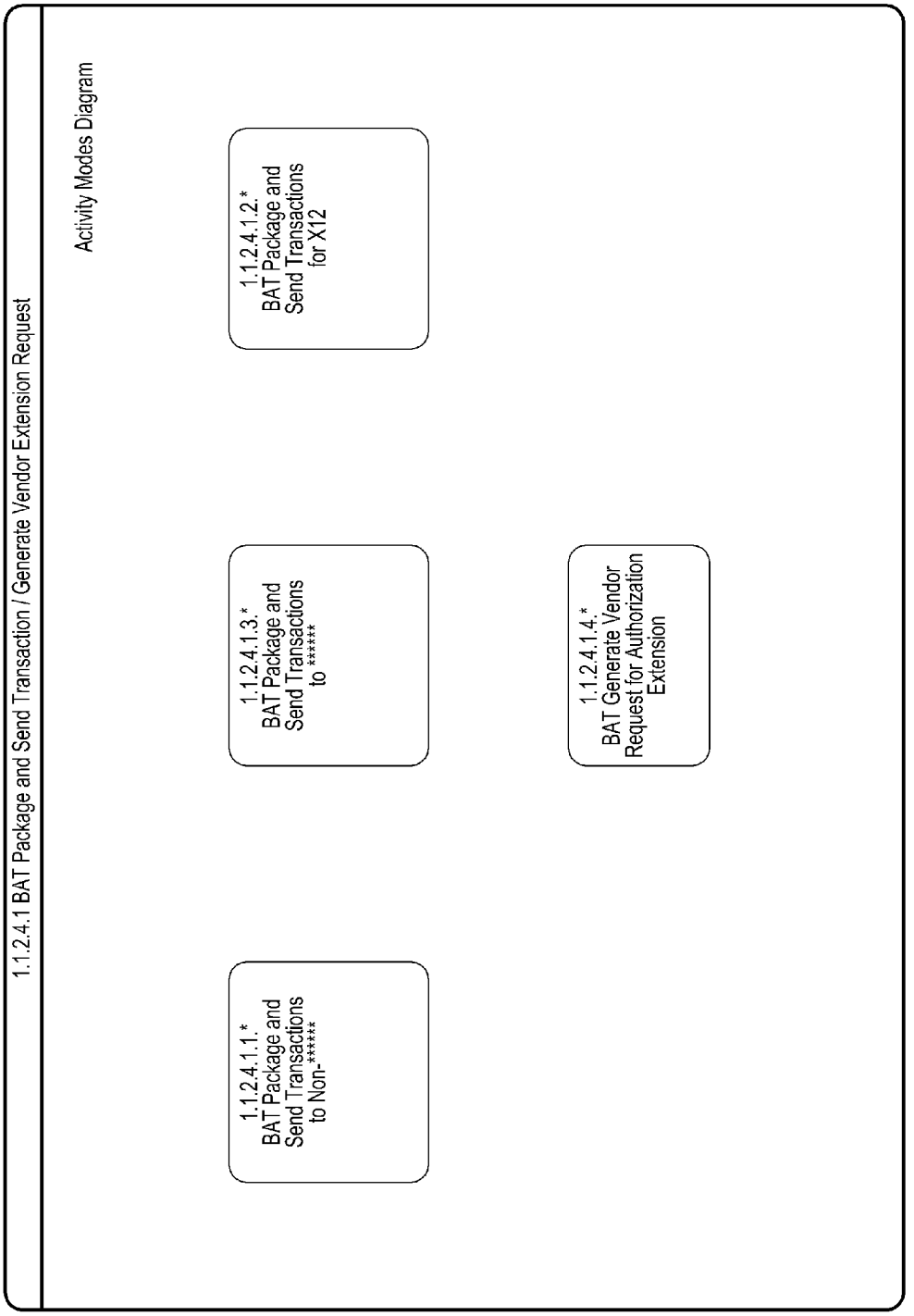

1.1.2.4.1 BAT Package and Send Transaction / Generate Vendor Extension Request
Activity Modes Diagram
1.1.2.4.1.1.* BAT Package and Send Transactions to Non-******
1.1.2.4.1.2.* BAT Package and Send Transactions for X12
1.1.2.4.1.3.* BAT Package and Send Transactions to ******
1.1.2.4.1.4.* BAT Generate Vendor Request for Authorization Extension

FIG. 31

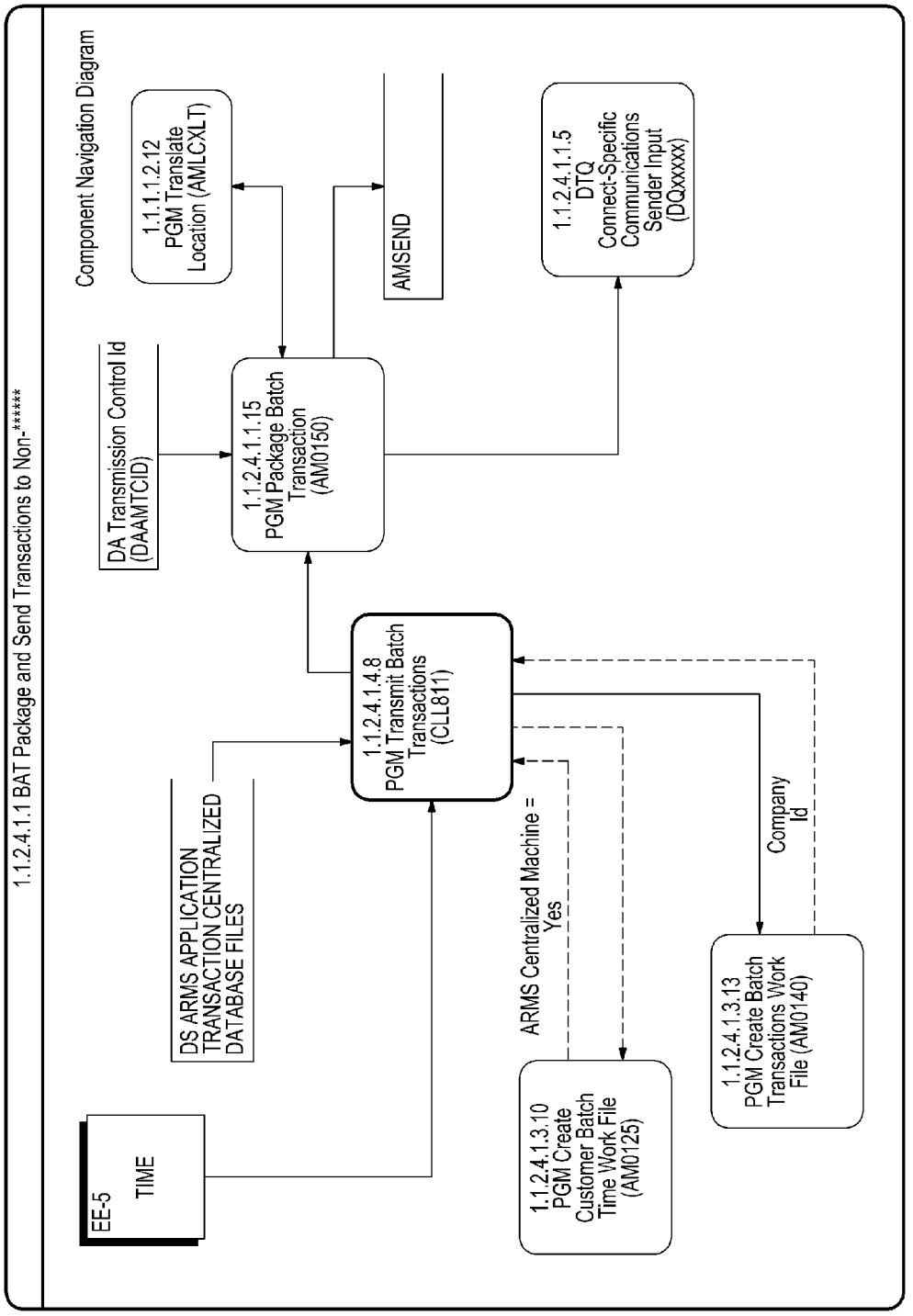

1.1.2.4.1.1 BAT Package and Send Transactions to Non-******
Component Navigation Diagram
1.1.1.1.2.12
PGM Translate
Location (AMLCXLT)
AMSEND
1.1.2.4.1.1.5
DTQ
Connect-Specific
Communications
Sender Input
(DQxxxxx)
DA Transmission Control Id
(DAAMTCID)
1.1.2.4.1.1.15
PGM Package Batch
Transaction
(AM0150)
1.1.2.4.1.4.8
PGM Transmit Batch
Transactions
(CLL811)
DS ARMS APPLICATION
TRANSACTION CENTRALIZED
DATABASE FILES
EE-5
TIME
ARMS Centralized Machine =
Yes
Company
Id
1.1.2.4.1.3.10
PGM Create
Customer Batch
Time Work File
(AM0125)
1.1.2.4.1.3.13
PGM Create Batch
Transactions Work
File (AM0140)

FIG. 32

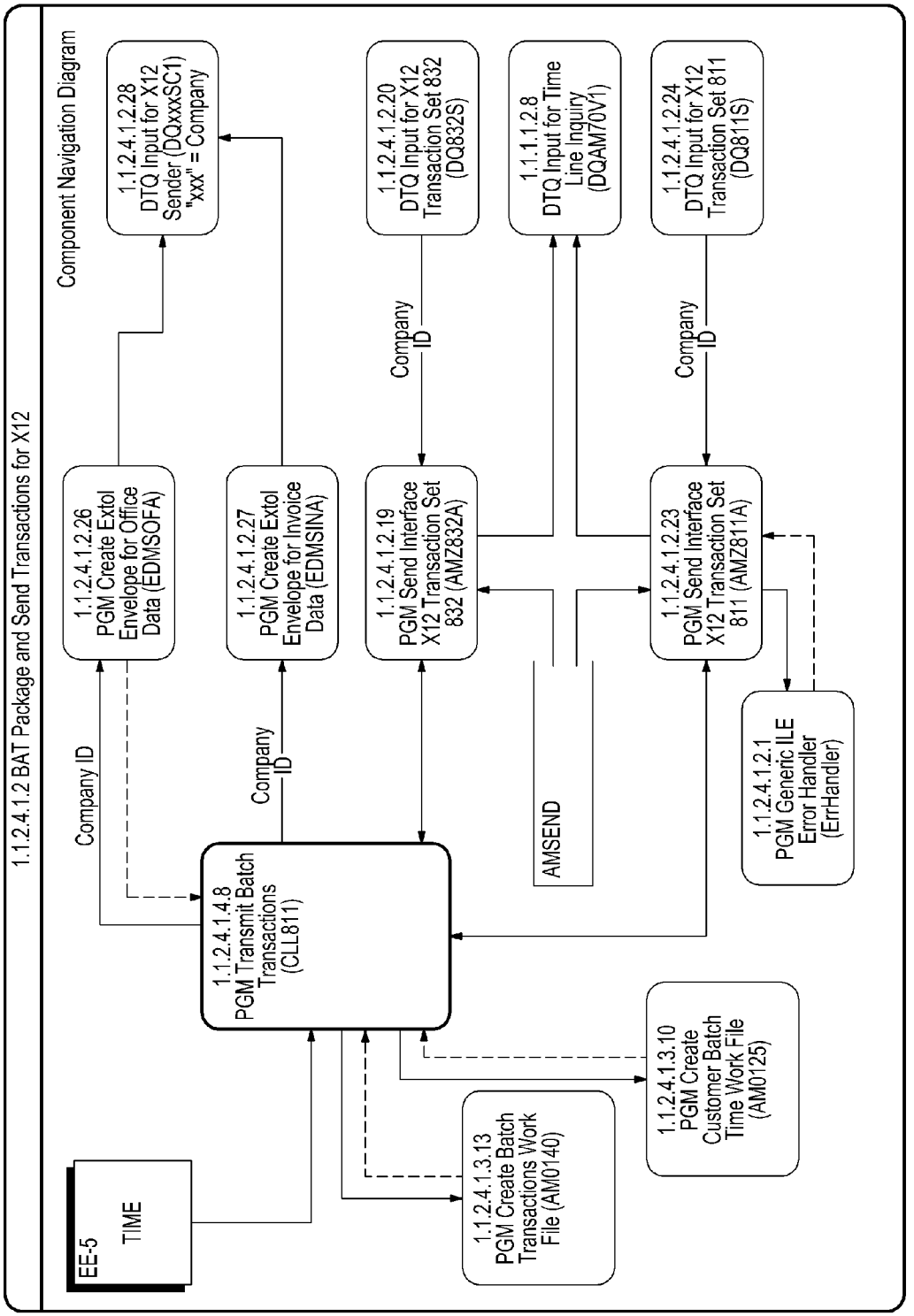

1.1.2.4.1.2 BAT Package and Send Transactions for X12
Component Navigation Diagram
EE-5
TIME
1.1.2.4.1.2.28
DTQ Input for X12
Sender (DQxxxSC1)
"xxx" = Company
1.1.2.4.1.2.26
PGM Create Extol
Envelope for Office
Data (EDMSOFA)
1.1.2.4.1.2.27
PGM Create Extol
Envelope for Invoice
Data (EDMSINA)
1.1.2.4.1.2.20
DTQ Input for X12
Transaction Set 832
(DQ832S)
1.1.1.1.2.8
DTQ Input for Time
Line Inquiry
(DQAM70V1)
1.1.2.4.1.2.24
DTQ Input for X12
Transaction Set 811
(DQ811S)
Company ID
Company ID
Company ID
1.1.2.4.1.2.19
PGM Send Interface
X12 Transaction Set
832 (AMZ832A)
1.1.2.4.1.2.23
PGM Send Interface
X12 Transaction Set
811 (AMZ811A)
AMSEND
1.1.2.4.1.4.8
PGM Transmit Batch
Transactions
(CLL811)
1.1.2.4.1.2.1
PGM Generic ILE
Error Handler
(ErrHandler)
1.1.2.4.1.3.13
PGM Create Batch
Transactions Work
File (AM0140)
1.1.2.4.1.3.10
PGM Create
Customer Batch
Time Work File
(AM0125)

FIG. 33

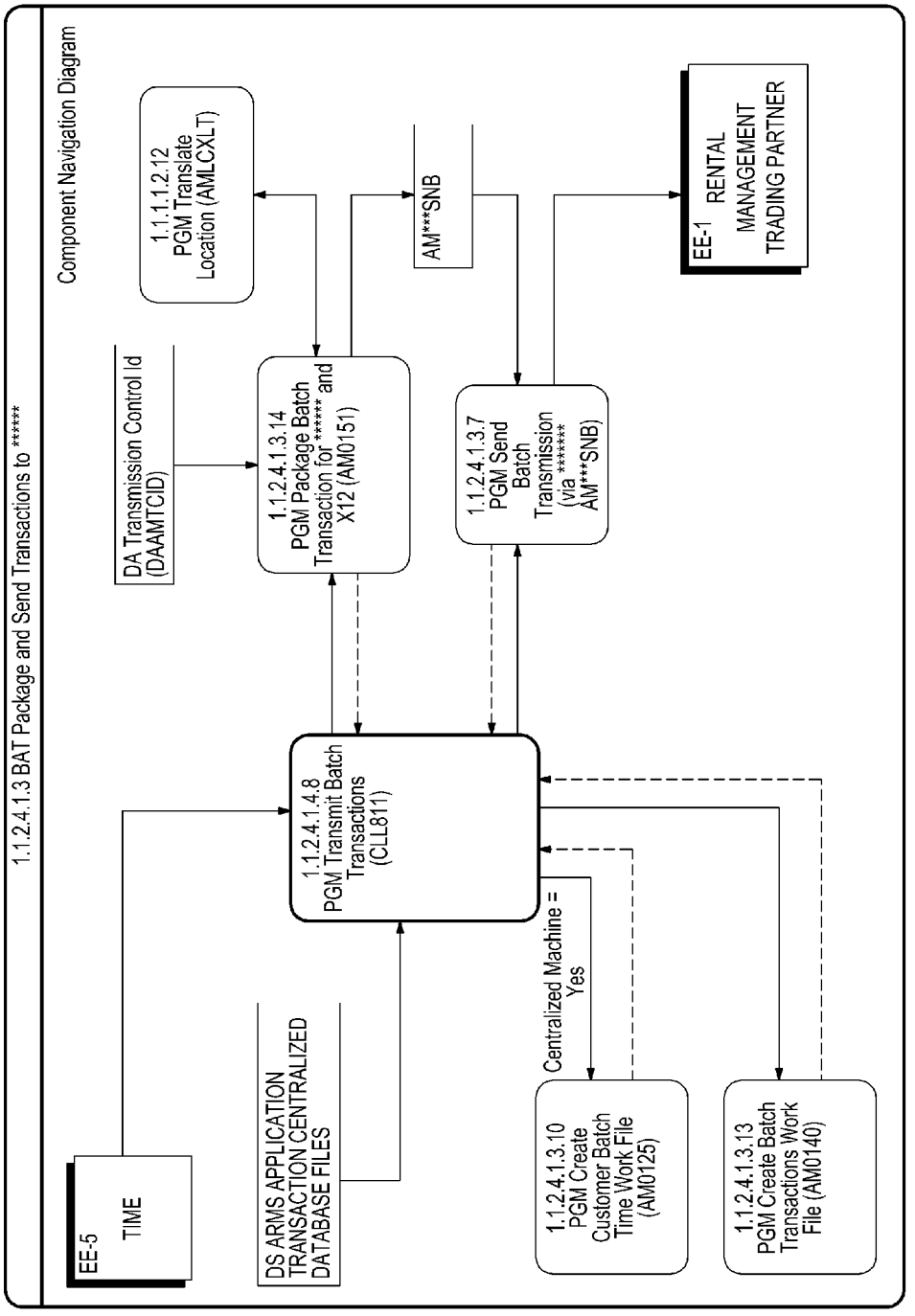

1.1.2.4.1.3 BAT Package and Send Transactions to ******
Component Navigation Diagram
EE-5
TIME
DS ARMS APPLICATION
TRANSACTION CENTRALIZED
DATABASE FILES
DA Transmission Control Id
(DAAMTCID)
1.1.1.1.2.12
PGM Translate
Location (AMLCXLT)
1.1.2.4.1.3.14
PGM Package Batch
Transaction for ****** and
X12 (AM0151)
1.1.2.4.1.4.8
PGM Transmit Batch
Transactions
(CLL811)
1.1.2.4.1.3.7
PGM Send
Batch
Transmission
(via *******
AM***SNB)
AM***SNB
EE-1 RENTAL
MANAGEMENT
TRADING PARTNER
Centralized Machine =
Yes
1.1.2.4.1.3.10
PGM Create
Customer Batch
Time Work File
(AM0125)
1.1.2.4.1.3.13
PGM Create Batch
Transactions Work
File (AM0140)

FIG. 34

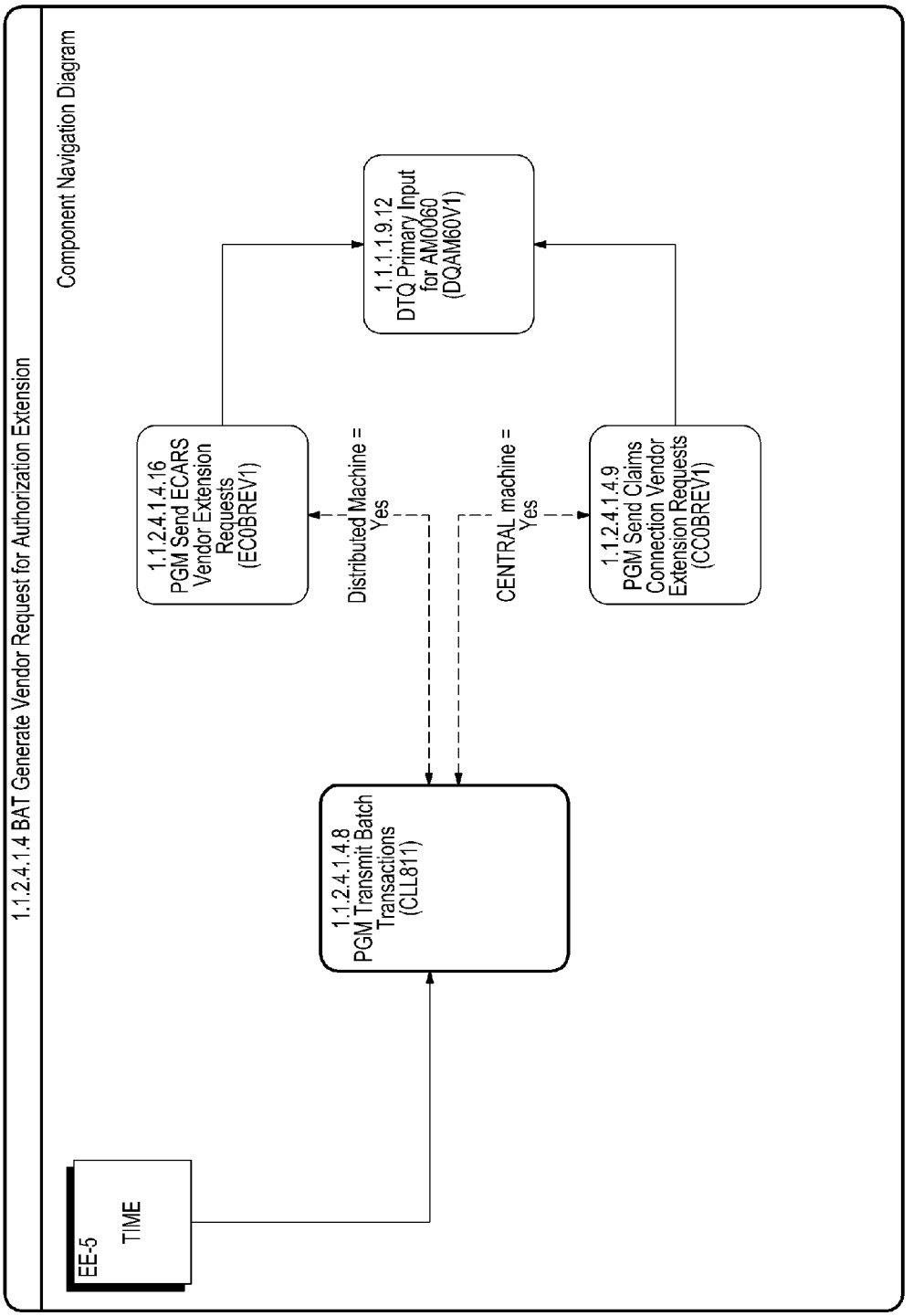

1.1.2.4.1.4 BAT Generate Vendor Request for Authorization Extension
Component Navigation Diagram
EE-5
TIME
1.1.2.4.1.4.8
PGM Transmit Batch
Transactions
(CLL811)
1.1.2.4.1.4.16
PGM Send ECARS
Vendor Extension
Requests
(EC0BREV1)
Distributed Machine =
Yes
CENTRAL machine =
Yes
1.1.2.4.1.4.9
PGM Send Claims
Connection Vendor
Extension Requests
(CC0BREV1)
1.1.1.1.9.12
DTQ Primary Input
for AM0060
(DQAM60V1)

FIG. 35

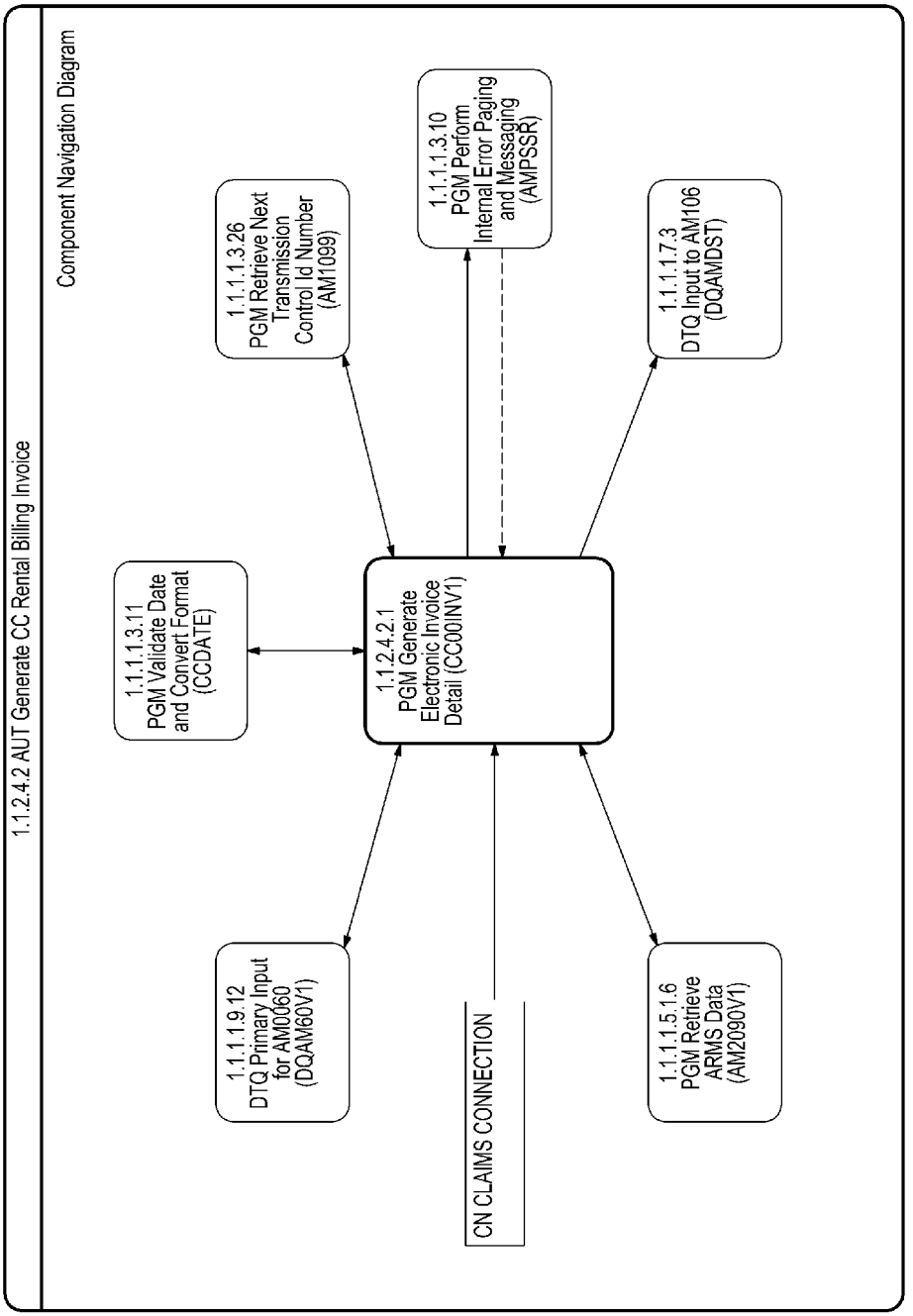

1.1.2.4.2 AUT Generate CC Rental Billing Invoice
Component Navigation Diagram
1.1.1.1.3.26 PGM Retrieve Next Transmission Control Id Number (AM1099)
1.1.1.1.3.10 PGM Perform Internal Error Paging and Messaging (AMPSSR)
1.1.1.1.7.3 DTQ Input to AM106 (DQAMDST)
1.1.1.1.3.11 PGM Validate Date and Convert Format (CCDATE)
1.1.2.4.2.1 PGM Generate Electronic Invoice Detail (CC00INV1)
1.1.1.1.9.12 DTQ Primary Input for AM0060 (DQAM60V1)
CN CLAIMS CONNECTION
1.1.1.1.5.1.6 PGM Retrieve ARMS Data (AM2090V1)

FIG. 36

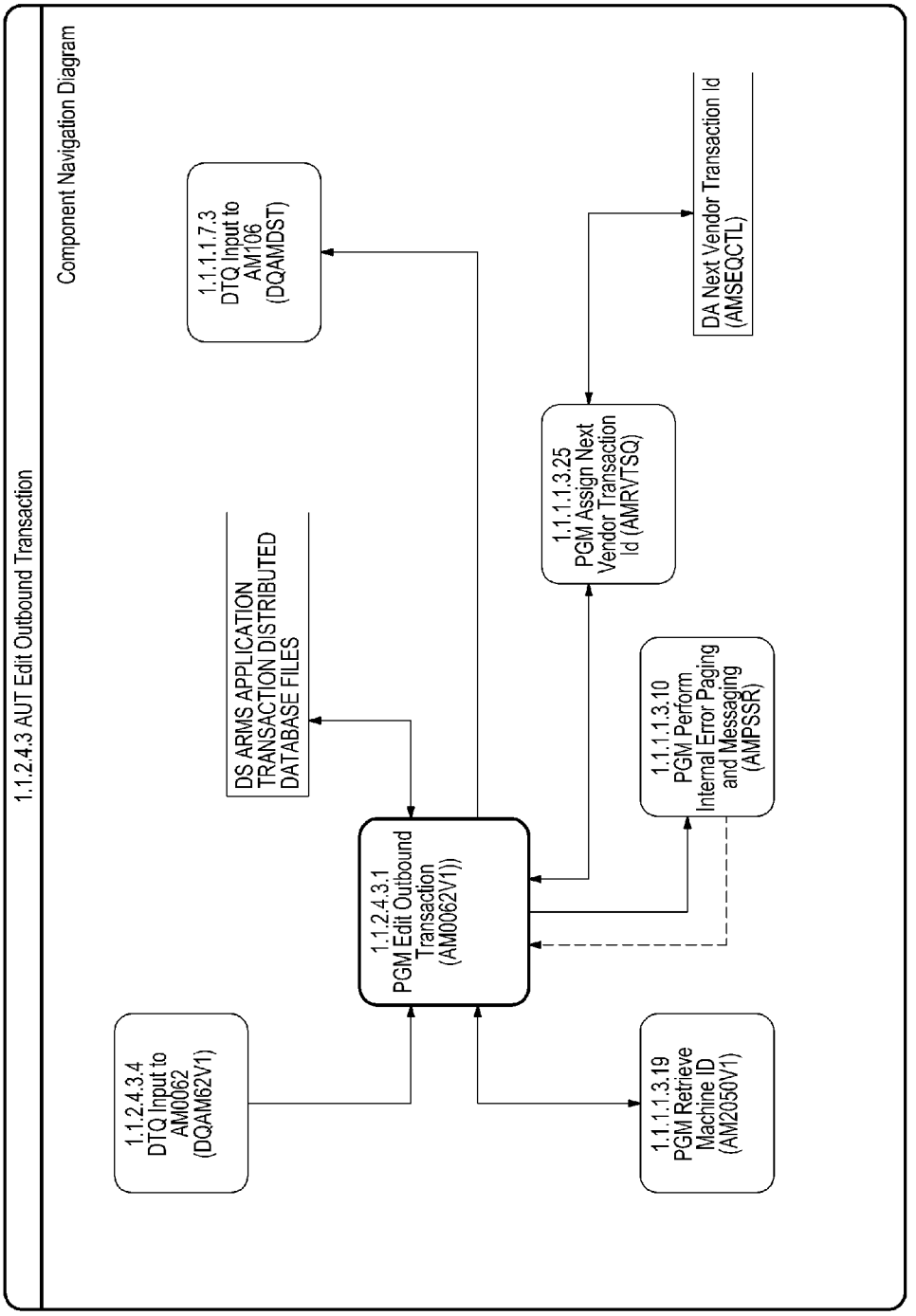

1.1.2.4.3 AUT Edit Outbound Transaction
Component Navigation Diagram
1.1.2.4.3.4
DTQ Input to
AM0062
(DQAM62V1)
1.1.2.4.3.1
PGM Edit Outbound
Transaction
(AM0062V1))
DS ARMS APPLICATION
TRANSACTION DISTRIBUTED
DATABASE FILES
1.1.1.1.7.3
DTQ Input to
AM106
(DQAMDST)
1.1.1.1.3.25
PGM Assign Next
Vendor Transaction
Id (AMRVTSQ)
DA Next Vendor Transaction Id
(AMSEQCTL)
1.1.1.1.3.10
PGM Perform
Internal Error Paging
and Messaging
(AMPSSR)
1.1.1.1.3.19
PGM Retrieve
Machine ID
(AM2050V1)

FIG. 37

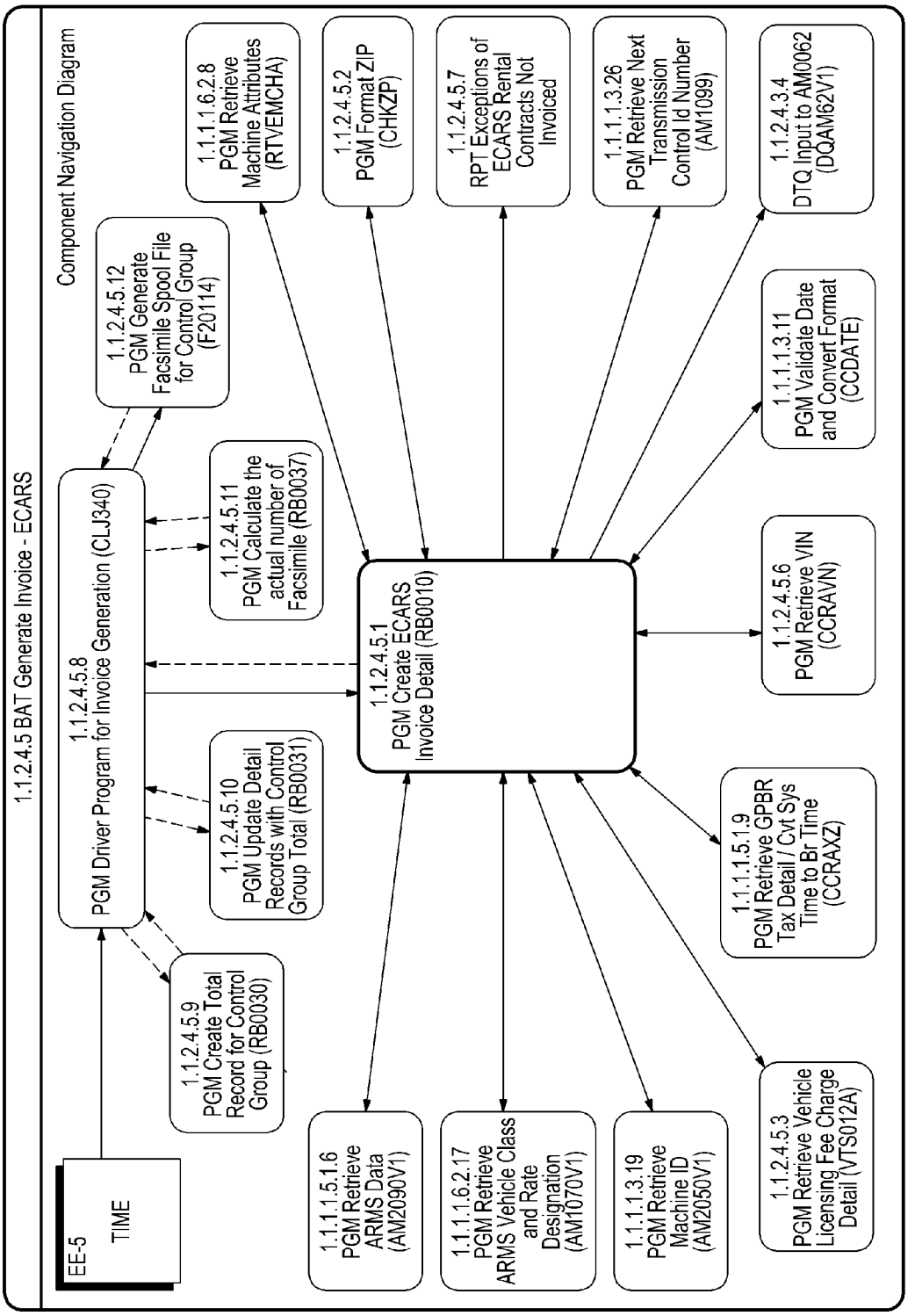

1.1.2.4.5 BAT Generate Invoice - ECARS
Component Navigation Diagram
EE-5
TIME
1.1.2.4.5.8
PGM Driver Program for Invoice Generation (CLJ340)
1.1.2.4.5.12
PGM Generate Facsimile Spool File for Control Group (F20114)
1.1.2.4.5.9
PGM Create Total Record for Control Group (RB0030)
1.1.2.4.5.10
PGM Update Detail Records with Control Group Total (RB0031)
1.1.2.4.5.11
PGM Calculate the actual number of Facsimile (RB0037)
1.1.2.4.5.1
PGM Create ECARS Invoice Detail (RB0010)
1.1.1.1.6.2.8
PGM Retrieve Machine Attributes (RTVEMCHA)
1.1.2.4.5.2
PGM Format ZIP (CHKZP)
1.1.2.4.5.7
RPT Exceptions of ECARS Rental Contracts Not Invoiced
1.1.1.1.3.26
PGM Retrieve Next Transmission Control Id Number (AM1099)
1.1.2.4.3.4
DTQ Input to AM0062 (DQAM62V1)
1.1.1.1.3.11
PGM Validate Date and Convert Format (CCDATE)
1.1.2.4.5.6
PGM Retrieve VIN (CCRAVIN)
1.1.1.1.5.1.9
PGM Retrieve GPBR Tax Detail / Cvt Sys Time to Br Time (CCRAXZ)
1.1.1.1.5.1.6
PGM Retrieve ARMS Data (AM2090V1)
1.1.1.1.6.2.17
PGM Retrieve ARMS Vehicle Class and Rate Designation (AM1070V1)
1.1.1.1.3.19
PGM Retrieve Machine ID (AM2050V1)
1.1.2.4.5.3
PGM Retrieve Vehicle Licensing Fee Charge Detail (VTS012A)

FIG. 38

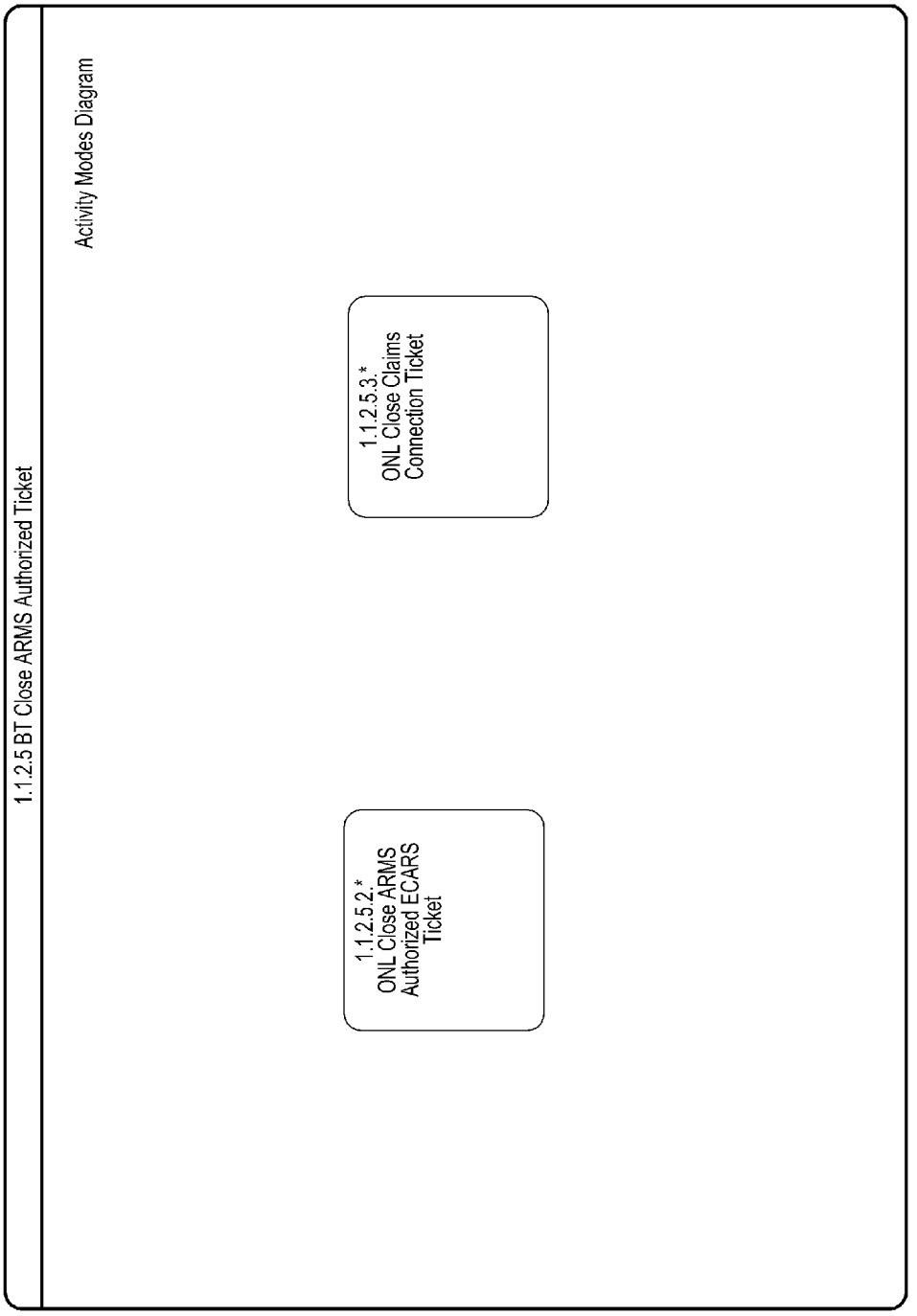

1.1.2.5 BT Close ARMS Authorized Ticket
Activity Modes Diagram
1.1.2.5.2.*
ONL Close ARMS
Authorized ECARS
Ticket
1.1.2.5.3.*
ONL Close Claims
Connection Ticket

FIG. 39

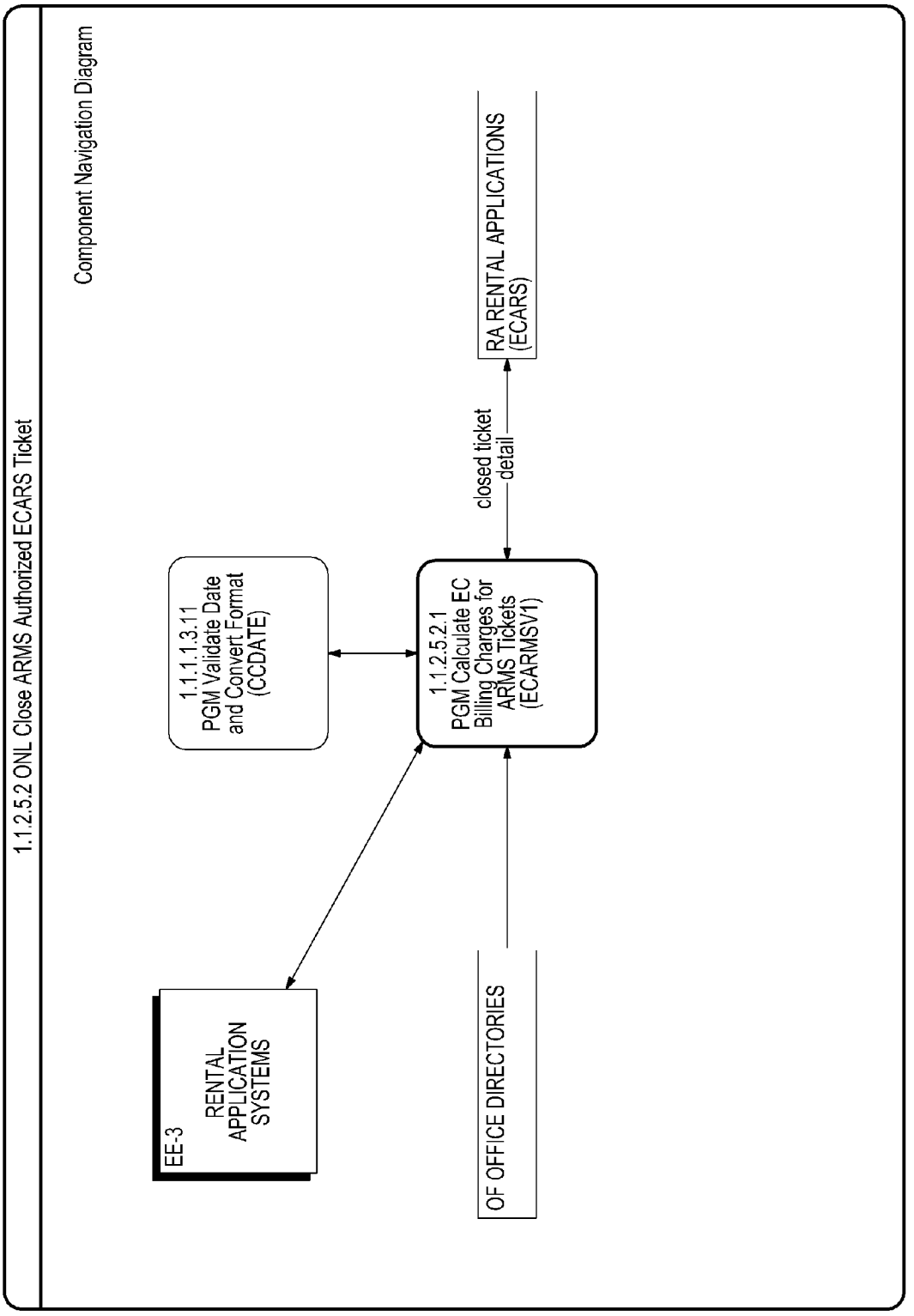

1.1.2.5.2 ONL Close ARMS Authorized ECARS Ticket
Component Navigation Diagram
RA RENTAL APPLICATIONS (ECARS)
closed ticket detail
1.1.1.1.3.11 PGM Validate Date and Convert Format (CCDATE)
1.1.2.5.2.1 PGM Calculate EC Billing Charges for ARMS Tickets (ECARMSV1)
EE-3 RENTAL APPLICATION SYSTEMS
OF OFFICE DIRECTORIES

FIG. 40

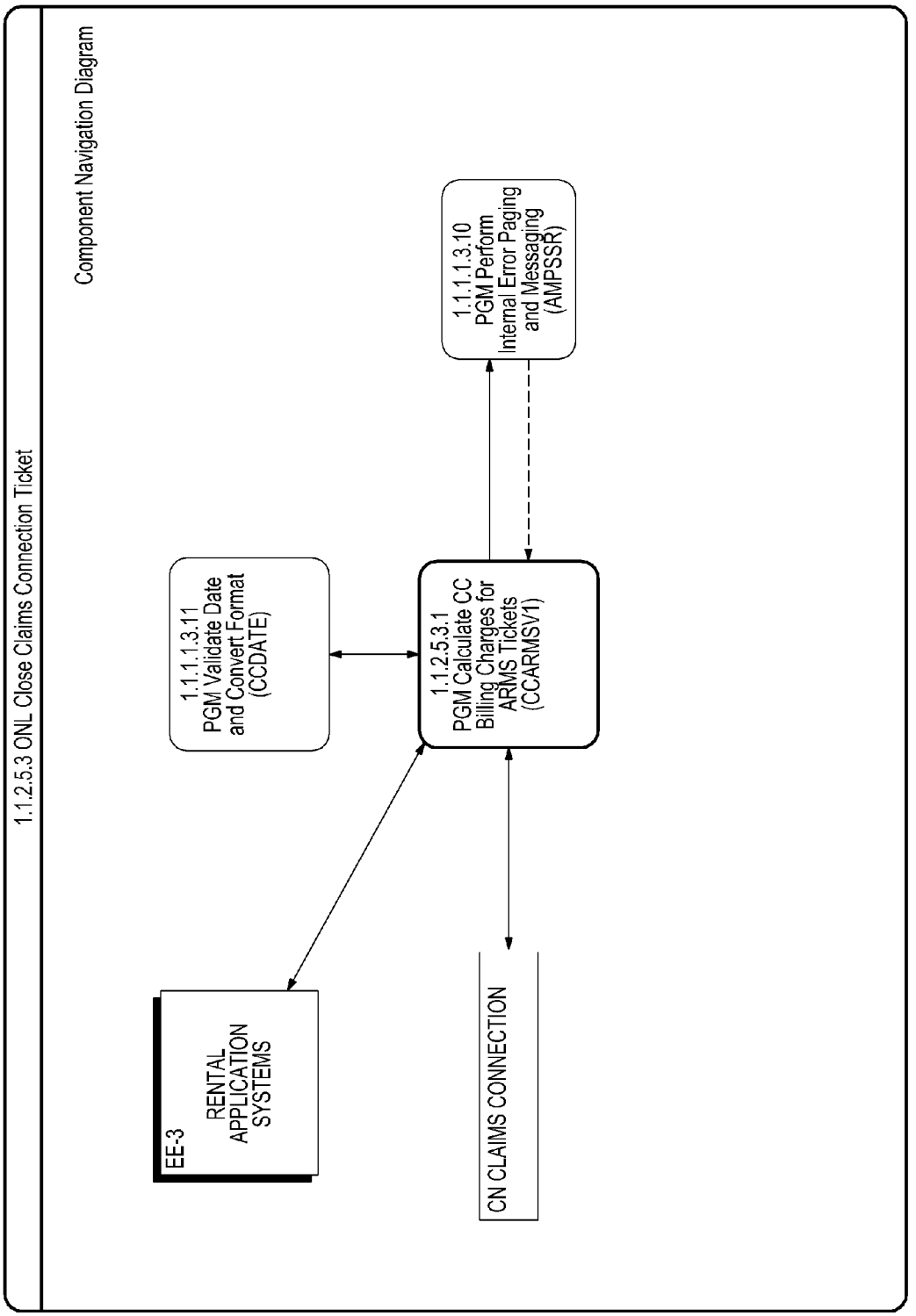

1.1.2.5.3 ONL Close Claims Connection Ticket
Component Navigation Diagram
1.1.1.1.3.10
PGM Perform
Internal Error Paging
and Messaging
(AMPSSR)
1.1.1.1.3.11
PGM Validate Date
and Convert Format
(CCDATE)
1.1.2.5.3.1
PGM Calculate CC
Billing Charges for
ARMS Tickets
(CCARMSV1)
EE-3
RENTAL
APPLICATION
SYSTEMS
CN CLAIMS CONNECTION

FIG. 41

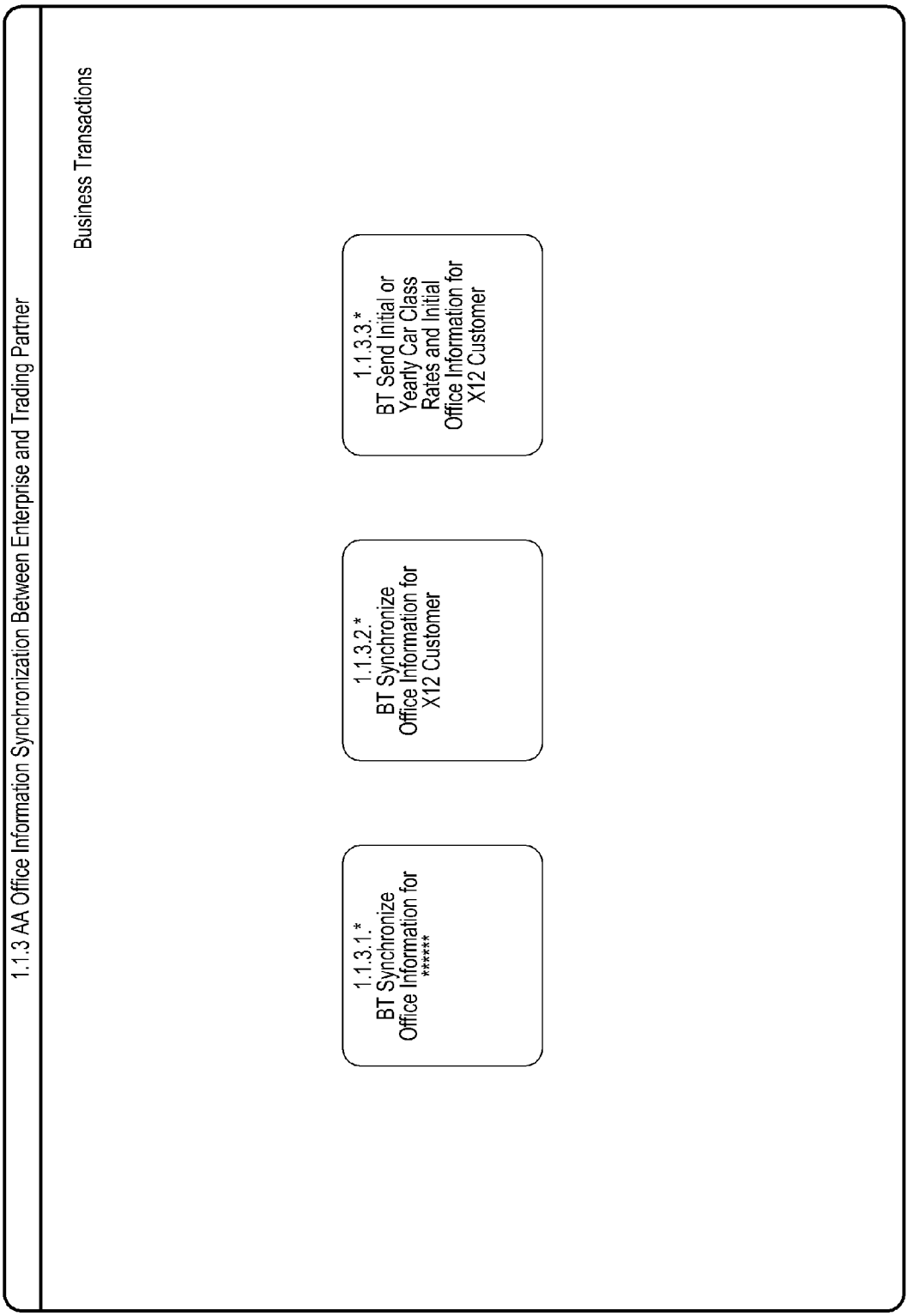

1.1.3 AA Office Information Synchronization Between Enterprise and Trading Partner
Business Transactions
1.1.3.1.*
BT Synchronize
Office Information for
******
1.1.3.2.*
BT Synchronize
Office Information for
X12 Customer
1.1.3.3.*
BT Send Initial or
Yearly Car Class
Rates and Initial
Office Information for
X12 Customer

FIG. 42

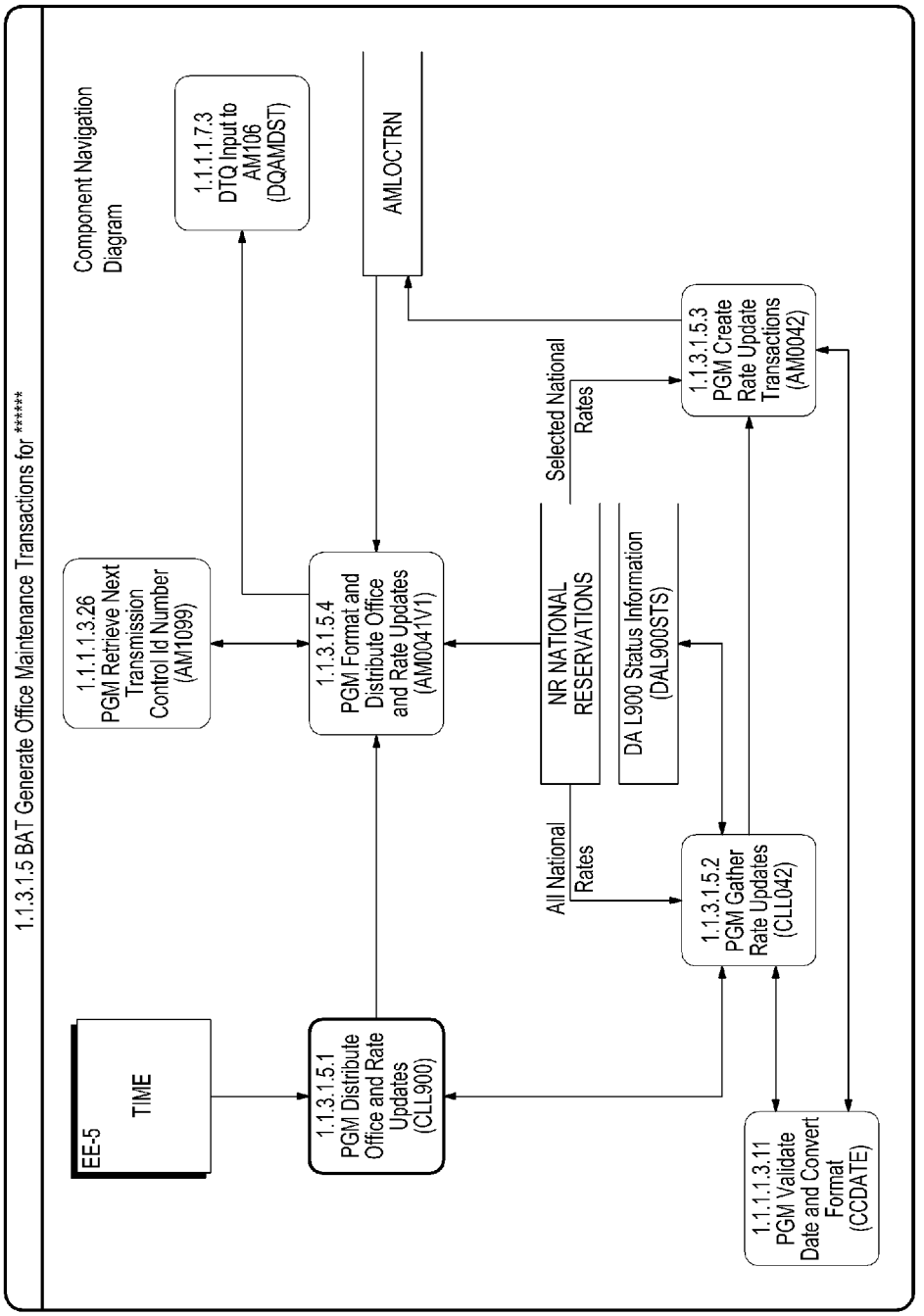

1.1.3.1.5 BAT Generate Office Maintenance Transactions for ******
Component Navigation Diagram
EE-5
TIME
1.1.3.1.5.1 PGM Distribute Office and Rate Updates (CLL900)
1.1.1.1.3.26 PGM Retrieve Next Transmission Control Id Number (AM1099)
1.1.3.1.5.4 PGM Format and Distribute Office and Rate Updates (AM0041V1)
1.1.1.1.7.3 DTQ Input to AM106 (DQAMDST)
AMLOCTRN
NR NATIONAL RESERVATIONS
DA L900 Status Information (DAL900STS)
All National Rates
Selected National Rates
1.1.3.1.5.2 PGM Gather Rate Updates (CLL042)
1.1.3.1.5.3 PGM Create Rate Update Transactions (AM0042)
1.1.1.1.3.11 PGM Validate Date and Convert Format (CCDATE)

FIG. 43

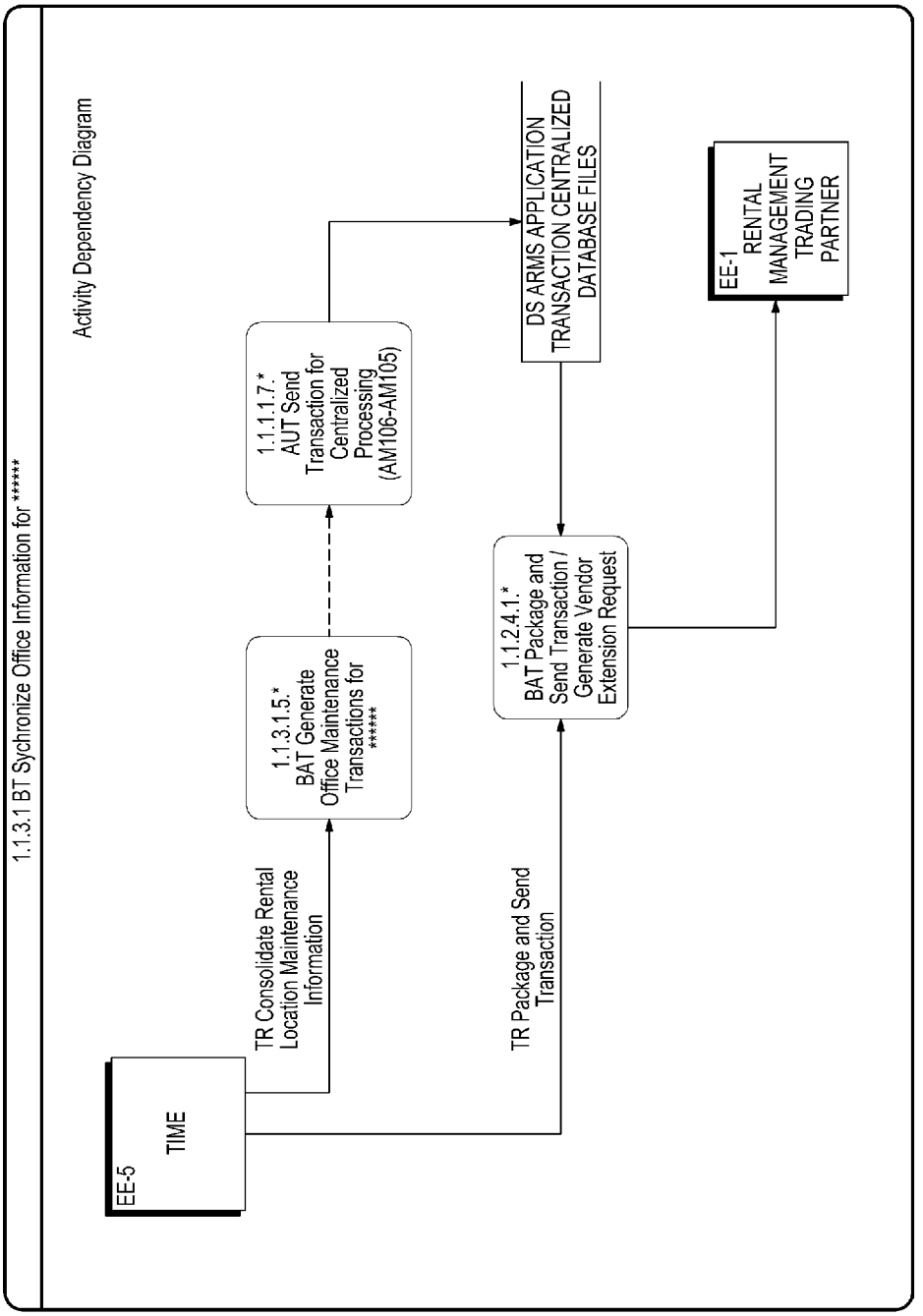

1.1.3.1 BT Sychronize Office Information for ******
Activity Dependency Diagram
EE-5
TIME
TR Consolidate Rental Location Maintenance Information
TR Package and Send Transaction
1.1.3.1.5.*
BAT Generate Office Maintenance Transactions for ******
1.1.1.1.7.*
AUT Send Transaction for Centralized Processing (AM106-AM105)
1.1.2.4.1.*
BAT Package and Send Transaction / Generate Vendor Extension Request
DS ARMS APPLICATION TRANSACTION CENTRALIZED DATABASE FILES
EE-1
RENTAL MANAGEMENT TRADING PARTNER

FIG. 44

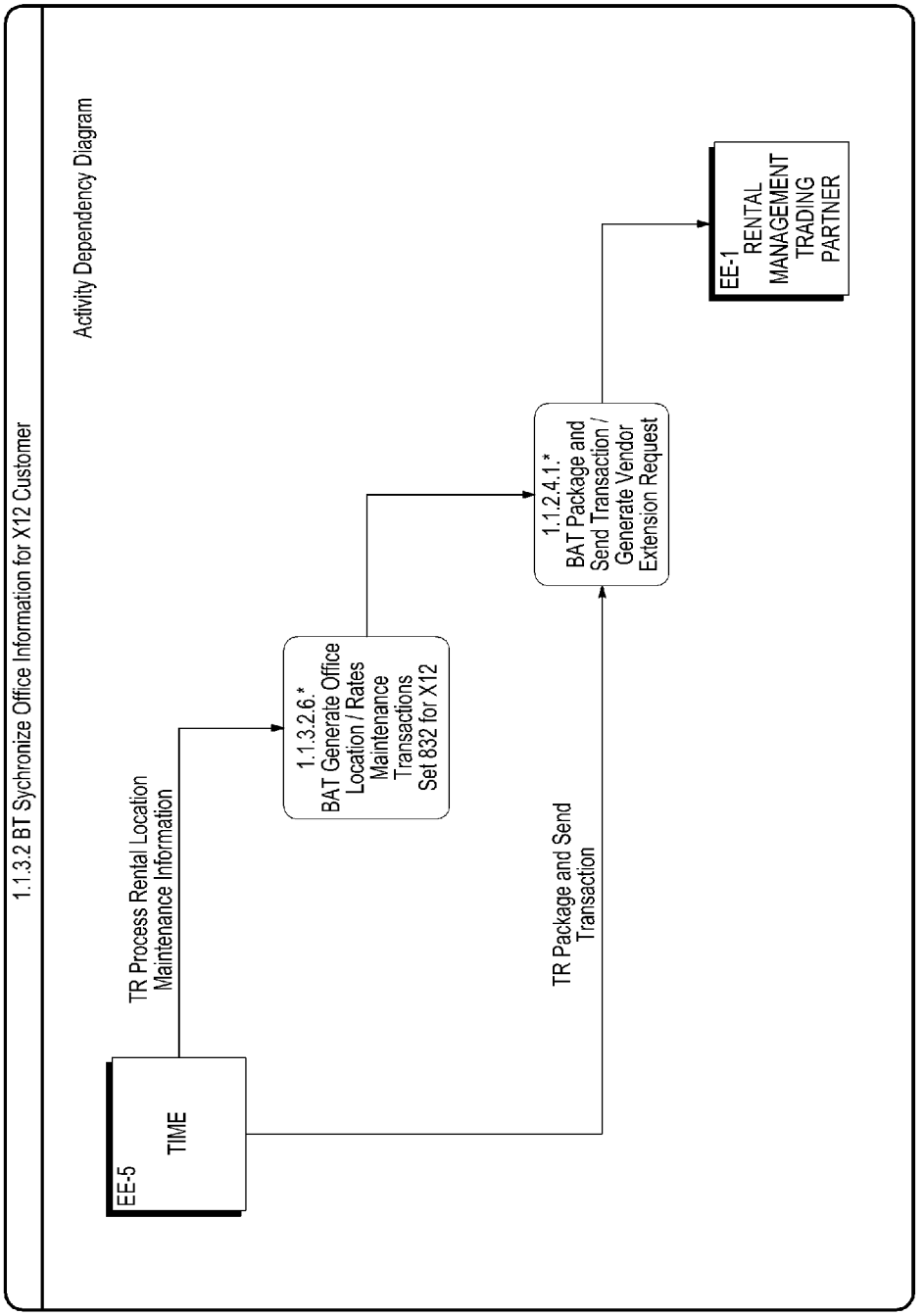

1.1.3.2 BT Sychronize Office Information for X12 Customer
Activity Dependency Diagram
EE-5
TIME
TR Process Rental Location Maintenance Information
1.1.3.2.6.*
BAT Generate Office Location / Rates Maintenance Transactions Set 832 for X12
TR Package and Send Transaction
1.1.2.4.1.*
BAT Package and Send Transaction / Generate Vendor Extension Request
EE-1
RENTAL MANAGEMENT TRADING PARTNER

FIG. 45

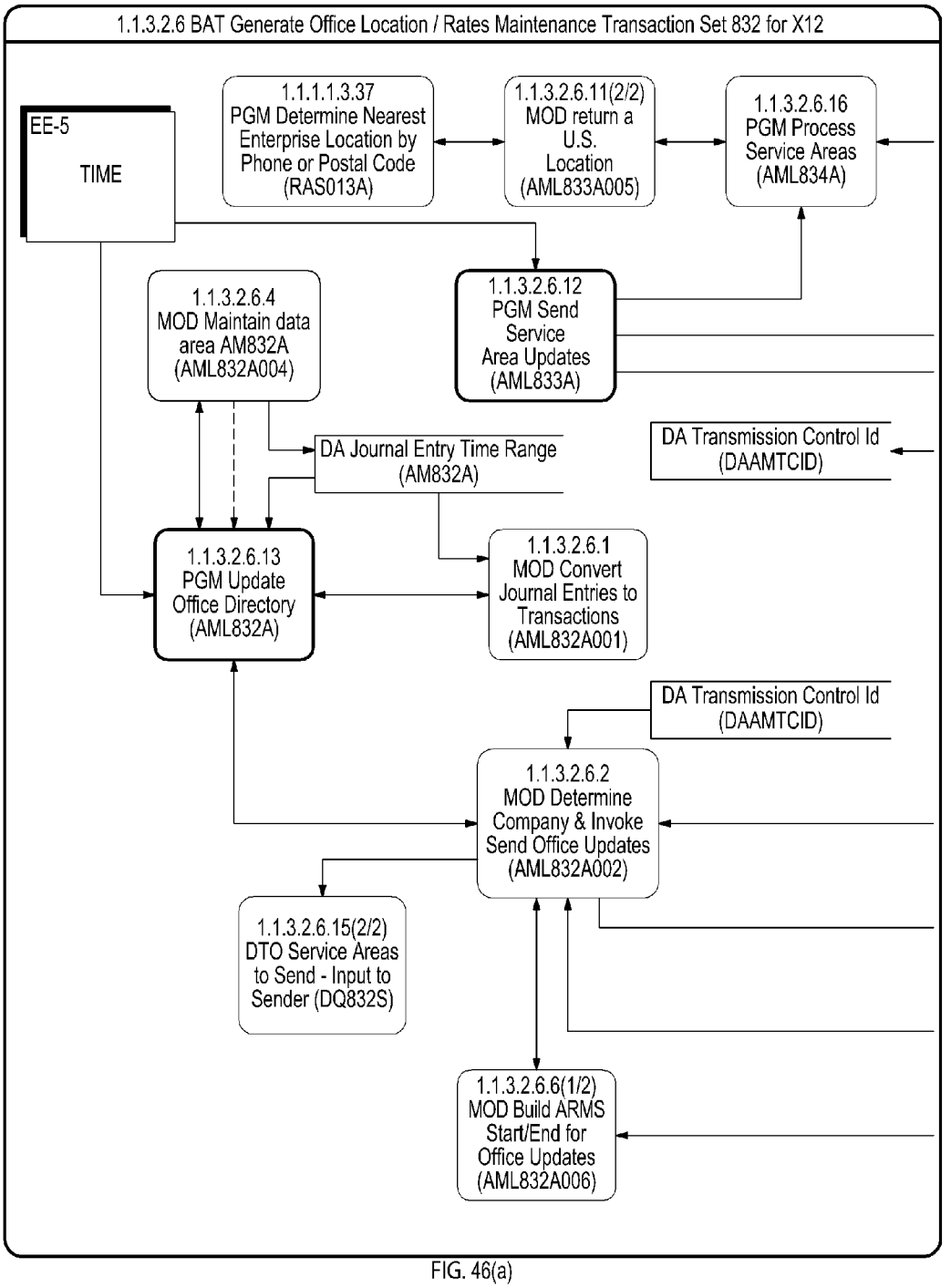

1.1.3.2.6 BAT Generate Office Location / Rates Maintenance Transaction Set 832 for X12
EE-5
TIME
1.1.1.1.3.37
PGM Determine Nearest Enterprise Location by Phone or Postal Code (RAS013A)
1.1.3.2.6.11(2/2)
MOD return a U.S. Location (AML833A005)
1.1.3.2.6.16
PGM Process Service Areas (AML834A)
1.1.3.2.6.4
MOD Maintain data area AM832A (AML832A004)
1.1.3.2.6.12
PGM Send Service Area Updates (AML833A)
DA Journal Entry Time Range (AM832A)
DA Transmission Control Id (DAAMTCID)
1.1.3.2.6.13
PGM Update Office Directory (AML832A)
1.1.3.2.6.1
MOD Convert Journal Entries to Transactions (AML832A001)
DA Transmission Control Id (DAAMTCID)
1.1.3.2.6.2
MOD Determine Company & Invoke Send Office Updates (AML832A002)
1.1.3.2.6.15(2/2)
DTO Service Areas to Send - Input to Sender (DQ832S)
1.1.3.2.6.6(1/2)
MOD Build ARMS Start/End for Office Updates (AML832A006)

FIG. 46(a)

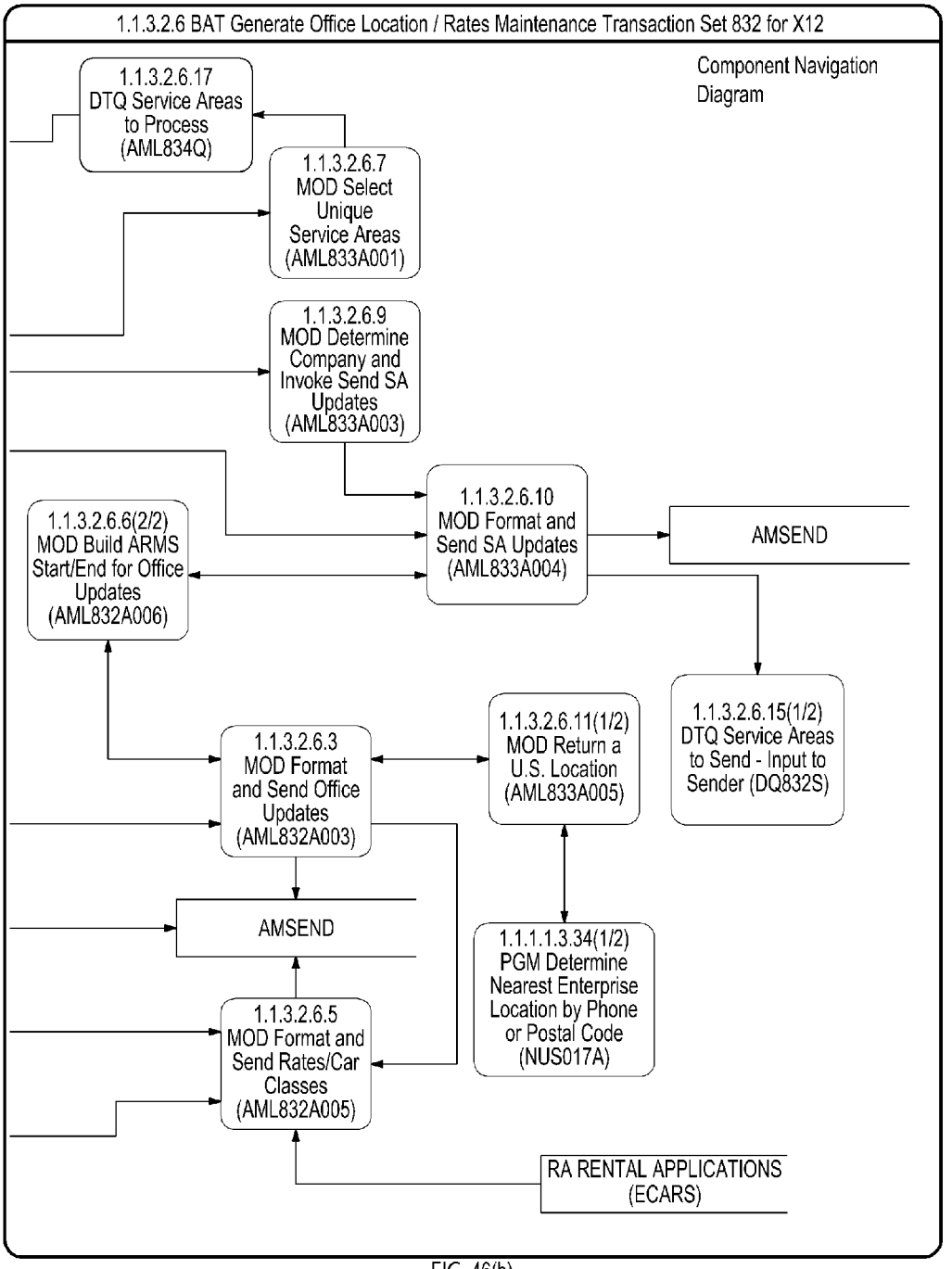

1.1.3.2.6 BAT Generate Office Location / Rates Maintenance Transaction Set 832 for X12
Component Navigation Diagram
1.1.3.2.6.17 DTQ Service Areas to Process (AML834Q)
1.1.3.2.6.7 MOD Select Unique Service Areas (AML833A001)
1.1.3.2.6.9 MOD Determine Company and Invoke Send SA Updates (AML833A003)
1.1.3.2.6.10 MOD Format and Send SA Updates (AML833A004)
AMSEND
1.1.3.2.6.6(2/2) MOD Build ARMS Start/End for Office Updates (AML832A006)
1.1.3.2.6.15(1/2) DTQ Service Areas to Send - Input to Sender (DQ832S)
1.1.3.2.6.11(1/2) MOD Return a U.S. Location (AML833A005)
1.1.3.2.6.3 MOD Format and Send Office Updates (AML832A003)
AMSEND
1.1.1.1.3.34(1/2) PGM Determine Nearest Enterprise Location by Phone or Postal Code (NUS017A)
1.1.3.2.6.5 MOD Format and Send Rates/Car Classes (AML832A005)
RA RENTAL APPLICATIONS (ECARS)

FIG. 46(b)

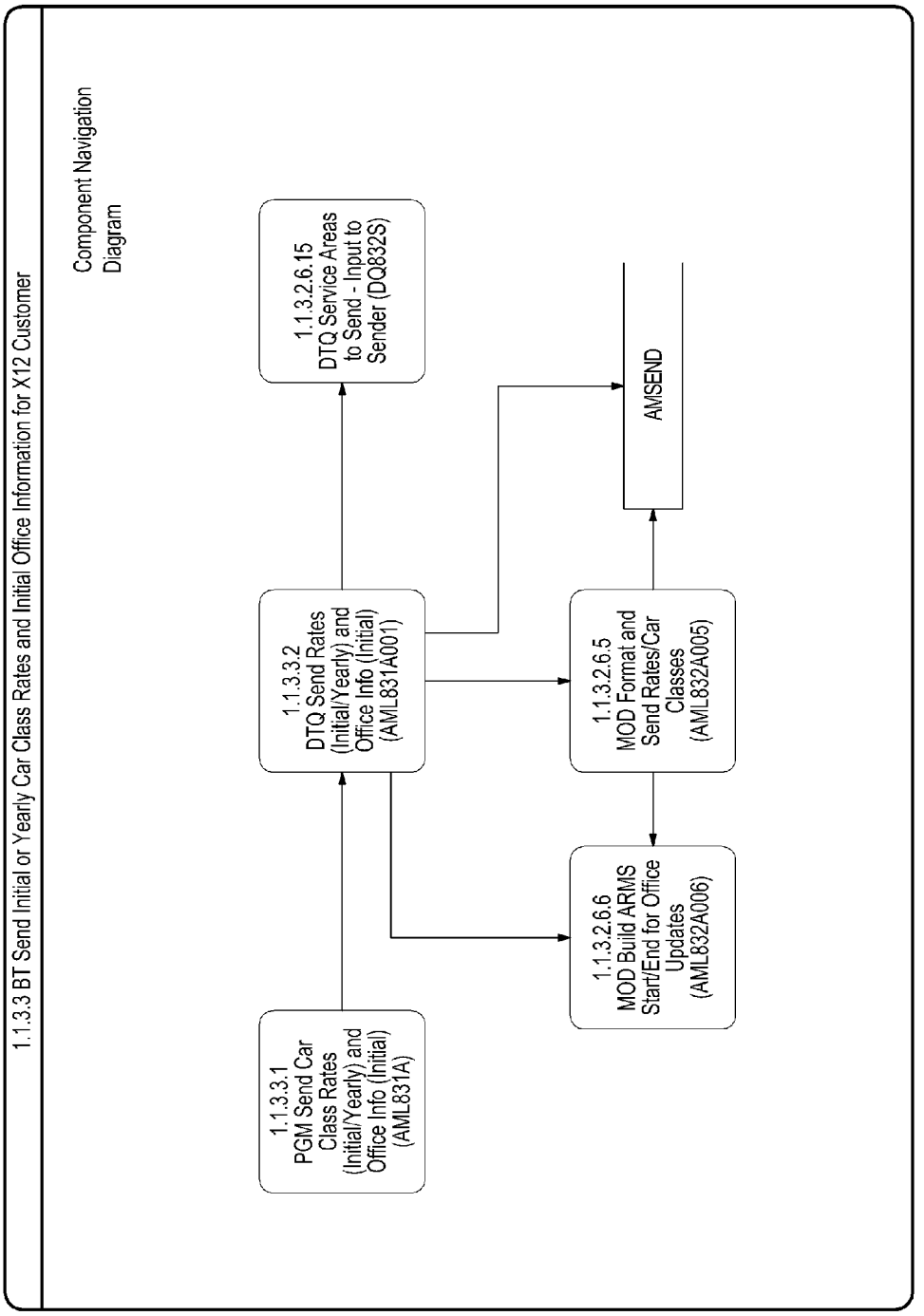

1.1.3.3 BT Send Initial or Yearly Car Class Rates and Initial Office Information for X12 Customer
Component Navigation Diagram
1.1.3.3.1 PGM Send Car Class Rates (Initial/Yearly) and Office Info (Initial) (AML831A)
1.1.3.3.2 DTQ Send Rates (Initial/Yearly) and Office Info (Initial) (AML831A001)
1.1.3.2.6.15 DTQ Service Areas to Send - Input to Sender (DQ832S)
1.1.3.2.6.6 MOD Build ARMS Start/End for Office Updates (AML832A006)
1.1.3.2.6.5 MOD Format and Send Rates/Car Classes (AML832A005)
AMSEND

FIG. 47

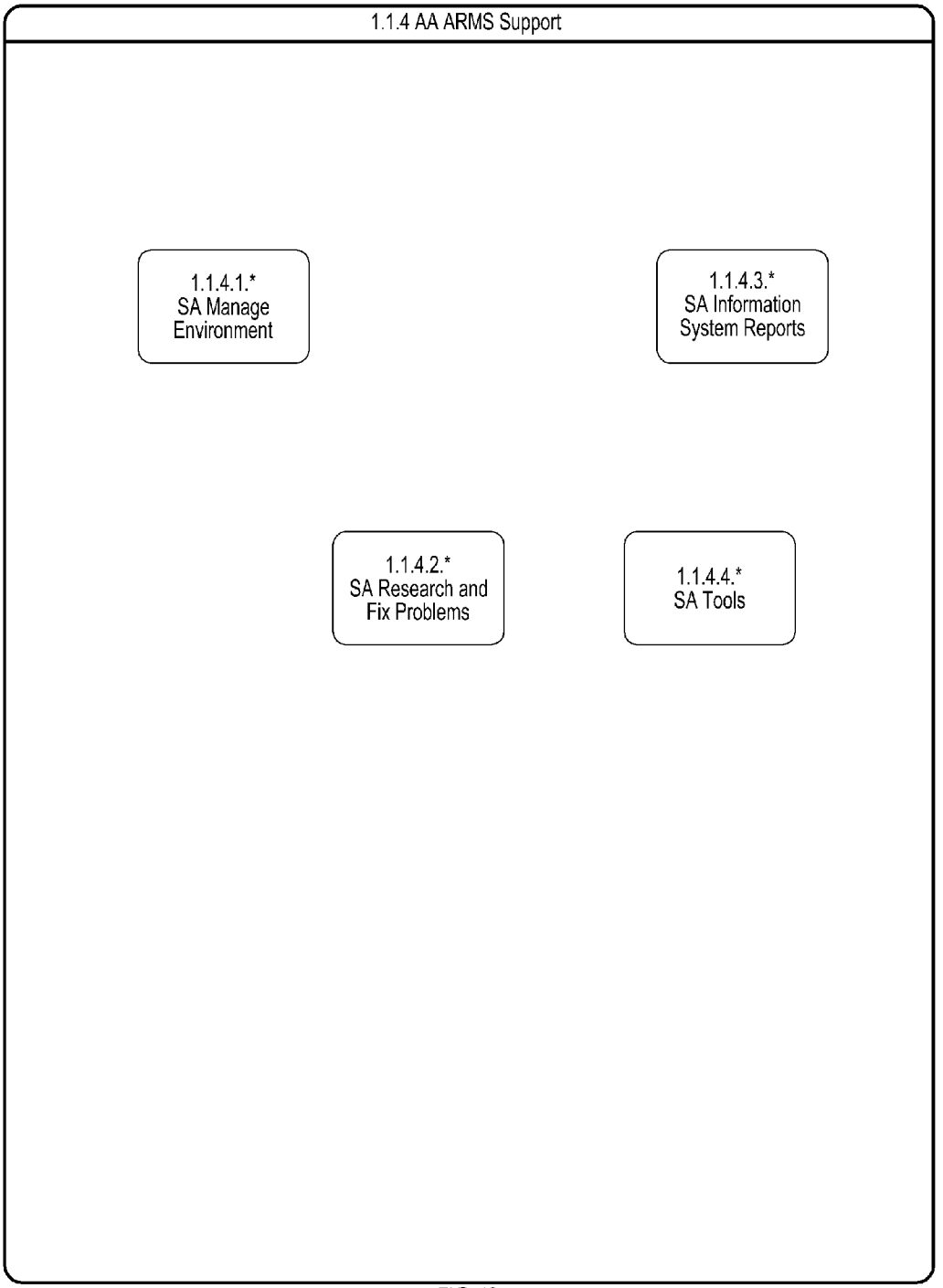

1.1.4 AA ARMS Support
1.1.4.1.*
SA Manage
Environment
1.1.4.3.*
SA Information
System Reports
1.1.4.2.*
SA Research and
Fix Problems
1.1.4.4.*
SA Tools

FIG. 48

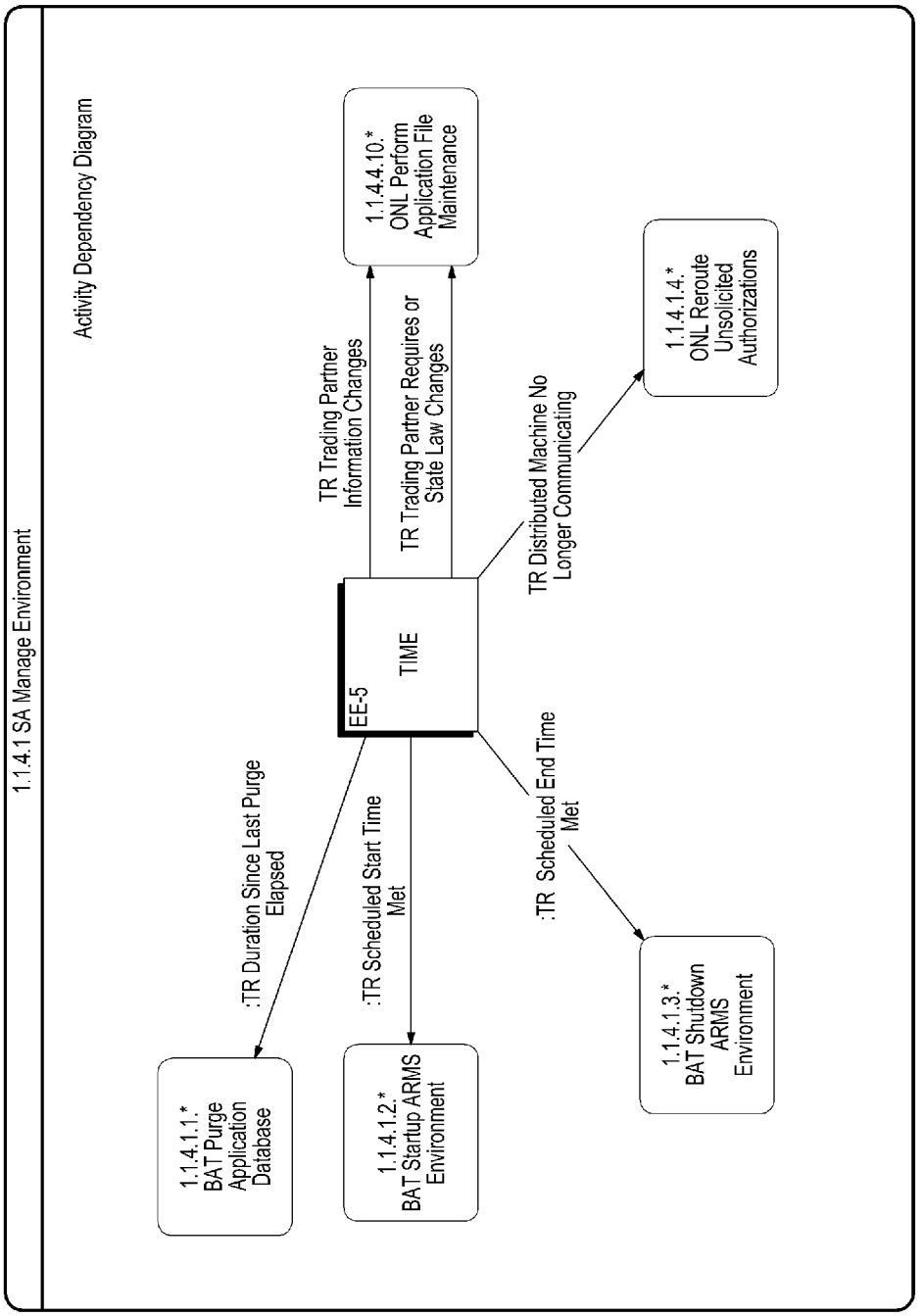

1.1.4.1 SA Manage Environment
Activity Dependency Diagram
1.1.4.1.1.*
BAT Purge
Application
Database
:TR Duration Since Last Purge
Elapsed
1.1.4.1.2.*
BAT Startup ARMS
Environment
:TR Scheduled Start Time
Met
EE-5
TIME
1.1.4.1.3.*
BAT Shutdown
ARMS
Environment
:TR Scheduled End Time
Met
TR Distributed Machine No
Longer Communicating
1.1.4.1.4.*
ONL Reroute
Unsolicited
Authorizations
TR Trading Partner
Information Changes
TR Trading Partner Requires or
State Law Changes
1.1.4.4.10.*
ONL Perform
Application File
Maintenance

FIG. 49

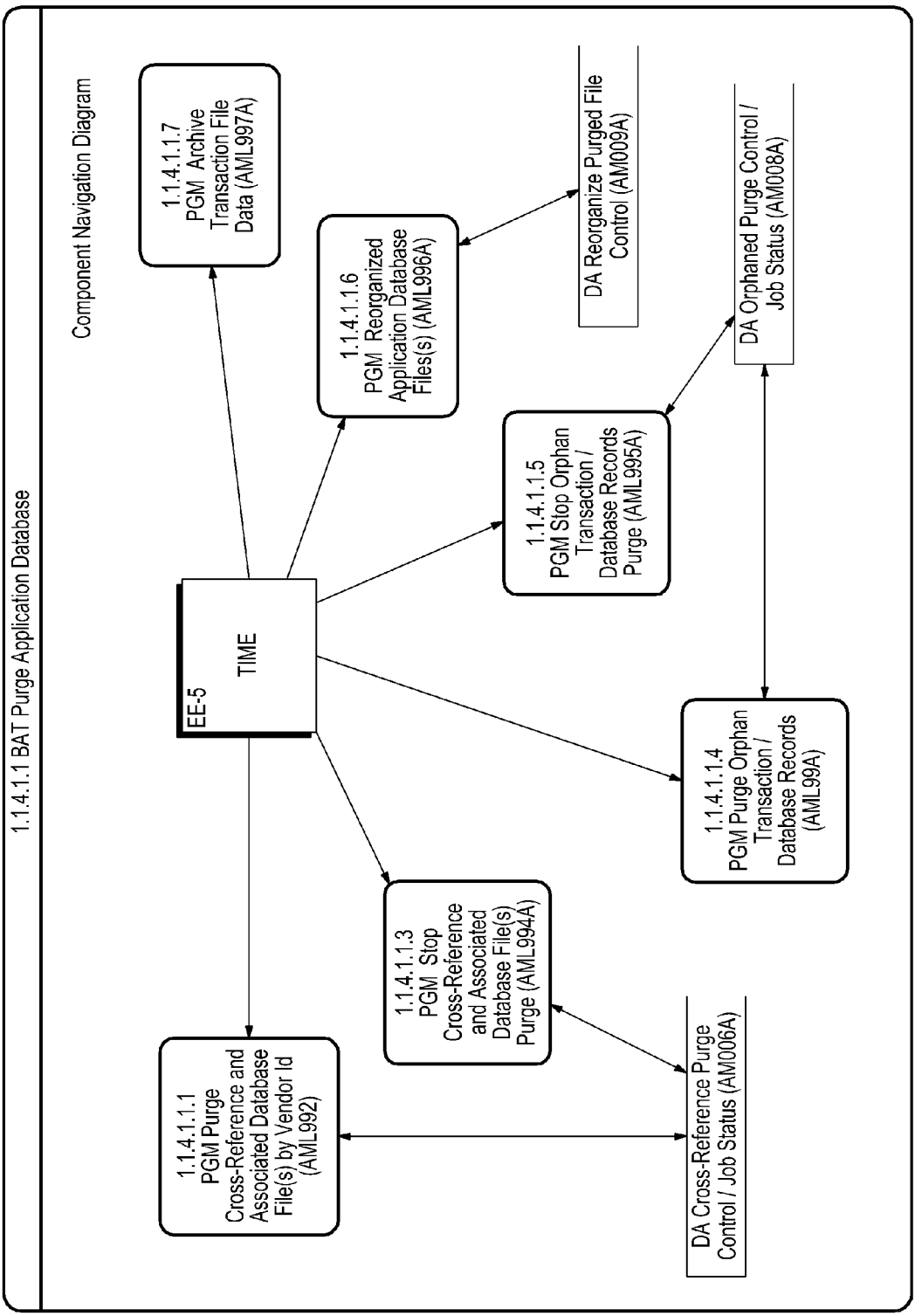

1.1.4.1.1 BAT Purge Application Database
Component Navigation Diagram
EE-5
TIME
1.1.4.1.1.1
PGM Purge
Cross-Reference and
Associated Database
File(s) by Vendor Id
(AML992)
1.1.4.1.1.3
PGM Stop
Cross-Reference
and Associated
Database File(s)
Purge (AML994A)
1.1.4.1.1.4
PGM Purge Orphan
Transaction /
Database Records
(AML99A)
1.1.4.1.1.5
PGM Stop Orphan
Transaction /
Database Records
Purge (AML995A)
1.1.4.1.1.6
PGM Reorganized
Application Database
Files(s) (AML996A)
1.1.4.1.1.7
PGM Archive
Transaction File
Data (AML997A)
DA Cross-Reference Purge
Control / Job Status (AM006A)
DA Reorganize Purged File
Control (AM009A)
DA Orphaned Purge Control /
Job Status (AM008A)

FIG. 50

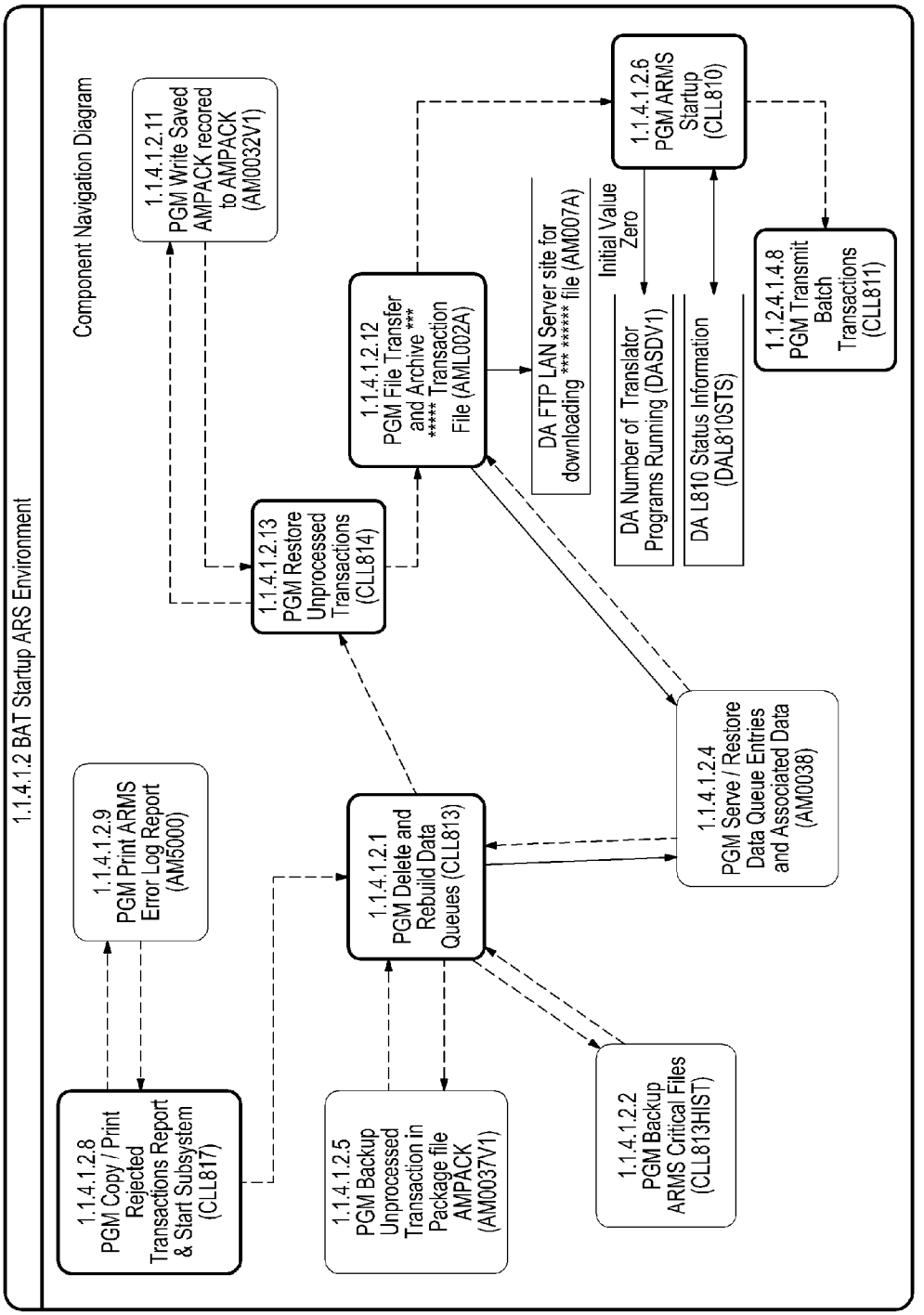

1.1.4.1.2 BAT Startup ARS Environment
Component Navigation Diagram
1.1.4.1.2.11 PGM Write Saved AMPACK recored to AMPACK (AM0032V1)
1.1.4.1.2.6 PGM ARMS Startup (CLL810)
1.1.4.1.2.12 PGM File Transfer and Archive *** ***** Transaction File (AML002A)
DA FTP LAN Server site for downloading *** ***** file (AM007A)
Initial Value Zero
DA Number of Translator Programs Running (DASDV1)
DA L810 Status Information (DAL810STS)
1.1.2.4.1.4.8 PGM Transmit Batch Transactions (CLL811)
1.1.4.1.2.13 PGM Restore Unprocessed Transactions (CLL814)
1.1.4.1.2.9 PGM Print ARMS Error Log Report (AM5000)
1.1.4.1.2.1 PGM Delete and Rebuild Data Queues (CLL813)
1.1.4.1.2.4 PGM Serve / Restore Data Queue Entries and Associated Data (AM0038)
1.1.4.1.2.8 PGM Copy / Print Rejected Transactions Report & Start Subsystem (CLL817)
1.1.4.1.2.5 PGM Backup Unprocessed Transaction in Package file AMPACK (AM0037V1)
1.1.4.1.2.2 PGM Backup ARMS Critical Files (CLL813HIST)

FIG. 51

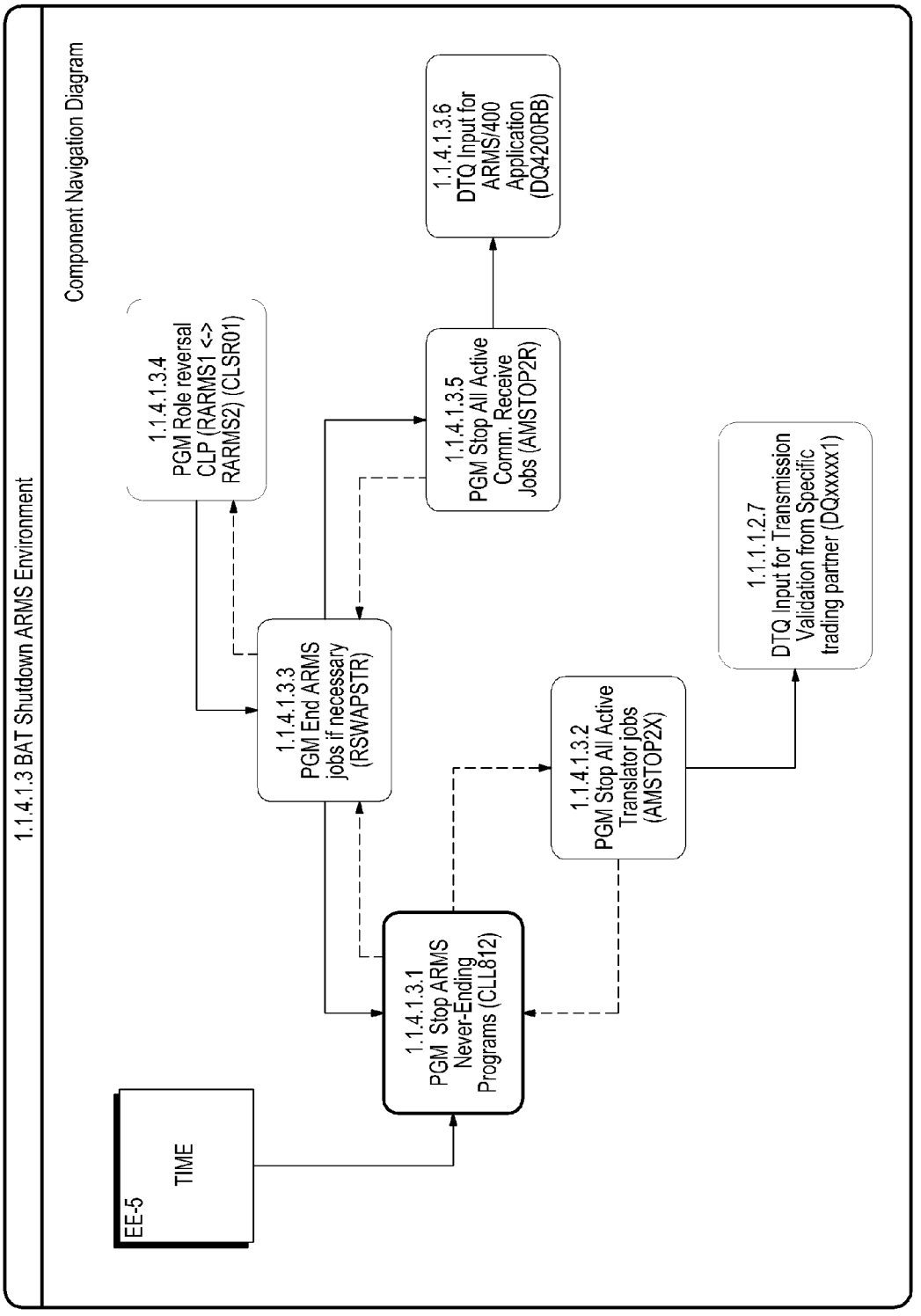

1.1.4.1.3 BAT Shutdown ARMS Environment
Component Navigation Diagram
EE-5
TIME
1.1.4.1.3.1
PGM Stop ARMS
Never-Ending
Programs (CLL812)
1.1.4.1.3.2
PGM Stop All Active
Translator jobs
(AMSTOP2X)
1.1.4.1.3.3
PGM End ARMS
jobs if necessary
(RSWAPSTR)
1.1.4.1.3.4
PGM Role reversal
CLP (RARMS1 <->
RARMS2) (CLSR01)
1.1.4.1.3.5
PGM Stop All Active
Comm. Receive
Jobs (AMSTOP2R)
1.1.4.1.3.6
DTQ Input for
ARMS/400
Application
(DQ4200RB)
1.1.1.1.2.7
DTQ Input for Transmission
Validation from Specific
trading partner (DQxxxxx1)

FIG. 52

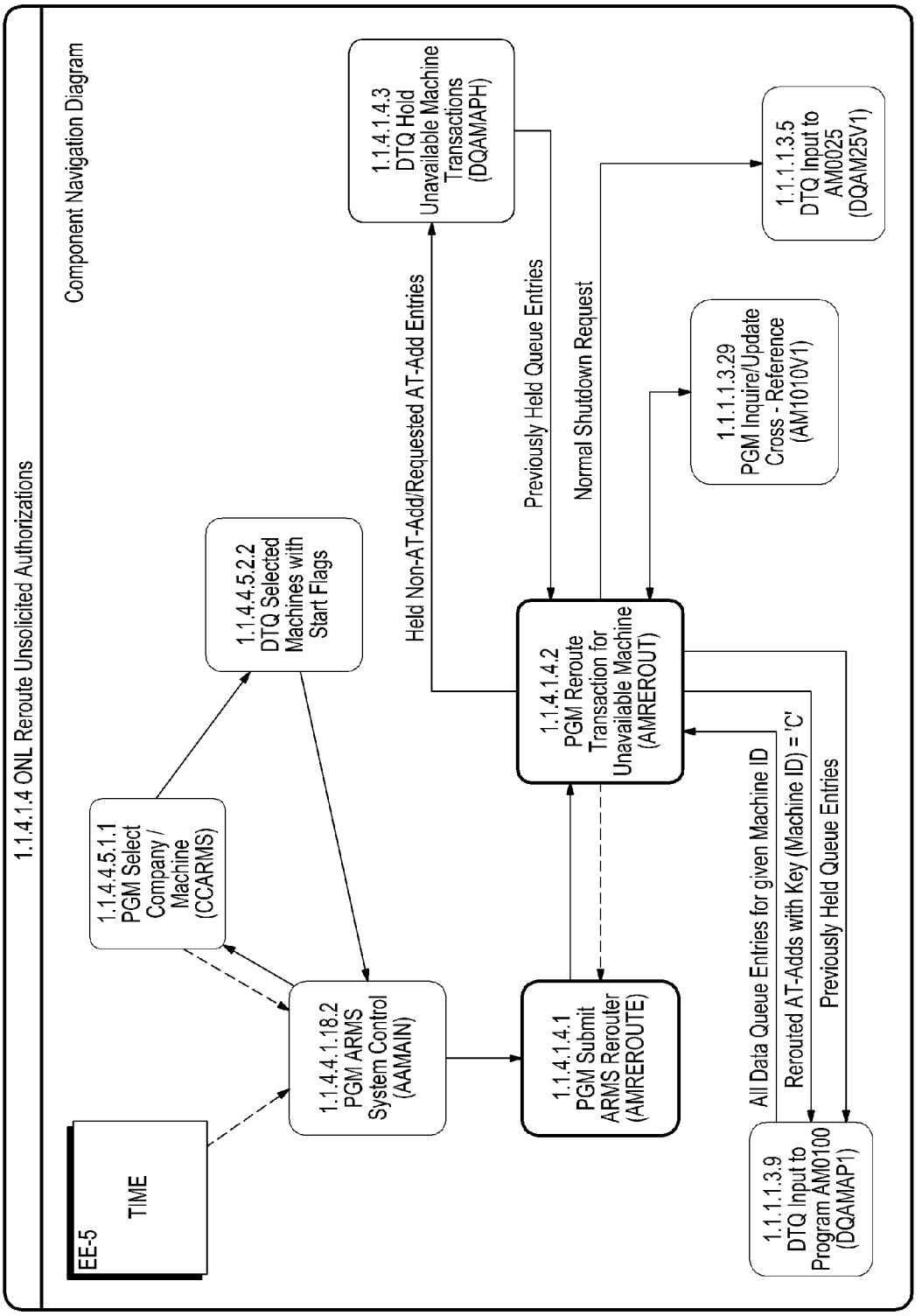

1.1.4.1.4 ONL Reroute Unsolicited Authorizations
Component Navigation Diagram
EE-5
TIME
1.1.4.4.5.1.1
PGM Select Company / Machine (CCARMS)
1.1.4.4.1.18.2
PGM ARMS System Control (AAMAIN)
1.1.4.4.5.2.2
DTQ Selected Machines with Start Flags
1.1.4.1.4.1
PGM Submit ARMS Rerouter (AMREROUTE)
1.1.4.1.4.2
PGM Reroute Transaction for Unavailable Machine (AMREROUT)
1.1.4.1.4.3
DTQ Hold Unavailable Machine Transactions (DQAMAPH)
1.1.1.1.3.9
DTQ Input to Program AM0100 (DQAMAP1)
1.1.1.1.3.5
DTQ Input to AM0025 (DQAM25V1)
1.1.1.1.3.29
PGM Inquire/Update Cross - Reference (AM1010V1)
Held Non-AT-Add/Requested AT-Add Entries
Previously Held Queue Entries
Normal Shutdown Request
All Data Queue Entries for given Machine ID
Rerouted AT-Adds with Key (Machine ID) = 'C'
Previously Held Queue Entries

FIG. 53

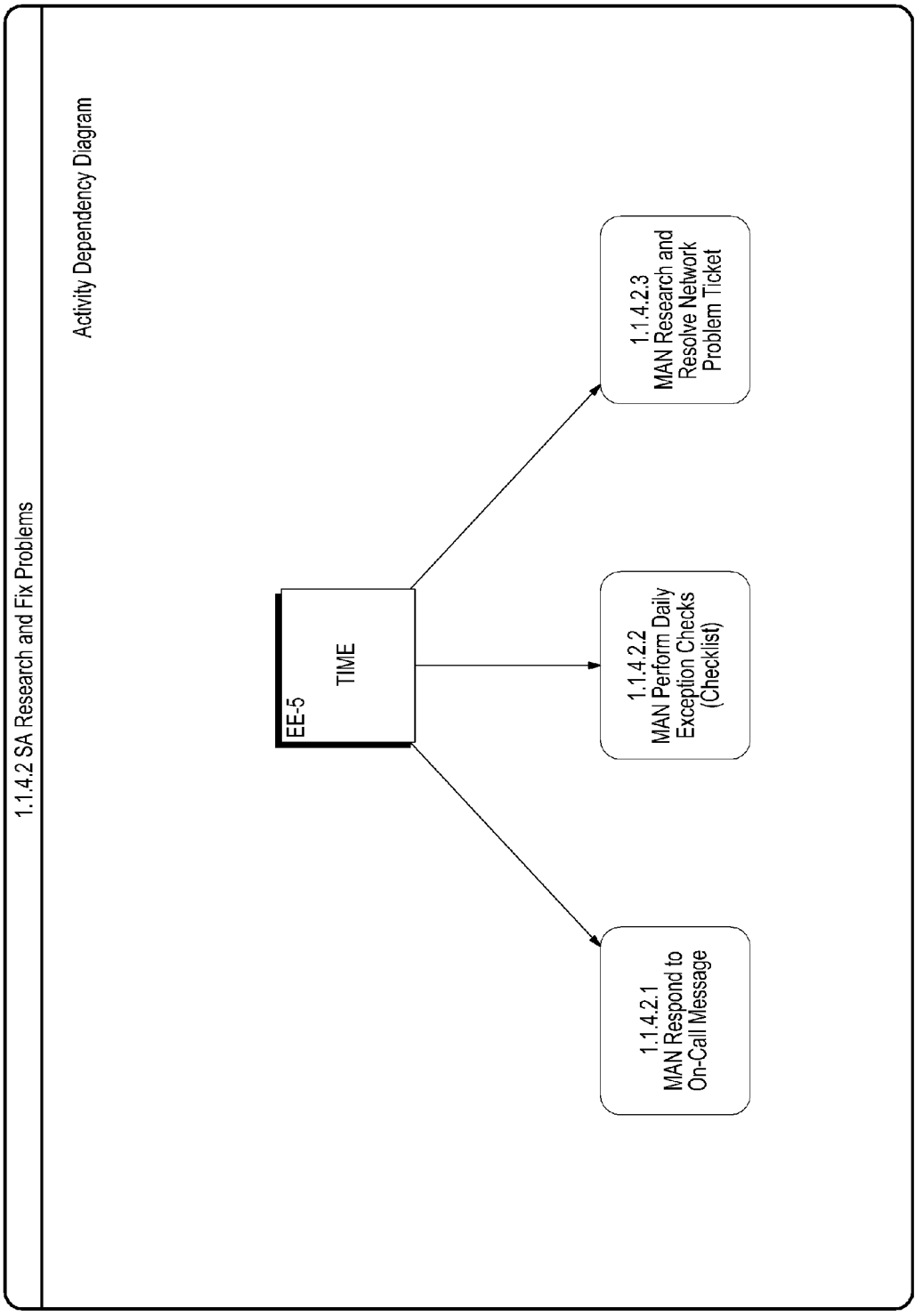

1.1.4.2 SA Research and Fix Problems
Activity Dependency Diagram
EE-5
TIME
1.1.4.2.1
MAN Respond to
On-Call Message
1.1.4.2.2
MAN Perform Daily
Exception Checks
(Checklist)
1.1.4.2.3
MAN Research and
Resolve Network
Problem Ticket

FIG. 54

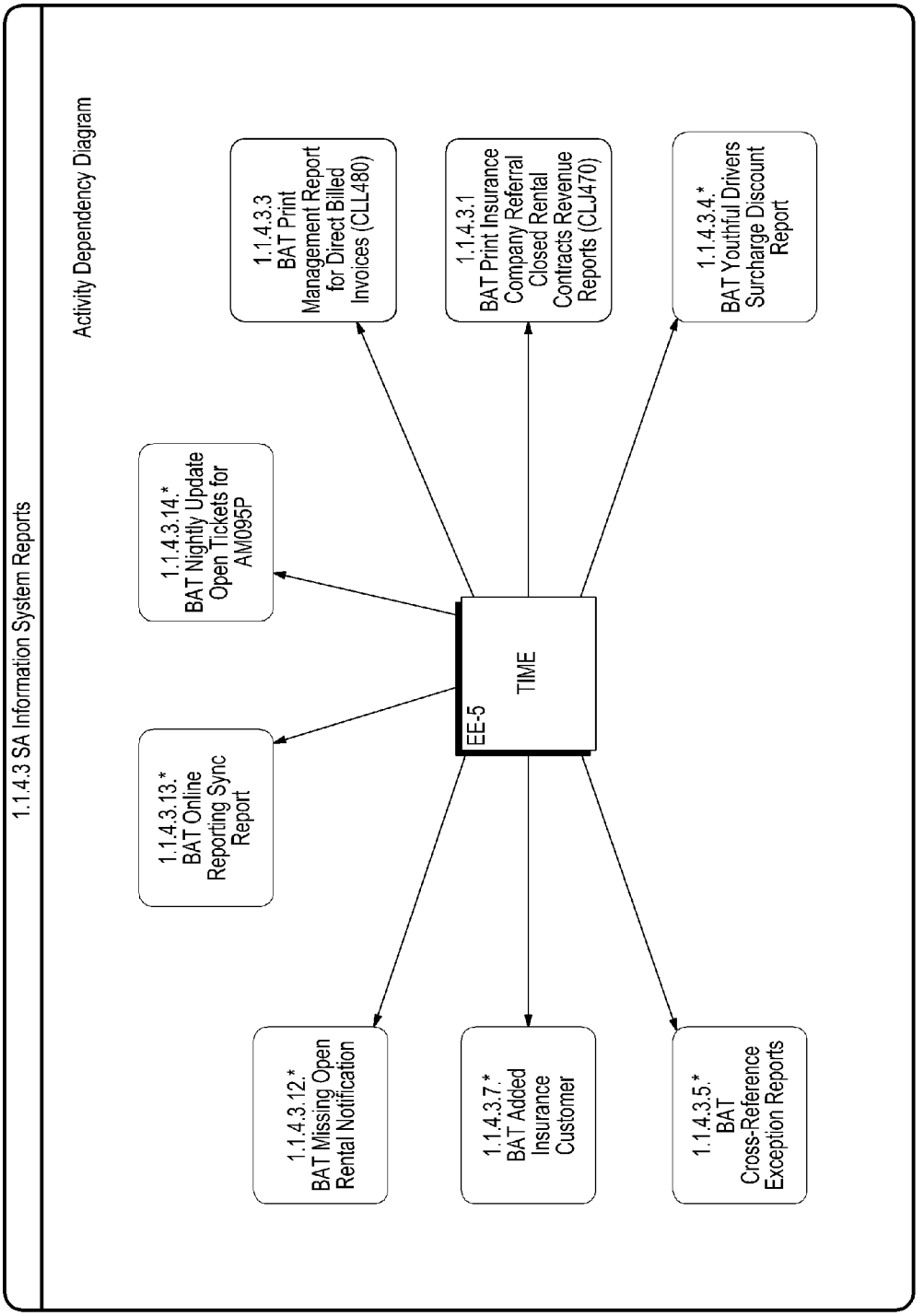

1.1.4.3 SA Information System Reports
Activity Dependency Diagram
1.1.4.3.3
BAT Print
Management Report
for Direct Billed
Invoices (CLL480)
1.1.4.3.1
BAT Print Insurance
Company Referral
Closed Rental
Contracts Revenue
Reports (CLJ470)
1.1.4.3.4.*
BAT Youthful Drivers
Surcharge Discount
Report
1.1.4.3.14.*
BAT Nightly Update
Open Tickets for
AM095P
1.1.4.3.13.*
BAT Online
Reporting Sync
Report
EE-5
TIME
1.1.4.3.12.*
BAT Missing Open
Rental Notification
1.1.4.3.7.*
BAT Added
Insurance
Customer
1.1.4.3.5.*
BAT
Cross-Reference
Exception Reports

FIG. 55

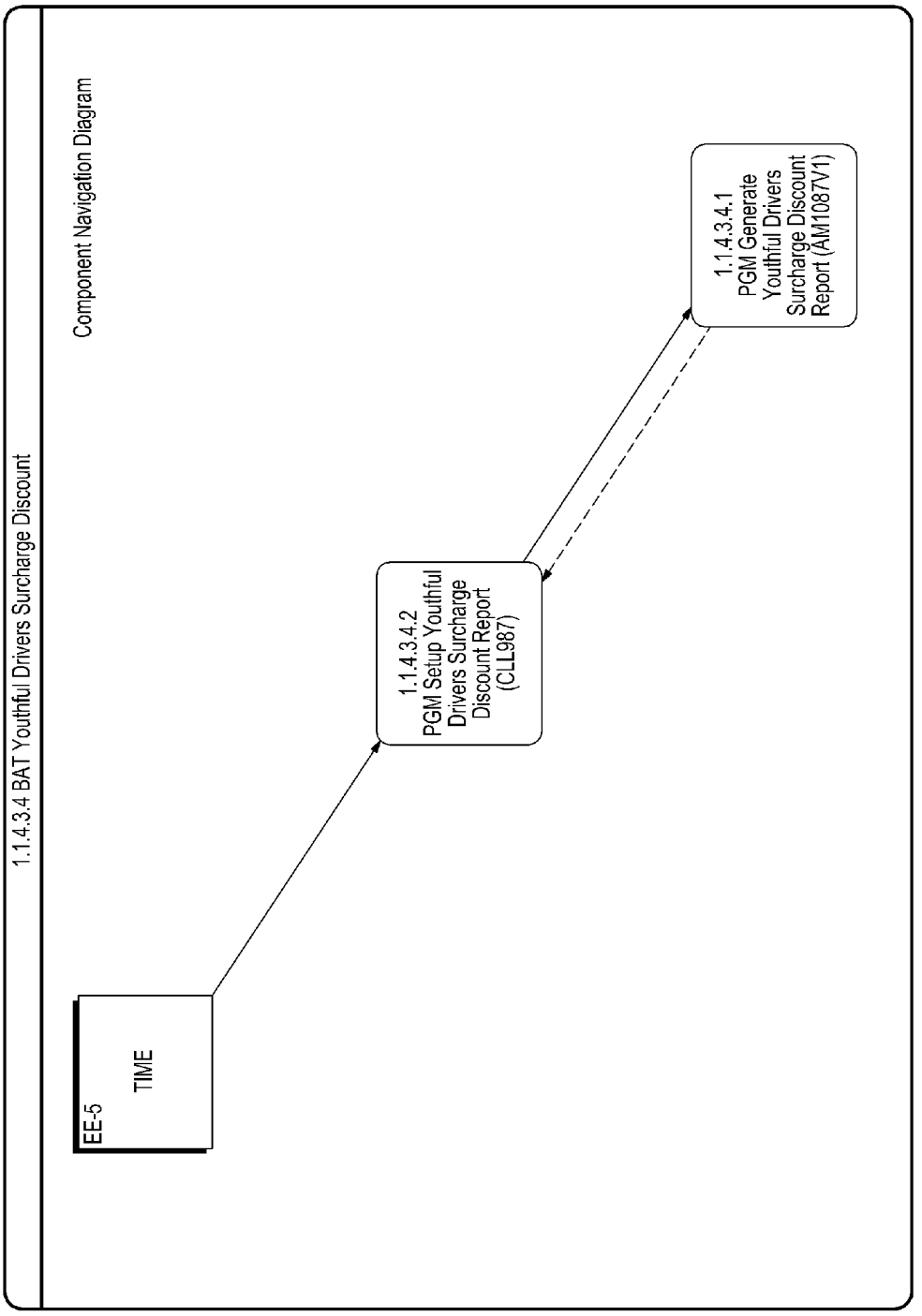

1.1.4.3.4 BAT Youthful Drivers Surcharge Discount
Component Navigation Diagram
EE-5
TIME
1.1.4.3.4.2
PGM Setup Youthful Drivers Surcharge Discount Report (CLL987)
1.1.4.3.4.1
PGM Generate Youthful Drivers Surcharge Discount Report (AM1087V1)

FIG. 56

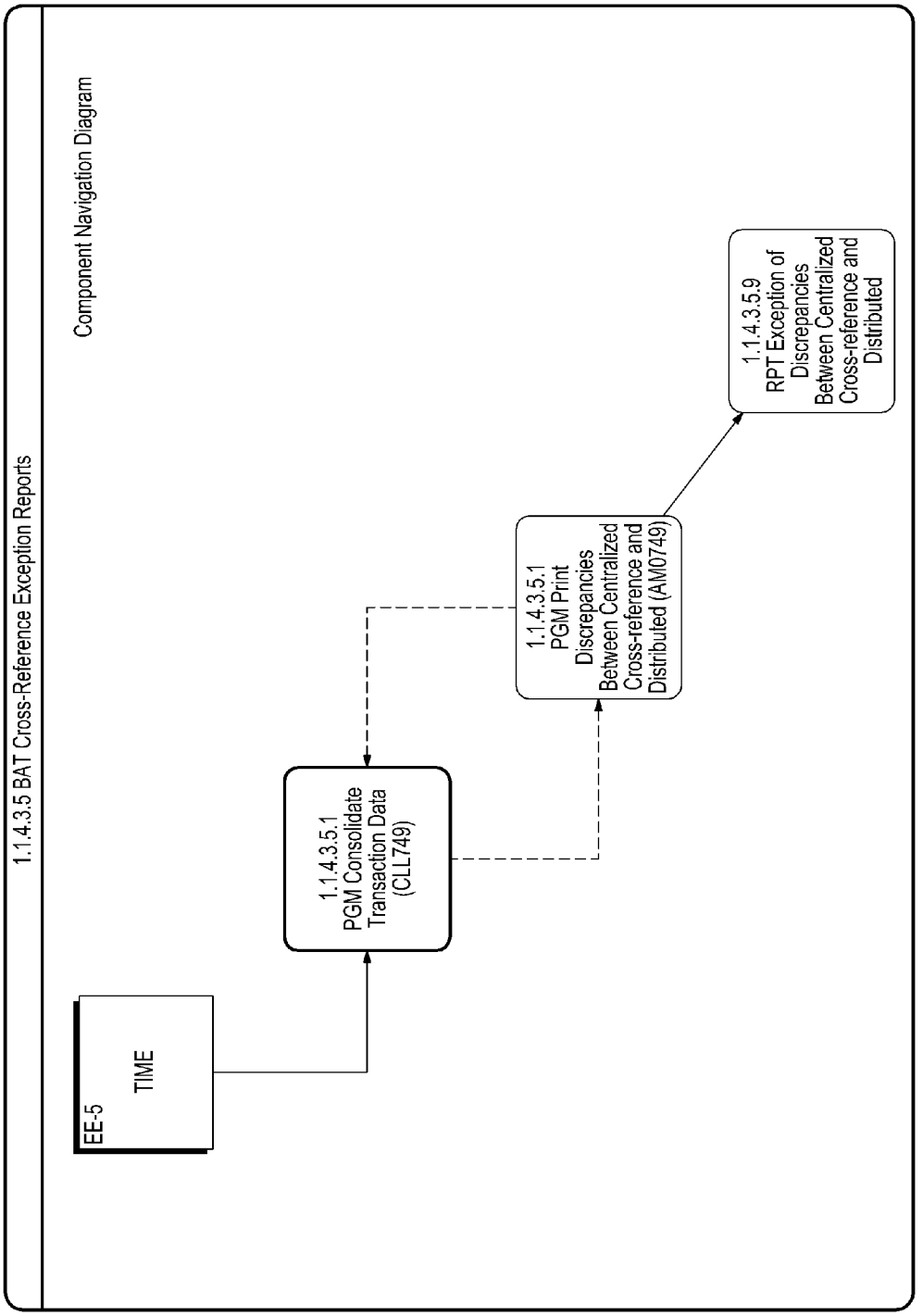

1.1.4.3.5 BAT Cross-Reference Exception Reports
Component Navigation Diagram
EE-5
TIME
1.1.4.3.5.1
PGM Consolidate
Transaction Data
(CLL749)
1.1.4.3.5.1
PGM Print
Discrepancies
Between Centralized
Cross-reference and
Distributed (AM0749)
1.1.4.3.5.9
RPT Exception of
Discrepancies
Between Centralized
Cross-reference and
Distributed

FIG. 57

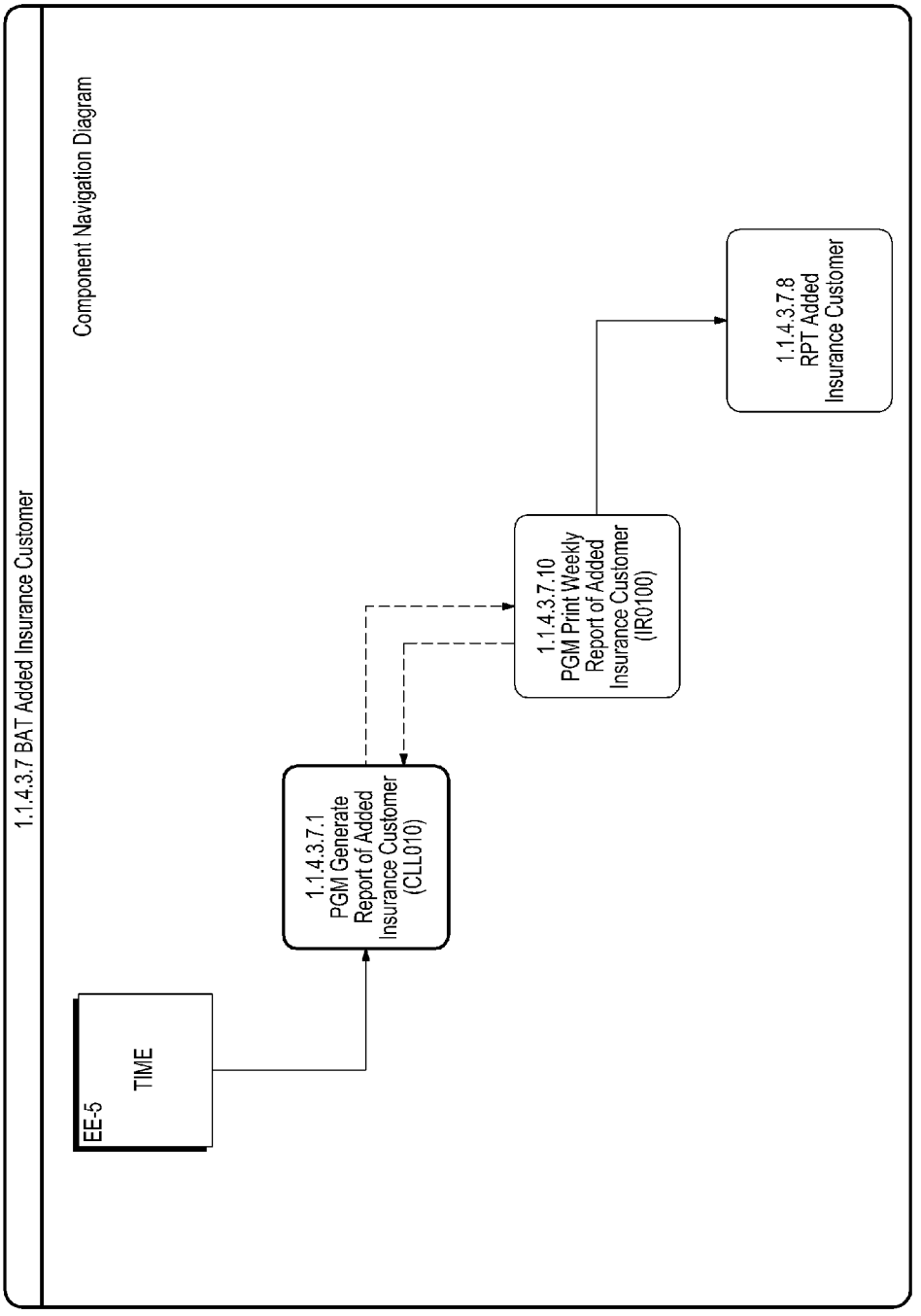

1.1.4.3.7 BAT Added Insurance Customer
Component Navigation Diagram
EE-5
TIME
1.1.4.3.7.1
PGM Generate
Report of Added
Insurance Customer
(CLL010)
1.1.4.3.7.10
PGM Print Weekly
Report of Added
Insurance Customer
(IR0100)
1.1.4.3.7.8
RPT Added
Insurance Customer

FIG. 58

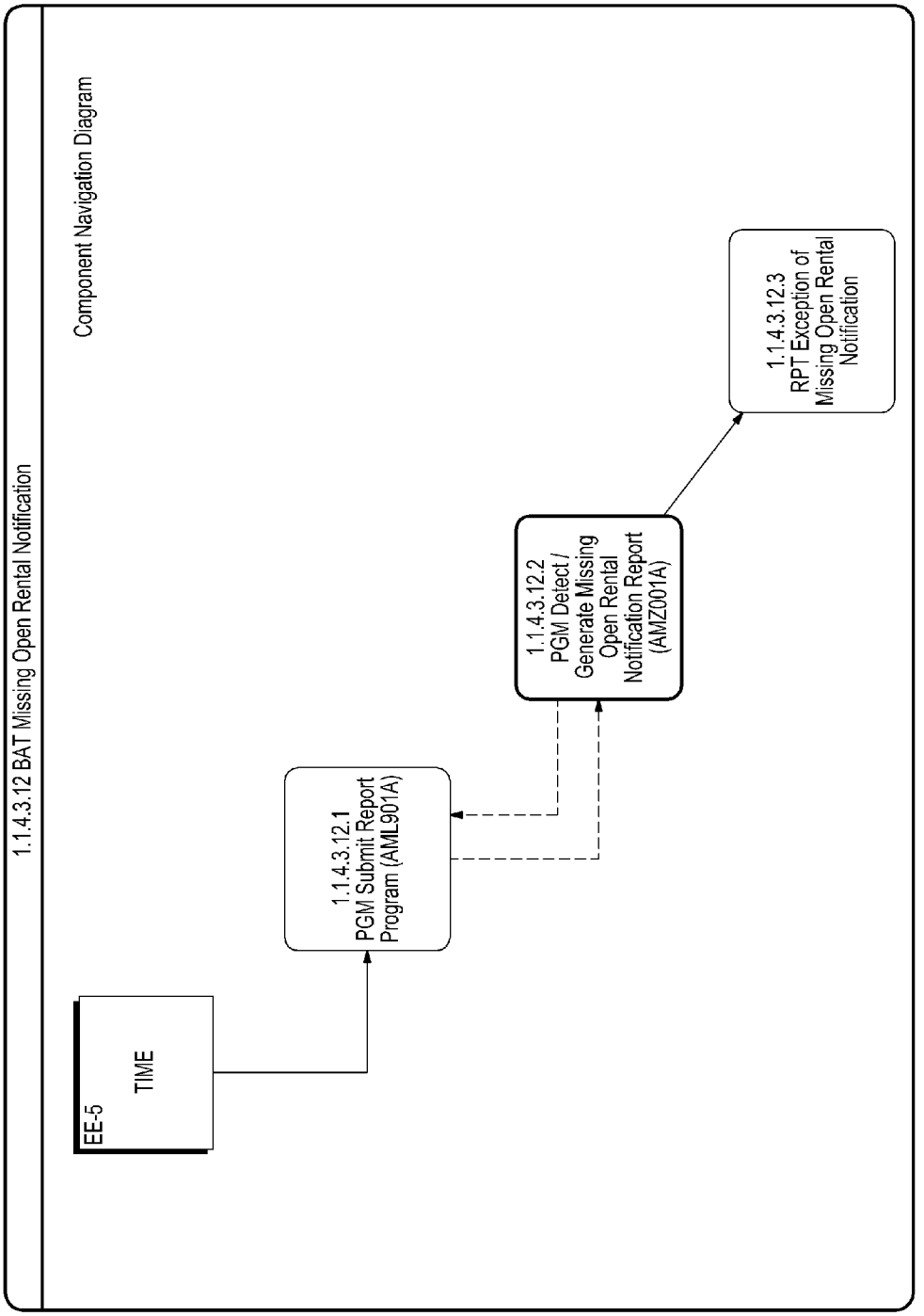

1.1.4.3.12 BAT Missing Open Rental Notification
Component Navigation Diagram
EE-5
TIME
1.1.4.3.12.1
PGM Submit Report
Program (AML901A)
1.1.4.3.12.2
PGM Detect /
Generate Missing
Open Rental
Notification Report
(AMZ001A)
1.1.4.3.12.3
RPT Exception of
Missing Open Rental
Notification

FIG. 59

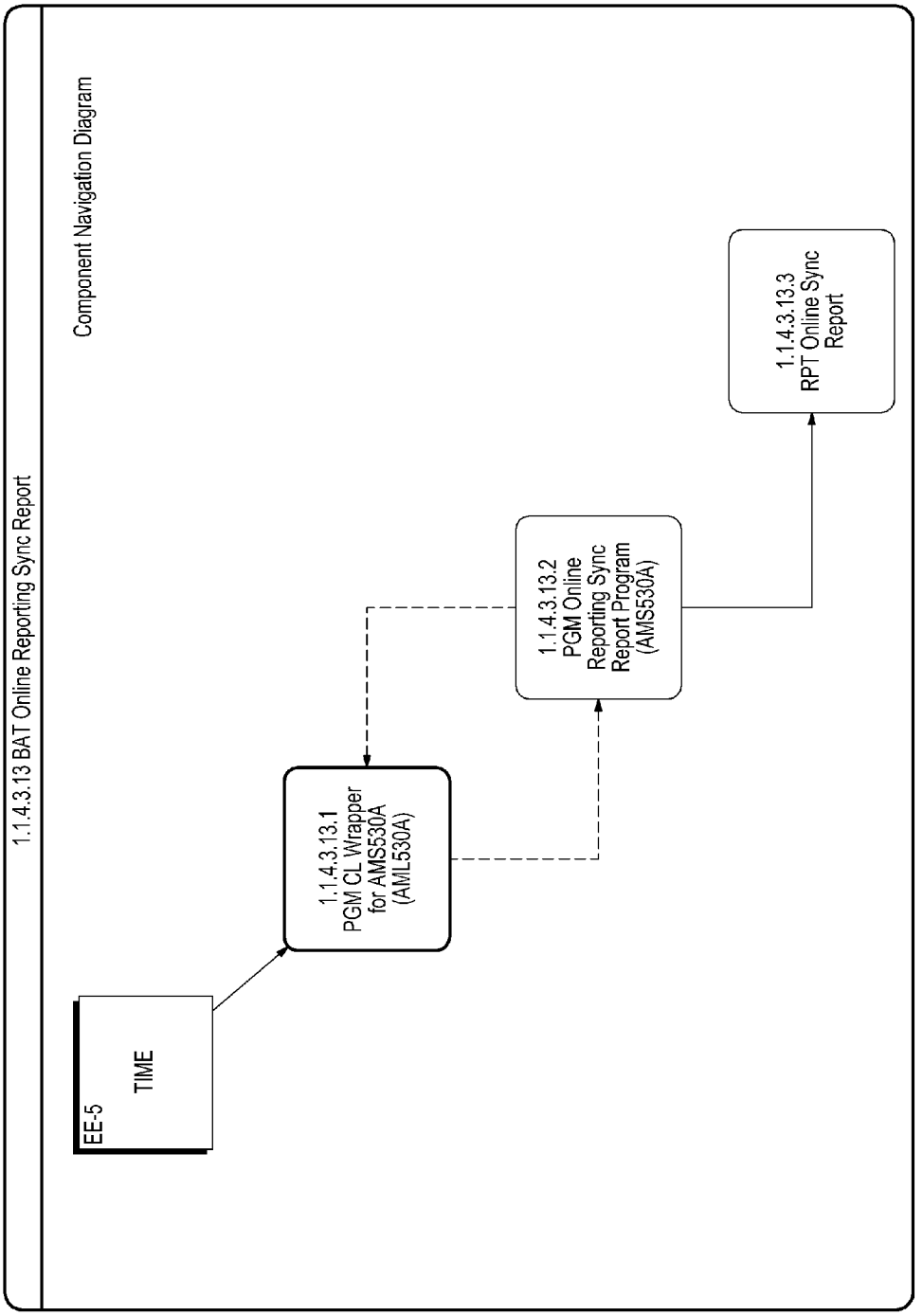

1.1.4.3.13 BAT Online Reporting Sync Report
Component Navigation Diagram
EE-5
TIME
1.1.4.3.13.1
PGM CL Wrapper
for AMS530A
(AML530A)
1.1.4.3.13.2
PGM Online
Reporting Sync
Report Program
(AMS530A)
1.1.4.3.13.3
RPT Online Sync
Report

FIG. 60

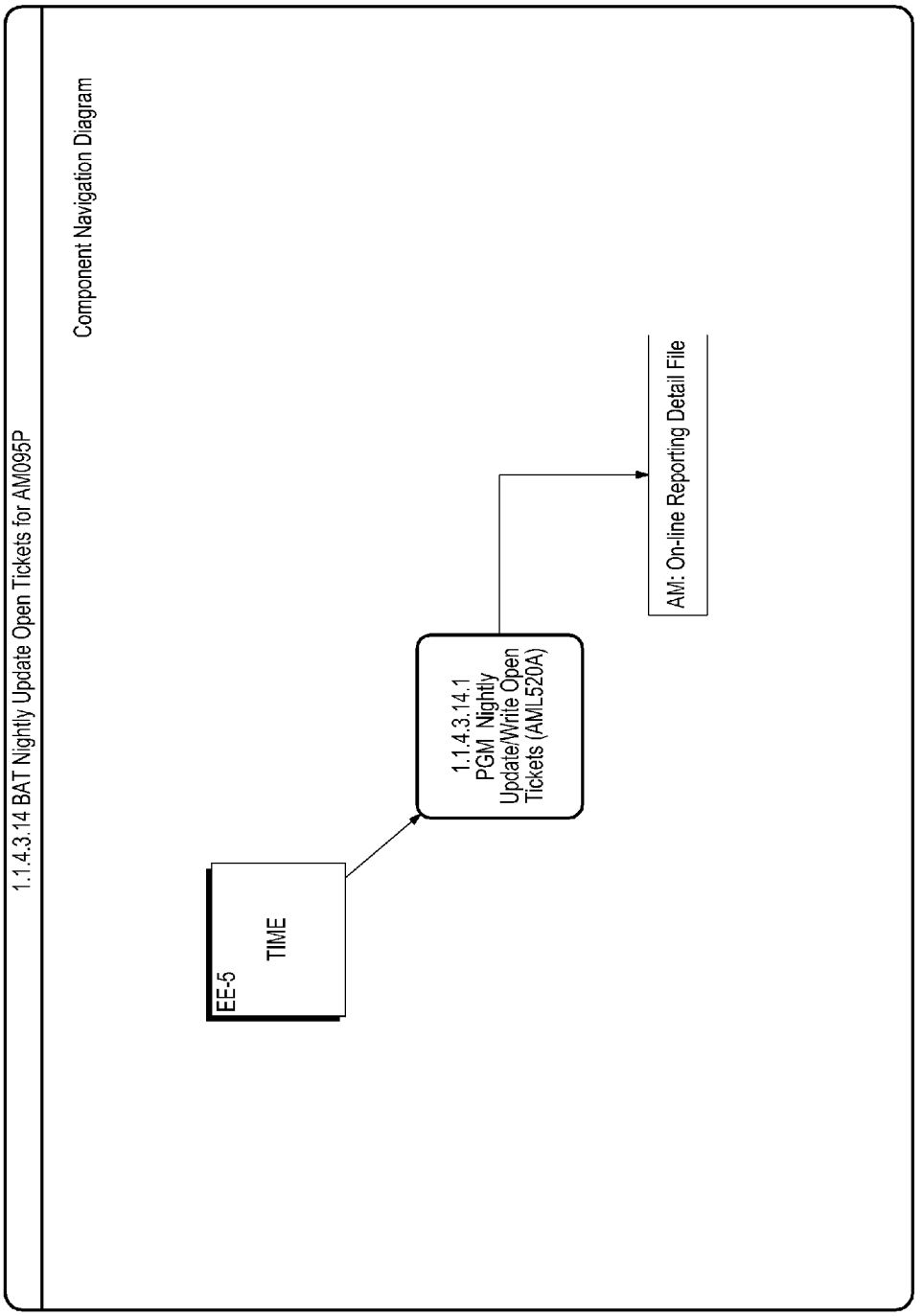

1.1.4.3.14 BAT Nightly Update Open Tickets for AM095P
Component Navigation Diagram
EE-5
TIME
1.1.4.3.14.1
PGM Nightly
Update/Write Open
Tickets (AML520A)
AM: On-line Reporting Detail File

FIG. 61

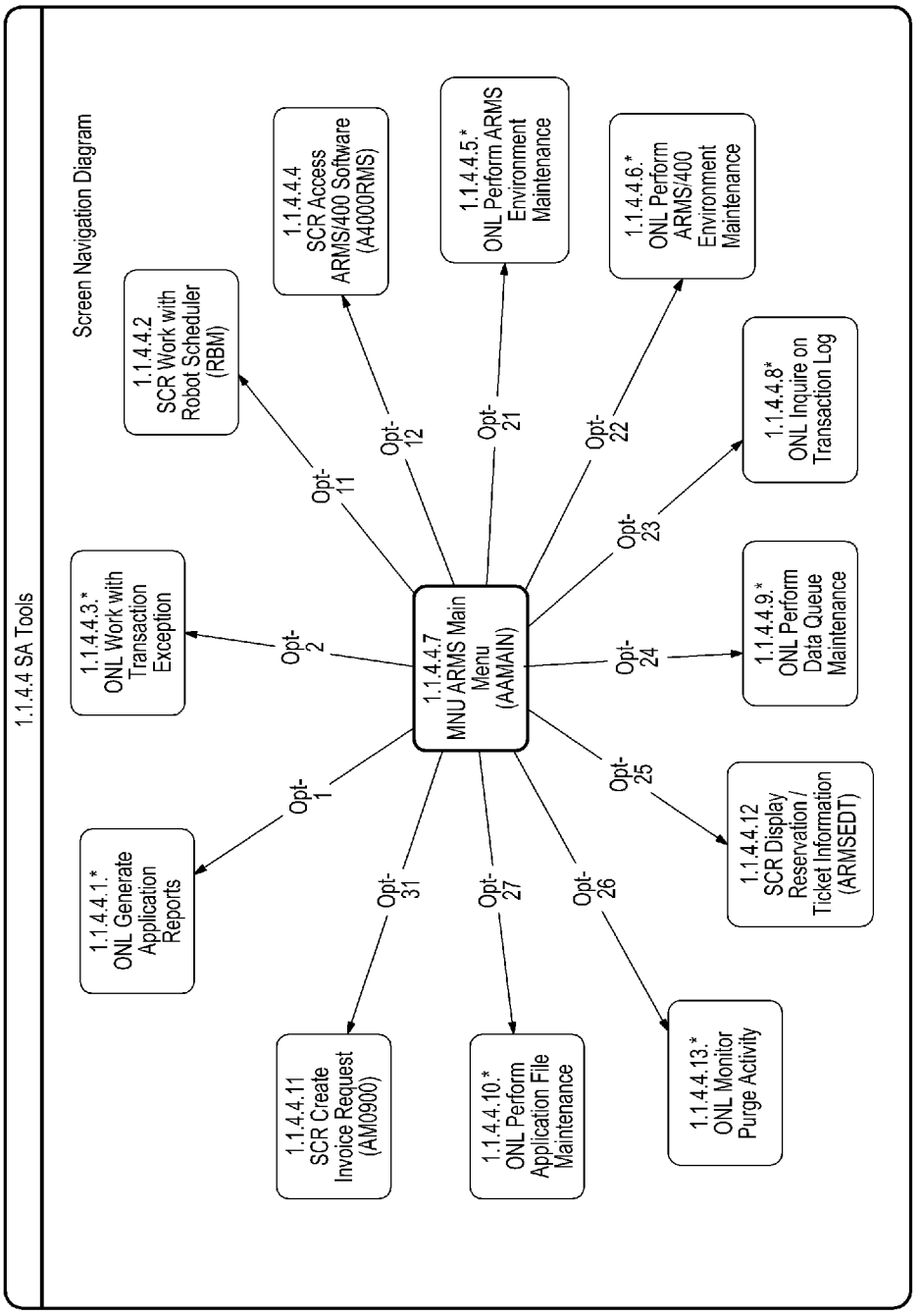

1.1.4.4 SA Tools
Screen Navigation Diagram
1.1.4.4.7
MNU ARMS Main
Menu
(AAMAIN)
Opt-
1
1.1.4.4.1.*
ONL Generate
Application
Reports
Opt-
2
1.1.4.4.3.*
ONL Work with
Transaction
Exception
Opt-
11
1.1.4.4.2
SCR Work with
Robot Scheduler
(RBM)
Opt-
12
1.1.4.4.4
SCR Access
ARMS/400 Software
(A4000RMS)
Opt-
21
1.1.4.4.5.*
ONL Perform ARMS
Environment
Maintenance
Opt-
22
1.1.4.4.6.*
ONL Perform
ARMS/400
Environment
Maintenance
Opt-
23
1.1.4.4.8*
ONL Inquire on
Transaction Log
Opt-
24
1.1.4.4.9.*
ONL Perform
Data Queue
Maintenance
Opt-
25
1.1.4.4.12
SCR Display
Reservation /
Ticket Information
(ARMSEDT)
Opt-
26
1.1.4.4.13.*
ONL Monitor
Purge Activity
Opt-
27
1.1.4.4.10.*
ONL Perform
Application File
Maintenance
Opt-
31
1.1.4.4.11
SCR Create
Invoice Request
(AM0900)

FIG. 62

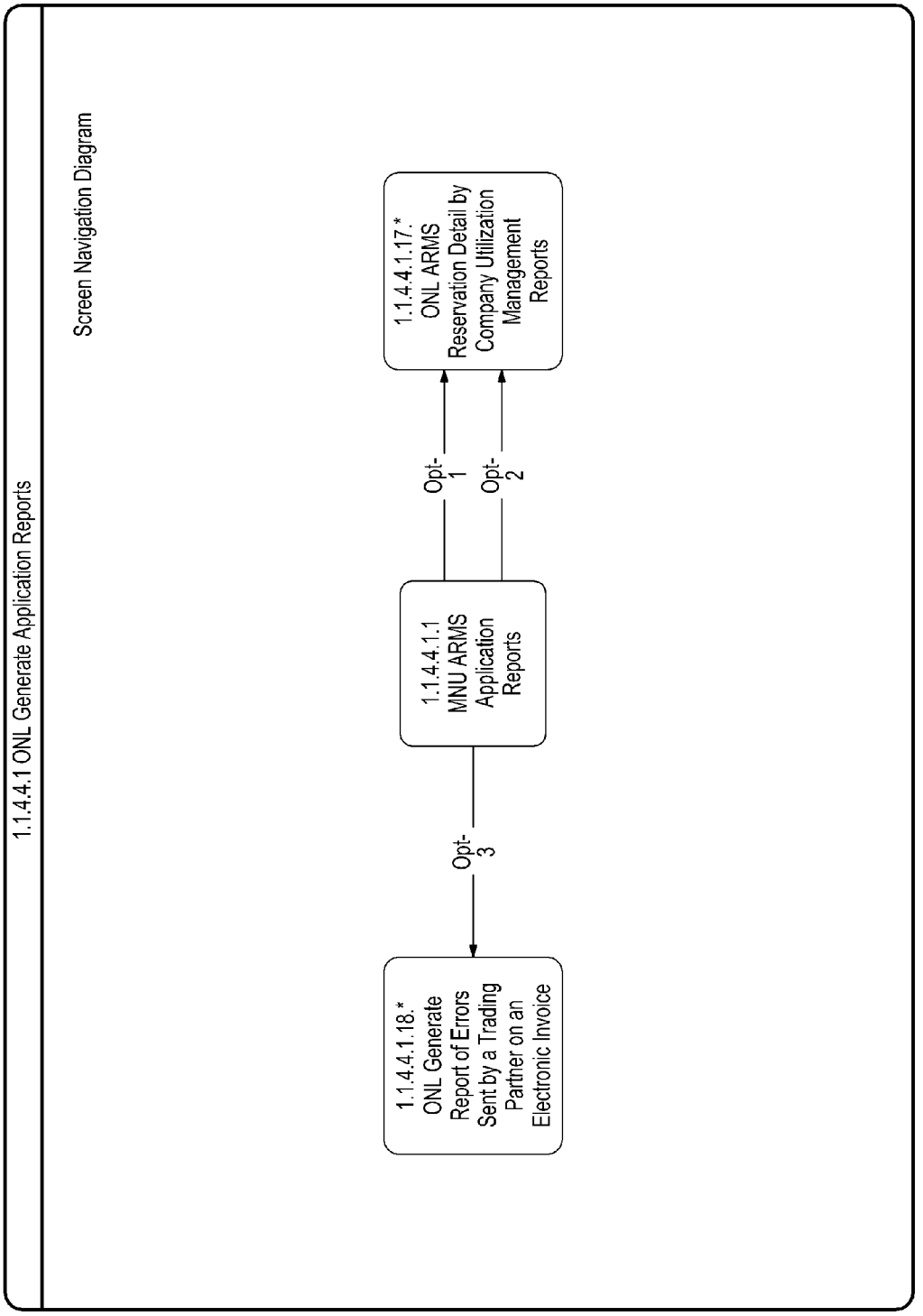

1.1.4.4.1 ONL Generate Application Reports
Screen Navigation Diagram
1.1.4.4.1.17.* ONL ARMS Reservation Detail by Company Utilization Management Reports
Opt-1
Opt-2
1.1.4.4.1.1 MNU ARMS Application Reports
Opt-3
1.1.4.4.1.18.* ONL Generate Report of Errors Sent by a Trading Partner on an Electronic Invoice

FIG. 63

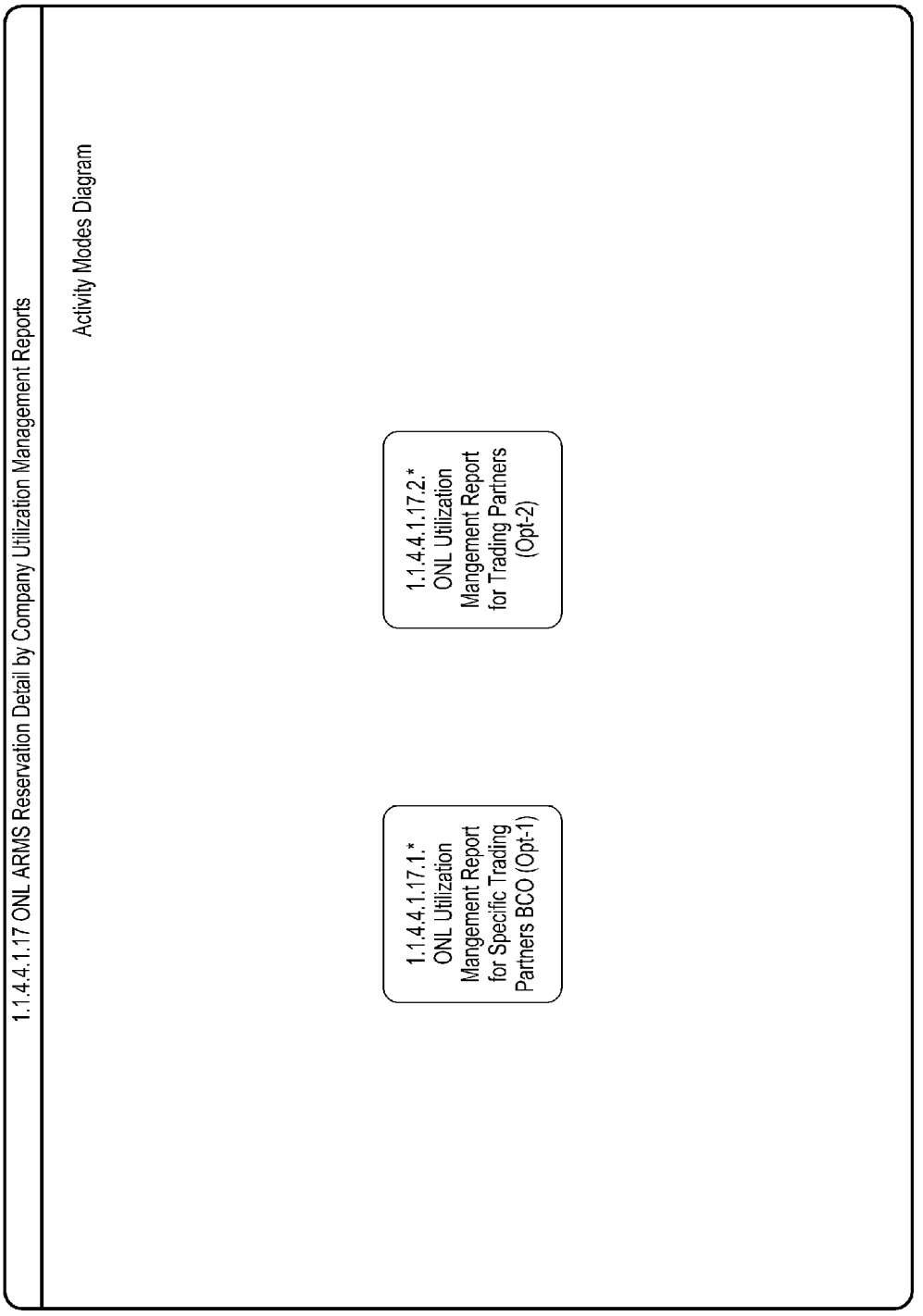

1.1.4.4.1.17 ONL ARMS Reservation Detail by Company Utilization Management Reports
Activity Modes Diagram
1.1.4.4.1.17.1.* ONL Utilization Mangement Report for Specific Trading Partners BCO (Opt-1)
1.1.4.4.1.17.2.* ONL Utilization Mangement Report for Trading Partners (Opt-2)

FIG. 64

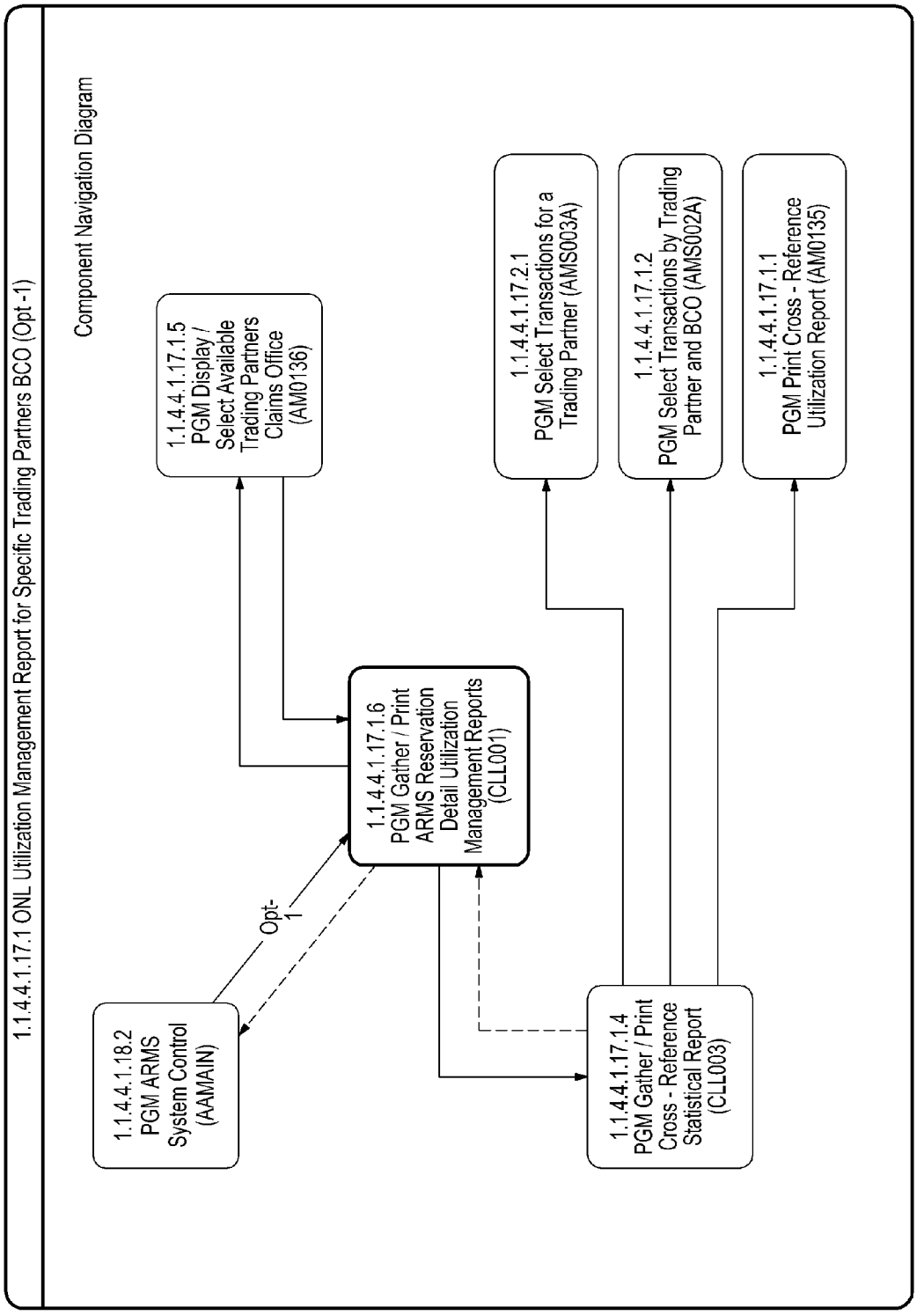

1.1.4.4.1.17.1 ONL Utilization Management Report for Specific Trading Partners BCO (Opt -1)
Component Navigation Diagram
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)
Opt-
1
1.1.4.4.1.17.1.6
PGM Gather / Print
ARMS Reservation
Detail Utilization
Management Reports
(CLL001)
1.1.4.4.1.17.1.5
PGM Display /
Select Available
Trading Partners
Claims Office
(AM0136)
1.1.4.4.1.17.1.4
PGM Gather / Print
Cross - Reference
Statistical Report
(CLL003)
1.1.4.4.1.17.2.1
PGM Select Transactions for a
Trading Partner (AMS003A)
1.1.4.4.1.17.1.2
PGM Select Transactions by Trading
Partner and BCO (AMS002A)
1.1.4.4.1.17.1.1
PGM Print Cross - Reference
Utilization Report (AM0135)

FIG. 65

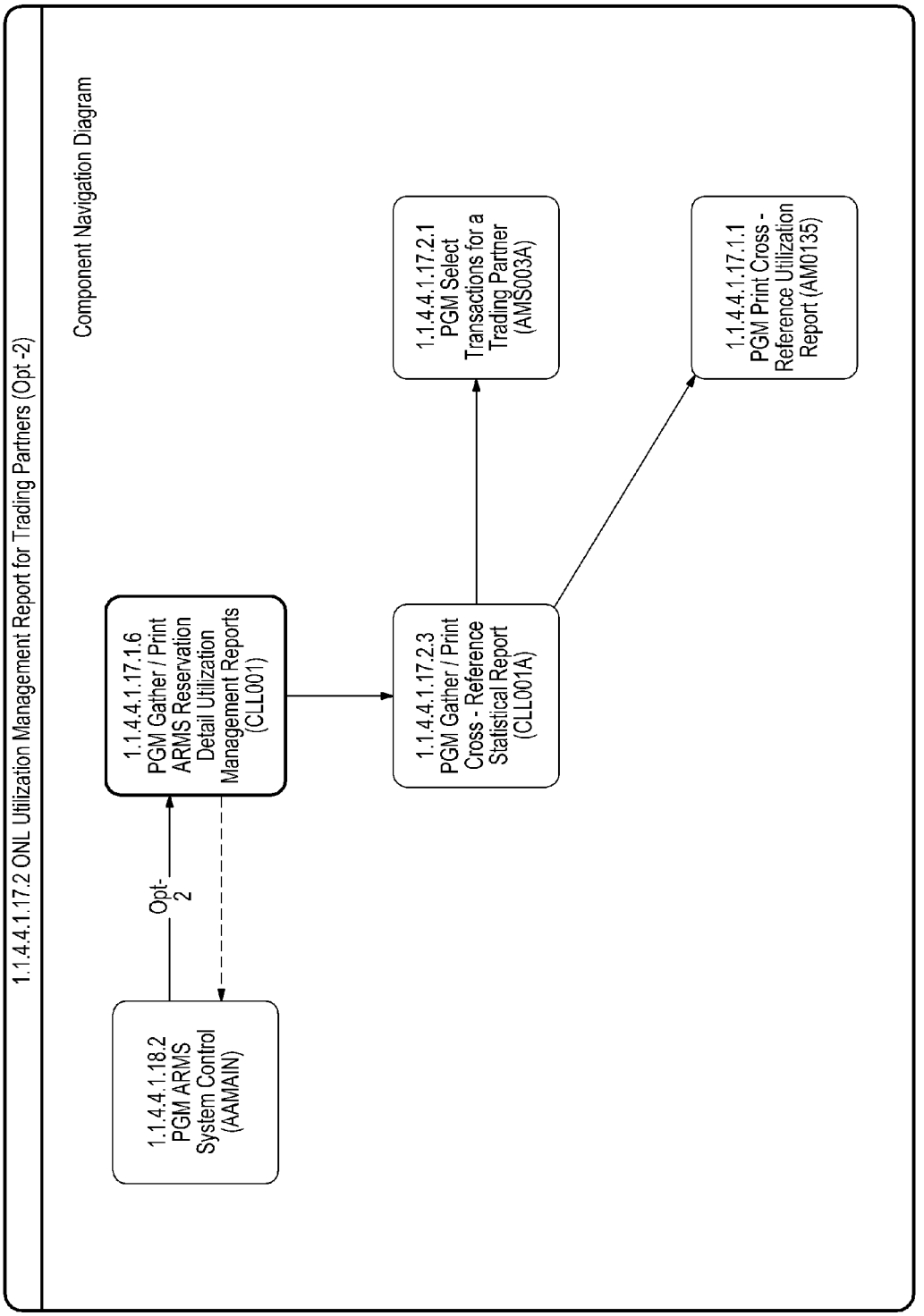

1.1.4.4.1.17.2 ONL Utilization Management Report for Trading Partners (Opt -2)
Component Navigation Diagram
1.1.4.4.1.18.2 PGM ARMS System Control (AAMAIN)
Opt-2
1.1.4.4.1.17.1.6 PGM Gather / Print ARMS Reservation Detail Utilization Management Reports (CLL001)
1.1.4.4.1.17.2.3 PGM Gather / Print Cross - Reference Statistical Report (CLL001A)
1.1.4.4.1.17.2.1 PGM Select Transactions for a Trading Partner (AMS003A)
1.1.4.4.1.17.1.1 PGM Print Cross - Reference Utilization Report (AM0135)

FIG. 66

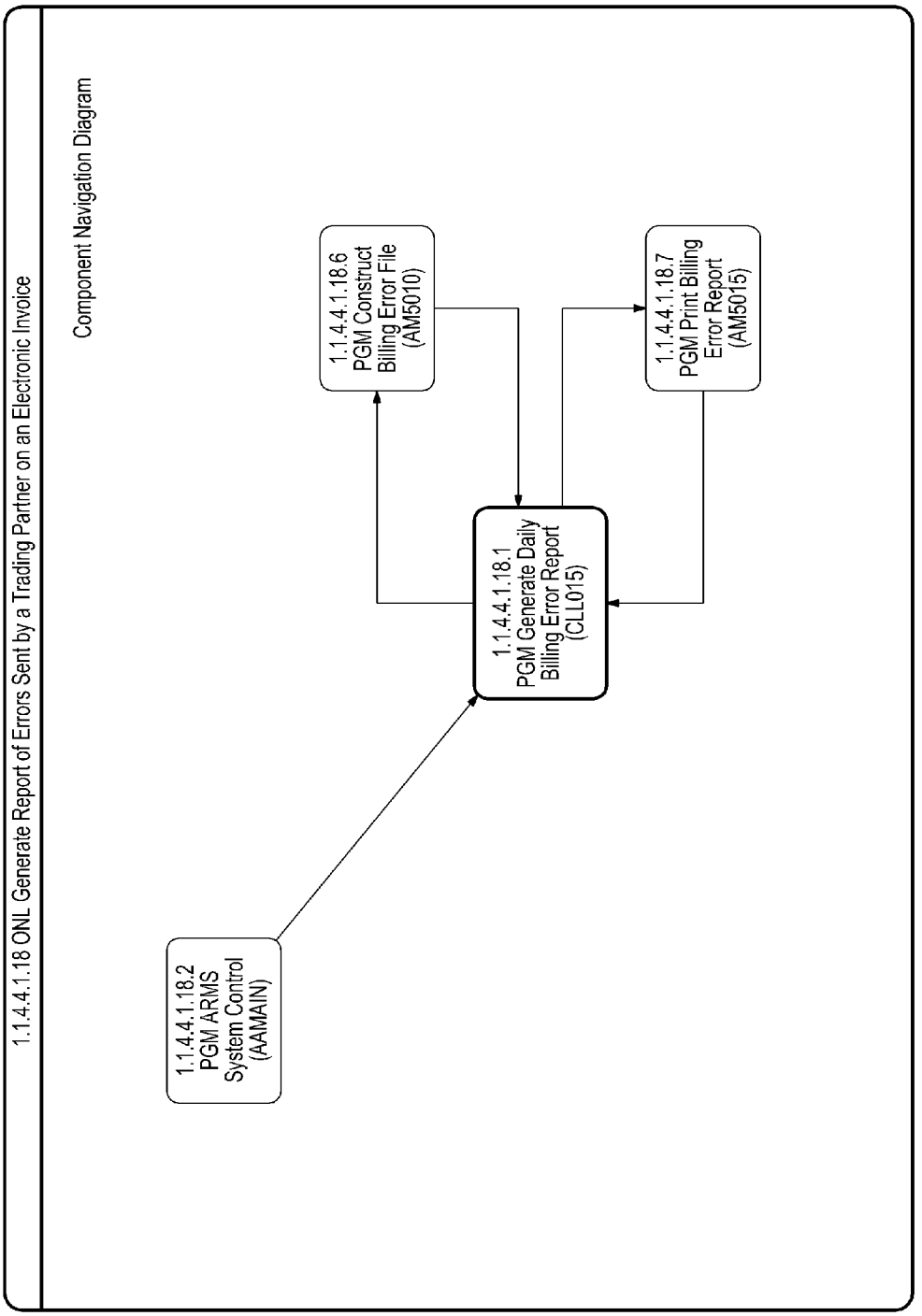

1.1.4.4.1.18 ONL Generate Report of Errors Sent by a Trading Partner on an Electronic Invoice
Component Navigation Diagram
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)
1.1.4.4.1.18.1
PGM Generate Daily
Billing Error Report
(CLL015)
1.1.4.4.1.18.6
PGM Construct
Billing Error File
(AM5010)
1.1.4.4.1.18.7
PGM Print Billing
Error Report
(AM5015)

FIG. 67

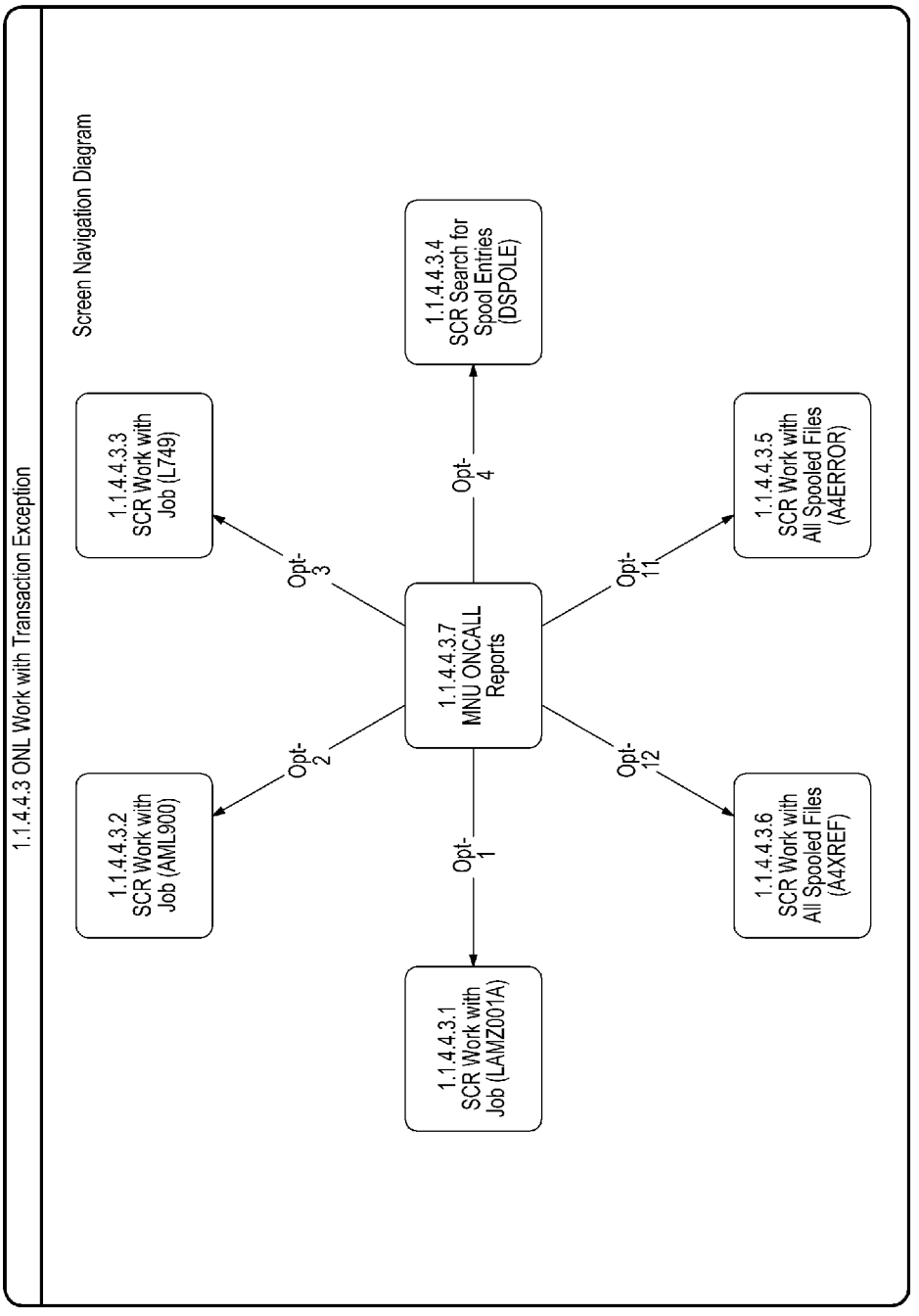

1.1.4.4.3 ONL Work with Transaction Exception
Screen Navigation Diagram
1.1.4.4.3.7
MNU ONCALL
Reports
Opt-
1
1.1.4.4.3.1
SCR Work with
Job (LAMZ001A)
Opt-
2
1.1.4.4.3.2
SCR Work with
Job (AML900)
Opt-
3
1.1.4.4.3.3
SCR Work with
Job (L749)
Opt-
4
1.1.4.4.3.4
SCR Search for
Spool Entries
(DSPOLE)
Opt-
11
1.1.4.4.3.5
SCR Work with
All Spooled Files
(A4ERROR)
Opt-
12
1.1.4.4.3.6
SCR Work with
All Spooled Files
(A4XREF)

FIG. 68

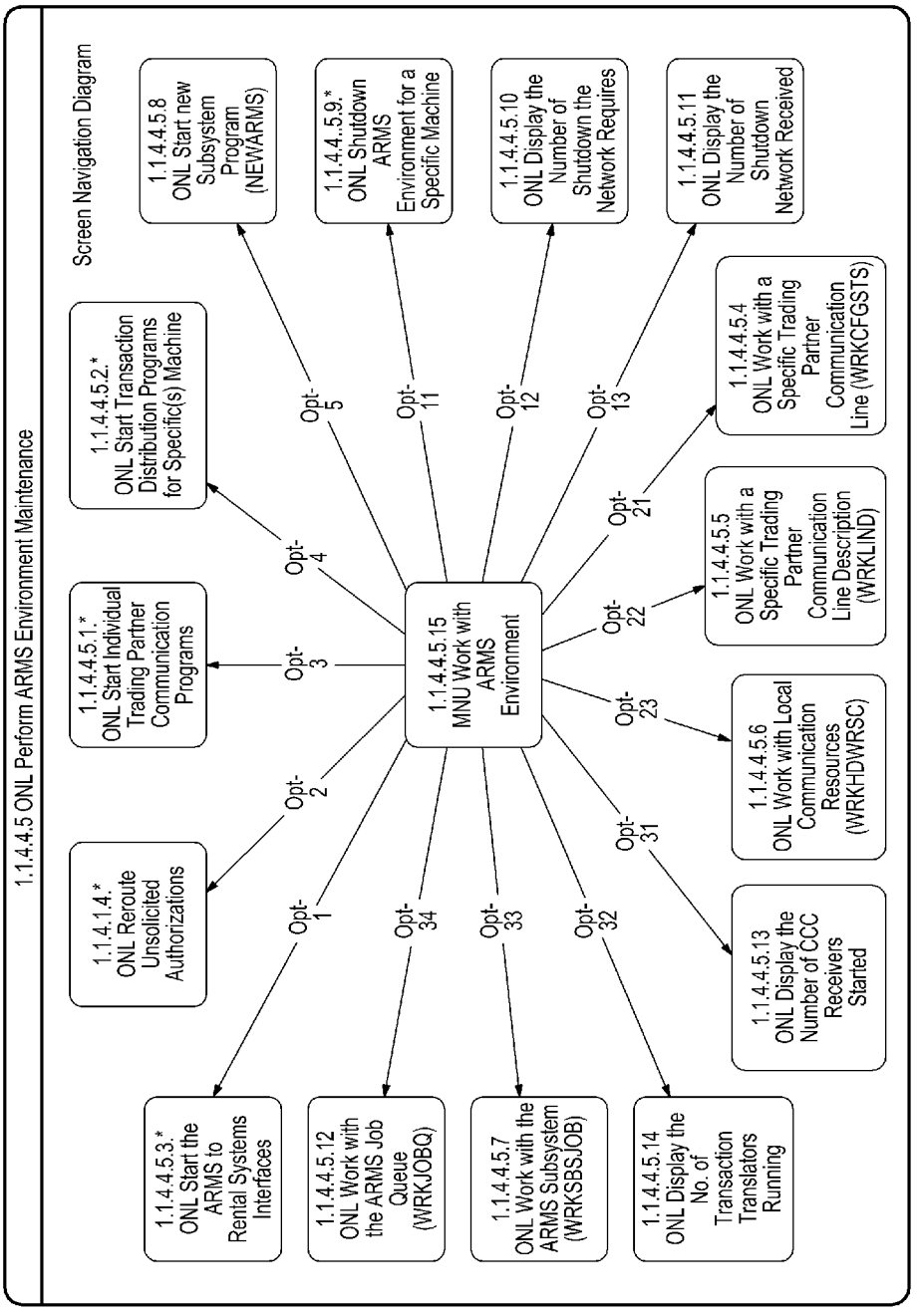

1.1.4.4.5 ONL Perform ARMS Environment Maintenance
Screen Navigation Diagram
1.1.4.4.5.15 MNU Work with ARMS Environment
1.1.4.1.4.* ONL Reroute Unsolicited Authorizations
1.1.4.4.5.1.* ONL Start Individual Trading Partner Communication Programs
1.1.4.4.5.2.* ONL Start Transaction Distribution Programs for Specific(s) Machine
1.1.4.4.5.8 ONL Start new Subsystem Program (NEWARMS)
1.1.4.4..5.9.* ONL Shutdown ARMS Environment for a Specific Machine
1.1.4.4.5.10 ONL Display the Number of Shutdown the Network Requires
1.1.4.4.5.11 ONL Display the Number of Shutdown Network Received
1.1.4.4.5.4 ONL Work with a Specific Trading Partner Communication Line (WRKCFGSTS)
1.1.4.4.5.5 ONL Work with a Specific Trading Partner Communication Line Description (WRKLIND)
1.1.4.4.5.6 ONL Work with Local Communication Resources (WRKHDWRSC)
1.1.4.4.5.13 ONL Display the Number of CCC Receivers Started
1.1.4.4.5.3.* ONL Start the ARMS to Rental Systems Interfaces
1.1.4.4.5.12 ONL Work with the ARMS Job Queue (WRKJOBQ)
1.1.4.4.5.7 ONL Work with the ARMS Subsystem (WRKSBSJOB)
1.1.4.4.5.14 ONL Display the No. of Transaction Translators Running
Opt-1
Opt-2
Opt-3
Opt-4
Opt-5
Opt-11
Opt-12
Opt-13
Opt-21
Opt-22
Opt-23
Opt-31
Opt-32
Opt-33
Opt-34

FIG. 69

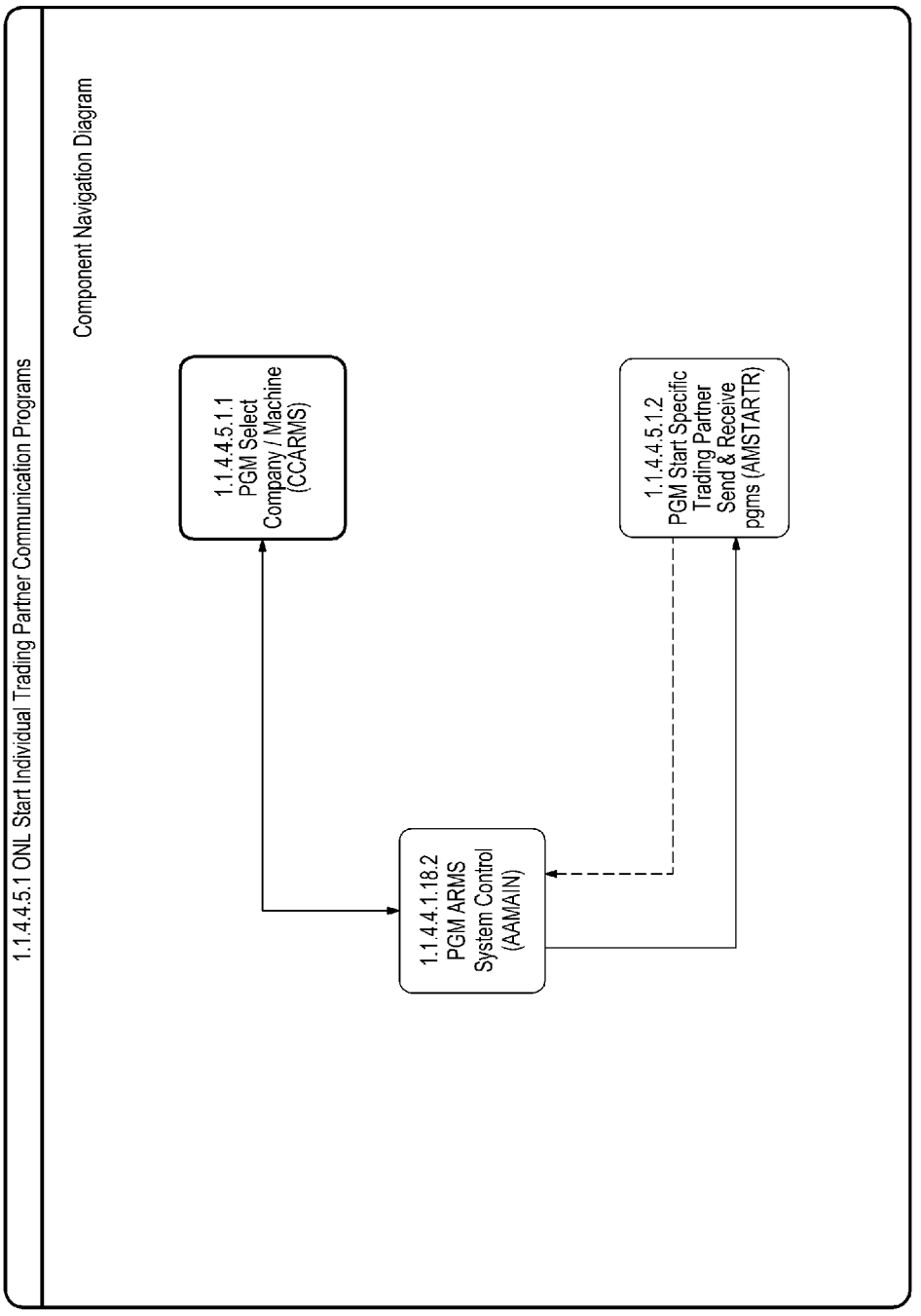

1.1.4.4.5.1 ONL Start Individual Trading Partner Communication Programs
Component Navigation Diagram
1.1.4.4.5.1.1
PGM Select
Company / Machine
(CCARMS)
1.1.4.4.5.1.2
PGM Start Specific
Trading Partner
Send & Receive
pgms (AMSTARTR)
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)

FIG. 70

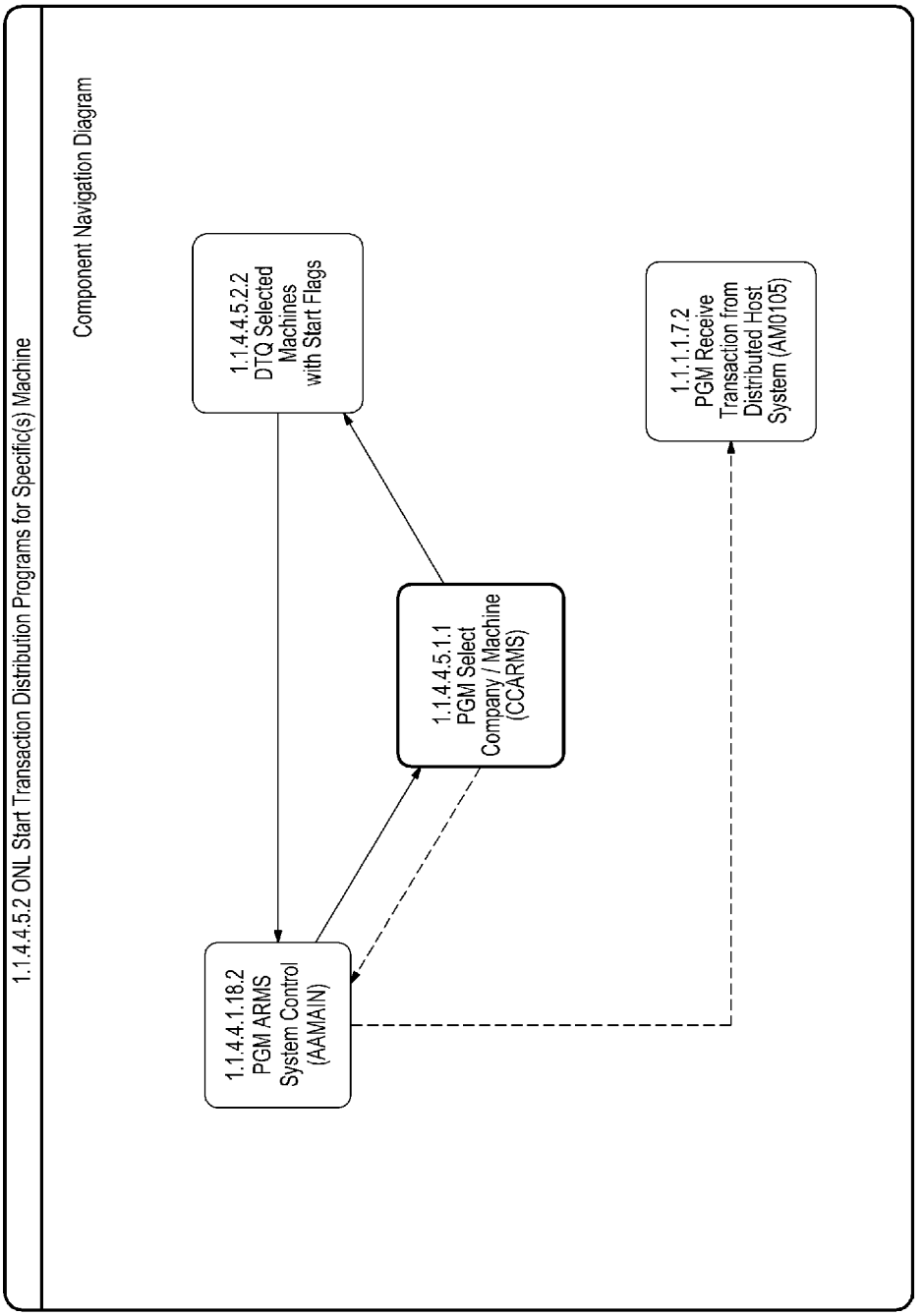

1.1.4.4.5.2 ONL Start Transaction Distribution Programs for Specific(s) Machine
Component Navigation Diagram
1.1.4.4.5.2.2 DTQ Selected Machines with Start Flags
1.1.1.1.7.2 PGM Receive Transaction from Distributed Host System (AM0105)
1.1.4.4.5.1.1 PGM Select Company / Machine (CCARMS)
1.1.4.4.1.18.2 PGM ARMS System Control (AAMAIN)

FIG. 71

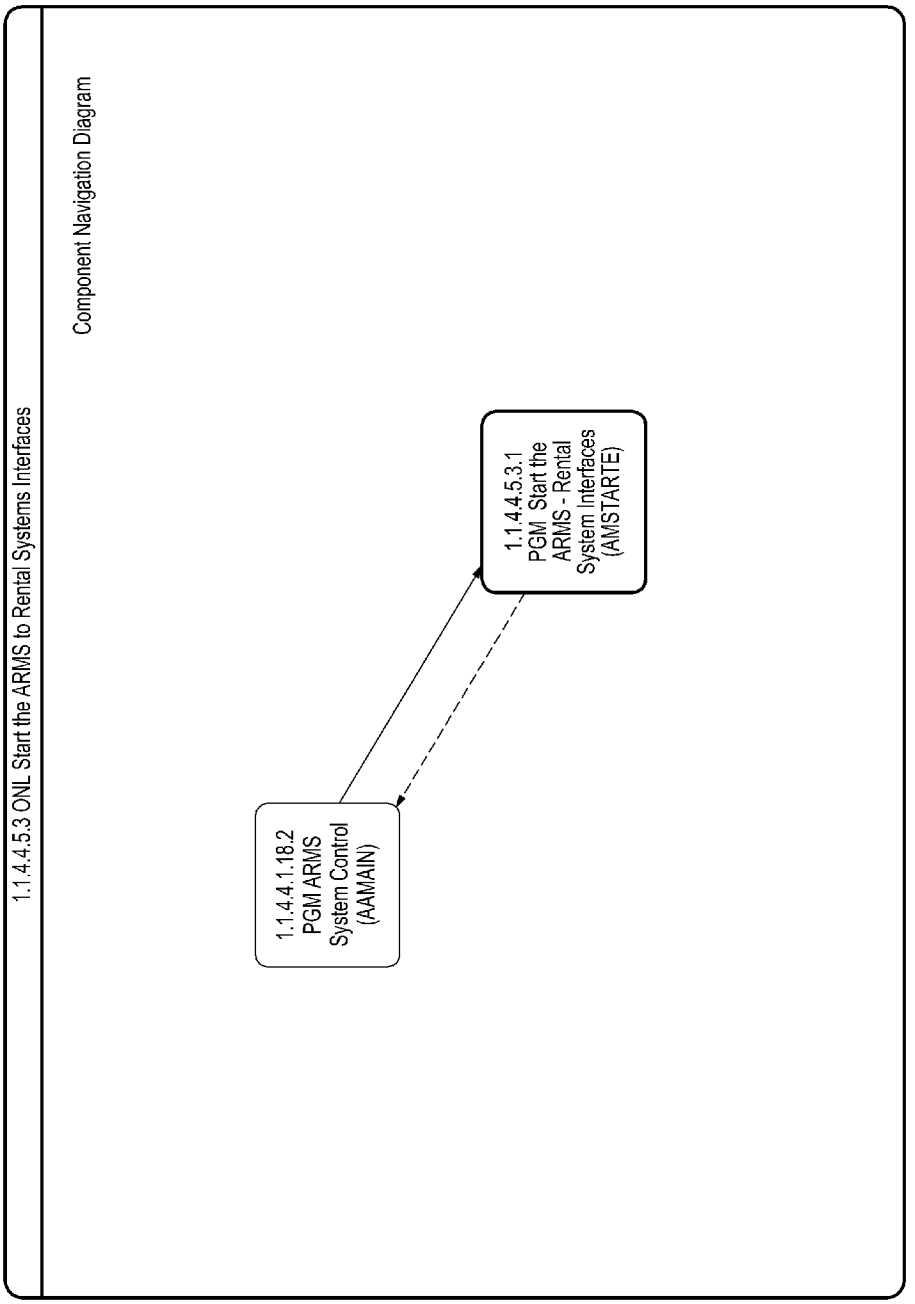

1.1.4.4.5.3 ONL Start the ARMS to Rental Systems Interfaces
Component Navigation Diagram
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)
1.1.4.4.5.3.1
PGM Start the
ARMS - Rental
System Interfaces
(AMSTARTE)

FIG. 72

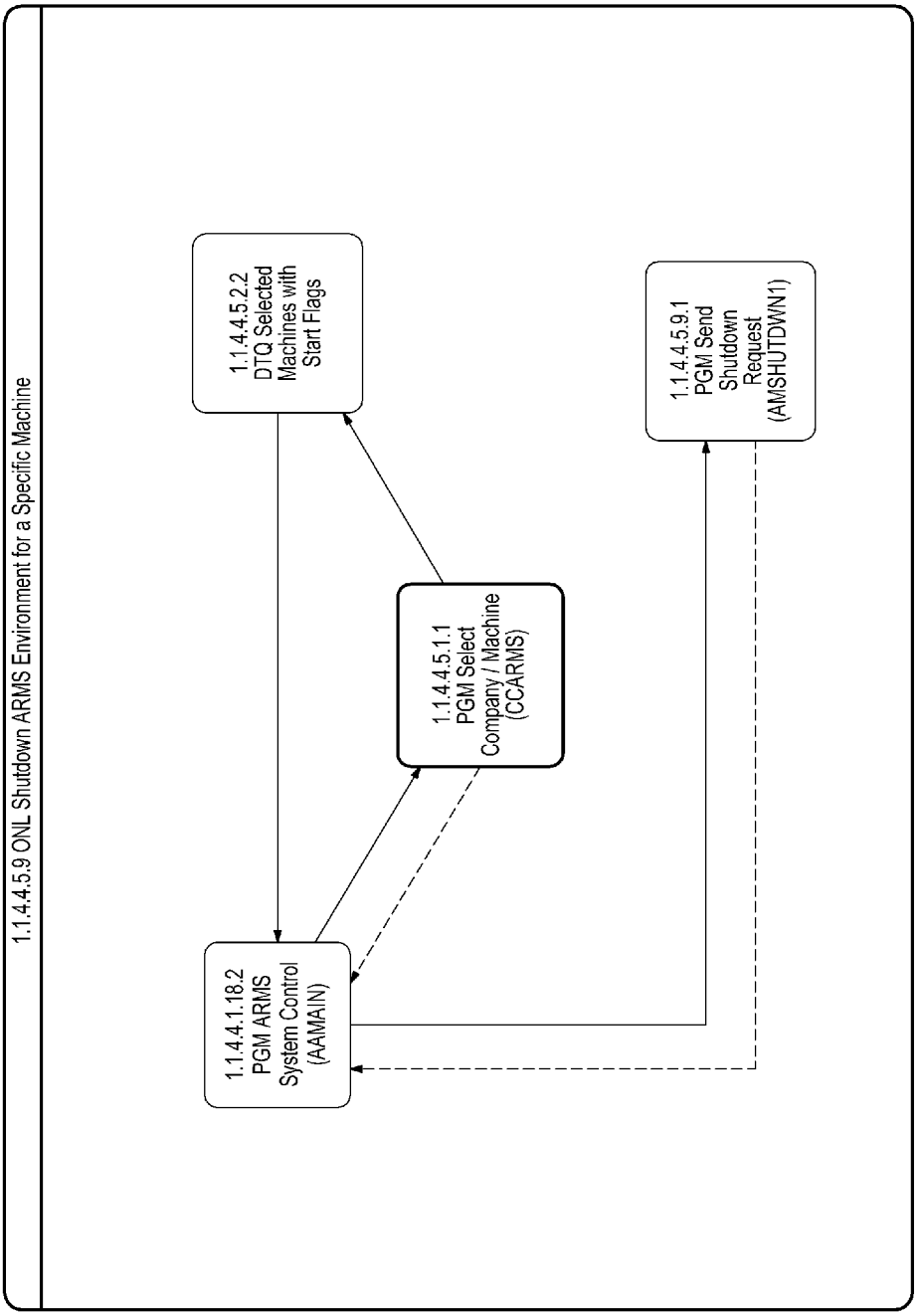

1.1.4.4.5.9 ONL Shutdown ARMS Environment for a Specific Machine
1.1.4.4.5.2.2 DTQ Selected Machines with Start Flags
1.1.4.4.5.9.1 PGM Send Shutdown Request (AMSHUTDWN1)
1.1.4.4.5.1.1 PGM Select Company / Machine (CCARMS)
1.1.4.4.1.18.2 PGM ARMS System Control (AAMAIN)

FIG. 73

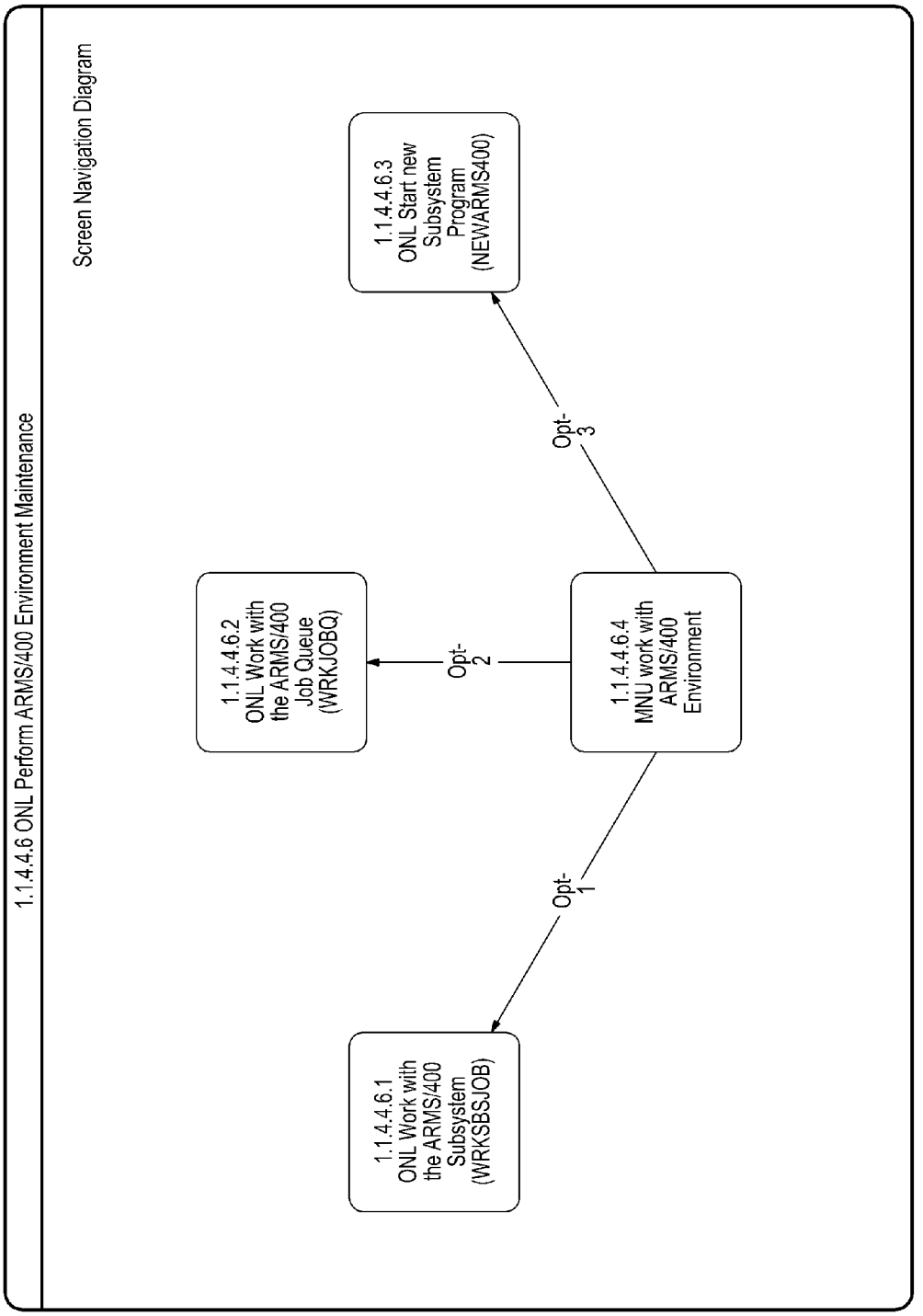

1.1.4.4.6 ONL Perform ARMS/400 Environment Maintenance
Screen Navigation Diagram
1.1.4.4.6.1 ONL Work with the ARMS/400 Subsystem (WRKSBSJOB)
1.1.4.4.6.2 ONL Work with the ARMS/400 Job Queue (WRKJOBQ)
1.1.4.4.6.3 ONL Start new Subsystem Program (NEWARMS400)
1.1.4.4.6.4 MNU work with ARMS/400 Environment
Opt-1
Opt-2
Opt-3

FIG. 74

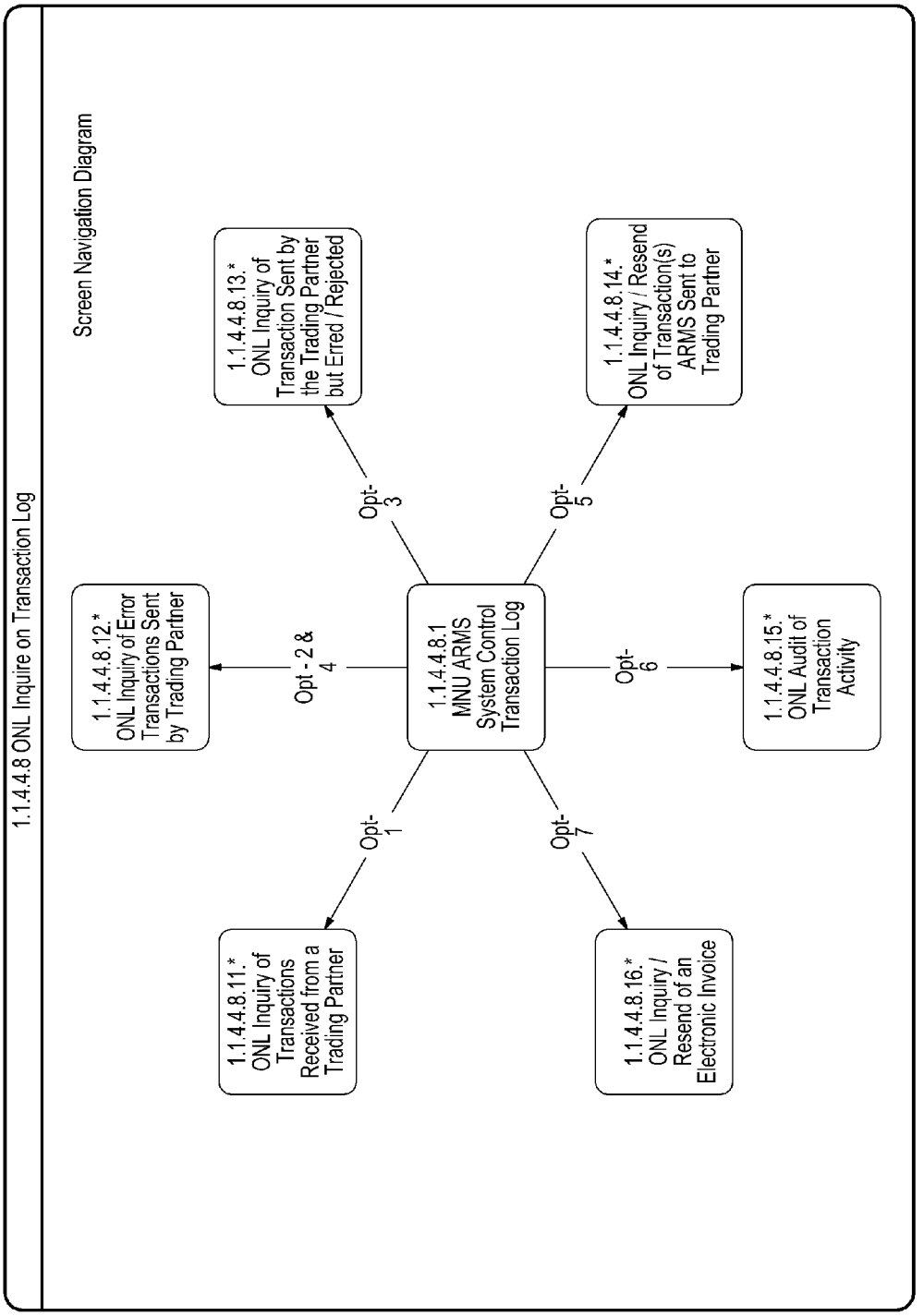

1.1.4.4.8 ONL Inquire on Transaction Log
Screen Navigation Diagram
1.1.4.4.8.1 MNU ARMS System Control Transaction Log
Opt-1
1.1.4.4.8.11.* ONL Inquiry of Transactions Received from a Trading Partner
Opt - 2 & 4
1.1.4.4.8.12.* ONL Inquiry of Error Transactions Sent by Trading Partner
Opt-3
1.1.4.4.8.13.* ONL Inquiry of Transaction Sent by the Trading Partner but Erred / Rejected
Opt-5
1.1.4.4.8.14.* ONL Inquiry / Resend of Transaction(s) ARMS Sent to Trading Partner
Opt-6
1.1.4.4.8.15.* ONL Audit of Transaction Activity
Opt-7
1.1.4.4.8.16.* ONL Inquiry / Resend of an Electronic Invoice

FIG. 75

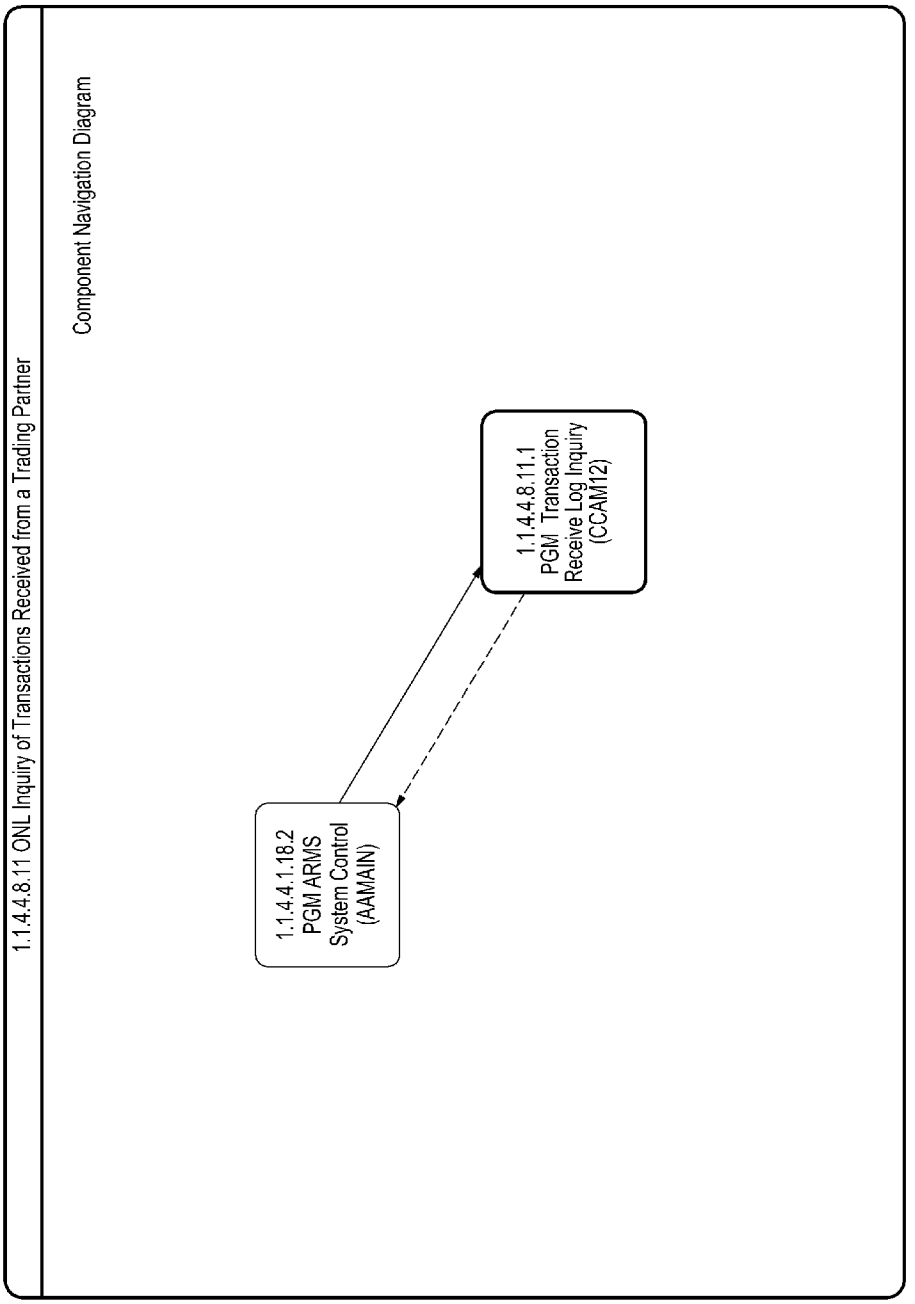

1.1.4.4.8.11 ONL Inquiry of Transactions Received from a Trading Partner
Component Navigation Diagram
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)
1.1.4.4.8.11.1
PGM Transaction
Receive Log Inquiry
(CCAM12)

FIG. 76

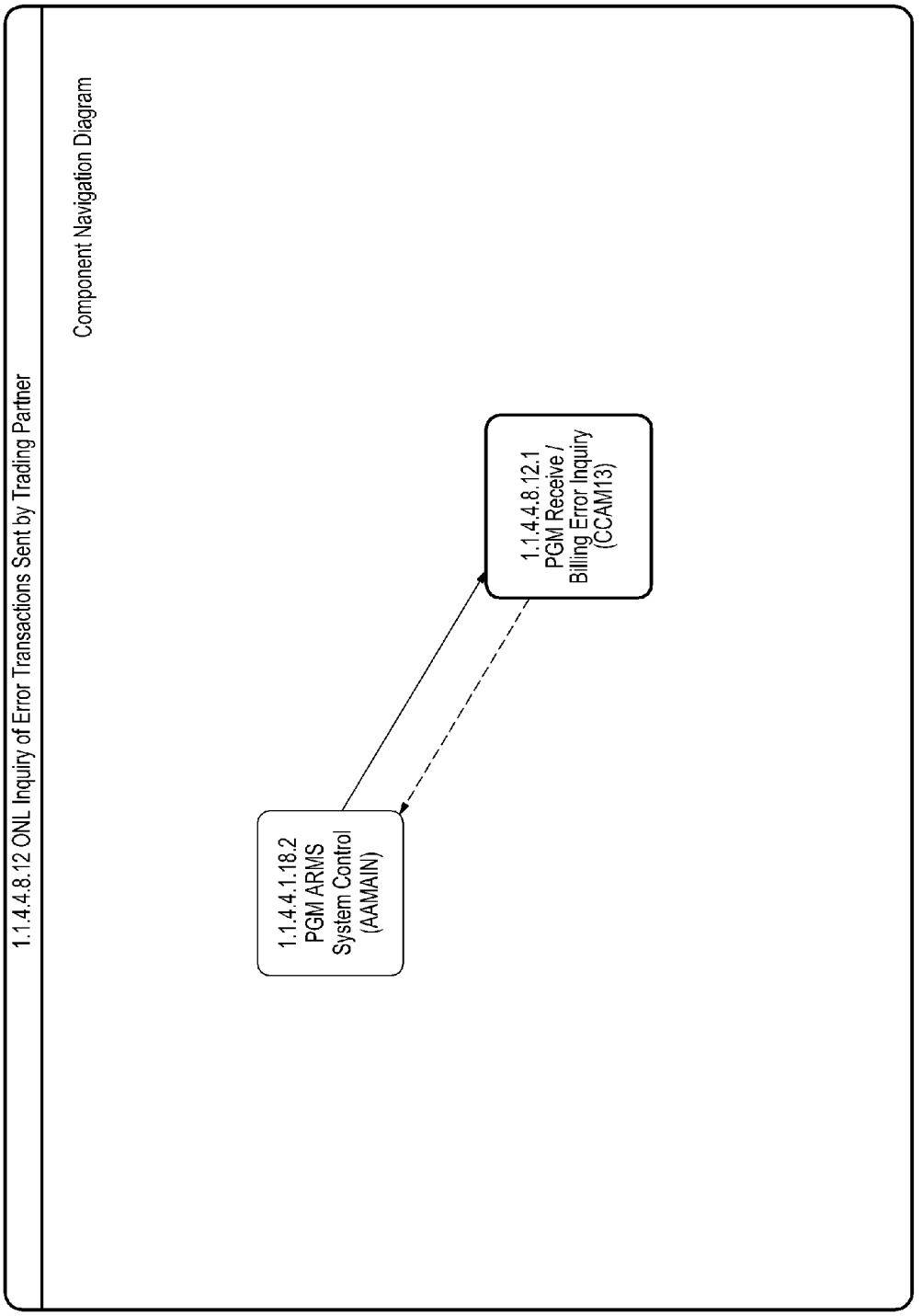

1.1.4.4.8.12 ONL Inquiry of Error Transactions Sent by Trading Partner
Component Navigation Diagram
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)
1.1.4.4.8.12.1
PGM Receive /
Billing Error Inquiry
(CCAM13)

FIG. 77

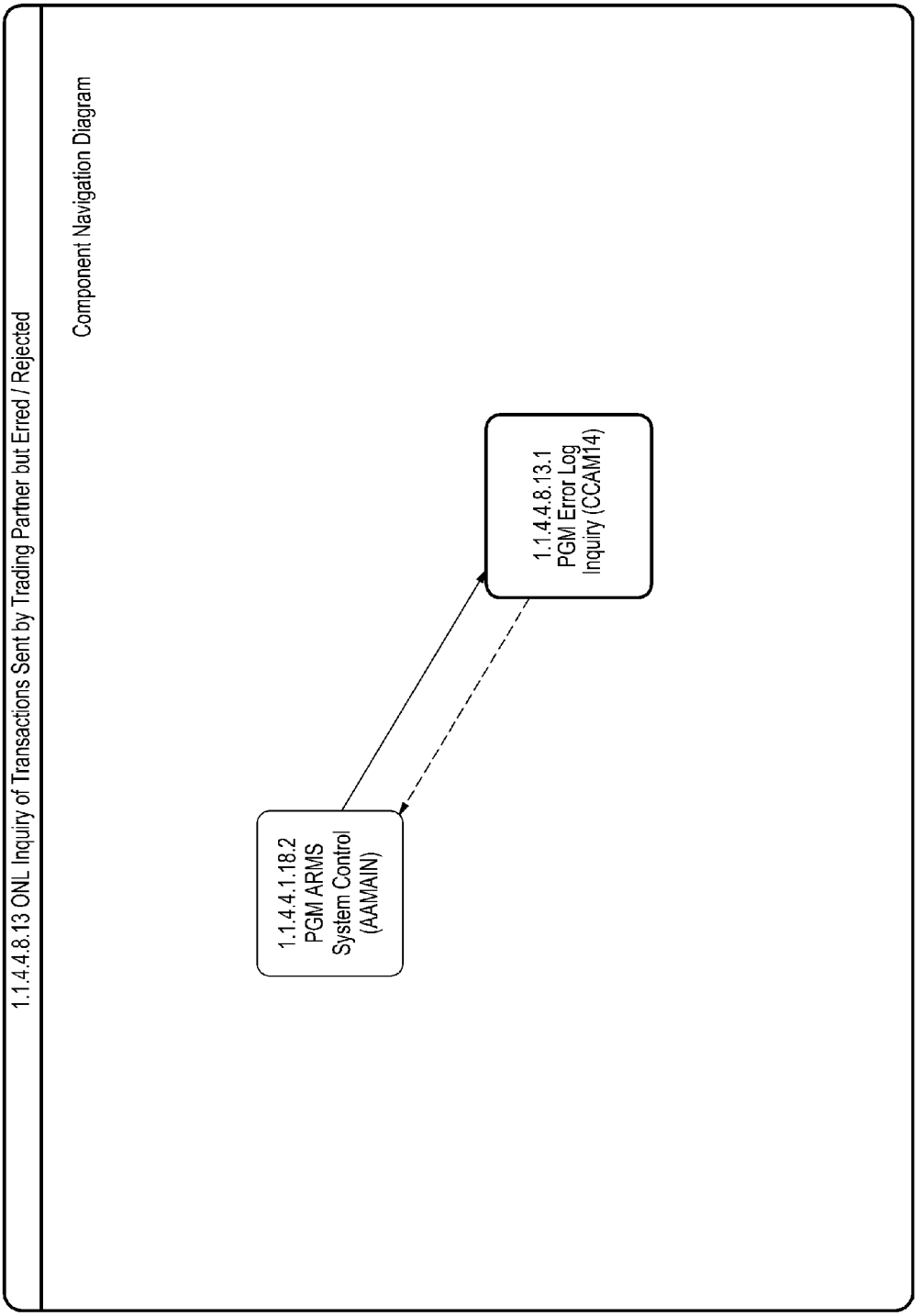

1.1.4.4.8.13 ONL Inquiry of Transactions Sent by Trading Partner but Erred / Rejected
Component Navigation Diagram
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)
1.1.4.4.8.13.1
PGM Error Log
Inquiry (CCAM14)

FIG. 78

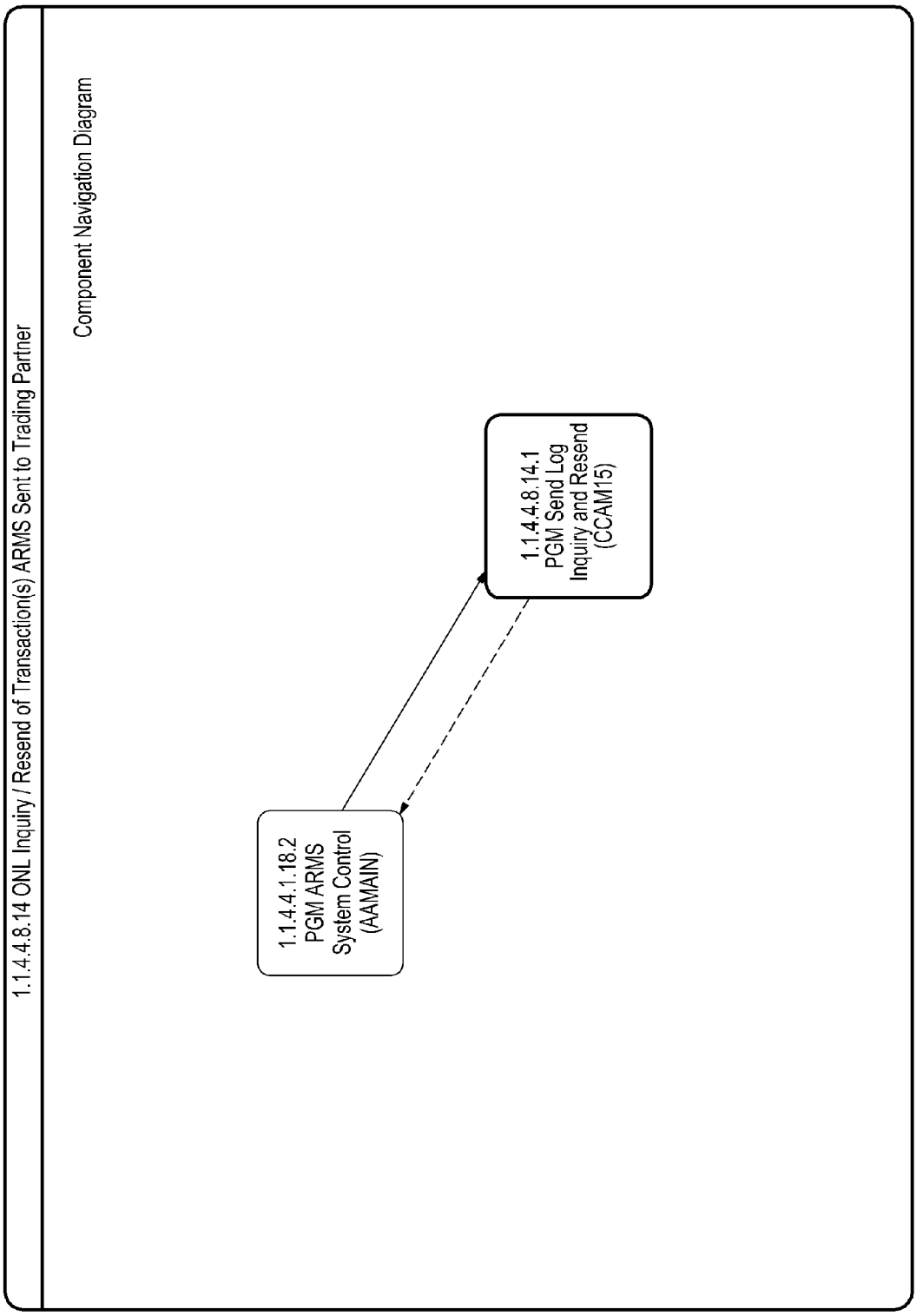

1.1.4.4.8.14 ONL Inquiry / Resend of Transaction(s) ARMS Sent to Trading Partner
Component Navigation Diagram
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)
1.1.4.4.8.14.1
PGM Send Log
Inquiry and Resend
(CCAM15)

FIG. 79

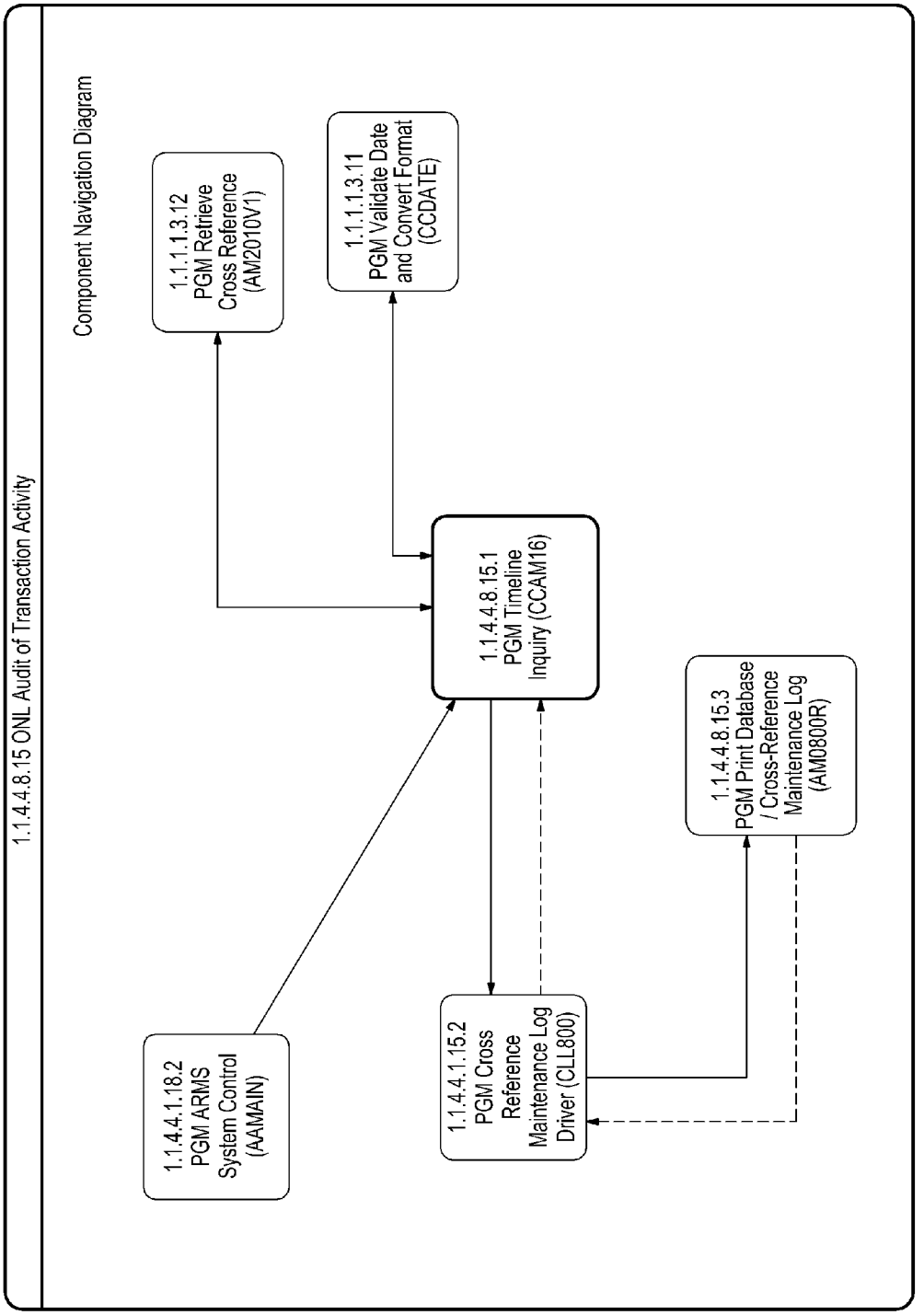

1.1.4.4.8.15 ONL Audit of Transaction Activity
Component Navigation Diagram
1.1.1.1.3.12 PGM Retrieve Cross Reference (AM2010V1)
1.1.1.1.3.11 PGM Validate Date and Convert Format (CCDATE)
1.1.4.4.8.15.1 PGM Timeline Inquiry (CCAM16)
1.1.4.4.1.18.2 PGM ARMS System Control (AAMAIN)
1.1.4.4.1.15.2 PGM Cross Reference Maintenance Log Driver (CLL800)
1.1.4.4.8.15.3 PGM Print Database / Cross-Reference Maintenance Log (AM0800R)

FIG. 80

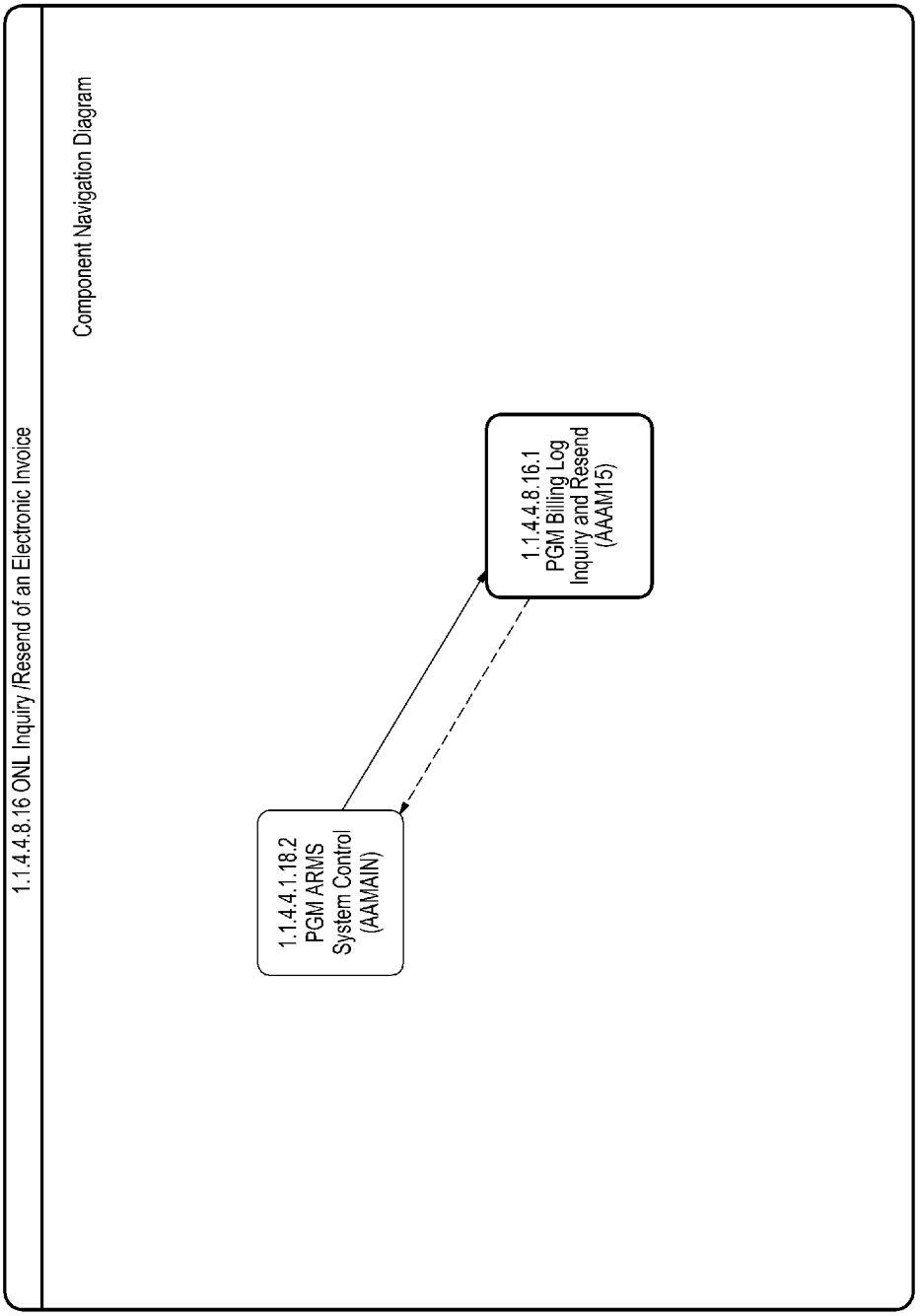

1.1.4.4.8.16 ONL Inquiry /Resend of an Electronic Invoice
Component Navigation Diagram
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)
1.1.4.4.8.16.1
PGM Billing Log
Inquiry and Resend
(AAAM15)

FIG. 81

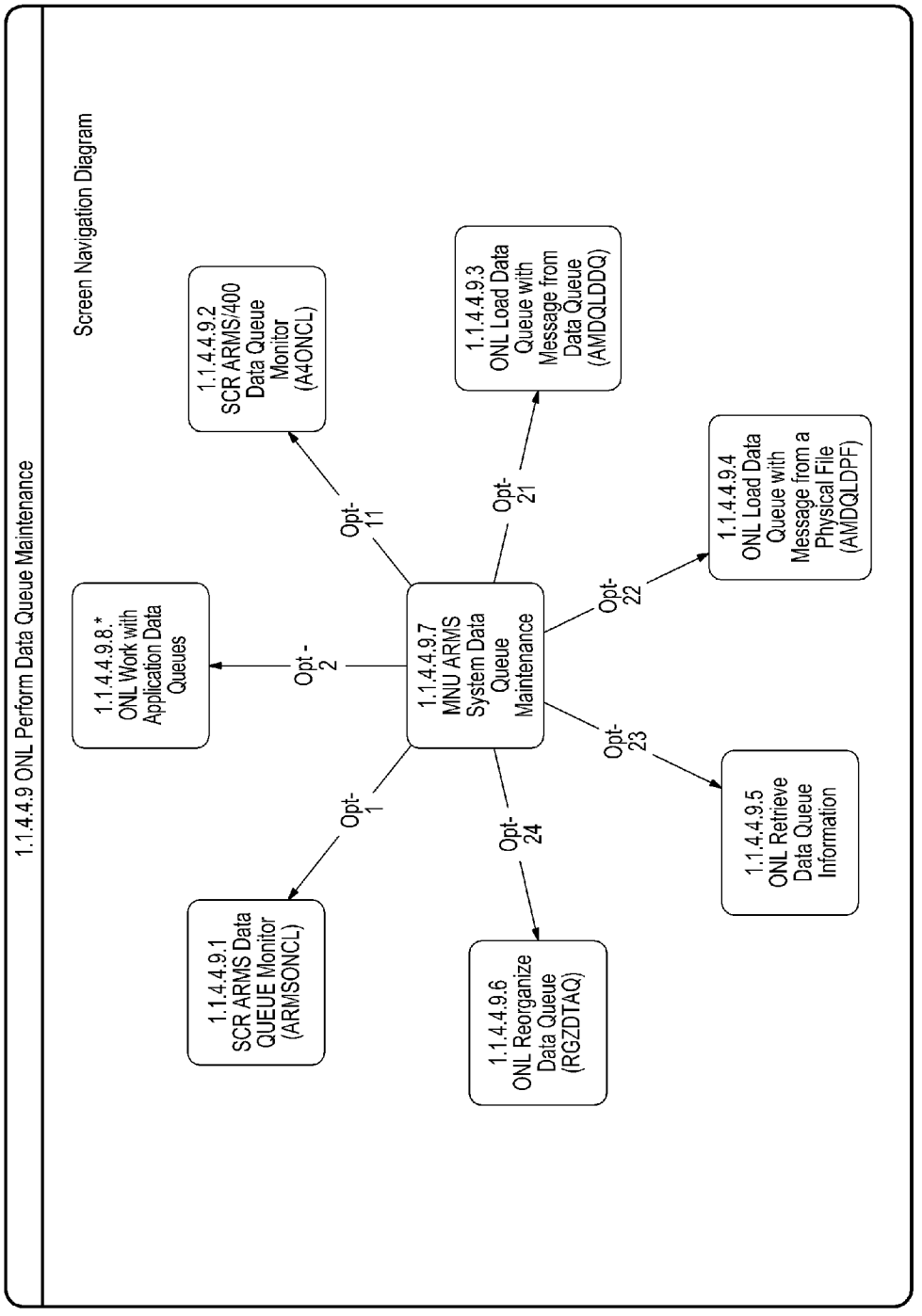

1.1.4.4.9 ONL Perform Data Queue Maintenance
Screen Navigation Diagram
1.1.4.4.9.7 MNU ARMS System Data Queue Maintenance
1.1.4.4.9.8.* ONL Work with Application Data Queues
1.1.4.4.9.2 SCR ARMS/400 Data Queue Monitor (A4ONCL)
1.1.4.4.9.3 ONL Load Data Queue with Message from Data Queue (AMDQLDDQ)
1.1.4.4.9.4 ONL Load Data Queue with Message from a Physical File (AMDQLDPF)
1.1.4.4.9.5 ONL Retrieve Data Queue Information
1.1.4.4.9.6 ONL Reorganize Data Queue (RGZDTAQ)
1.1.4.4.9.1 SCR ARMS Data QUEUE Monitor (ARMSONCL)
Opt- 1
Opt - 2
Opt- 11
Opt- 21
Opt- 22
Opt- 23
Opt- 24

FIG. 82

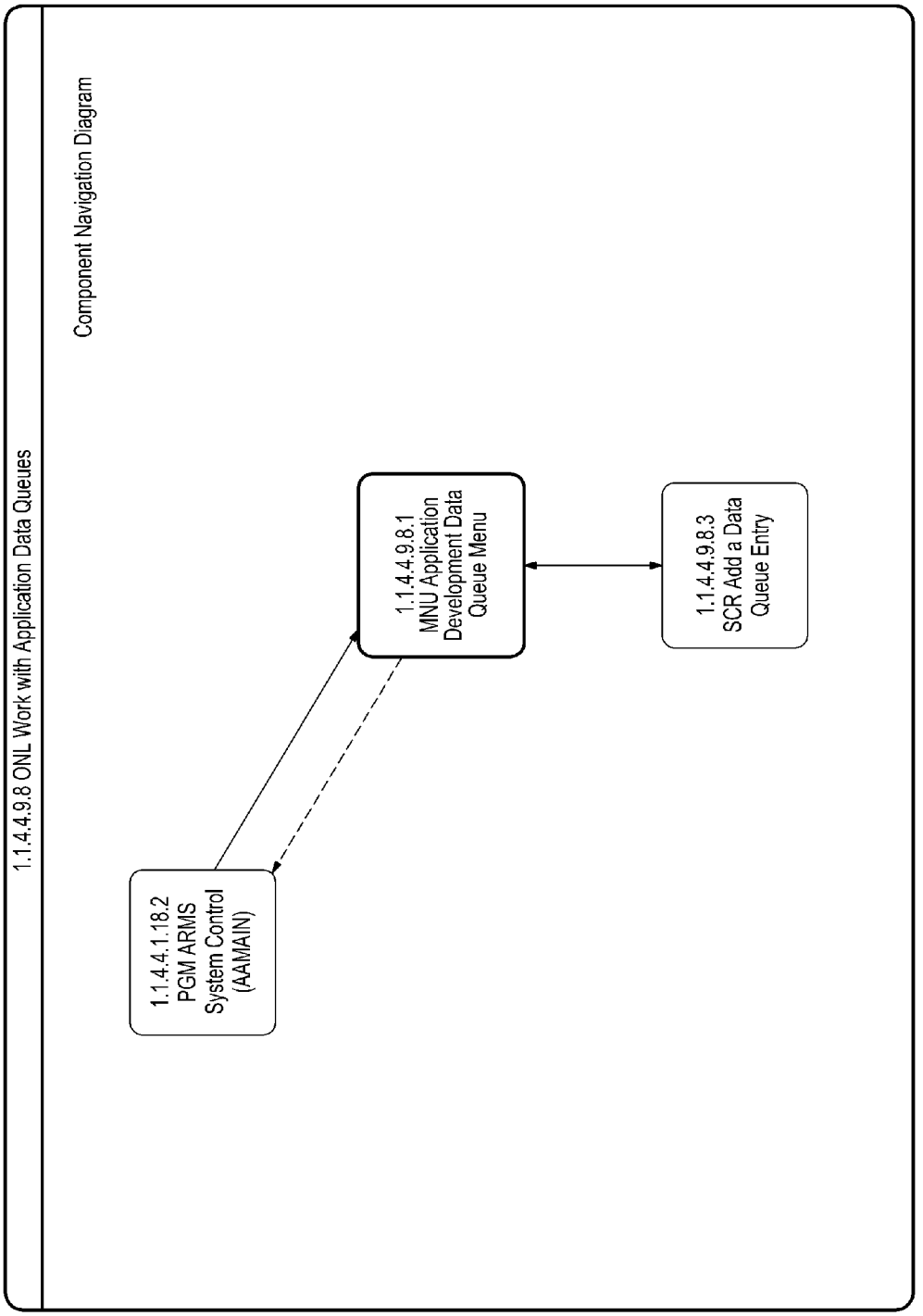

1.1.4.4.9.8 ONL Work with Application Data Queues
Component Navigation Diagram
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)
1.1.4.4.9.8.1
MNU Application
Development Data
Queue Menu
1.1.4.4.9.8.3
SCR Add a Data
Queue Entry

FIG. 83

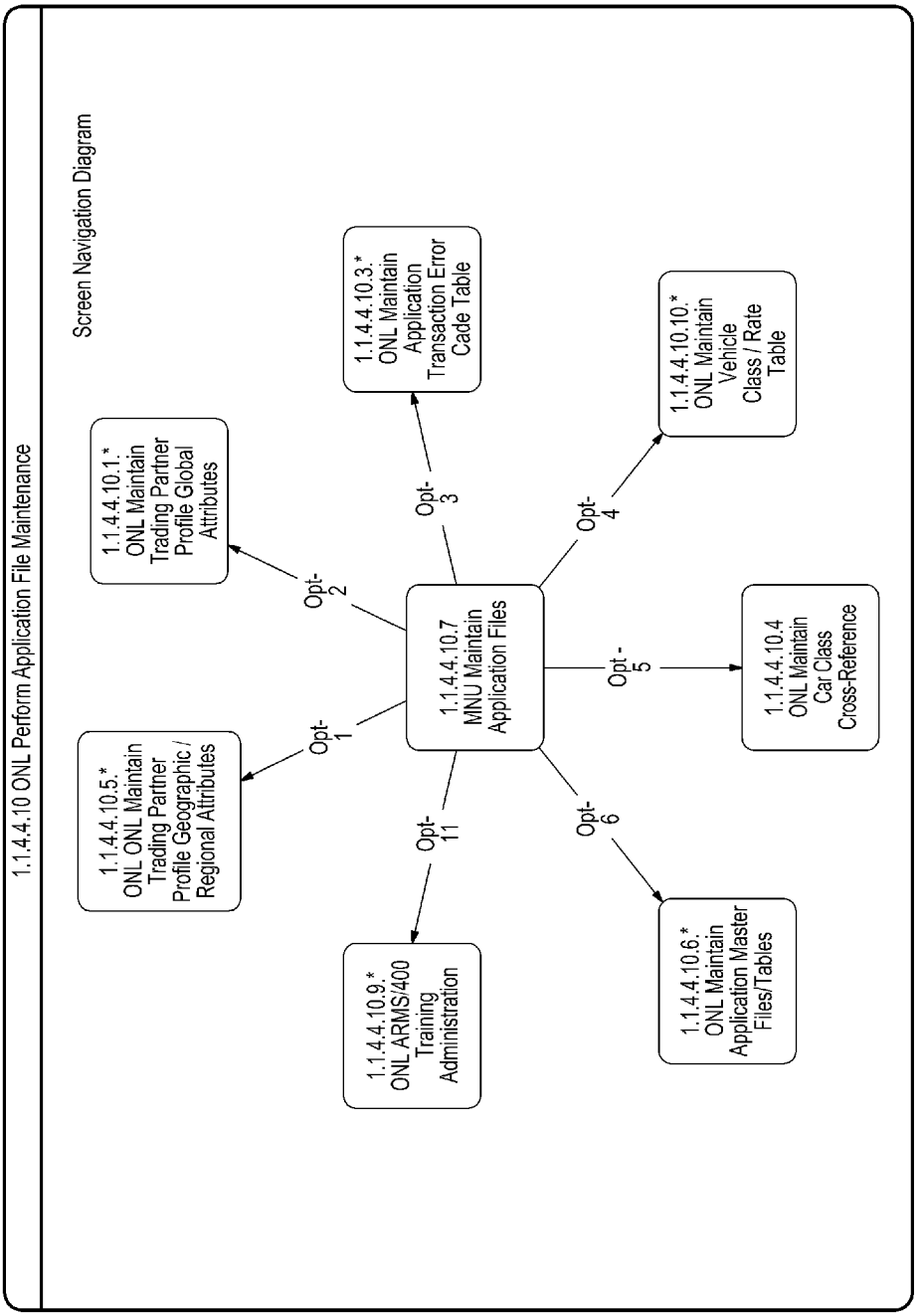

1.1.4.4.10 ONL Perform Application File Maintenance
Screen Navigation Diagram
1.1.4.4.10.7 MNU Maintain Application Files
Opt-1
1.1.4.4.10.5.* ONL ONL Maintain Trading Partner Profile Geographic / Regional Attributes
Opt-2
1.1.4.4.10.1.* ONL Maintain Trading Partner Profile Global Attributes
Opt-3
1.1.4.4.10.3.* ONL Maintain Application Transaction Error Cade Table
Opt-4
1.1.4.4.10.10.* ONL Maintain Vehicle Class / Rate Table
Opt-5
1.1.4.4.10.4 ONL Maintain Car Class Cross-Reference
Opt-6
1.1.4.4.10.6.* ONL Maintain Application Master Files/Tables
Opt-11
1.1.4.4.10.9.* ONL ARMS/400 Training Administration

FIG. 84

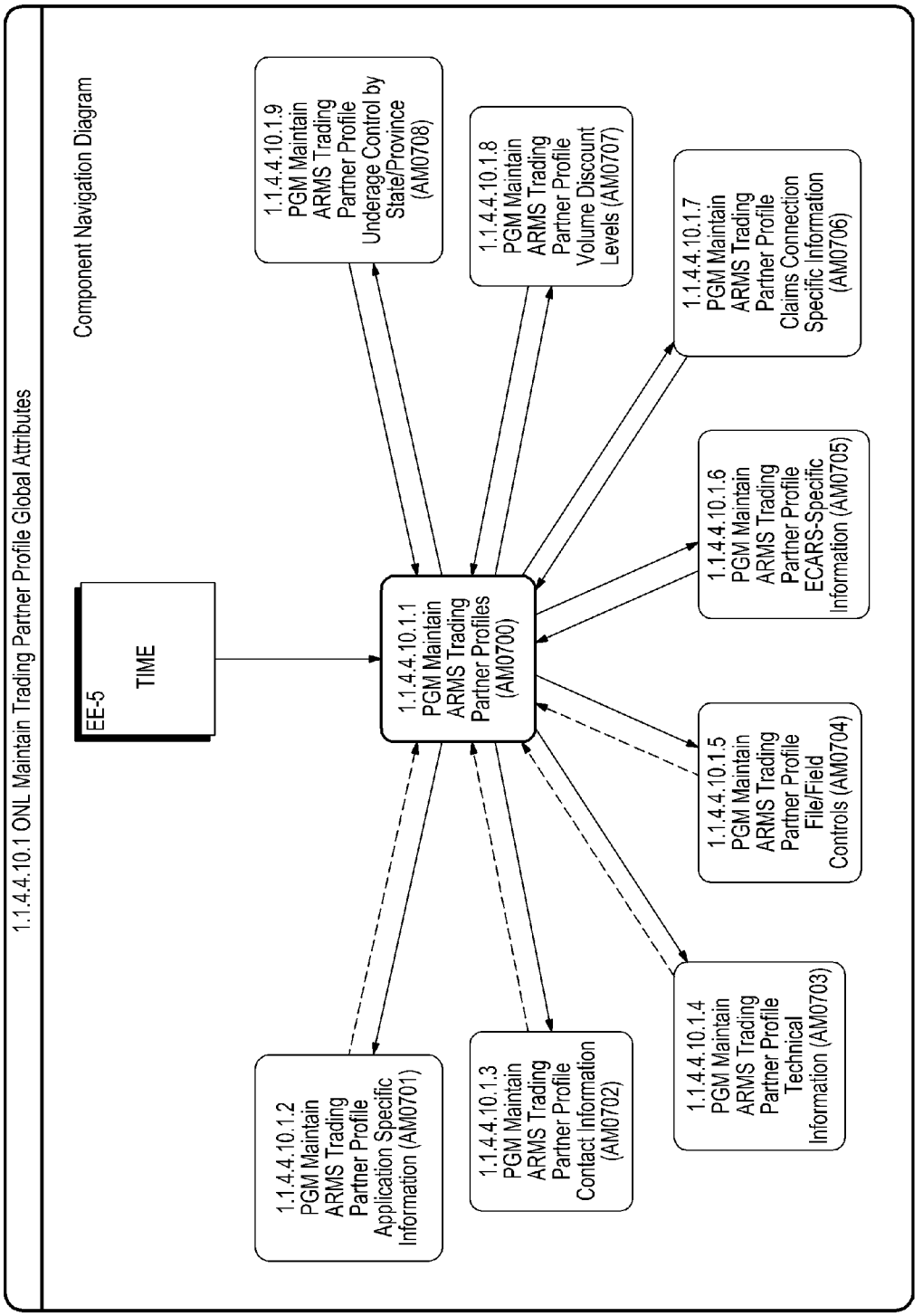

1.1.4.4.10.1 ONL Maintain Trading Partner Profile Global Attributes
Component Navigation Diagram
EE-5
TIME
1.1.4.4.10.1.1 PGM Maintain ARMS Trading Partner Profiles (AM0700)
1.1.4.4.10.1.2 PGM Maintain ARMS Trading Partner Profile Application Specific Information (AM0701)
1.1.4.4.10.1.3 PGM Maintain ARMS Trading Partner Profile Contact Information (AM0702)
1.1.4.4.10.1.4 PGM Maintain ARMS Trading Partner Profile Technical Information (AM0703)
1.1.4.4.10.1.5 PGM Maintain ARMS Trading Partner Profile File/Field Controls (AM0704)
1.1.4.4.10.1.6 PGM Maintain ARMS Trading Partner Profile ECARS-Specific Information (AM0705)
1.1.4.4.10.1.7 PGM Maintain ARMS Trading Partner Profile Claims Connection Specific Information (AM0706)
1.1.4.4.10.1.8 PGM Maintain ARMS Trading Partner Profile Volume Discount Levels (AM0707)
1.1.4.4.10.1.9 PGM Maintain ARMS Trading Partner Profile Underage Control by State/Province (AM0708)

FIG. 85

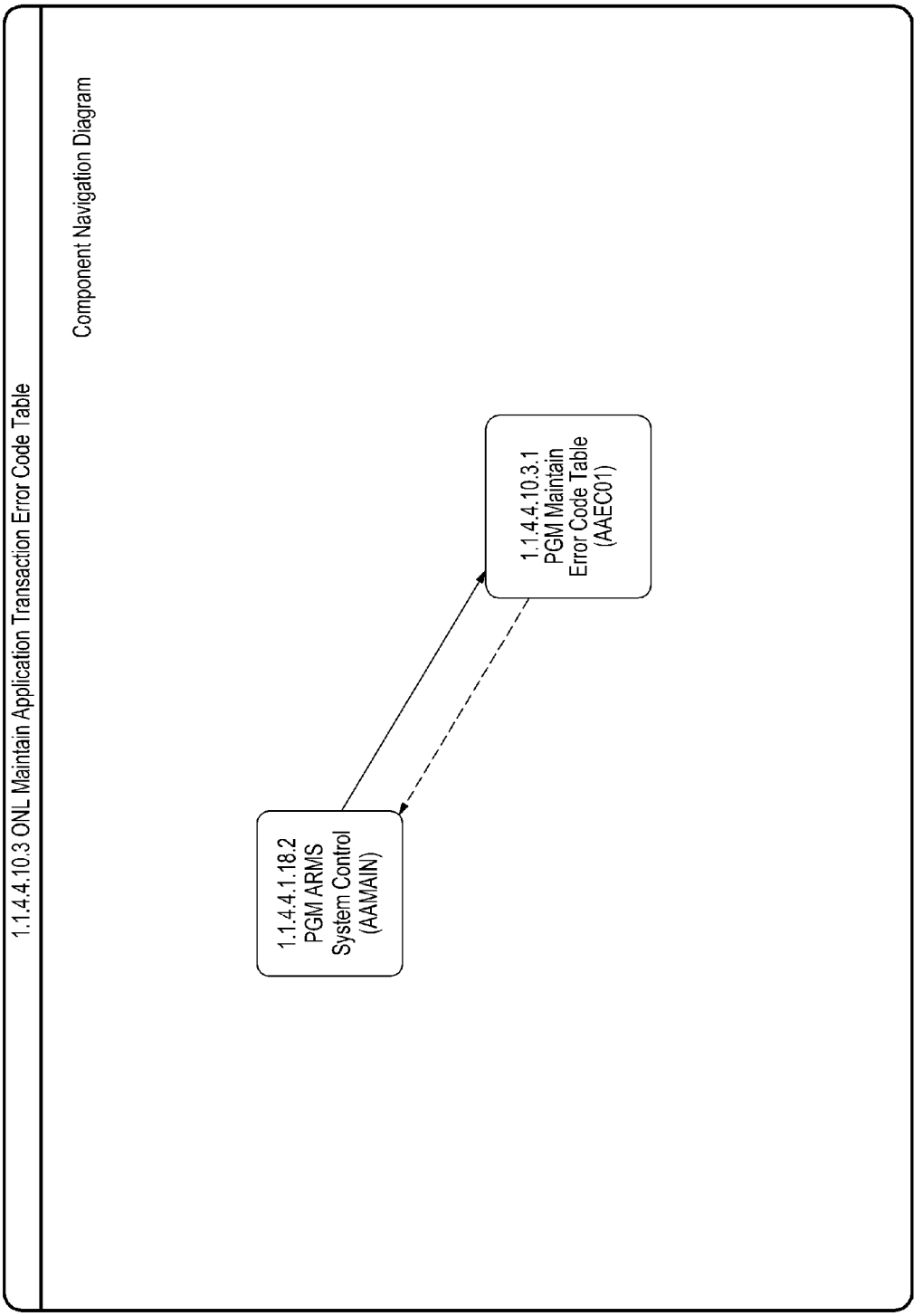

1.1.4.4.10.3 ONL Maintain Application Transaction Error Code Table
Component Navigation Diagram
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)
1.1.4.4.10.3.1
PGM Maintain
Error Code Table
(AAEC01)

FIG. 86

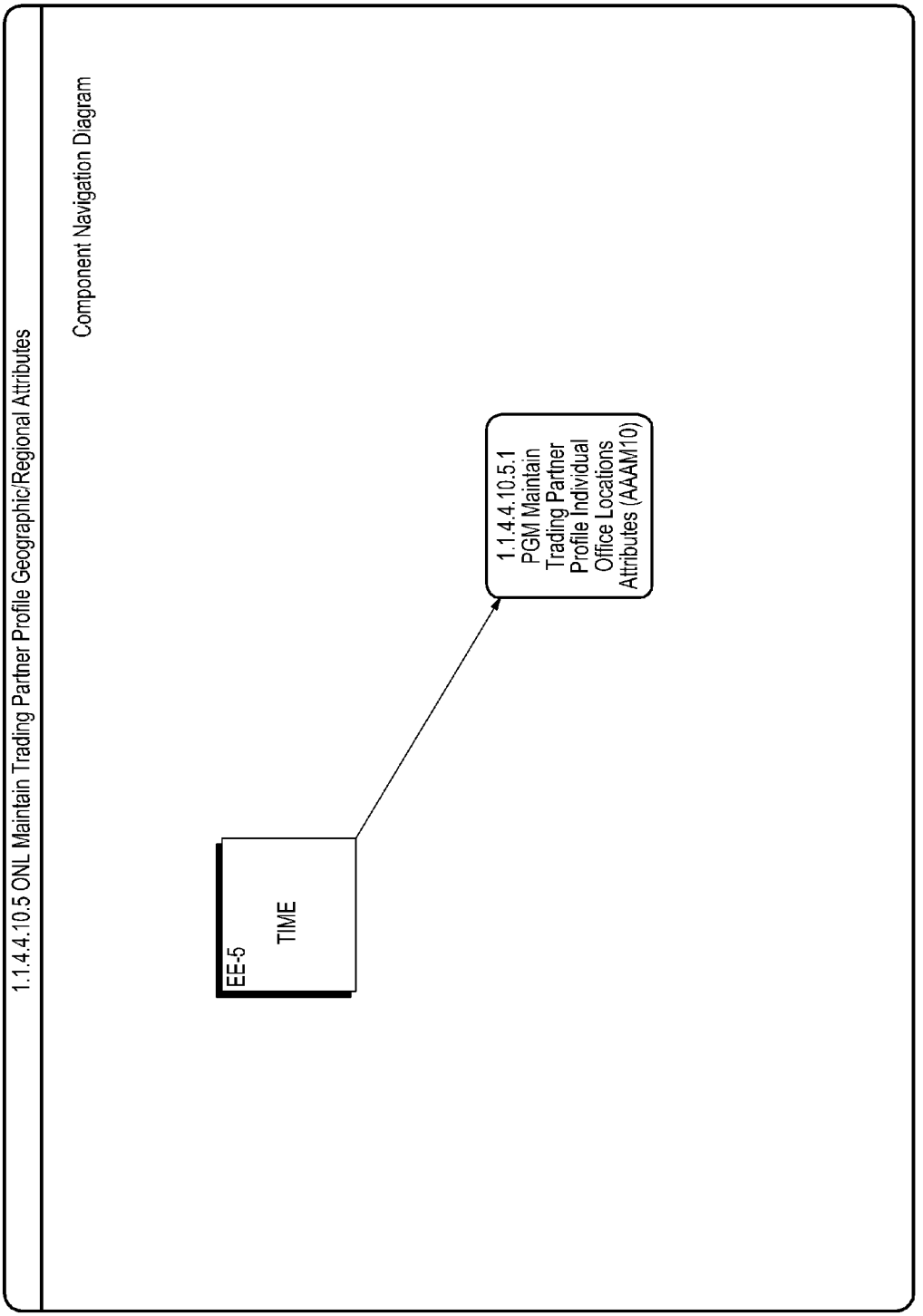

1.1.4.10.5 ONL Maintain Trading Partner Profile Geographic/Regional Attributes
Component Navigation Diagram
EE-5
TIME
1.1.4.10.5.1
PGM Maintain
Trading Partner
Profile Individual
Office Locations
Attributes (AAAM10)

FIG. 87

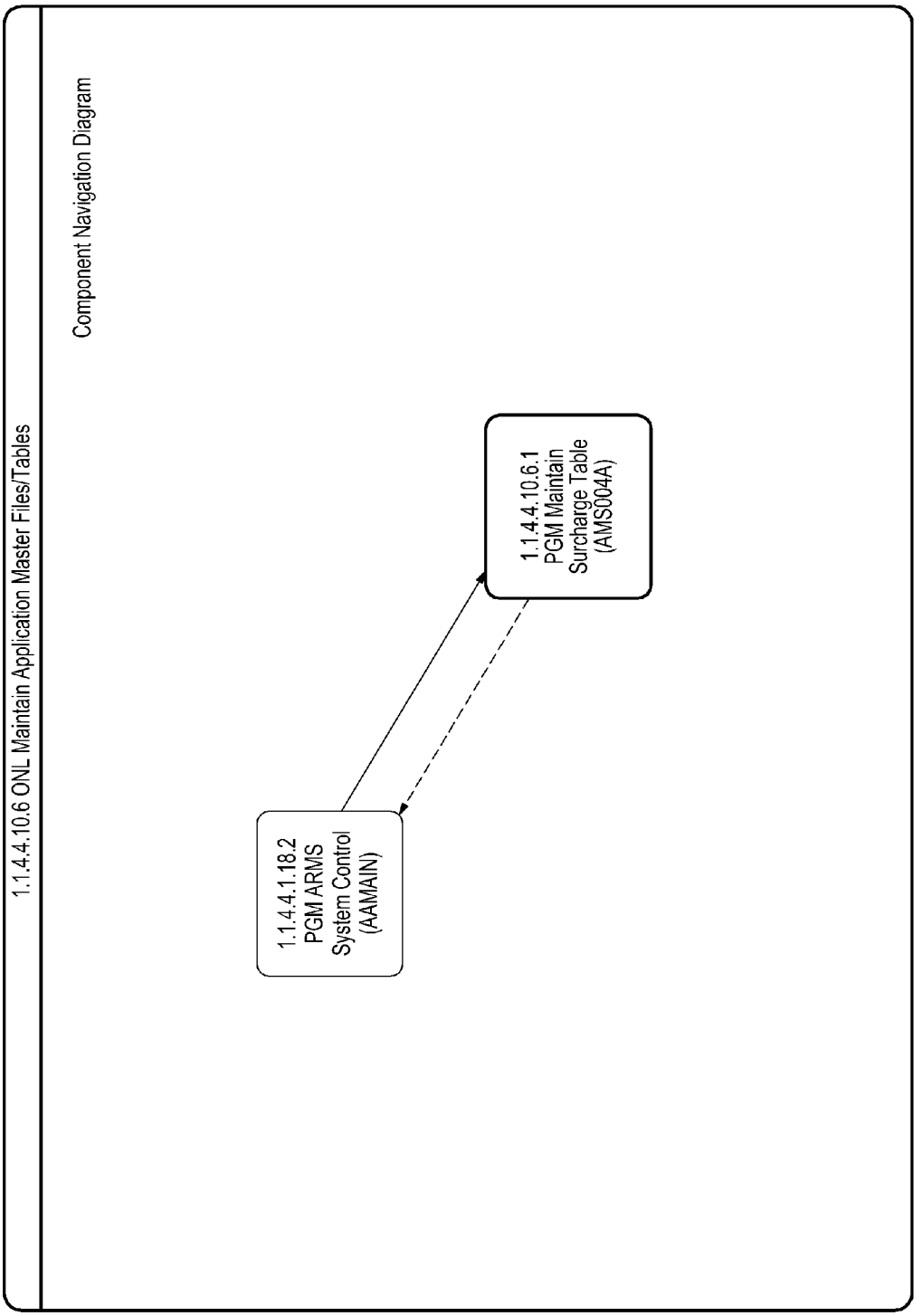

1.1.4.4.10.6 ONL Maintain Application Master Files/Tables
Component Navigation Diagram
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)
1.1.4.4.10.6.1
PGM Maintain
Surcharge Table
(AMS004A)

FIG. 88

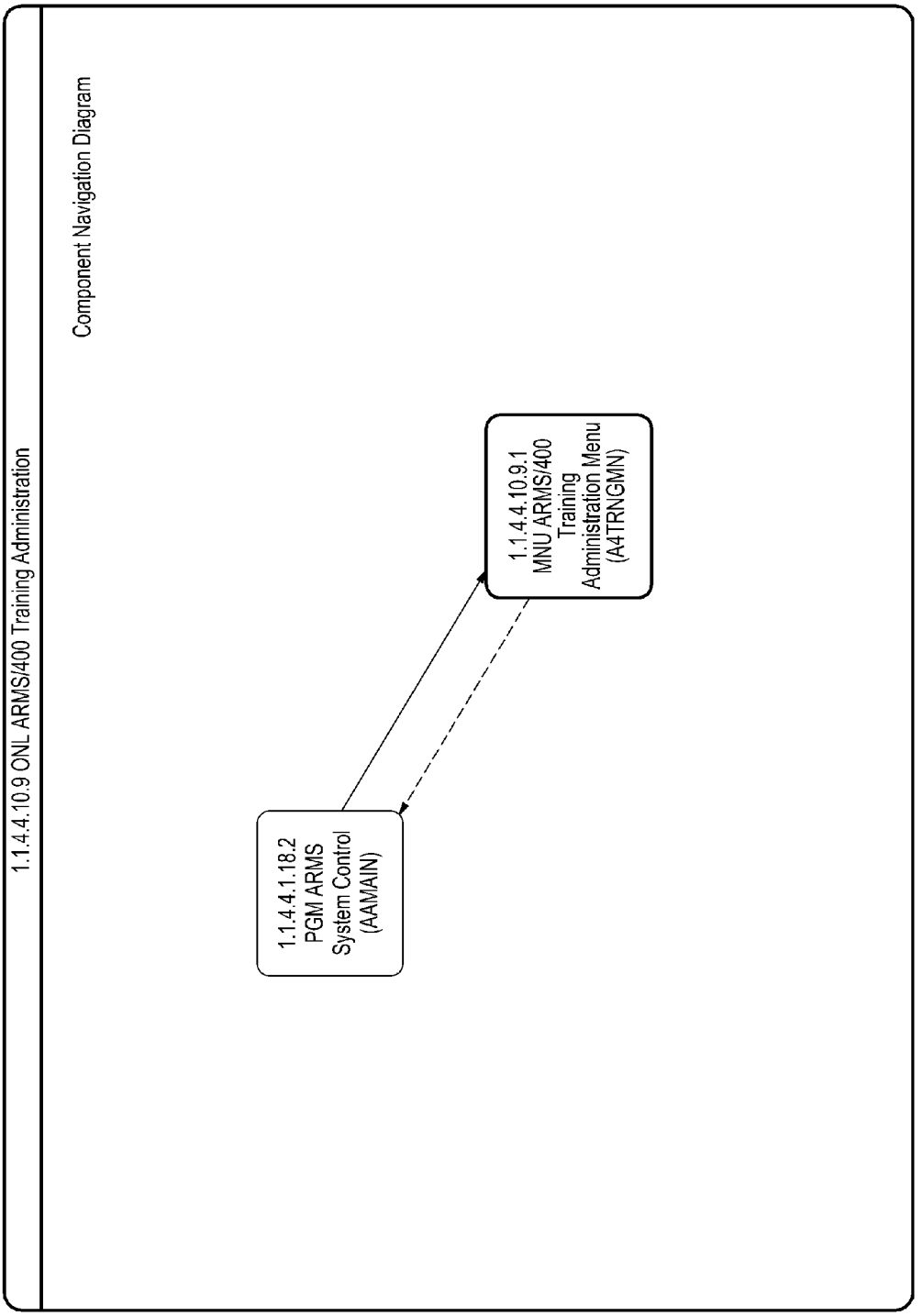

1.1.4.4.10.9 ONL ARMS/400 Training Administration
Component Navigation Diagram
1.1.4.4.10.9.1
MNU ARMS/400
Training
Administration Menu
(A4TRNGMN)
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)

FIG. 89

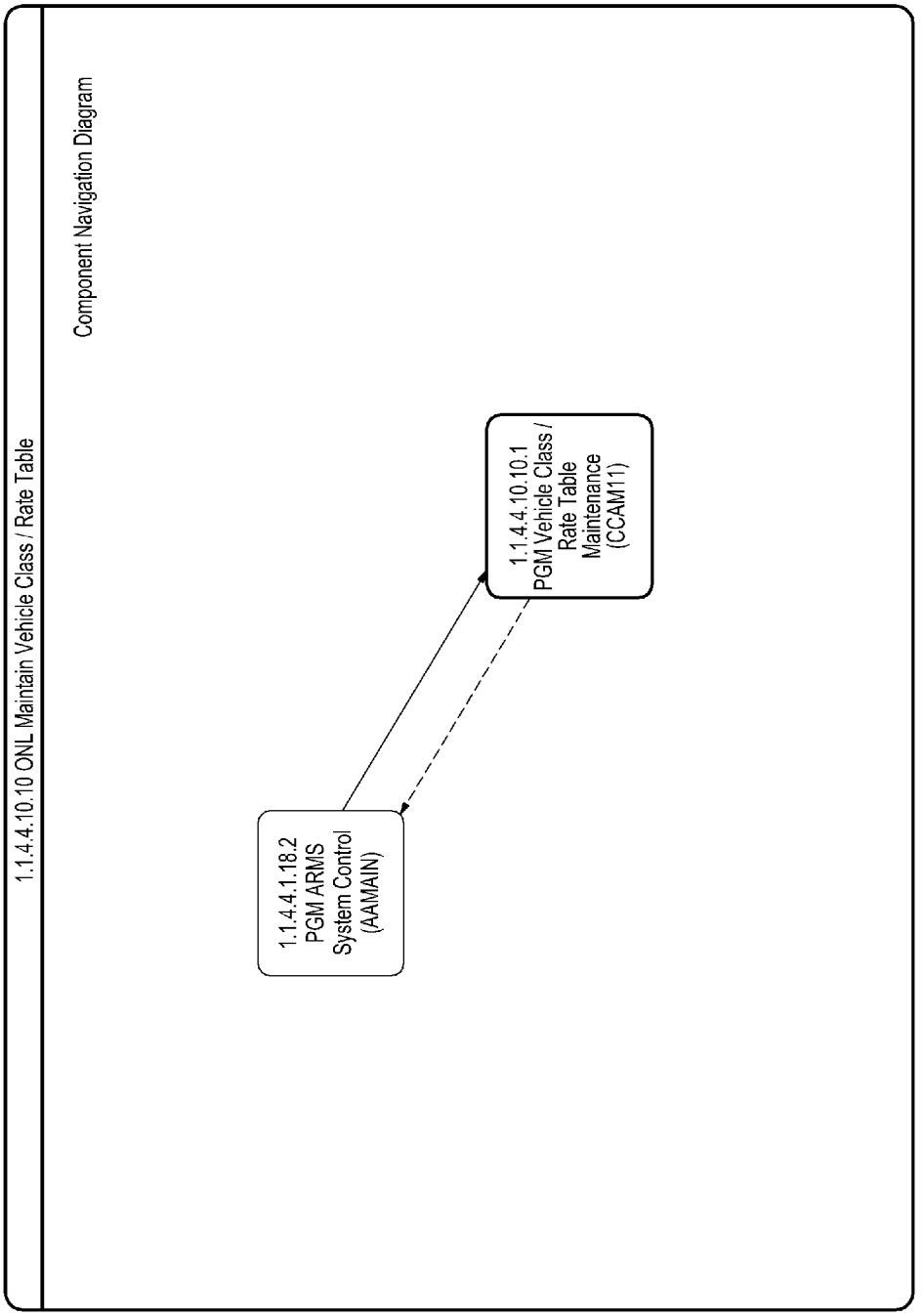

1.1.4.4.10.10 ONL Maintain Vehicle Class / Rate Table
Component Navigation Diagram
1.1.4.4.1.18.2
PGM ARMS
System Control
(AAMAIN)
1.1.4.4.10.10.1
PGM Vehicle Class /
Rate Table
Maintenance
(CCAM11)

FIG. 90

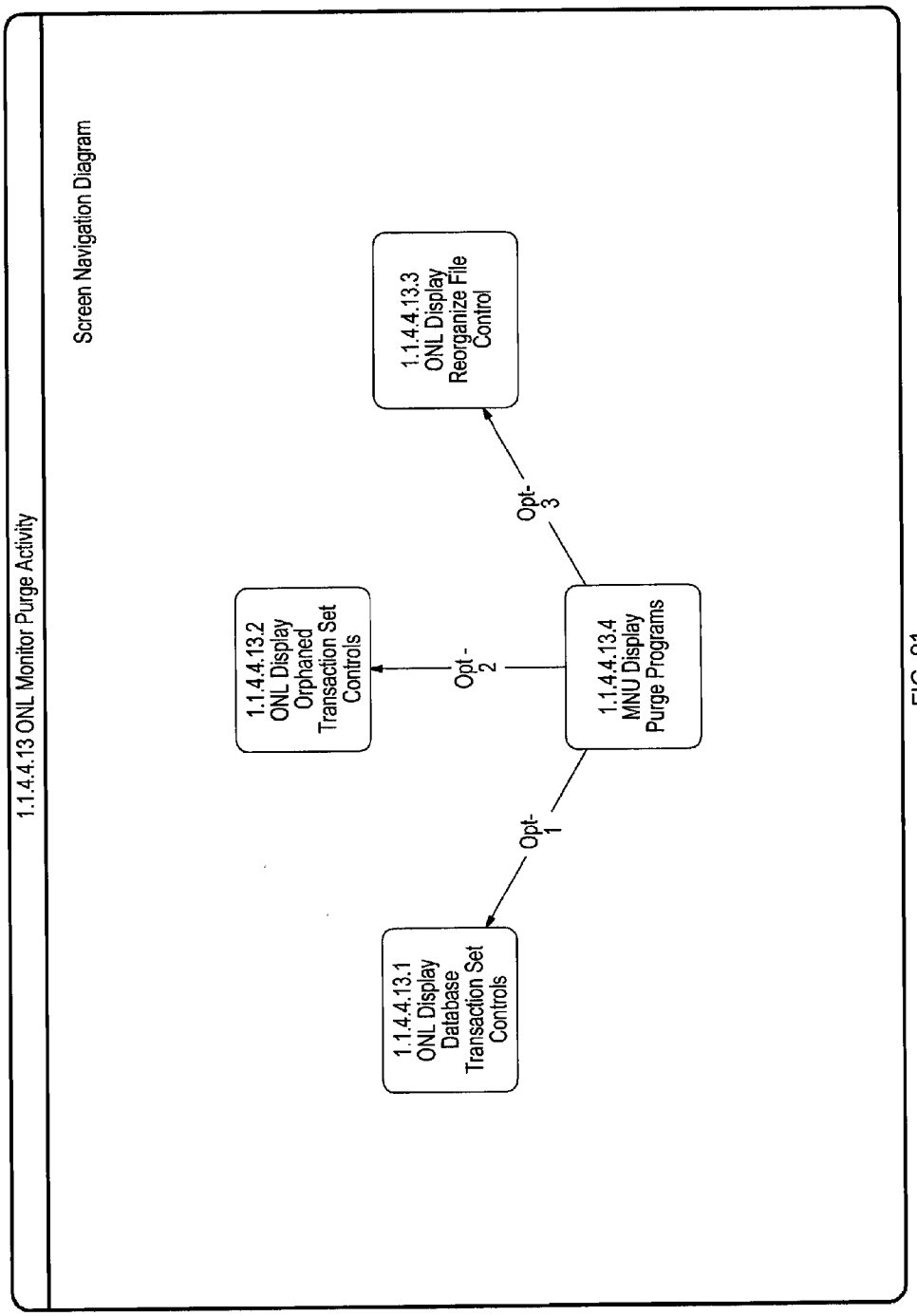

1.1.4.4.13 ONL Monitor Purge Activity
Screen Navigation Diagram
1.1.4.4.13.1 ONL Display Database Transaction Set Controls
1.1.4.4.13.2 ONL Display Orphaned Transaction Set Controls
1.1.4.4.13.3 ONL Display Reorganize File Control
1.1.4.4.13.4 MNU Display Purge Programs
Opt-1
Opt-2
Opt-3

FIG. 91

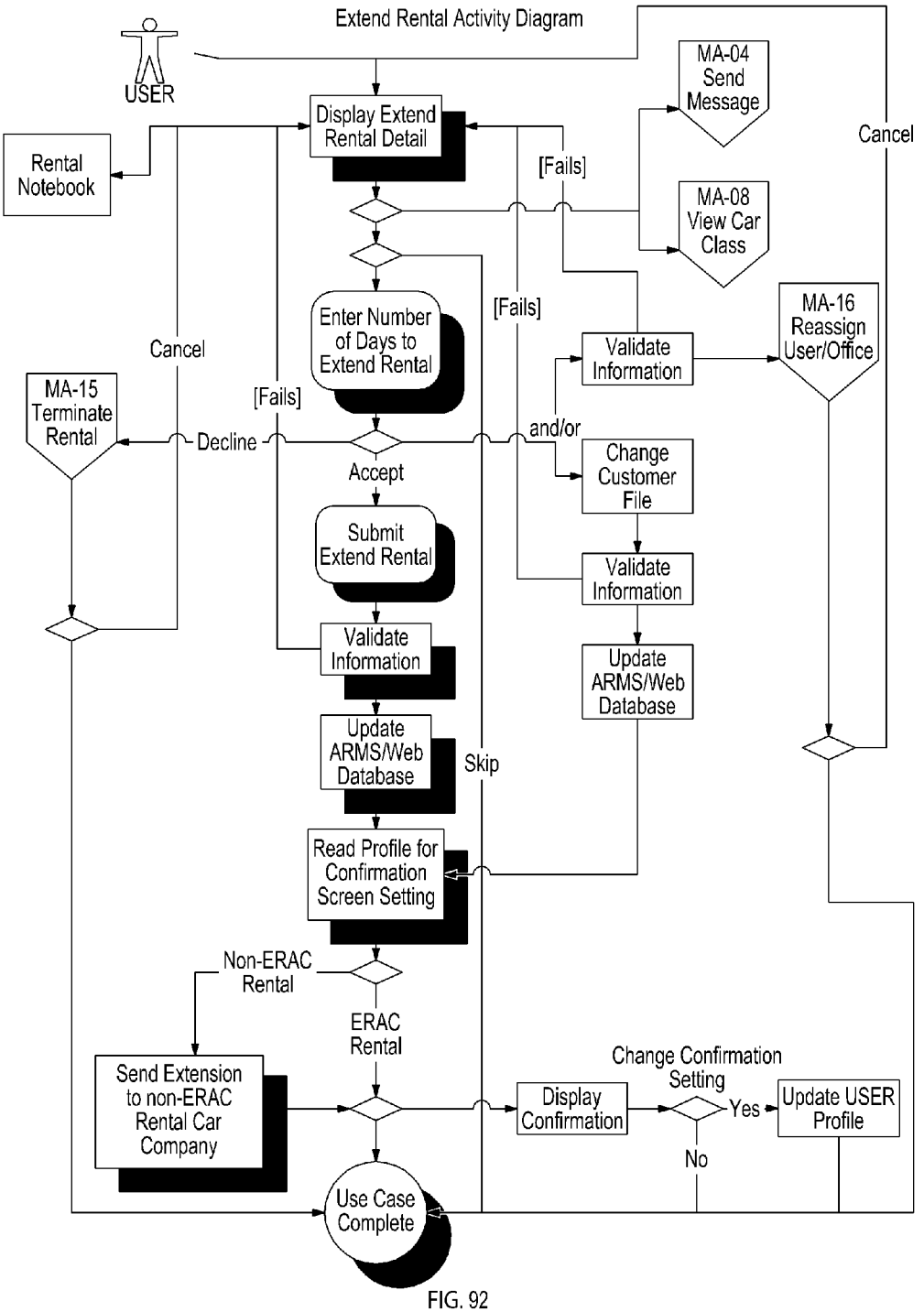

Extend Rental Activity Diagram
USER
Display Extend Rental Detail
MA-04 Send Message
Cancel
Rental Notebook
[Fails]
MA-08 View Car Class
Enter Number of Days to Extend Rental
[Fails]
MA-16 Reassign User/Office
Validate Information
Cancel
MA-15 Terminate Rental
[Fails]
Decline
and/or
Change Customer File
Accept
Submit Extend Rental
Validate Information
Validate Information
Update ARMS/Web Database
Update ARMS/Web Database
Skip
Read Profile for Confirmation Screen Setting
Non-ERAC Rental
ERAC Rental
Send Extension to non-ERAC Rental Car Company
Change Confirmation Setting
Display Confirmation
Yes
Update USER Profile
No
Use Case Complete

FIG. 92

ARMS/Web 2.0

Welcome to the
Automated Rental Management System

create a RESERVATION | find a CUSTOMER | action items | completed actions | reports | my profile | help

Claims office: 001 Handling for: Self TRANSFER FILE

You just authorized 3 day at $29.39/day for Hanks, Tom

EXTEND RENTAL: for Bowie, David Claim no. 765849322-001
CUSTOMER FILE

2 of 4 Action Items

Extension requested for:

3 additional authorized days @ Compact/21.95 VIEW CARS

Policy Limits 20/500

Note to Enterprise:

Note to Self Only:

Rental Status*

Last Authorized Date:	5/15/00
Rental Start Date:	4/13/00
Days Authorized to Date:	5 days
Policy Limits:	$259.00
Charges to Date:	$239.00
Direct Bill %:	100%

Messages: 5/01/00 Body Shop said waiting for fender from vendor
4/14/00 Body Shop on quote

Go to Notebook

LAST DAY | PROCESS | SKIP >>

[Change or Add]

RENTER INFORMATION
Bowie, David
1735 N. Paulina St.
Chicago, IL 60622

Home: (773)564-6054
Work: (773)395-6200
Email: dbowie@zefer.com
Requested email confirmation

RENTAL INFORMATION
Authorized Class: Standard
Days/Rate: 5 days @ $21.99/day
Current Class: Full-Size
Additional Charges: None
Direct Bill %: None
Rental Date: 03/28/2000
Start Date: 03/20/2000

Enterprise Rent-A-Car Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL60622
773-334-5400

ADDITIONAL CLAIM INFORMATION
Claim Number: 32323232323232323
Claim Type: Theft
Insured Name: Lalumandier, Craig
Owner's vehicle: GMC Suburban 1999
Date of Loss: 03/28/2000
Loss Type: Non-Driveable
Policy: Daily rate/
Maximum dollars: 30/600

Repair Location:
Elco Chevrolet
Chicago, IL 60621
(773)334-9832

NOTEBOOK:
Message, Belanger, Hugues, 2/20/00
Note from Enterprise, Sarussi, Marty, 2/21/00
Extension Request, 2/24/00
Extension, 2/25/00

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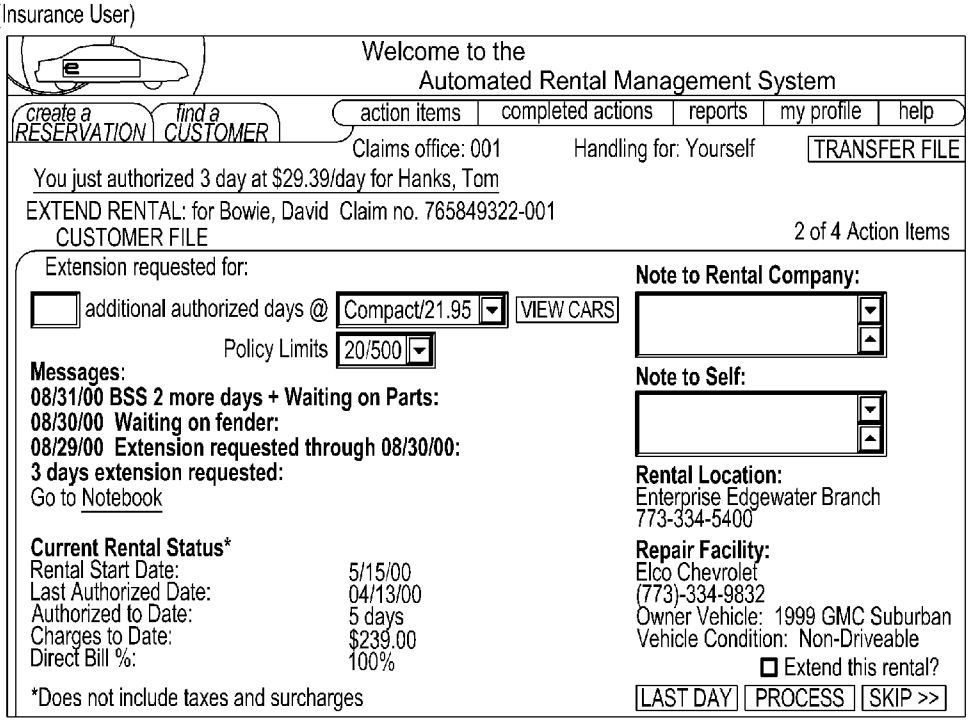
FIG. 93(a)

(Insurance User)



[Change or Add]

RENTER INFORMATION:
Bowie, David
1735 N. Paulina St.
Chicago, IL 60622

Home: (773)564-6054
Work: (773)395-6200
Email: dbowie@zefer.com
Requested email confirmation

RENTAL INFORMATION:
Authorized Class: Standard
Days/Rate: 5 days @ $21.99/day
Current Class: Full-Size
Additional Charges: None
Direct Bill %: None
Rental Date: 03/28/2000
Start Date: 03/20/2000

Rental Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL60622
773-334-5400

ADDITIONAL CLAIM INFORMATION:
Claim Number: 32323232323232323
Claim Type: Theft
Insured Name: Lalumandier, Craig
Owner's vehicle: GMC Suburban 1999
Date of Loss: 03/28/2000
Loss Type: Non-Driveable
Policy: Daily rate/
Maximum dollars: 30/600

Repair Location:
Elco Chevrolet
Chicago, IL 60621
(773)334-9832

NOTEBOOK:
Message, Belanger, Hugues, 2/20/00
Note from Enterprise, Sarussi, Marty, 2/21/00
Extension Request, 2/24/00
Extension, 2/25/00

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FIG. 93(b)

(Fleet User)

Welcome to the
Automated Rental Management System

create a RESERVATION | find a CUSTOMER | action items | completed actions | reports | my profile | help

Claims office: 001 Handling for: Yourself TRANSFER FILE

You just authorized 3 day at $29.39/day for Hanks, Tom

EXTEND RENTAL: for Bowie, David Claim no. 765849322-001
CUSTOMER FILE

2 of 4 Action Items

Extension requested for:

☐ additional authorized days @ Compact/21.95 VIEW CARS

Policy Limits 20/500

Messages:
08/31/00 BSS 2 more days + Waiting on Parts:
08/30/00 Waiting on fender:
08/29/00 Extension requested through 08/30/00:
3 days extension requested:
Go to Notebook

Note to Rental Company:

Rental Location:
Enterprise Edgewater Branch
773-334-5400

Repair Facility:
Elco Chevrolet
(773)-334-9832
Owner Vehicle: 1999 GMC Suburban

Current Rental Status*

Rental Start Date:	5/15/00
Last Authorized Date:	04/13/00
Authorized to Date:	5 days
Charges to Date:	$239.00

☐ Extend this rental?

*Does not include taxes and surcharges

LAST DAY | PROCESS | SKIP >>

[Change or Add]

RENTER INFORMATION:
Bowie, David
1735 N. Paulina St.
Chicago, IL 60622

Home: (773)564-6054
Work: (773)395-6200
Email: dbowie@zefer.com
Requested email confirmation

RENTAL INFORMATION:
Authorized Class: Standard
Days/Rate: 5 days @ $21.99/day
Current Class: Full-Size
Additional Charges: None
Rental Date: 03/28/2000
Start Date: 03/20/2000

Rental Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL60622
773-334-5400

ADDITIONAL CLAIM INFORMATION:
Claim Number: 32323232323232323
Claim Type: Theft
Insured Name: Lalumandier, Craig
Owner's vehicle: GMC Suburban 1999
Date of Loss: 03/28/2000
Loss Type: Non-Driveable
Policy: Daily rate/
Maximum dollars: 30/600

Repair Location:
Elco Chevrolet
Chicago, IL 60621
(773)334-9832

NOTEBOOK:
Message, Belanger, Hugues, 2/20/00
Note from Enterprise, Sarussi, Marty, 2/21/00
Extension Request, 2/24/00
Extension, 2/25/00

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FIG. 93(c)

(Dealership User)

Welcome to the
Automated Rental Management System

create a RESERVATION | find a CUSTOMER | action items | completed actions | reports | my profile | help

Claims office: 001 Handling for: Yourself TRANSFER FILE

You just authorized 3 day at $29.39/day for Hanks, Tom

EXTEND RENTAL: for Bowie, David Claim no. 765849322-001

CUSTOMER FILE 2 of 4 Action Items

Extension requested for:

☐ additional authorized days @ Compact/21.95 VIEW CARS

Policy Limits 20/500

Messages:
08/31/00 BSS 2 more days + Waiting on Parts:
08/30/00 Waiting on fender:
08/29/00 Extension requested through 08/30/00:
3 days extension requested:
Go to Notebook

Current Rental Status*

Rental Start Date:	5/15/00
Last Authorized Date:	04/13/00
Authorized to Date:	5 days
Charges to Date:	$239.00

*Does not include taxes and surcharges

Note to Rental Company:

Note to Self:

Rental Location:
Enterprise Edgewater Branch
773-334-5400

Repair Facility:
Elco Chevrolet
(773)-334-9832
Owner Vehicle: 1999 GMC Suburban

☐ Extend this rental?

LAST DAY | PROCESS | SKIP >>

[Change or Add]

RENTER INFORMATION:
Bowie, David
1735 N. Paulina St.
Chicago, IL 60622

Home: (773)564-6054
Work: (773)395-6200
Email: dbowie@zefer.com
Requested email confirmation

RENTAL INFORMATION:
Authorized Class: Standard
Days/Rate: 5 days @ $21.99/day
Current Class: Full-Size
Additional Charges: None
Rental Date: 03/28/2000
Start Date: 03/20/2000

Rental Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL60622
773-334-5400

ADDITIONAL CLAIM INFORMATION:
Claim Number: 32323232323232323
Claim Type: Theft
Insured Name: Lalumandier, Craig
Owner's vehicle: GMC Suburban 1999
Date of Loss: 03/28/2000
Loss Type: Non-Driveable
Policy: Daily rate/
Maximum dollars: 30/600

Repair Location:
Elco Chevrolet
Chicago, IL 60621
(773)334-9832

NOTEBOOK:
Message, Belanger, Hugues, 2/20/00
Note from Enterprise, Sarussi, Marty, 2/21/00
Extension Request, 2/24/00
Extension, 2/25/00

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FIG. 93(d)

(Corporate User)

Welcome to the
Automated Rental Management System

create a RESERVATION | find a CUSTOMER | action items | completed actions | reports | my profile | help

Claims office: 001 Handling for: Yourself TRANSFER FILE

You just authorized 3 day at $29.39/day for Hanks, Tom

EXTEND RENTAL: for Bowie, David Claim no. 765849322-001
CUSTOMER FILE

2 of 4 Action Items

Extension requested for:

☐ additional authorized days @ Compact/21.95 VIEW CARS

Policy Limits 20/500

Messages:
08/31/00 BSS 2 more days + Waiting on Parts:
08/30/00 Waiting on fender:
08/29/00 Extension requested through 08/30/00:
3 days extension requested:
Go to Notebook

Note to Rental Company:

Note to Self:

Rental Location:
Enterprise Edgewater Branch
773-334-5400

Current Rental Status*

Rental Start Date:	5/15/00
Last Authorized Date:	04/13/00
Authorized to Date:	5 days
Charges to Date:	$239.00

☐ Extend this rental?

*Does not include taxes and surcharges

LAST DAY | PROCESS | SKIP >>

[Change or Add]

RENTER INFORMATION:
Bowie, David
1735 N. Paulina St.
Chicago, IL 60622

Home: (773)564-6054
Work: (773)395-6200
Email: dbowie@zefer.com
Requested email confirmation

RENTAL INFORMATION:
Authorized Class: Standard
Days/Rate: 5 days @ $21.99/day
Current Class: Full-Size
Additional Charges: None
Rental Date: 03/28/2000
Start Date: 03/20/2000

Rental Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL60622
773-334-5400

ADDITIONAL CLAIM INFORMATION:
Corporate Class Number: 3232323232323
Loss Type: Non-Driveable
Policy: Daily rate/
Maximum dollars: 30/600

NOTEBOOK:
Message, Belanger, Hugues, 2/20/00
Note from Enterprise, Sarussi, Marty, 2/21/00
Extension Request, 2/24/00
Extension, 2/25/00

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FIG. 93(e)

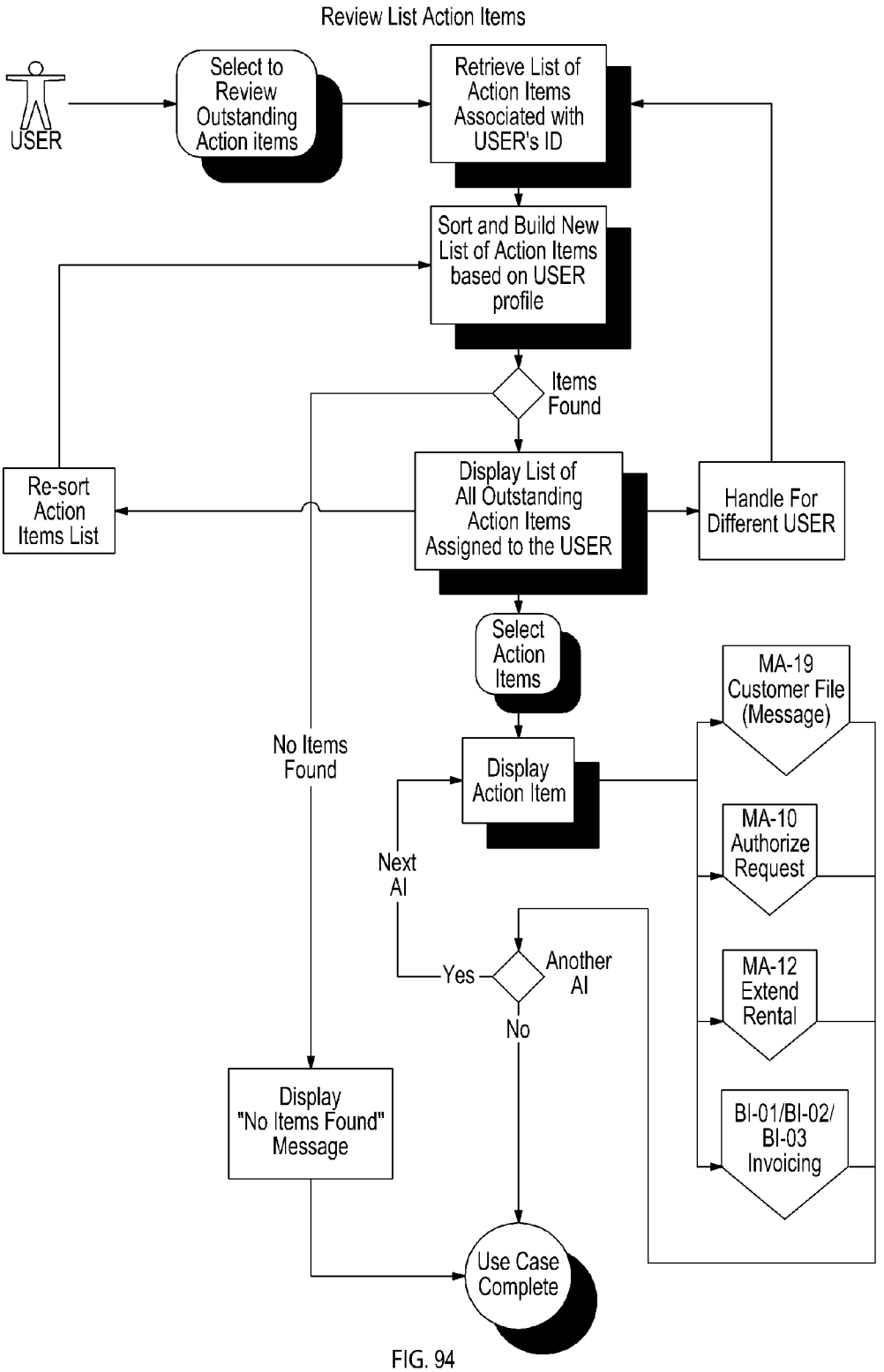
Review List Action Items
USER
Select to Review Outstanding Action items
Retrieve List of Action Items Associated with USER's ID
Sort and Build New List of Action Items based on USER profile
Items Found
Re-sort Action Items List
Display List of All Outstanding Action Items Assigned to the USER
Handle For Different USER
Select Action Items
No Items Found
Display Action Item
Next AI
Yes
Another AI
No
Display "No Items Found" Message
Use Case Complete
MA-19 Customer File (Message)
MA-10 Authorize Request
MA-12 Extend Rental
BI-01/BI-02/ BI-03 Invoicing

FIG. 94

(ARMS/Web 2.0)

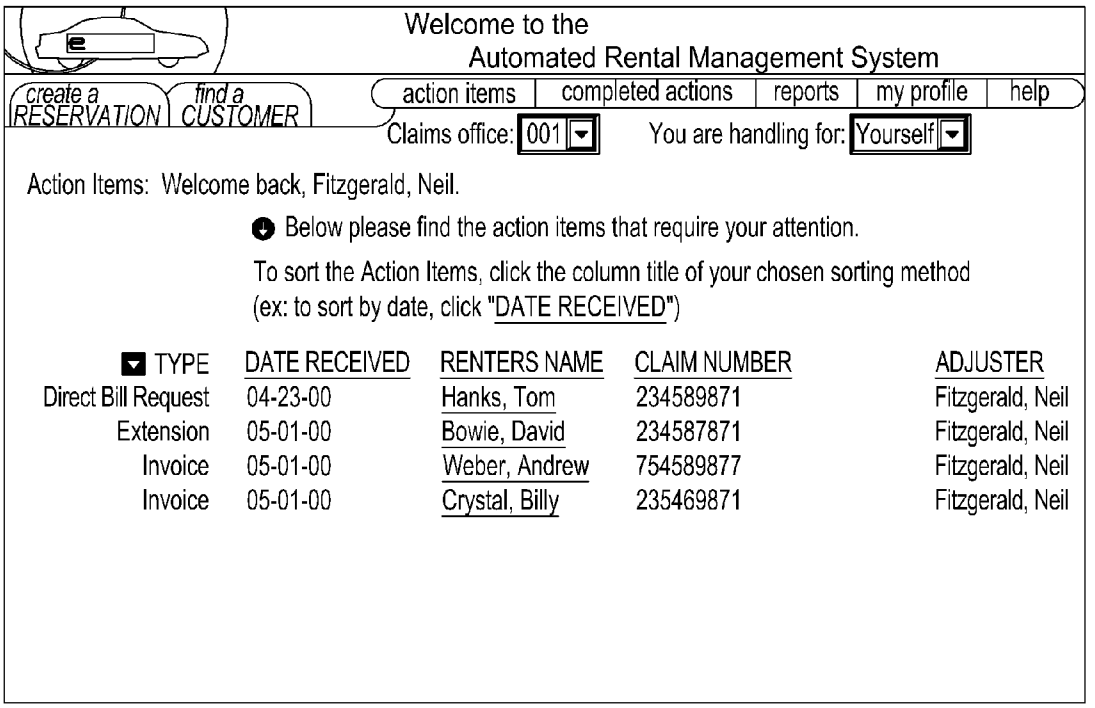

FIG. 95(a)

(Insurance User)

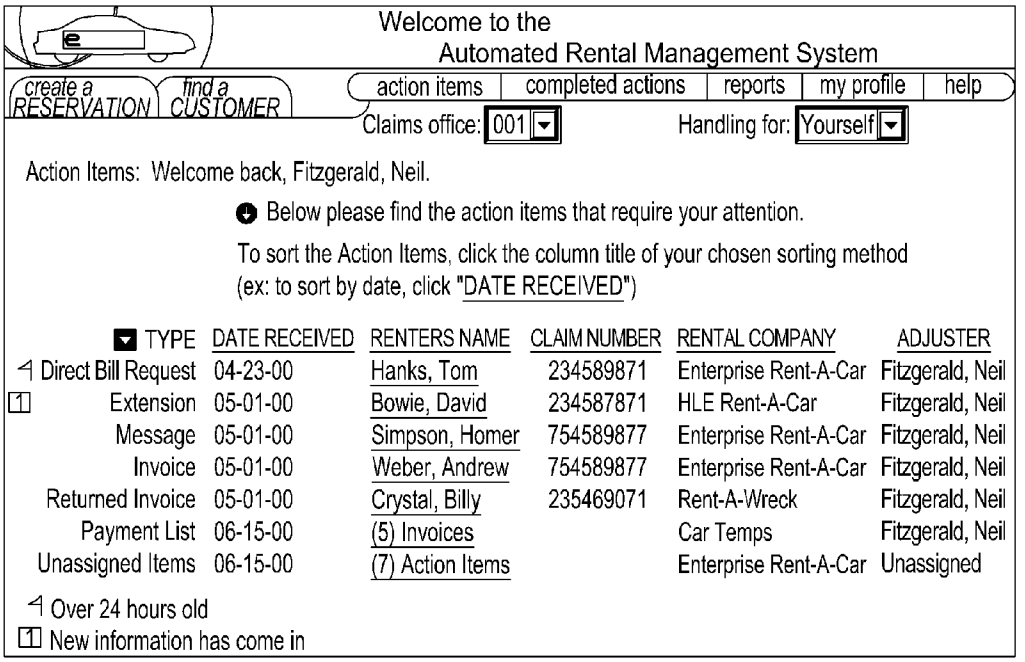

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FIG. 95(b)

(Fleet User)

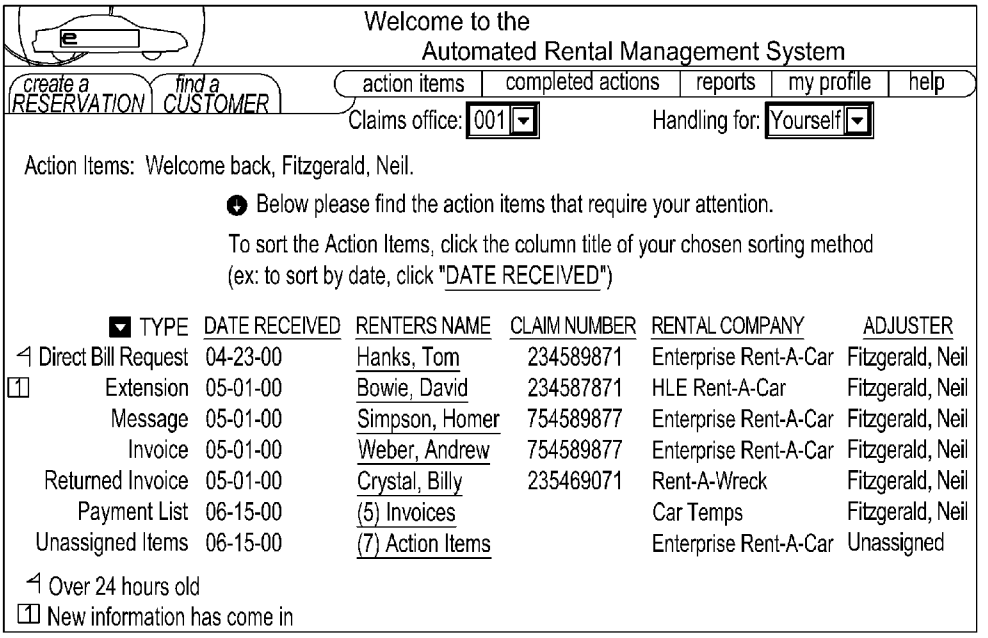

FIG. 95(c)

(Dealership User)

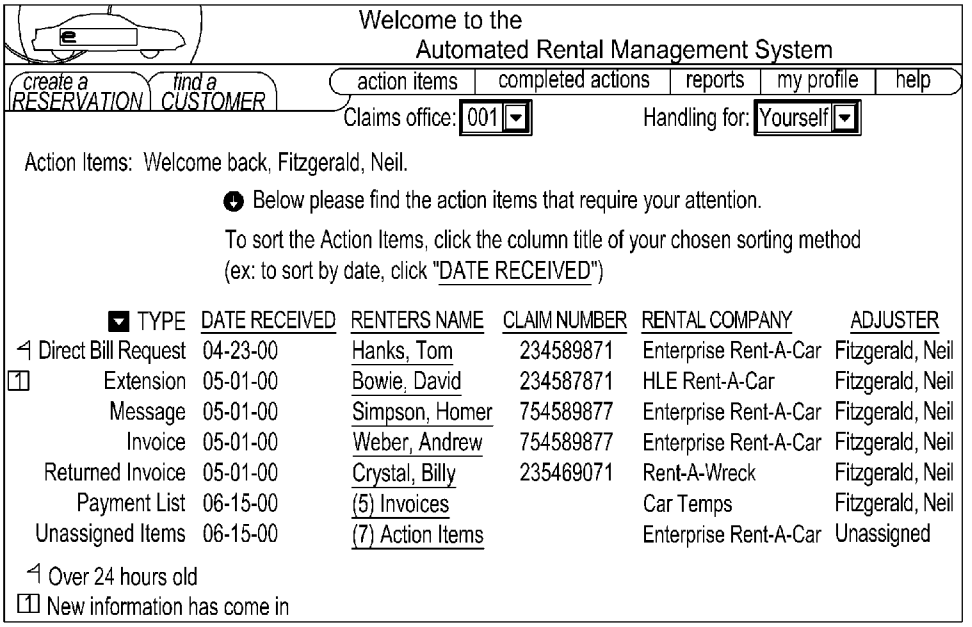

FIG. 95(d)

(Corporate User)

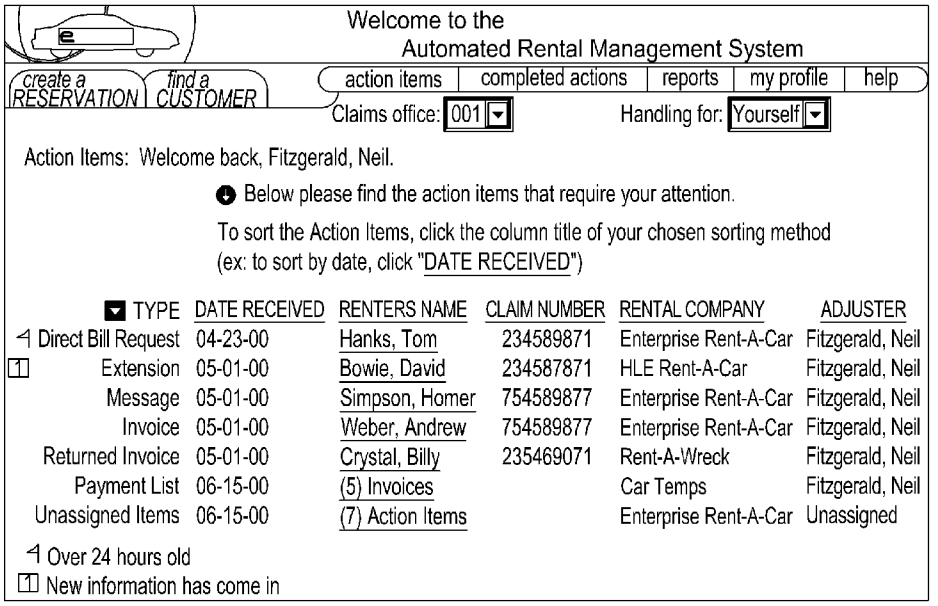

FIG. 95(e)

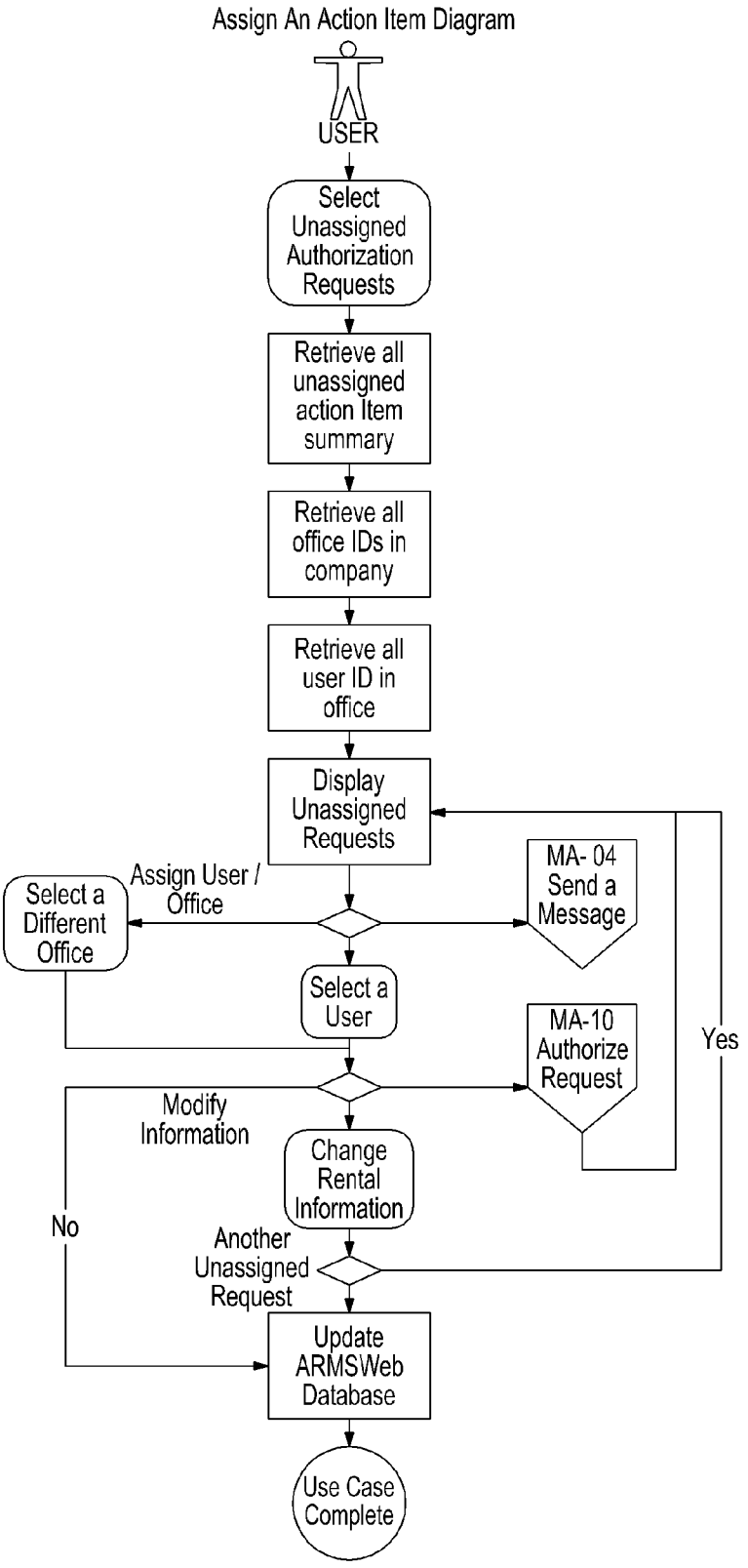
Assign An Action Item Diagram
USER
Select Unassigned Authorization Requests
Retrieve all unassigned action Item summary
Retrieve all office IDs in company
Retrieve all user ID in office
Display Unassigned Requests
Assign User / Office
Select a Different Office
MA- 04 Send a Message
Select a User
MA-10 Authorize Request
Yes
Modify Information
Change Rental Information
No
Another Unassigned Request
Update ARMSWeb Database
Use Case Complete

FIG. 96

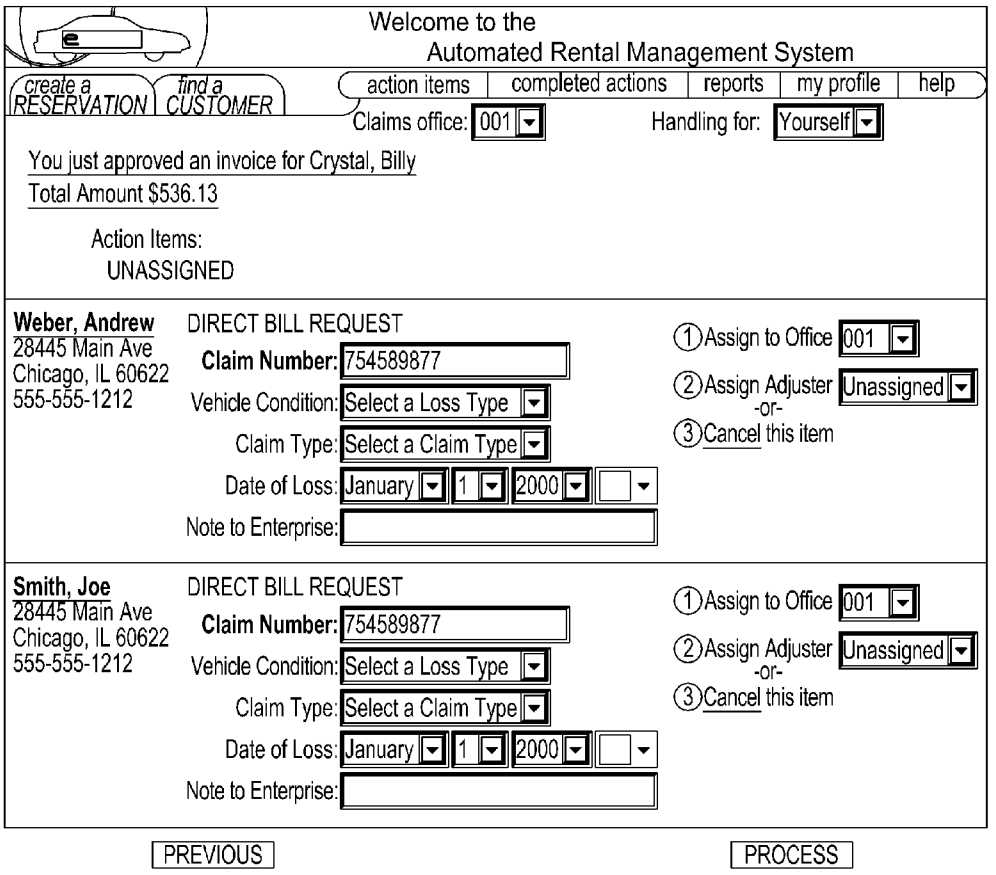
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
You just approved an invoice for Crystal, Billy
Total Amount $536.13
Action Items:
UNASSIGNED
Weber, Andrew
28445 Main Ave
Chicago, IL 60622
555-555-1212
DIRECT BILL REQUEST
Claim Number: 754589877
Vehicle Condition: Select a Loss Type
Claim Type: Select a Claim Type
Date of Loss: January 1 2000
Note to Enterprise:
1 Assign to Office 001
2 Assign Adjuster Unassigned
-or-
3 Cancel this item
Smith, Joe
28445 Main Ave
Chicago, IL 60622
555-555-1212
DIRECT BILL REQUEST
Claim Number: 754589877
Vehicle Condition: Select a Loss Type
Claim Type: Select a Claim Type
Date of Loss: January 1 2000
Note to Enterprise:
1 Assign to Office 001
2 Assign Adjuster Unassigned
-or-
3 Cancel this item
PREVIOUS
PROCESS
Contact Us | Terms & Conditions

FIG. 97(a)

(Insurance User)

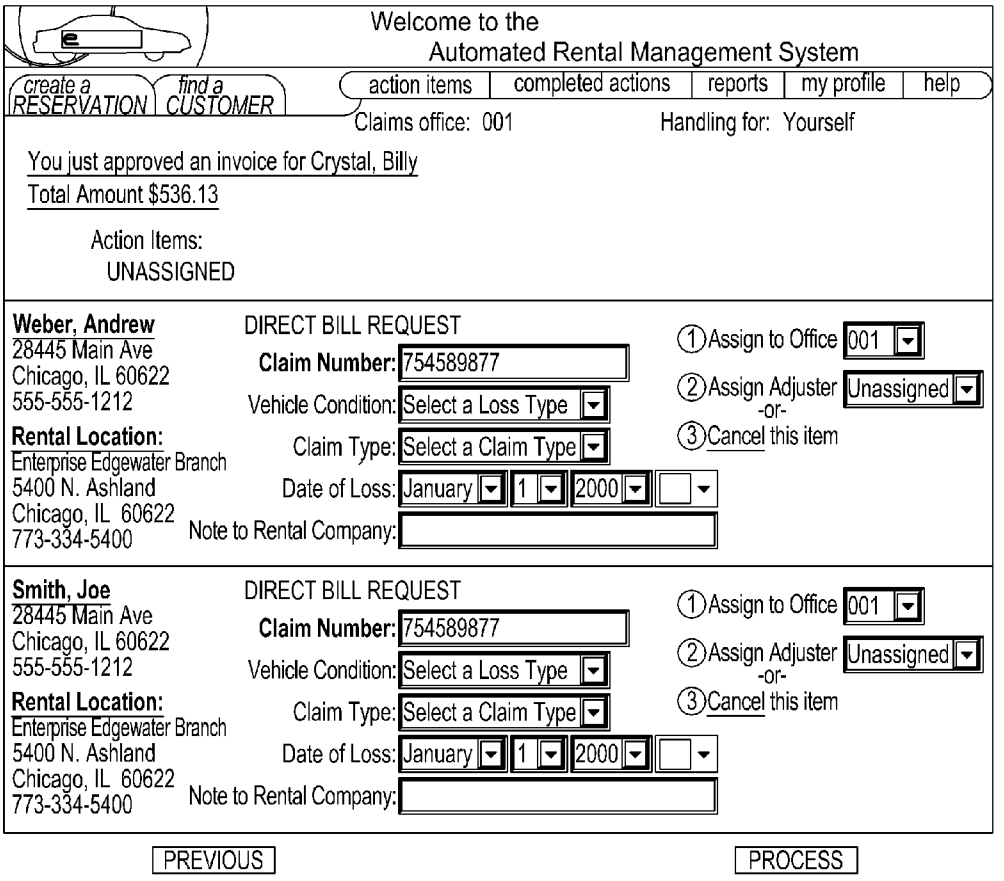

FIG. 97(b)

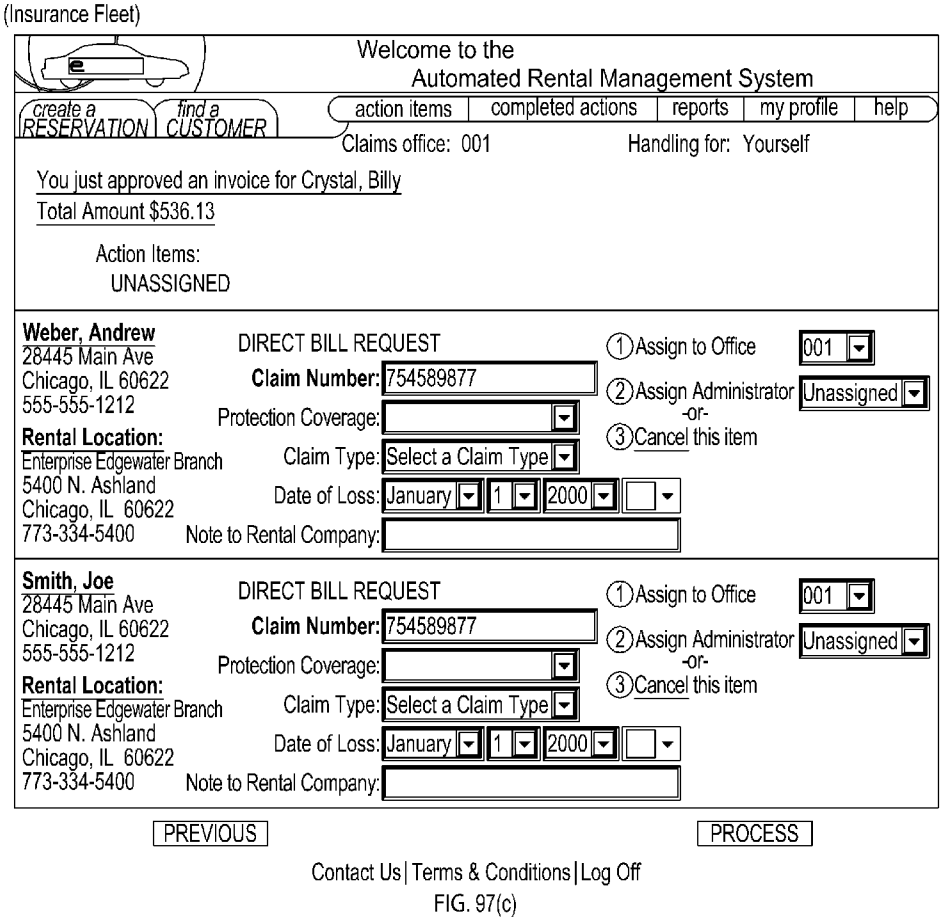
(Insurance Fleet)
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
You just approved an invoice for Crystal, Billy
Total Amount $536.13
Action Items:
UNASSIGNED
Weber, Andrew
28445 Main Ave
Chicago, IL 60622
555-555-1212
Rental Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400
DIRECT BILL REQUEST
Claim Number: 754589877
Protection Coverage:
Claim Type: Select a Claim Type
Date of Loss: January 1 2000
Note to Rental Company:
1 Assign to Office 001
2 Assign Administrator Unassigned
-or-
3 Cancel this item
Smith, Joe
28445 Main Ave
Chicago, IL 60622
555-555-1212
Rental Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400
DIRECT BILL REQUEST
Claim Number: 754589877
Protection Coverage:
Claim Type: Select a Claim Type
Date of Loss: January 1 2000
Note to Rental Company:
1 Assign to Office 001
2 Assign Administrator Unassigned
-or-
3 Cancel this item
PREVIOUS
PROCESS
Contact Us | Terms & Conditions | Log Off

FIG. 97(c)

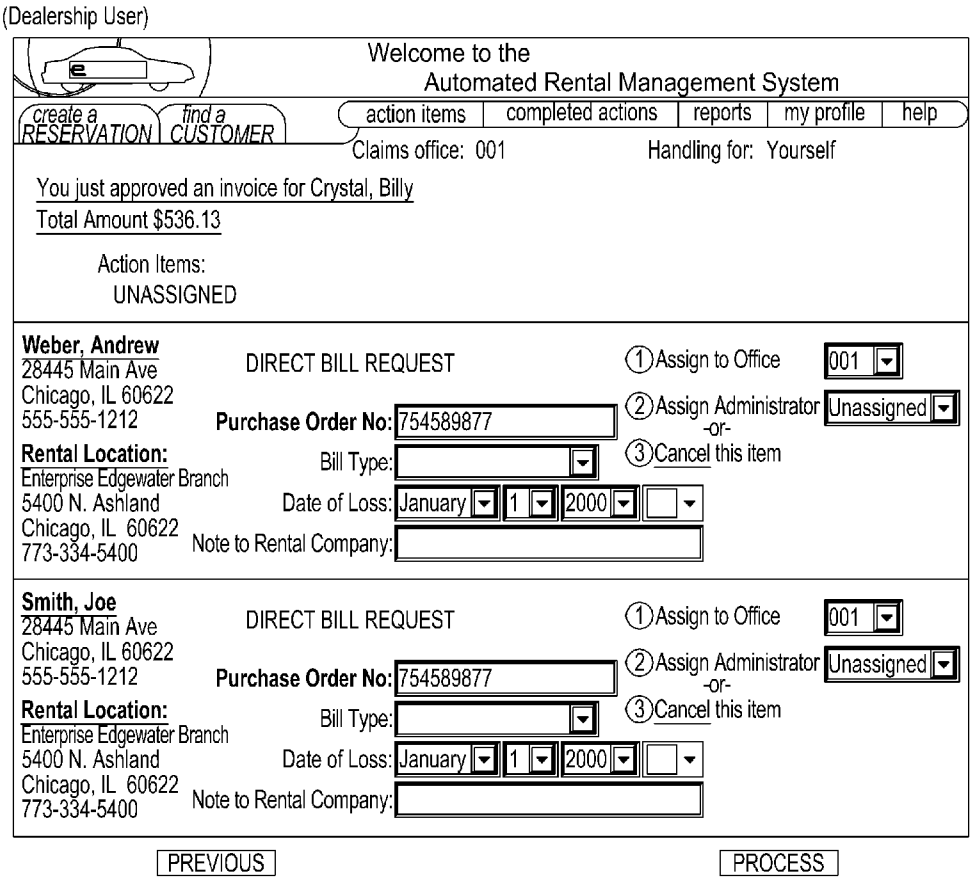
(Dealership User)
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
You just approved an invoice for Crystal, Billy
Total Amount $536.13
Action Items:
UNASSIGNED
Weber, Andrew
28445 Main Ave
Chicago, IL 60622
555-555-1212
Rental Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400
DIRECT BILL REQUEST
Purchase Order No: 754589877
Bill Type:
Date of Loss: January 1 2000
Note to Rental Company:
1 Assign to Office 001
2 Assign Administrator Unassigned
-or-
3 Cancel this item
Smith, Joe
28445 Main Ave
Chicago, IL 60622
555-555-1212
Rental Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400
DIRECT BILL REQUEST
Purchase Order No: 754589877
Bill Type:
Date of Loss: January 1 2000
Note to Rental Company:
1 Assign to Office 001
2 Assign Administrator Unassigned
-or-
3 Cancel this item
PREVIOUS
PROCESS
Contact Us | Terms & Conditions | Log Off

FIG. 97(d)

(Corporate User)

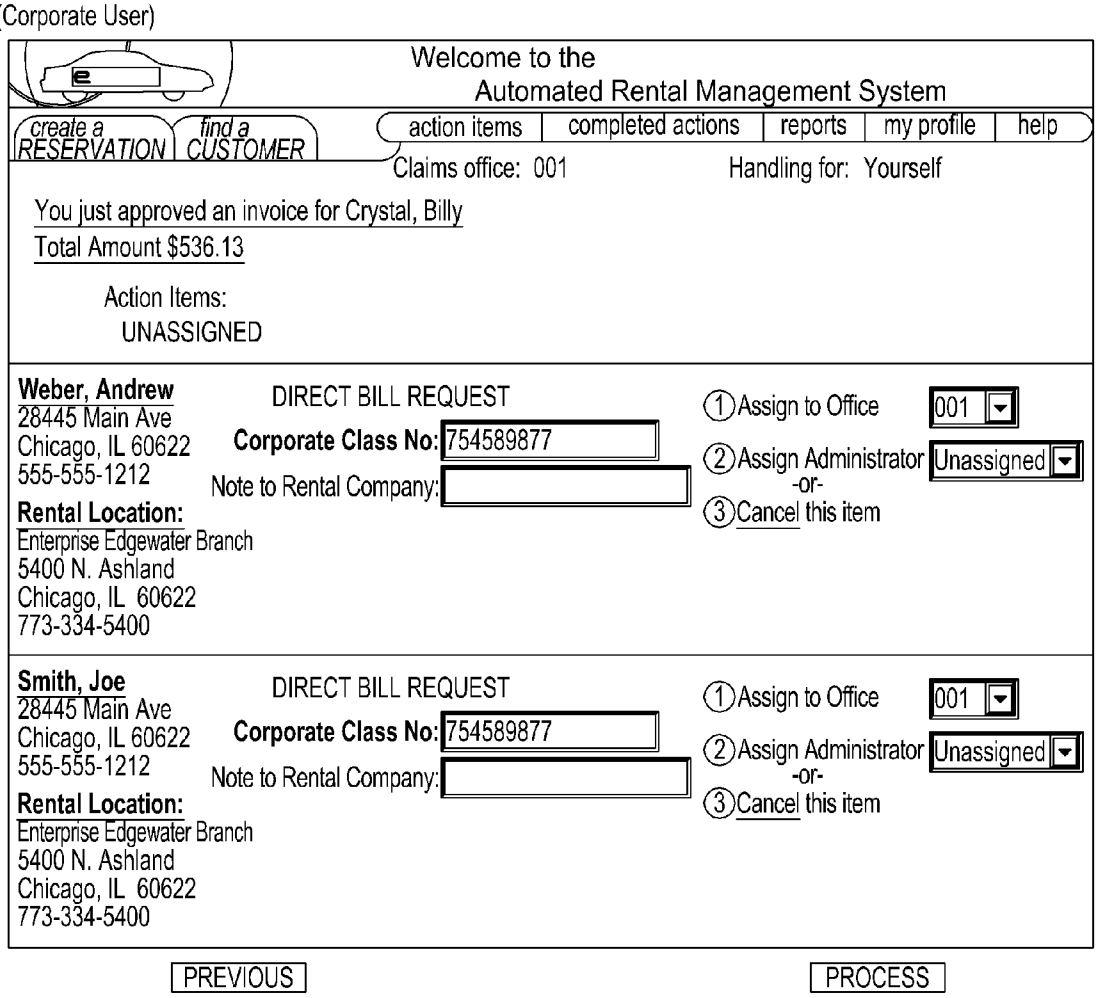

FIG. 97(e)

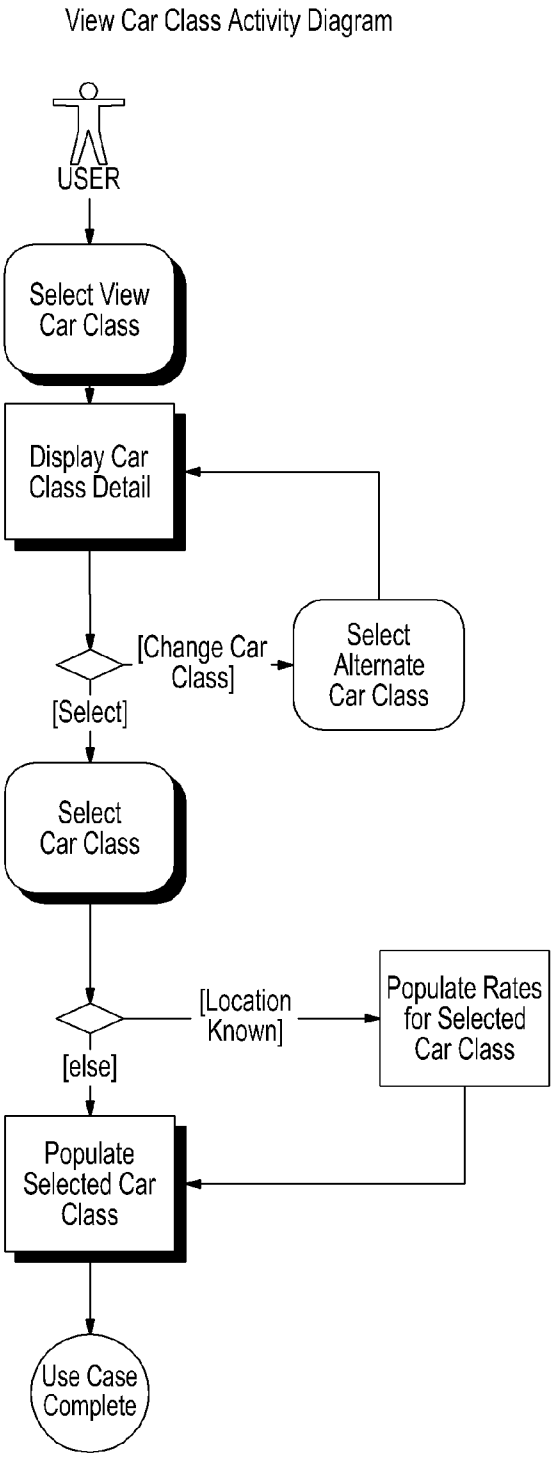
View Car Class Activity Diagram
USER
Select View Car Class
Display Car Class Detail
[Change Car Class]
Select Alternate Car Class
[Select]
Select Car Class
[Location Known]
Populate Rates for Selected Car Class
[else]
Populate Selected Car Class
Use Case Complete

FIG. 98

(ARMS/Web 2.0)

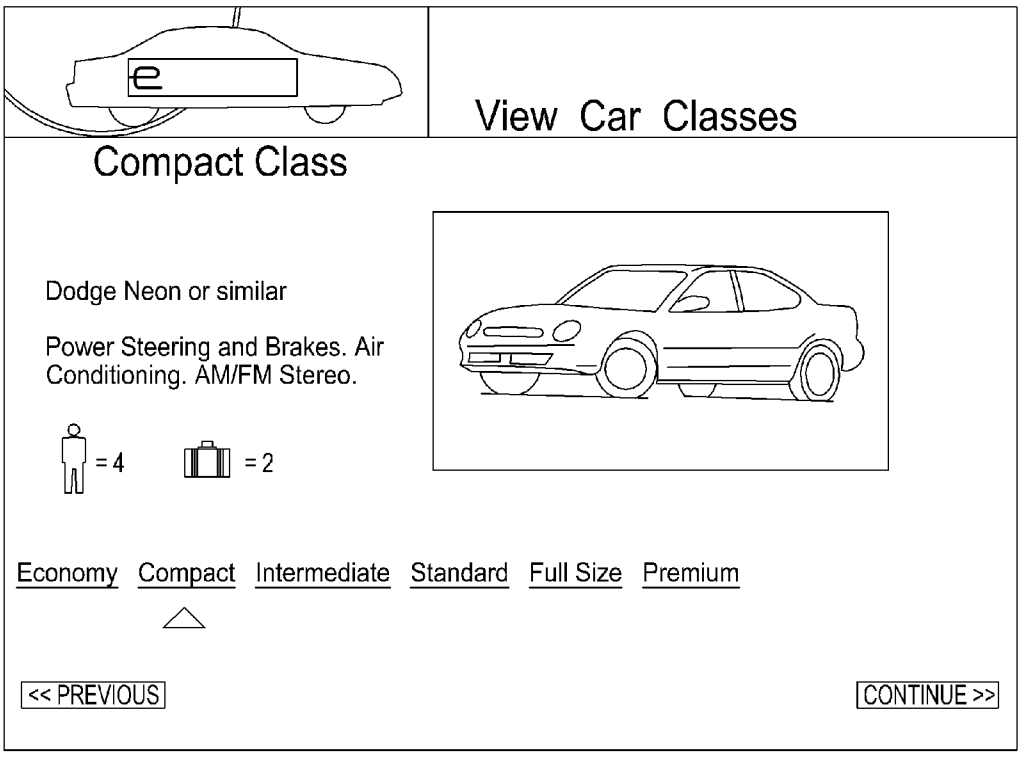

FIG. 99(a)

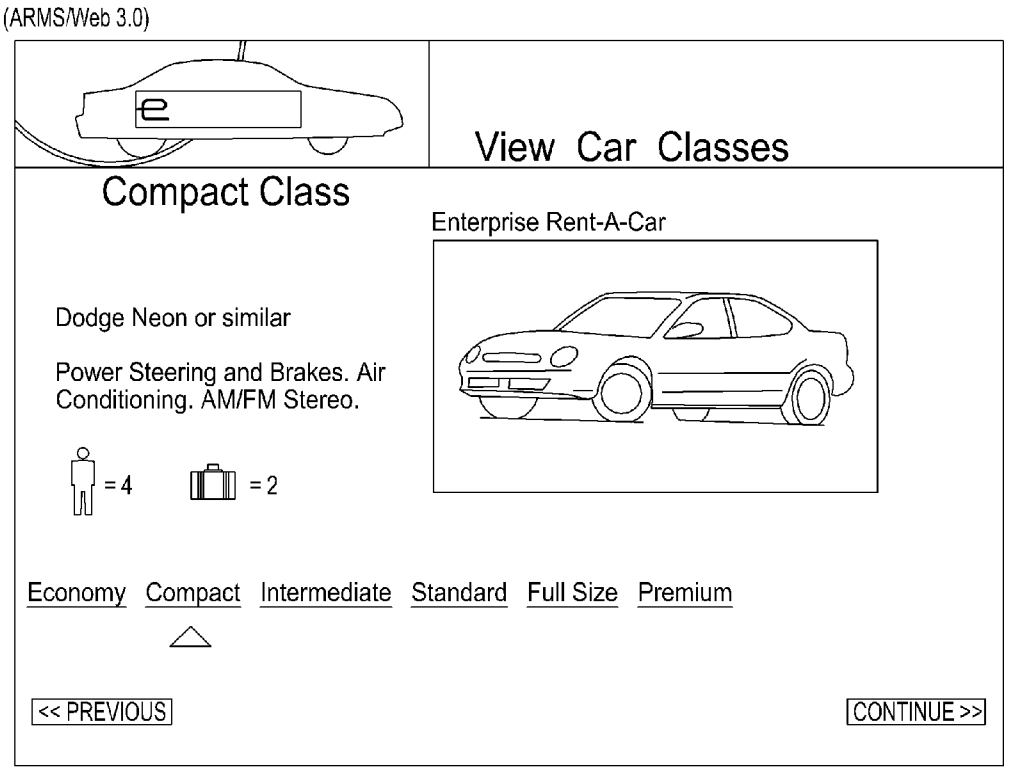
(ARMS/Web 3.0)
View Car Classes
Compact Class
Enterprise Rent-A-Car
Dodge Neon or similar
Power Steering and Brakes. Air Conditioning. AM/FM Stereo.
= 4
= 2
Economy Compact Intermediate Standard Full Size Premium
<< PREVIOUS
CONTINUE >>

FIG. 99(b)

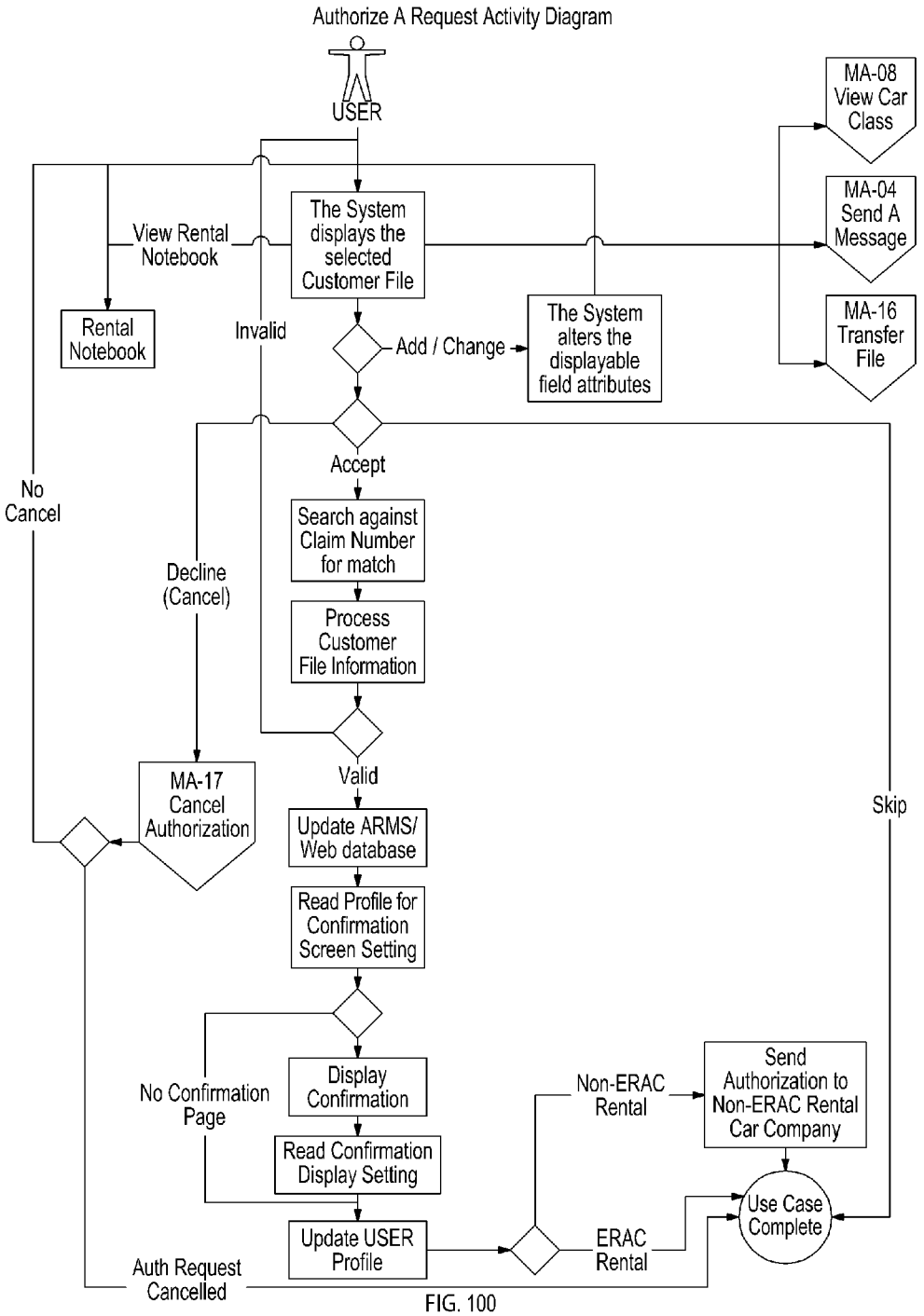
Authorize A Request Activity Diagram
USER
MA-08 View Car Class
MA-04 Send A Message
MA-16 Transfer File
View Rental Notebook
The System displays the selected Customer File
Rental Notebook
Invalid
Add / Change
The System alters the displayable field attributes
Accept
No Cancel
Search against Claim Number for match
Decline (Cancel)
Process Customer File Information
Valid
MA-17 Cancel Authorization
Update ARMS/ Web database
Skip
Read Profile for Confirmation Screen Setting
No Confirmation Page
Display Confirmation
Non-ERAC Rental
Send Authorization to Non-ERAC Rental Car Company
Read Confirmation Display Setting
Use Case Complete
Update USER Profile
ERAC Rental
Auth Request Cancelled

FIG. 100

(ARMS/Web 2.0)

Welcome to the
Automated Rental Management System

create a RESERVATION | find a CUSTOMER | action items | completed actions | reports | my profile | help

Claims office: 001 You are handling for: Yourself TRANSFER FILE

Authorize Direct Bill: for Hanks, Tom Claim no. 765849322-001
CUSTOMER FILE 1 of 4 Action Items

Direct Bill Requested for:

[ ] days @ Compact/21.95

Policy: Daily rate/ Maximum dollars 20/500

Note to Enterprise:

Note to Self Only:

Claim Number: 765849322-001

Claim Type: Select a Claim Type

Loss Type: Select a Loss Type

Date of Loss: mm dd yy

Date Rental Needed: mm dd yy

Insured Name: Last First

Message: Direct Bill request for Hanks: Tom 4/23/00

Go to Notebook

CANCEL PROCESS SKIP >>

[Change or Add]

RENTER INFORMATION:
Hanks, Tom
1735 N. Paulina St.
Chicago, IL 60622

Home: (773)564-6054
Work: (773)395-6200
Email: thanks@zefer.com
Requested email confirmation

RENTAL INFORMATION:
Enterprise Rent-A-Car Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400

ADDITIONAL CLAIM INFORMATION:
Insured Name: Lalumandier, Craig
Owner's vehicle: GMC Suburban 1999
Date of Loss: 03/28/2000
Type of Loss: Non-Driveable

Repair Facility:
Elco Chevrolet
22 Elston Dr.
Chicago, IL 60621
(773)334-9832

NOTEBOOK:
Direct Bill request for Hanks, Tom 4/23/00

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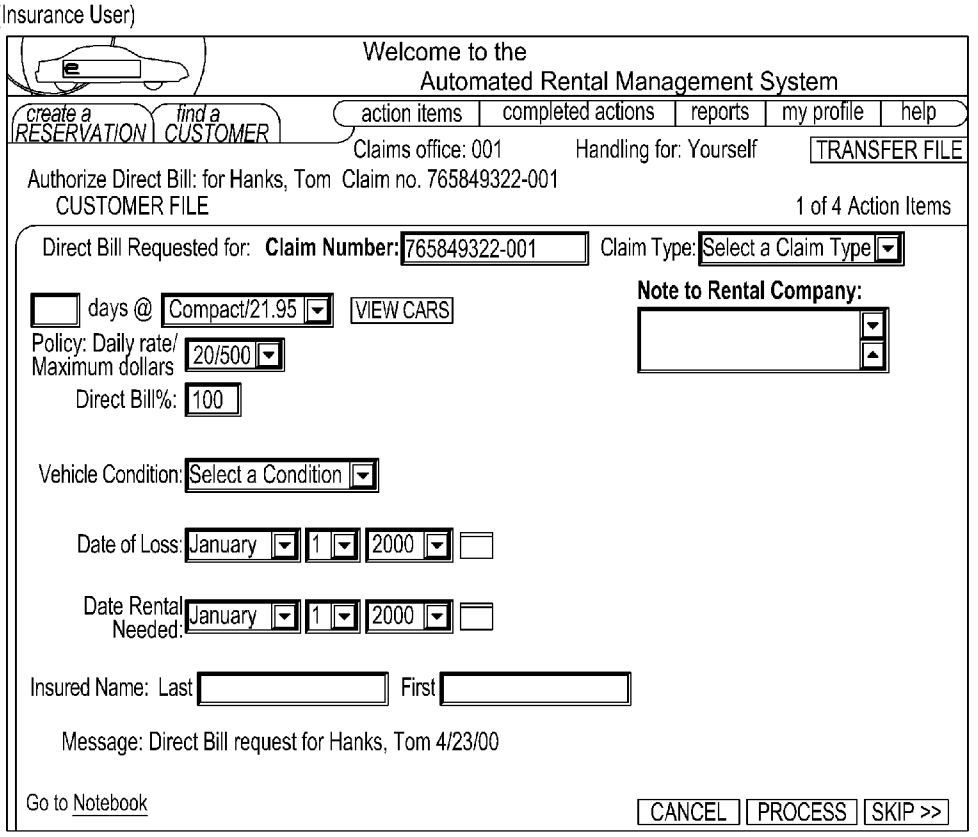
FIG. 101(a)

(Insurance User)



[Change or Add]

RENTER INFORMATION:
Hanks, Tom
1735 N. Paulina St.
Chicago, IL 60622

Home: (773)564-6054
Work: (773)395-6200
Email: thanks@zefer.com
Requested email confirmation

RENTAL INFORMATION:
Rental Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400

NOTEBOOK:
Direct Bill request for Hanks, Tom 4/23/00

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FIG. 101(b)

(Fleet User)

Welcome to the
Automated Rental Management System

create a RESERVATION | find a CUSTOMER | action items | completed actions | reports | my profile | help

Claims office: 001 Handling for: Yourself TRANSFER FILE

Authorize Direct Bill: for Hanks, Tom Claim no. 765849322-001
CUSTOMER FILE 1 of 4 Action Items

Direct Bill Requested for: **Claim Number:** 765849322-001 Claim Type: Select a Claim Type

days @ Compact/21.95 VIEW CARS

Policy: Daily rate/ Maximum dollars 20/500

Note to Rental Company:

Protection Coverage:

Date of Loss: January 1 2000

Date Rental Needed: January 1 2000

Insured Name: Last First

Message: Direct Bill request for Hanks, Tom 4/23/00

Go to Notebook

CANCEL PROCESS SKIP >>

[Change or Add]

RENTER INFORMATION:
Hanks, Tom
1735 N. Paulina St.
Chicago, IL 60622

Home: (773)564-6054
Work: (773)395-6200
Email: thanks@zefer.com
Requested email confirmation

RENTAL INFORMATION:
Rental Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400

NOTEBOOK:
Direct Bill request for Hanks, Tom 4/23/00

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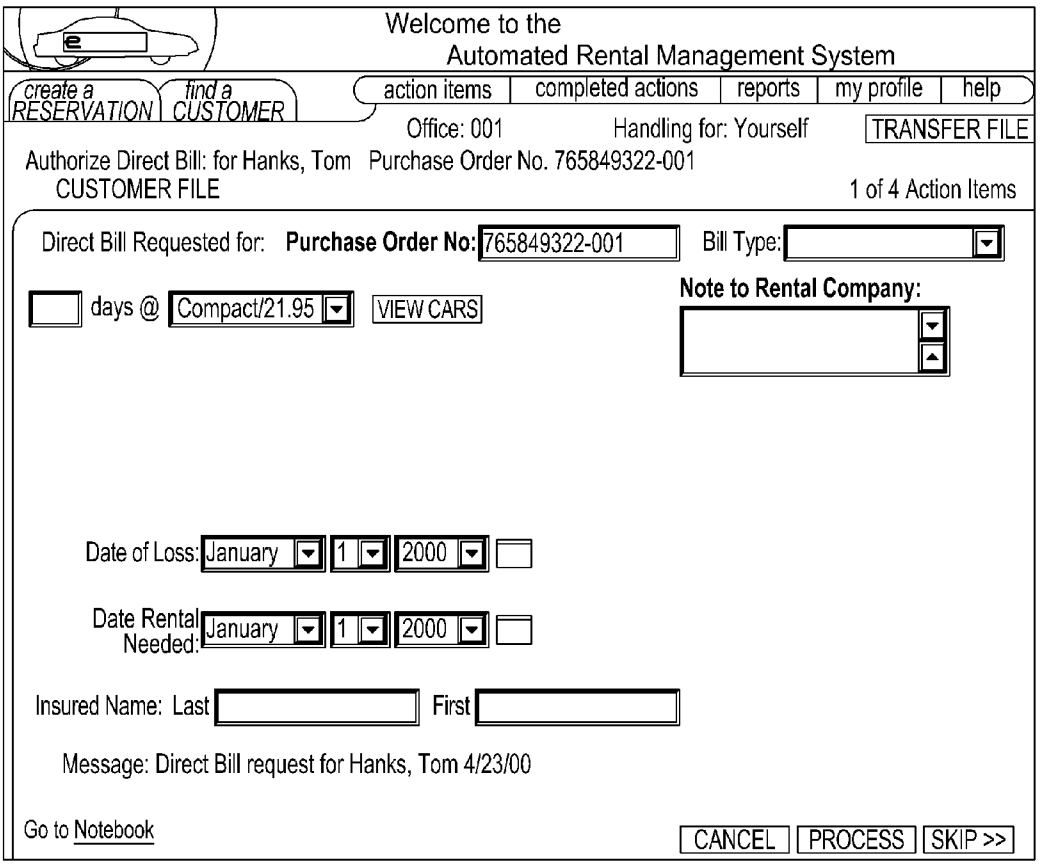
FIG. 101(c)

(Dealership User)



[Change or Add]

RENTER INFORMATION:
Hanks, Tom
1735 N. Paulina St.
Chicago, IL 60622

Home: (773)564-6054
Work: (773)395-6200
Email: thanks@zefer.com
Requested email confirmation

RENTAL INFORMATION:
Rental Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400

NOTEBOOK:
Direct Bill request for Hanks, Tom 4/23/00

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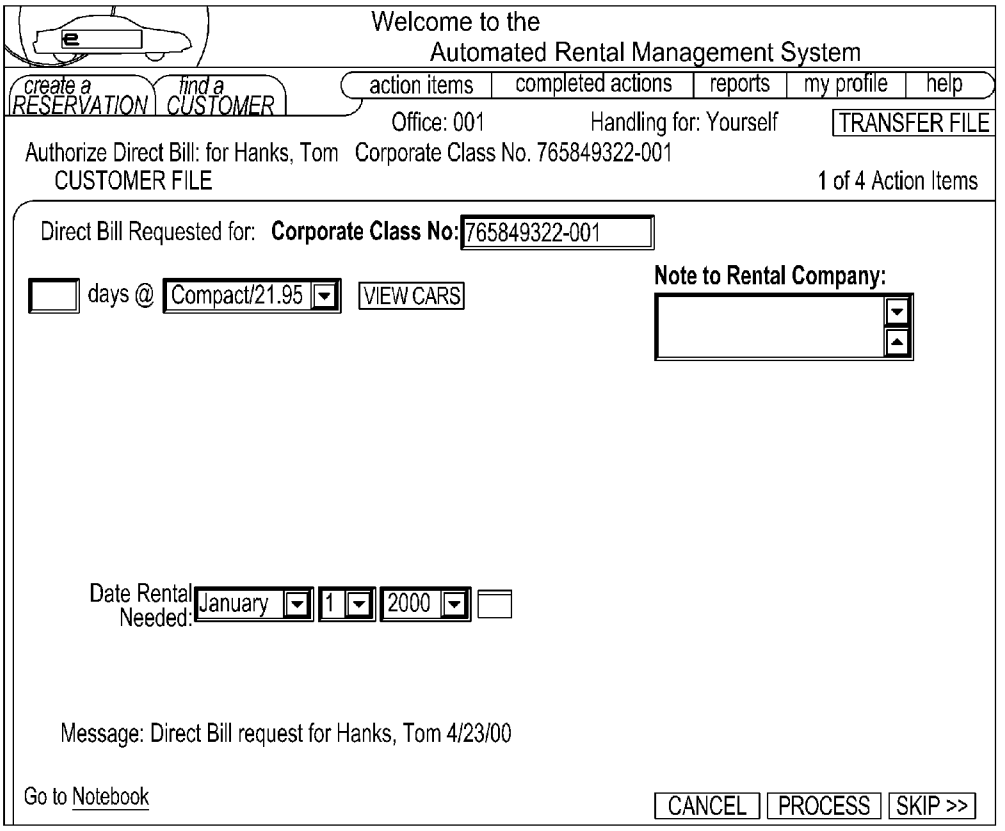
FIG. 101(d)

(Corporate User)



[Change or Add]

RENTER INFORMATION:
Hanks, Tom
1735 N. Paulina St.
Chicago, IL 60622

Home: (773)564-6054
Work: (773)395-6200
Email: thanks@zefer.com
Requested email confirmation

RENTAL INFORMATION:
Rental Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400

NOTEBOOK:
Direct Bill request for Hanks, Tom 4/23/00

top of page

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FIG. 101(e)

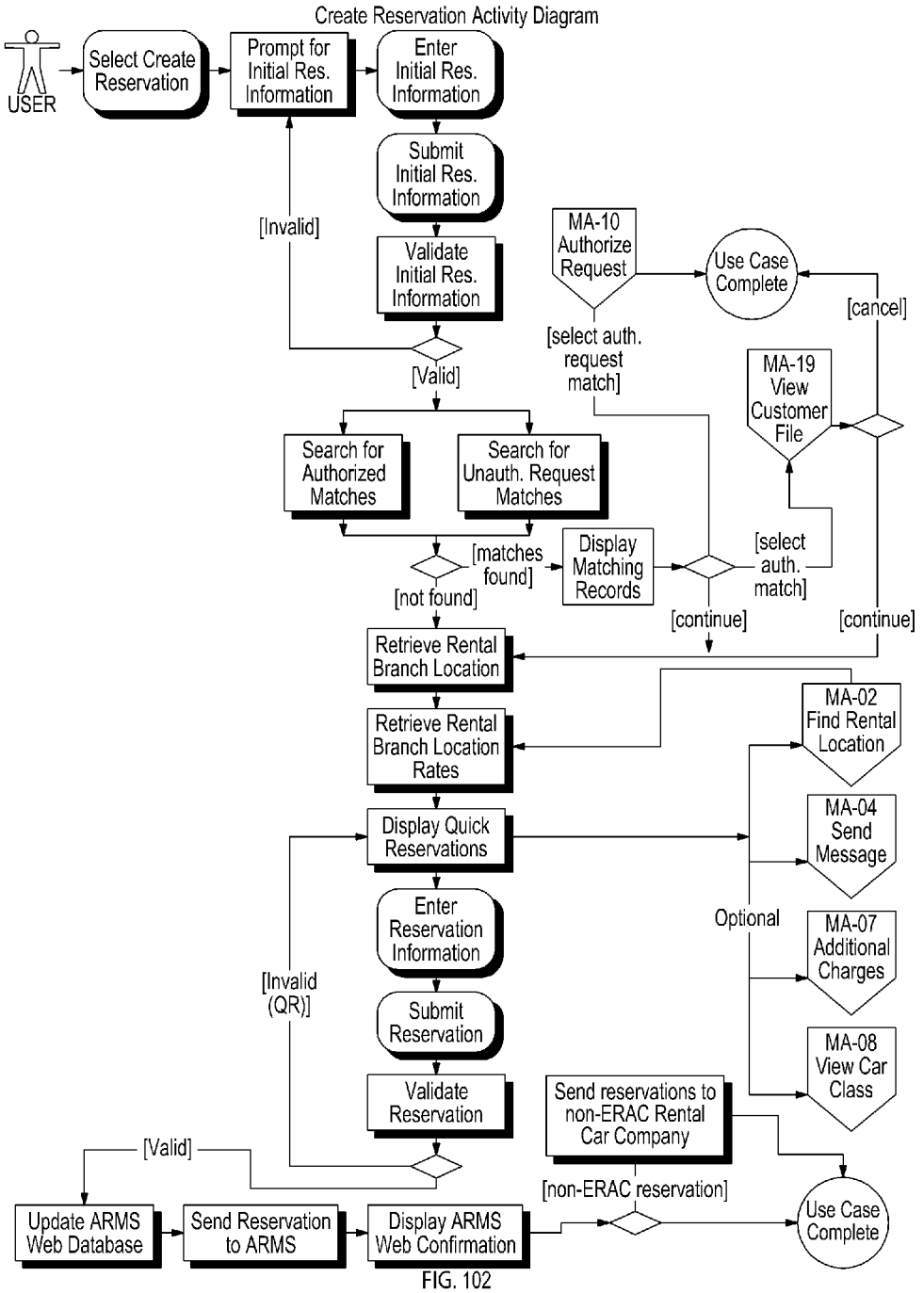
Create Reservation Activity Diagram
USER
Select Create Reservation
Prompt for Initial Res. Information
Enter Initial Res. Information
Submit Initial Res. Information
Validate Initial Res. Information
[Invalid]
[Valid]
MA-10 Authorize Request
Use Case Complete
[cancel]
[select auth. request match]
MA-19 View Customer File
Search for Authorized Matches
Search for Unauth. Request Matches
[matches found]
[not found]
Display Matching Records
[select auth. match]
[continue]
[continue]
Retrieve Rental Branch Location
Retrieve Rental Branch Location Rates
MA-02 Find Rental Location
Display Quick Reservations
MA-04 Send Message
Optional
Enter Reservation Information
MA-07 Additional Charges
[Invalid (QR)]
Submit Reservation
MA-08 View Car Class
Validate Reservation
Send reservations to non-ERAC Rental Car Company
[Valid]
[non-ERAC reservation]
Update ARMS Web Database
Send Reservation to ARMS
Display ARMS Web Confirmation
Use Case Complete

FIG. 102

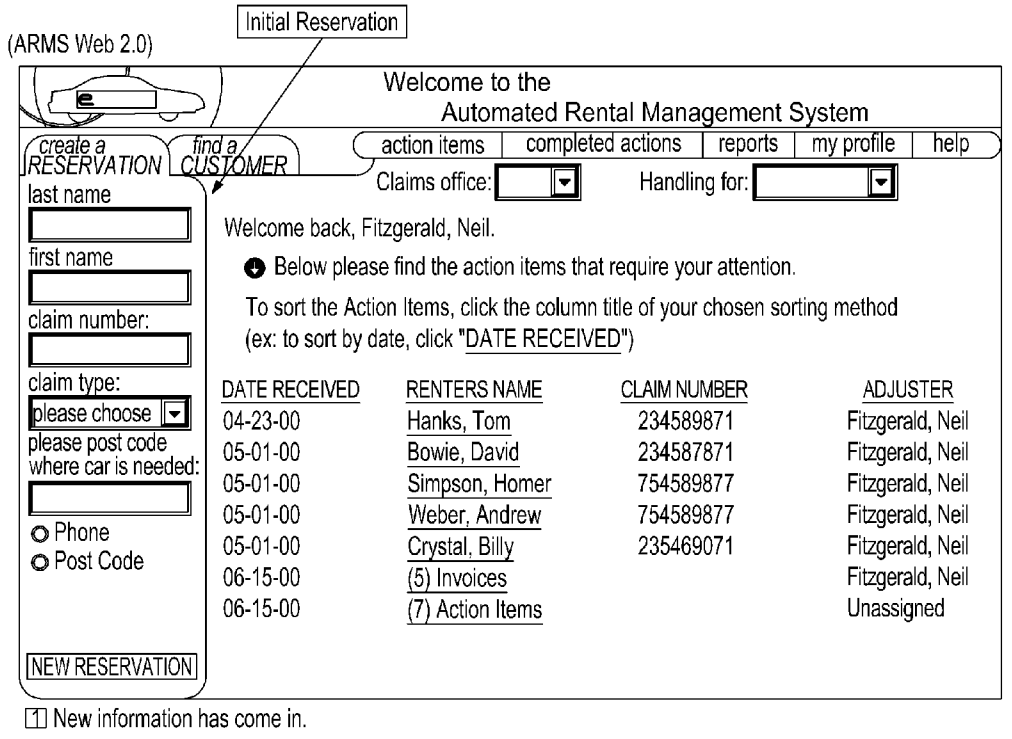
(ARMS Web 2.0)
Initial Reservation
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office:
Handling for:
last name
first name
claim number:
claim type:
please choose
please post code where car is needed:
Phone
Post Code
NEW RESERVATION
Welcome back, Fitzgerald, Neil.
Below please find the action items that require your attention.
To sort the Action Items, click the column title of your chosen sorting method
(ex: to sort by date, click "DATE RECEIVED")
DATE RECEIVED
RENTERS NAME
CLAIM NUMBER
ADJUSTER
04-23-00 Hanks, Tom 234589871 Fitzgerald, Neil
05-01-00 Bowie, David 234587871 Fitzgerald, Neil
05-01-00 Simpson, Homer 754589877 Fitzgerald, Neil
05-01-00 Weber, Andrew 754589877 Fitzgerald, Neil
05-01-00 Crystal, Billy 235469071 Fitzgerald, Neil
06-15-00 (5) Invoices Fitzgerald, Neil
06-15-00 (7) Action Items Unassigned
1 New information has come in.
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FIG. 103(a)

(Insurance User)

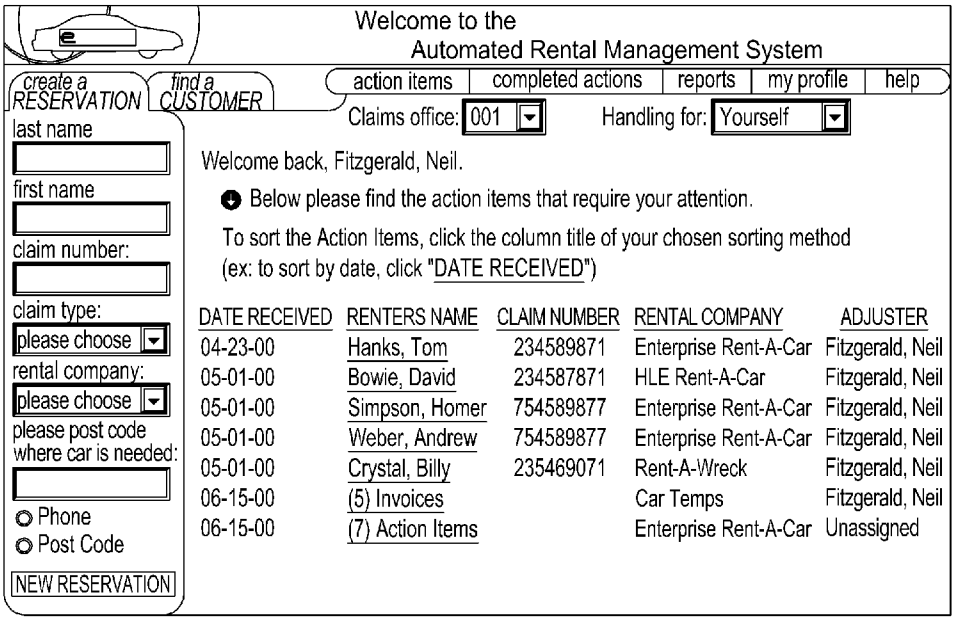

FIG. 103(b)

(Fleet User)

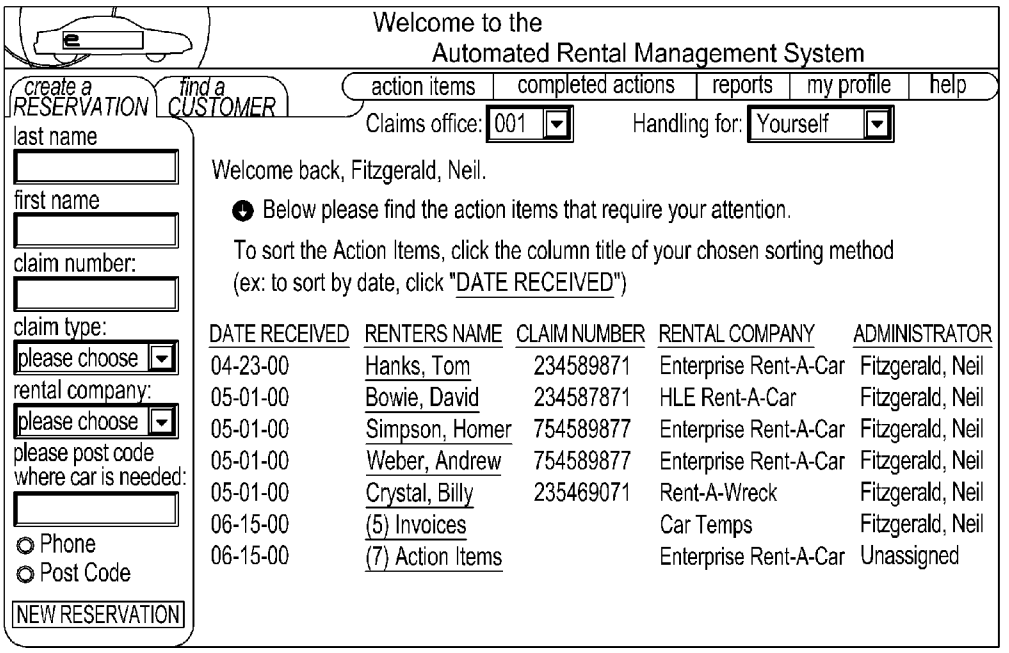

FIG. 103(c)

(Dealership User)

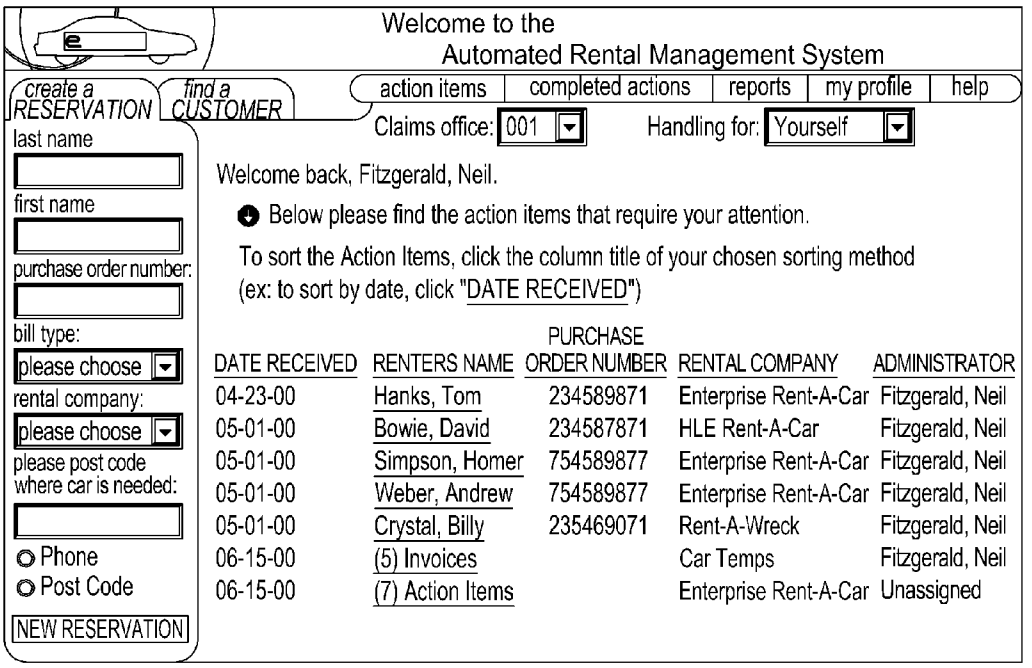

FIG. 103(d)

(Corporate User)

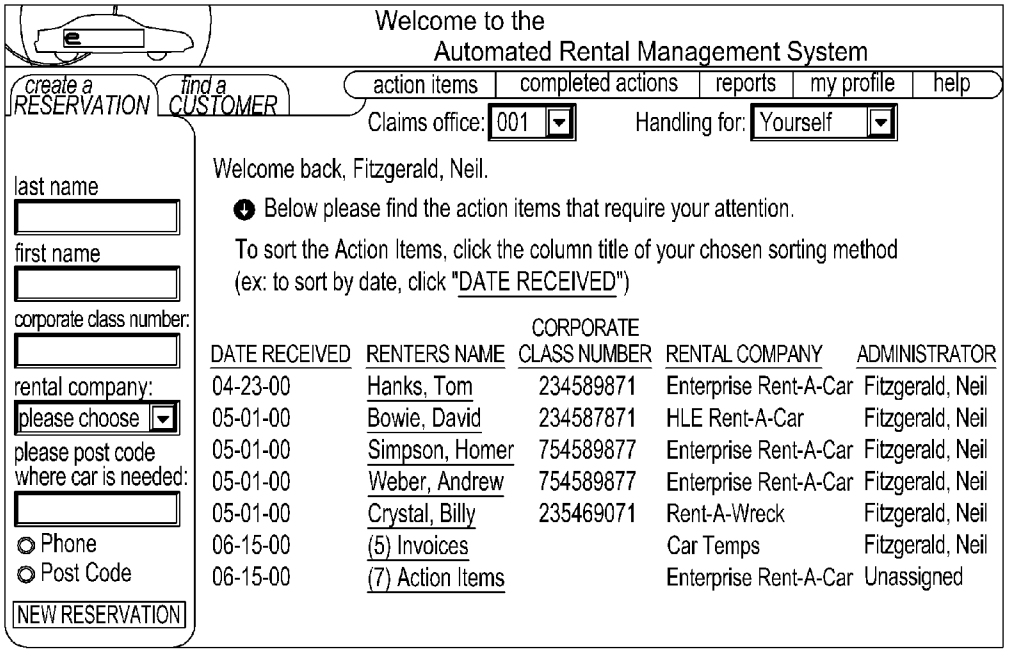

FIG. 103(e)

(ARMS Web 2.0)

Welcome to the
Automated Rental Management System

create a RESERVATION | find a CUSTOMER | action items | completed actions | reports | my profile | help

Claims office: 001 Handling for: Self

Please verify the reservation you want to create does not exist.
If it exists, you can click the link to view the file or process it.

Matches Found: You requested a reservation for: Hanks, Tom
Claim Number: 765849322 Claim Type: Claimant

NEW RESERVATION

AUTHORIZED

Claim No.	Customer Name	Status	Date Rental Needed	Invoice Amount
765849322-001	Hanks, Tom	Closed	4/23/2000	$200.95
765849322-002	Jones, Bill	Open (customer in car)	4/18/2000	$256.98

25 items in the list Matches 1-25 of 325 View next 25>>

UNAUTHORIZED

Claim No.	Customer Name	Status	Date Rental Needed
765849322-001	Hanks, Tom	Direct Bill Request	4/23/2000
888234213	Jones, Bob	Open (customer in car)	4/18/2000
888254321	Hanks, Sophia	Open (customer in car)	4/16/2000

25 items in the list Matches 1-25 of 325 View next 25>>

top of page NEW RESERVATION

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FIG. 104(a)

(Insurance User)

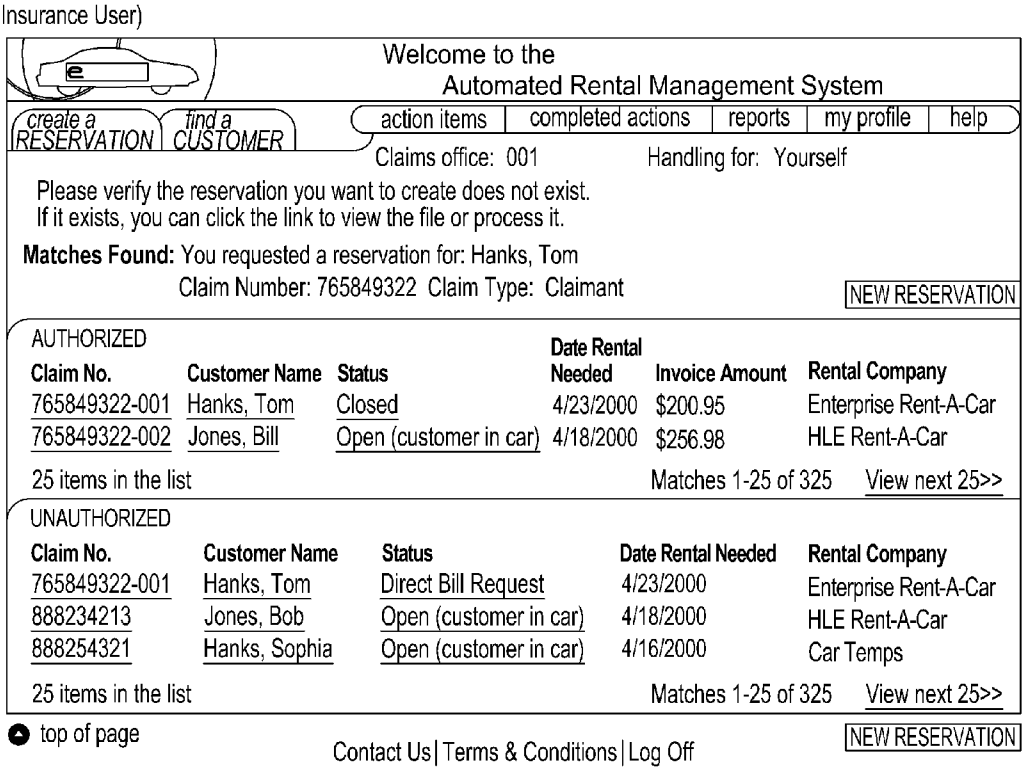


FIG. 104(b)

(Fleet User)

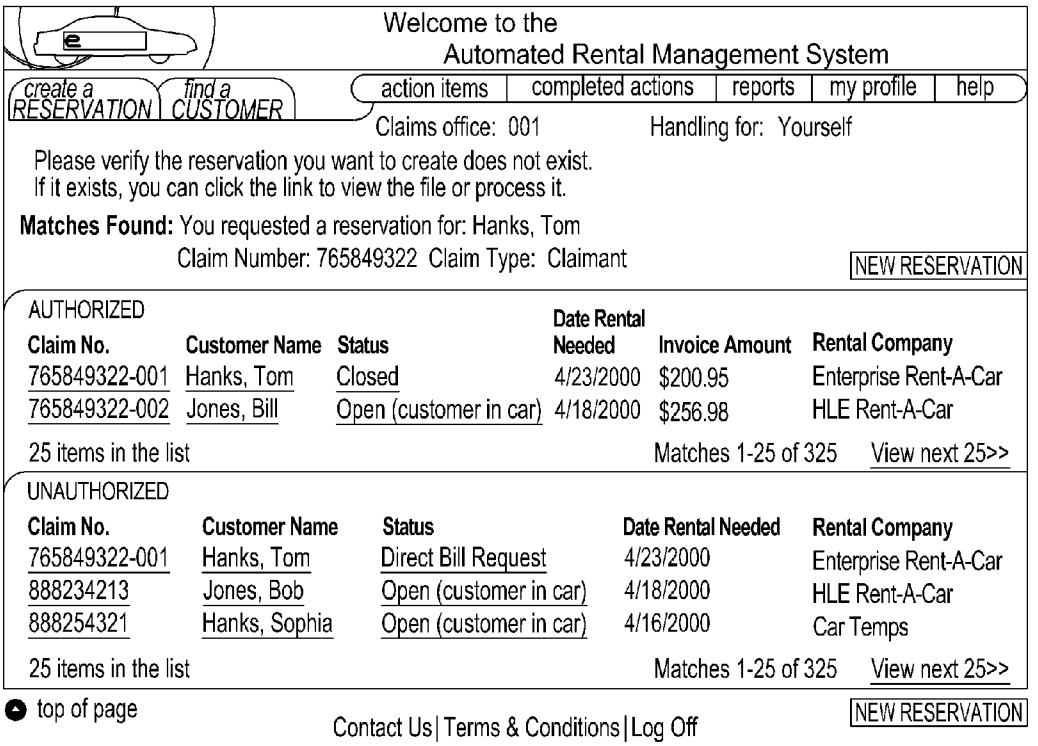


FIG. 104(c)

(Dealership User)

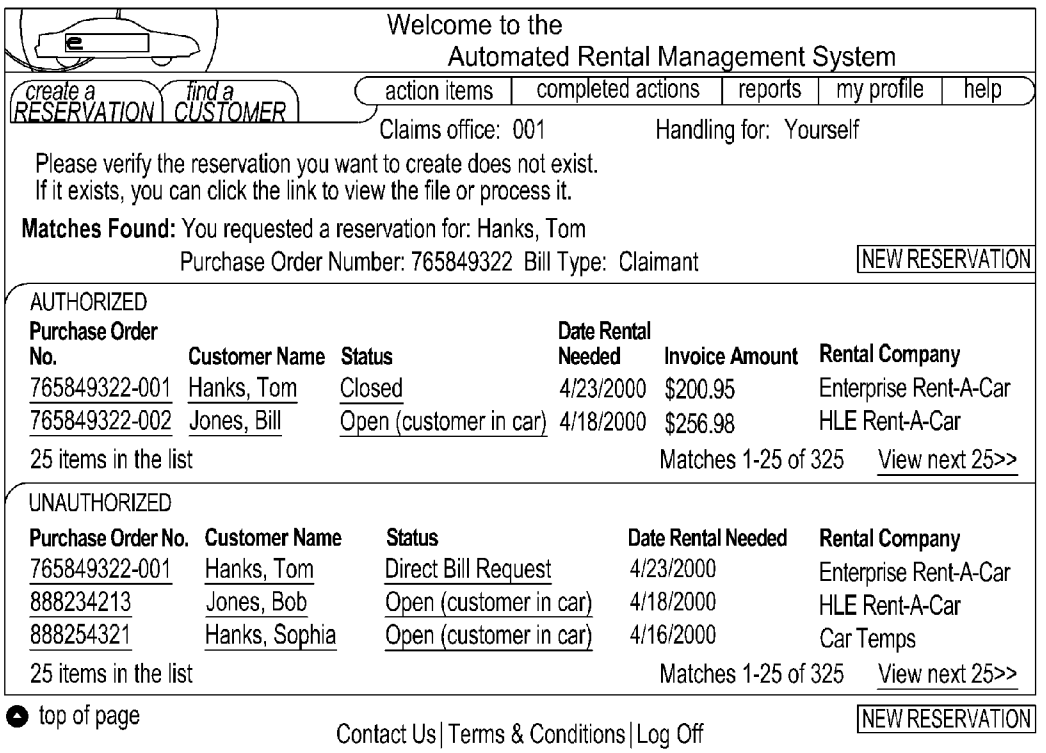


FIG. 104(d)

(Corporate User)

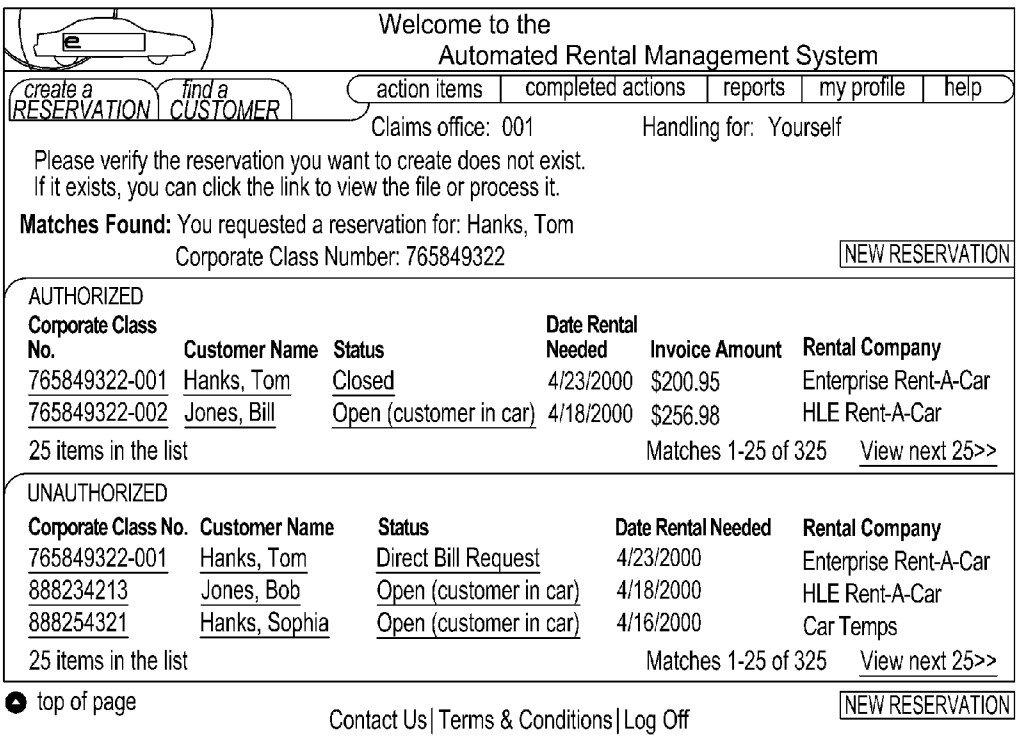


FIG. 104(e)

(ARMS/Web 2.0)

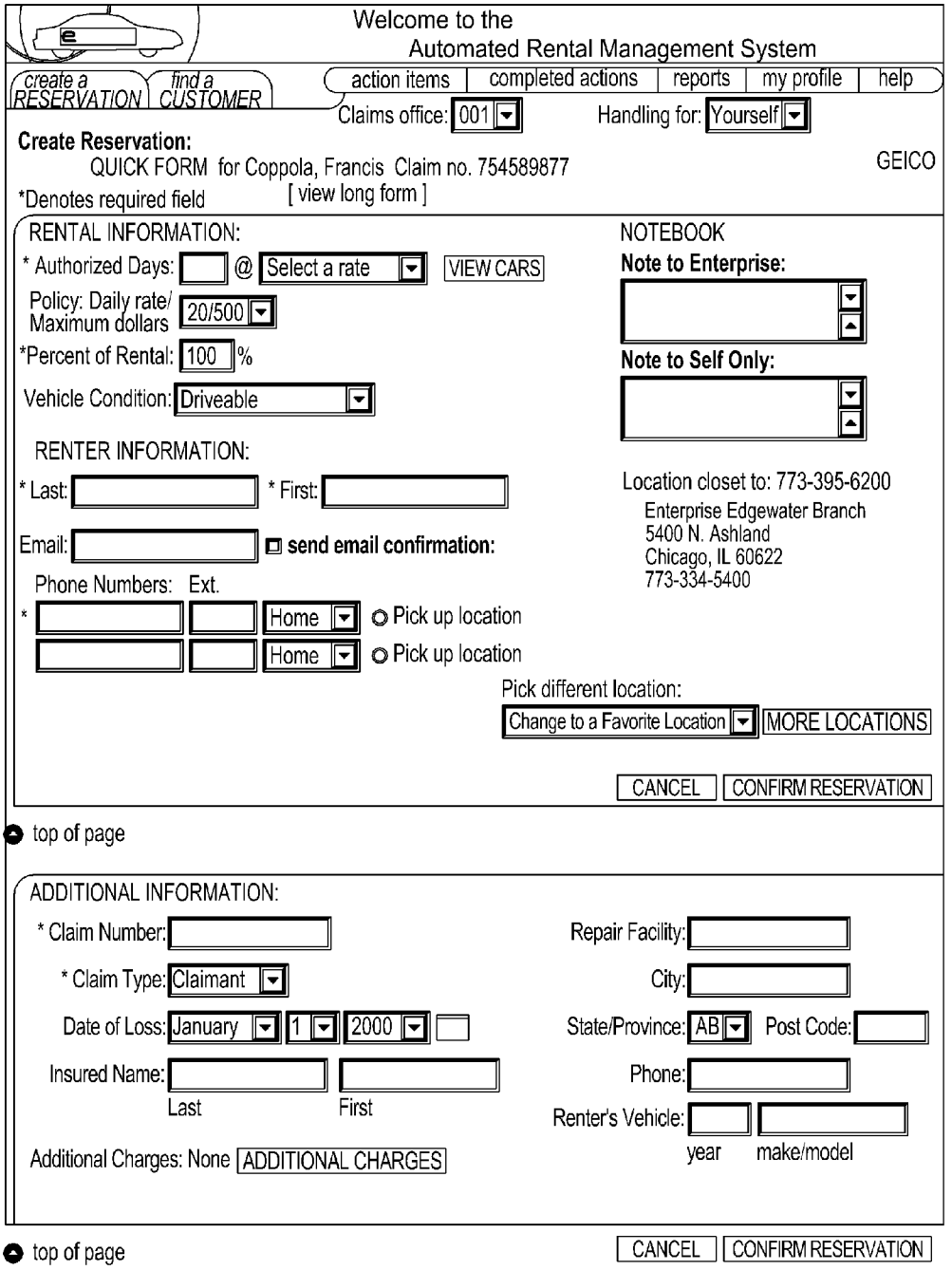


FIG. 105(a)

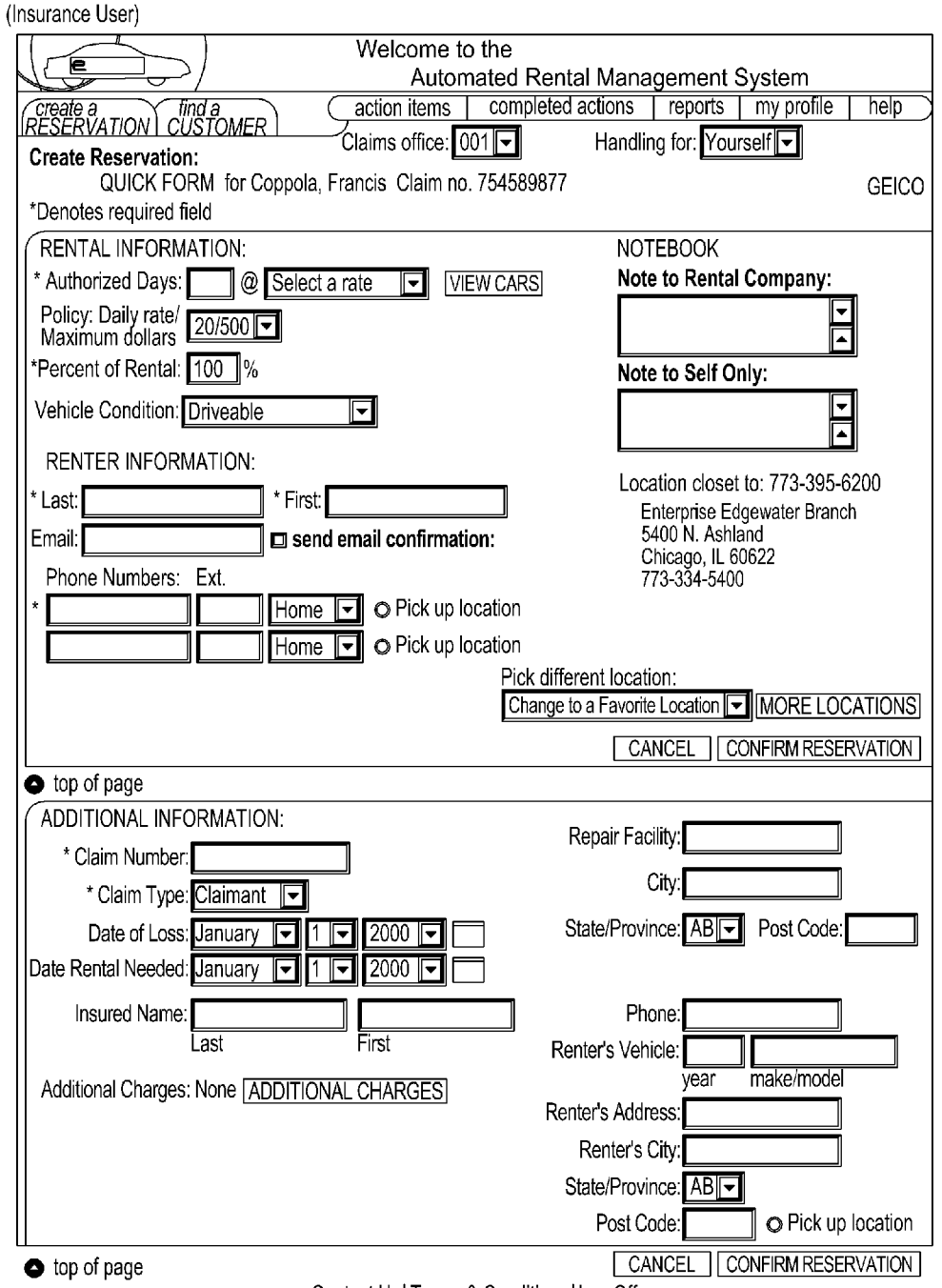

(Insurance User)
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
Create Reservation:
QUICK FORM for Coppola, Francis Claim no. 754589877
GEICO
*Denotes required field
RENTAL INFORMATION:
* Authorized Days:
@ Select a rate
VIEW CARS
Policy: Daily rate/ Maximum dollars 20/500
*Percent of Rental: 100 %
Vehicle Condition: Driveable
RENTER INFORMATION:
* Last:
* First:
Email:
send email confirmation:
Phone Numbers: Ext.
Home
Pick up location
NOTEBOOK
Note to Rental Company:
Note to Self Only:
Location closet to: 773-395-6200
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400
Pick different location:
Change to a Favorite Location
MORE LOCATIONS
CANCEL
CONFIRM RESERVATION
top of page
ADDITIONAL INFORMATION:
* Claim Number:
* Claim Type: Claimant
Date of Loss: January 1 2000
Date Rental Needed: January 1 2000
Insured Name:
Last
First
Additional Charges: None
ADDITIONAL CHARGES
Repair Facility:
City:
State/Province: AB
Post Code:
Phone:
Renter's Vehicle:
year
make/model
Renter's Address:
Renter's City:
State/Province: AB
Post Code:
Pick up location
top of page
CANCEL
CONFIRM RESERVATION
Contact Us | Terms & Conditions | Log Off

FIG. 105(b)

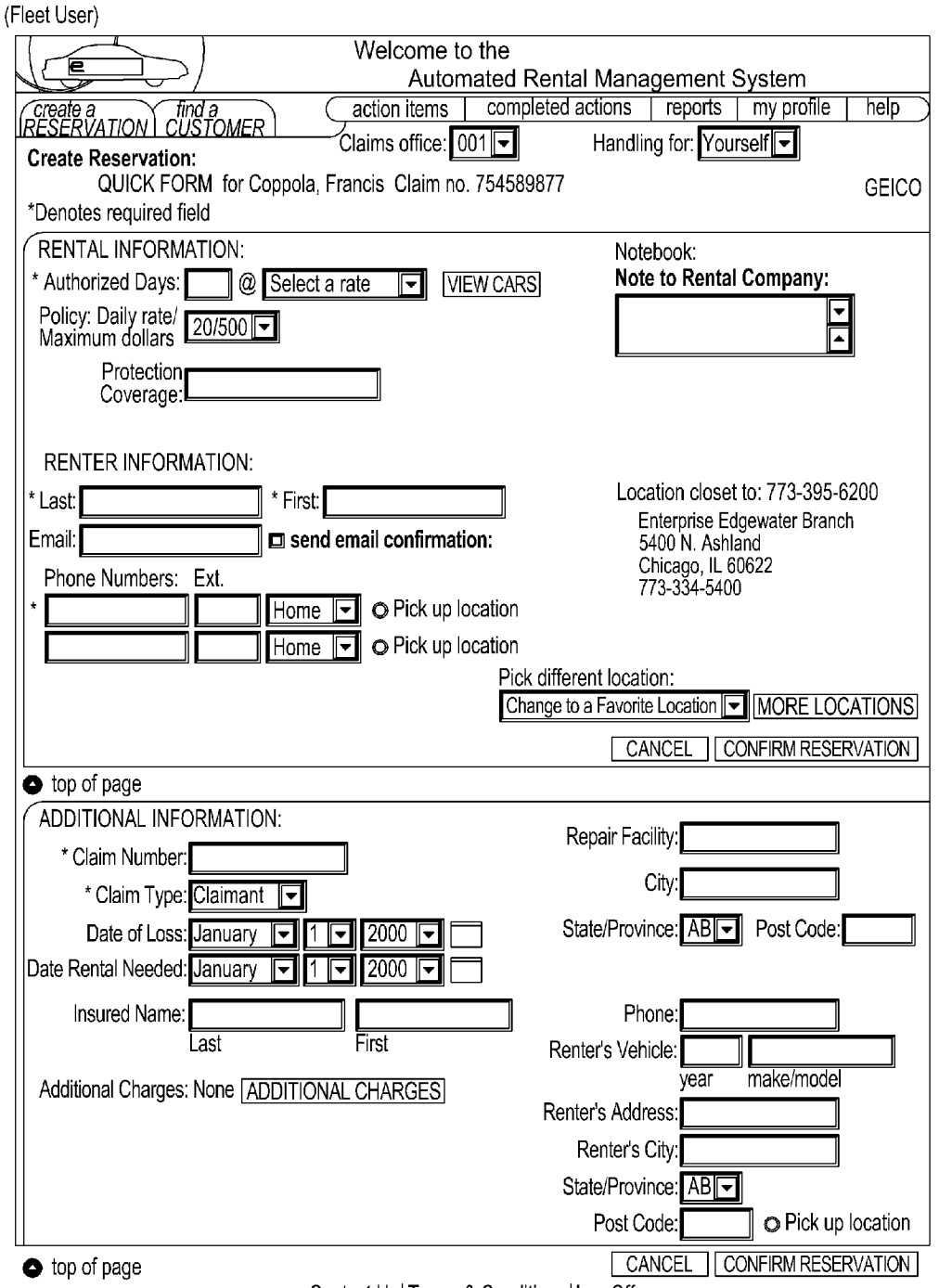

(Fleet User)
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
Create Reservation:
QUICK FORM for Coppola, Francis Claim no. 754589877
GEICO
*Denotes required field
RENTAL INFORMATION:
* Authorized Days:
@ Select a rate
VIEW CARS
Policy: Daily rate/ Maximum dollars 20/500
Protection Coverage:
Notebook:
Note to Rental Company:
RENTER INFORMATION:
* Last:
* First:
Email:
send email confirmation:
Phone Numbers: Ext.
Home
Pick up location
Location closet to: 773-395-6200
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400
Pick different location:
Change to a Favorite Location
MORE LOCATIONS
CANCEL
CONFIRM RESERVATION
top of page
ADDITIONAL INFORMATION:
* Claim Number:
* Claim Type: Claimant
Date of Loss: January 1 2000
Date Rental Needed: January 1 2000
Insured Name:
Last
First
Additional Charges: None
ADDITIONAL CHARGES
Repair Facility:
City:
State/Province: AB
Post Code:
Phone:
Renter's Vehicle:
year
make/model
Renter's Address:
Renter's City:
State/Province: AB
Post Code:
Pick up location
top of page
CANCEL
CONFIRM RESERVATION
Contact Us | Terms & Conditions | Log Off

FIG. 105(c)

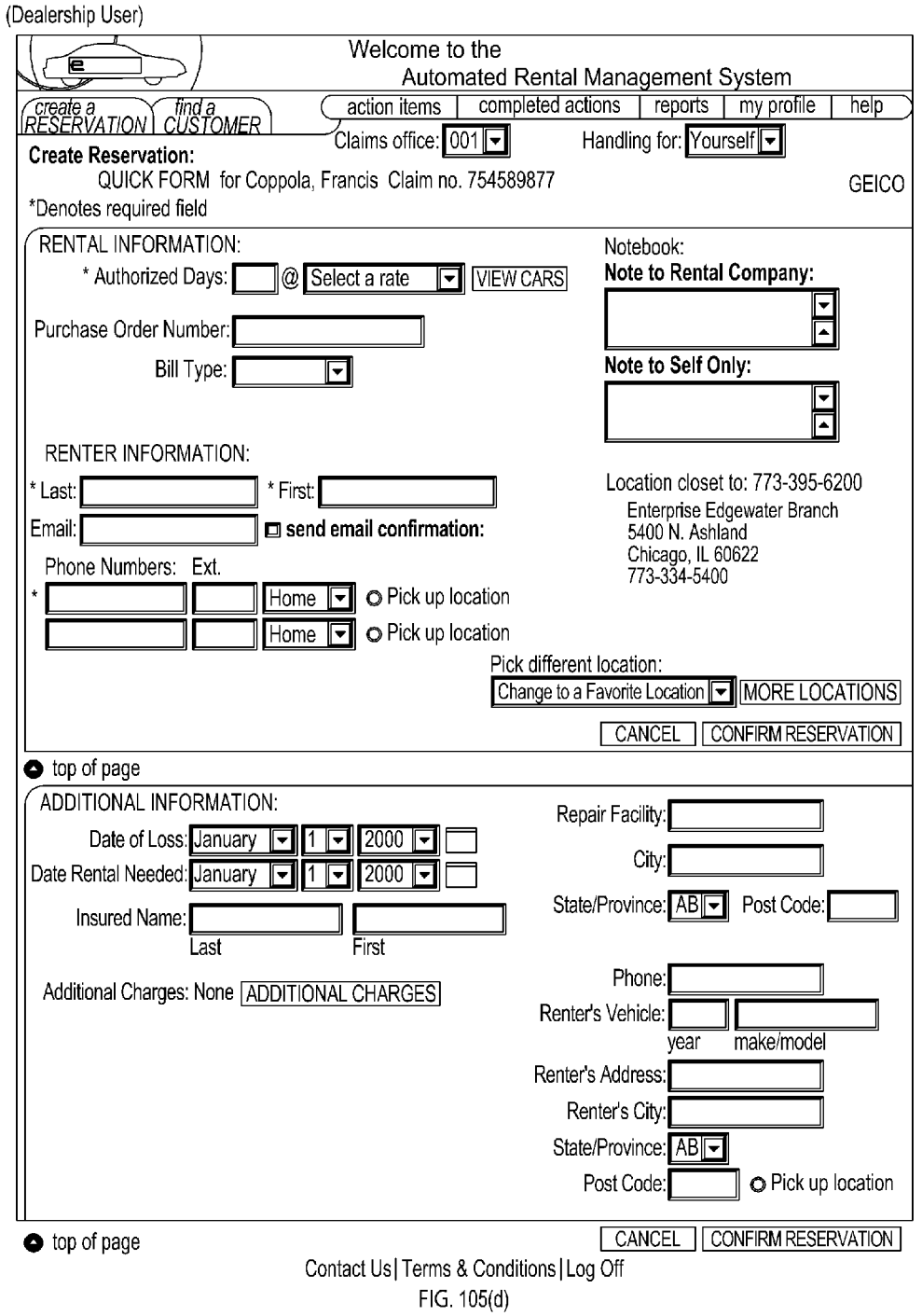

(Dealership User)
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
Create Reservation:
QUICK FORM for Coppola, Francis Claim no. 754589877
GEICO
*Denotes required field
RENTAL INFORMATION:
* Authorized Days:
@ Select a rate
VIEW CARS
Purchase Order Number:
Bill Type:
Notebook:
Note to Rental Company:
Note to Self Only:
RENTER INFORMATION:
* Last:
* First:
Email:
send email confirmation:
Phone Numbers: Ext.
Home
Pick up location
Location closet to: 773-395-6200
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400
Pick different location:
Change to a Favorite Location
MORE LOCATIONS
CANCEL
CONFIRM RESERVATION
top of page
ADDITIONAL INFORMATION:
Date of Loss: January 1 2000
Date Rental Needed: January 1 2000
Insured Name:
Last
First
Additional Charges: None
ADDITIONAL CHARGES
Repair Facility:
City:
State/Province: AB
Post Code:
Phone:
Renter's Vehicle:
year
make/model
Renter's Address:
Renter's City:
State/Province: AB
Post Code:
Pick up location
top of page
CANCEL
CONFIRM RESERVATION
Contact Us | Terms & Conditions | Log Off

FIG. 105(d)

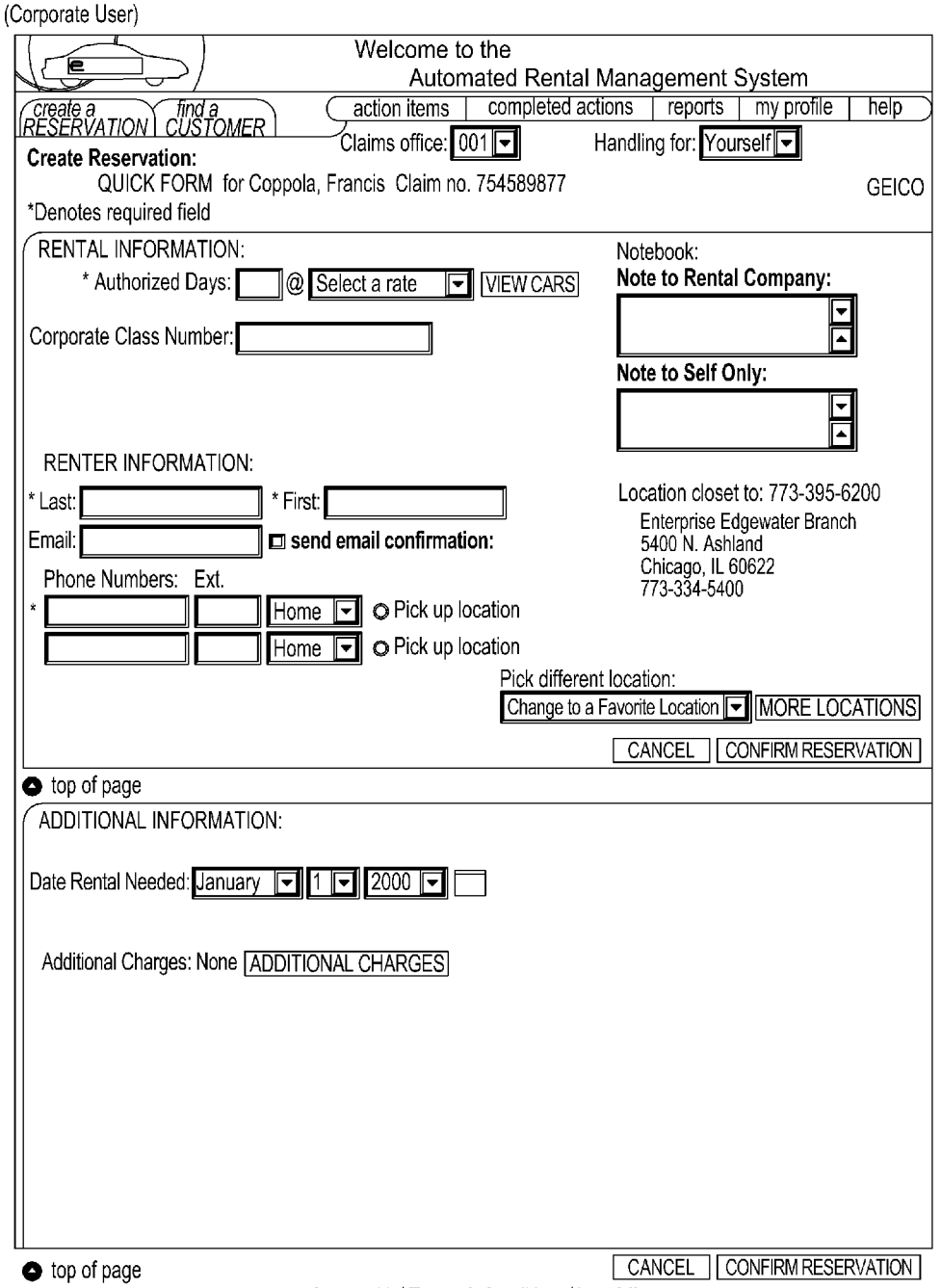

(Corporate User)
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
Create Reservation:
QUICK FORM for Coppola, Francis Claim no. 754589877
GEICO
*Denotes required field
RENTAL INFORMATION:
* Authorized Days:
@ Select a rate
VIEW CARS
Corporate Class Number:
Notebook:
Note to Rental Company:
Note to Self Only:
RENTER INFORMATION:
* Last:
* First:
Email:
send email confirmation:
Phone Numbers: Ext.
Home
Pick up location
Location closet to: 773-395-6200
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400
Pick different location:
Change to a Favorite Location
MORE LOCATIONS
CANCEL
CONFIRM RESERVATION
top of page
ADDITIONAL INFORMATION:
Date Rental Needed: January 1 2000
Additional Charges: None
ADDITIONAL CHARGES
top of page
CANCEL
CONFIRM RESERVATION
Contact Us | Terms & Conditions | Log Off

FIG. 105(e)

(ARMS Web 3.0)

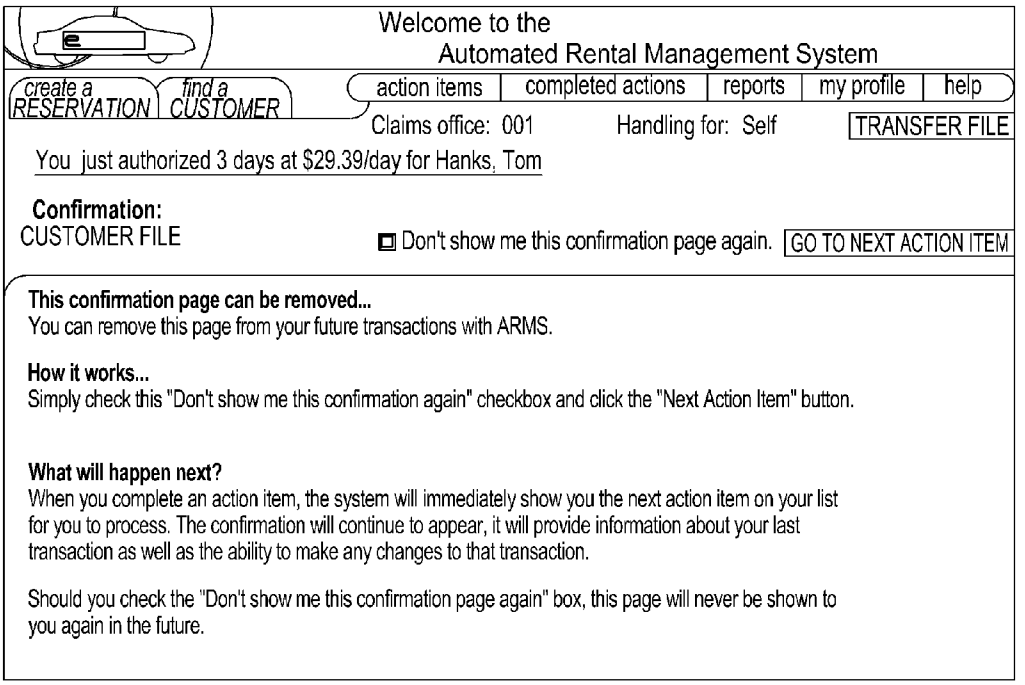


FIG. 106(a)

(Insurance User)

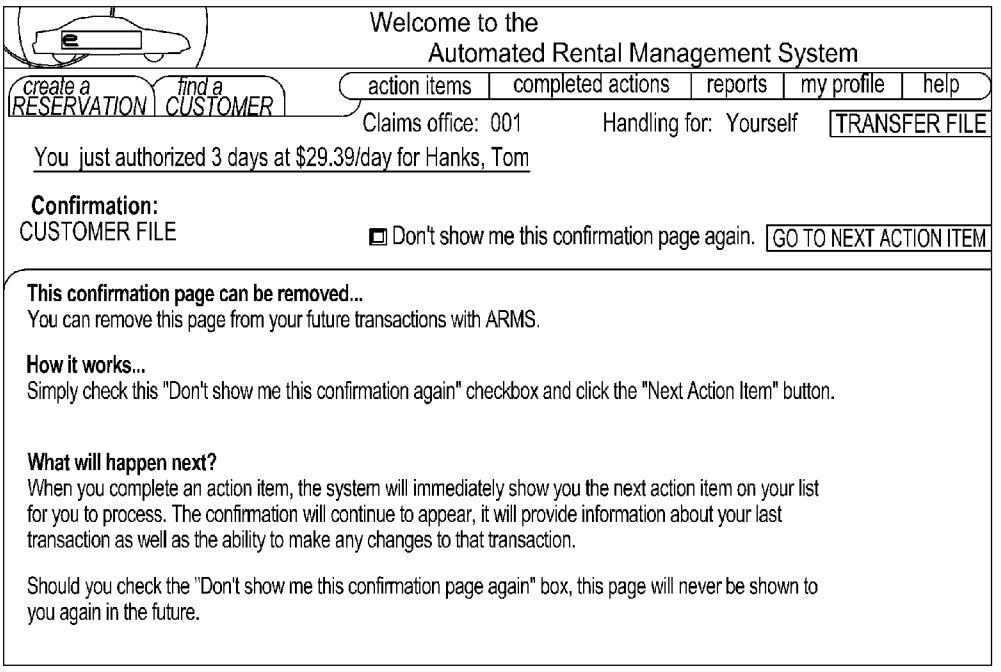


FIG. 106(b)

(Fleet/Dealership/Corporate User)

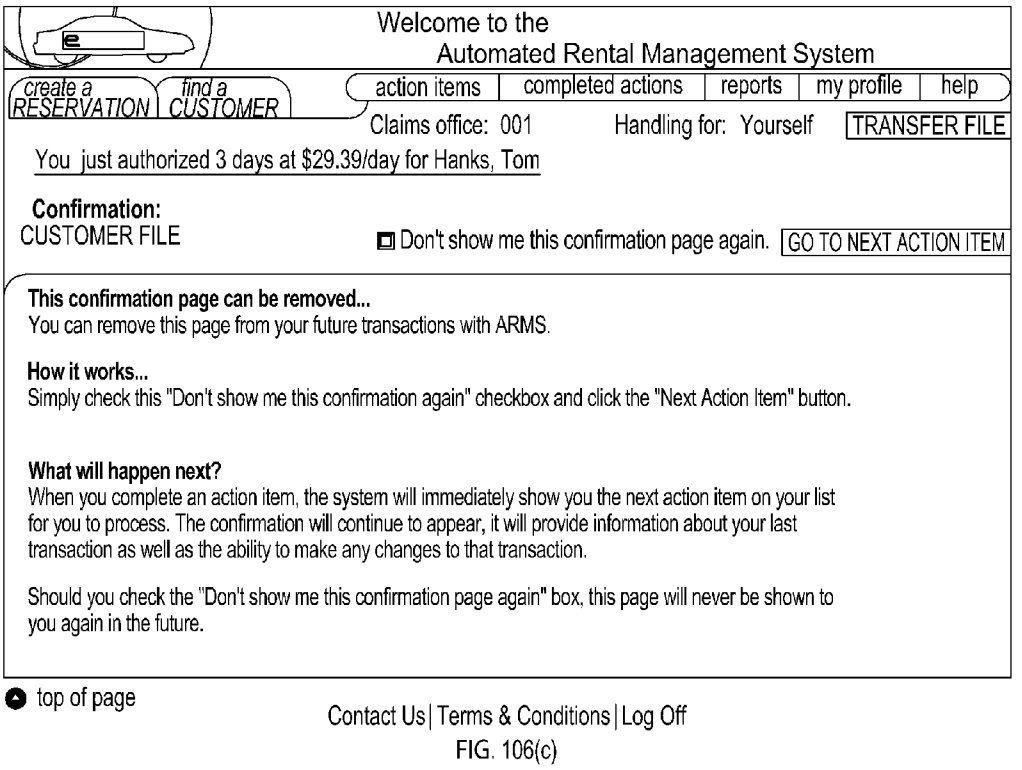


FIG. 106(c)

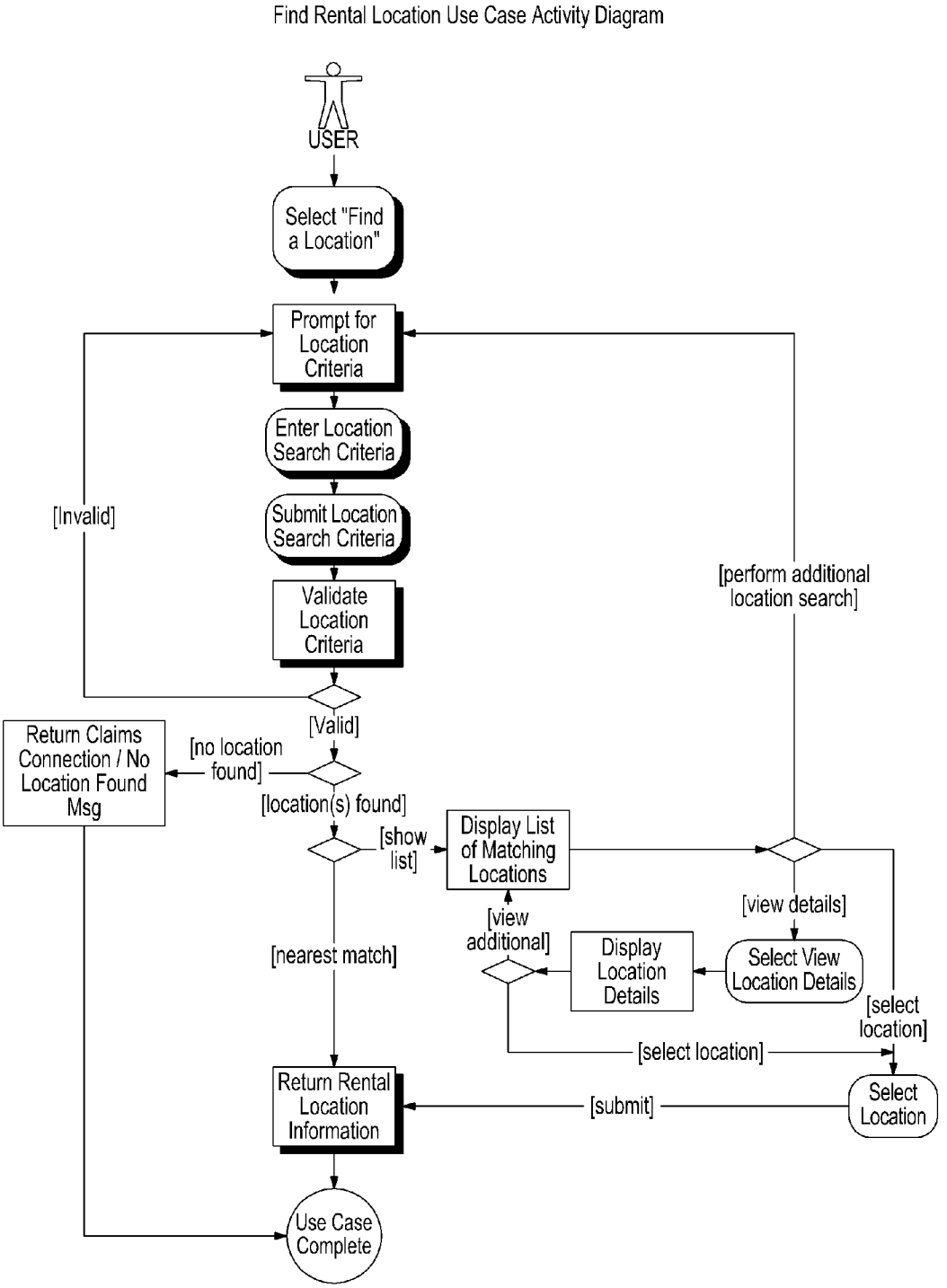

Find Rental Location Use Case Activity Diagram
USER
Select "Find a Location"
Prompt for Location Criteria
Enter Location Search Criteria
Submit Location Search Criteria
Validate Location Criteria
[Invalid]
[Valid]
[no location found]
Return Claims Connection / No Location Found Msg
[location(s) found]
[show list]
Display List of Matching Locations
[perform additional location search]
[view details]
[view additional]
Display Location Details
Select View Location Details
[nearest match]
[select location]
[select location]
Return Rental Location Information
[submit]
Select Location
Use Case Complete

FIG. 107

(ARMS/Web 2.0)

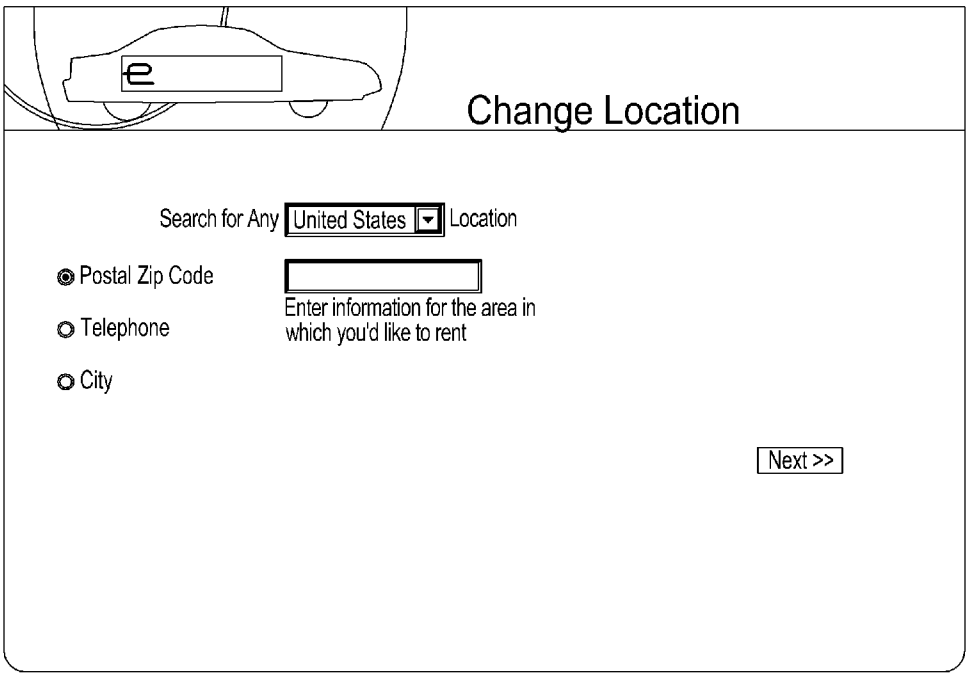


FIG. 108(a)

(ARMS/Web 3.0)

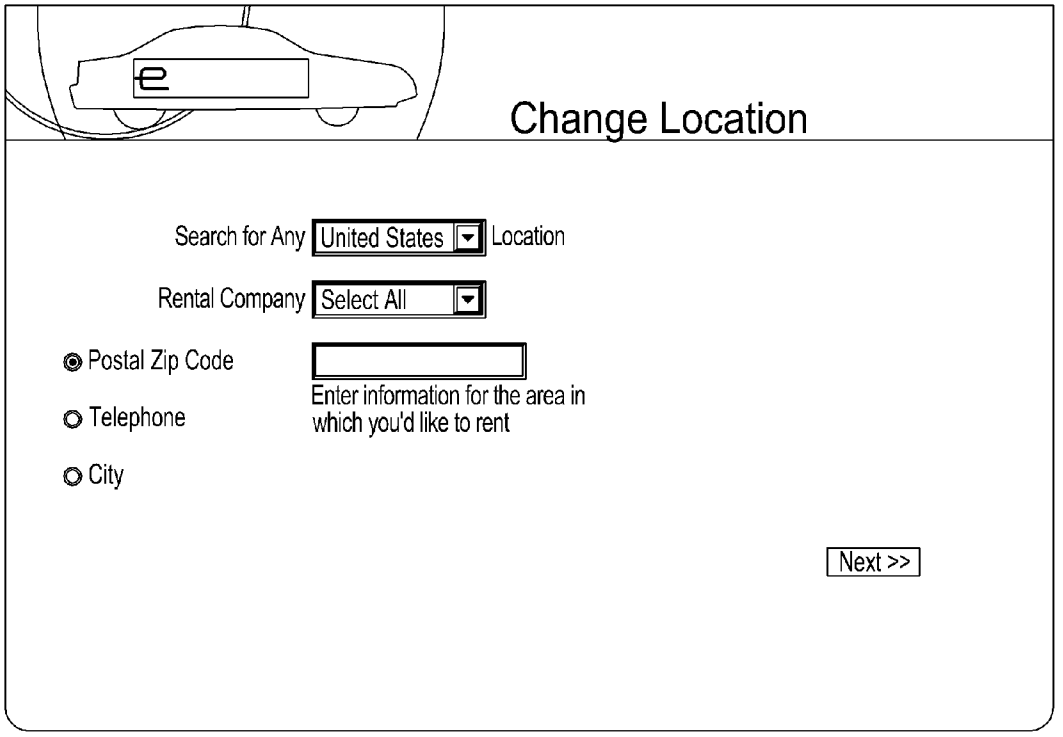


FIG. 108(b)

(ARMS/Web 2.0)

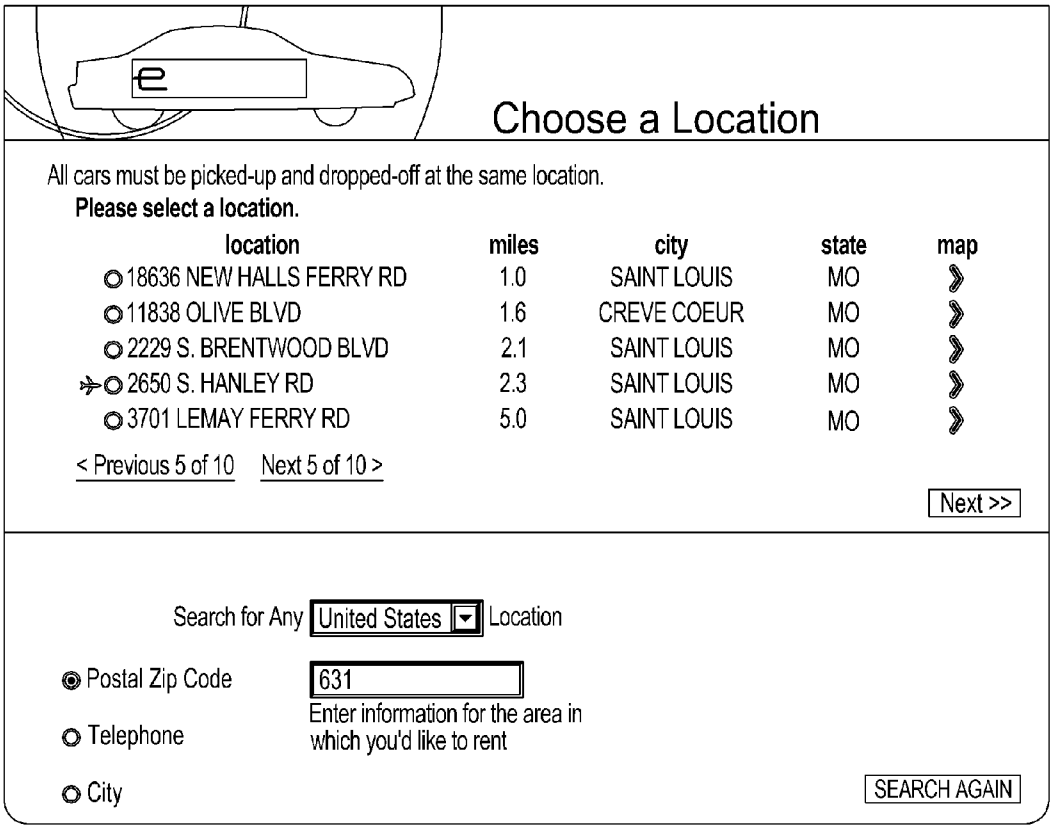


FIG. 109(a)

(ARMS/Web 3.0)

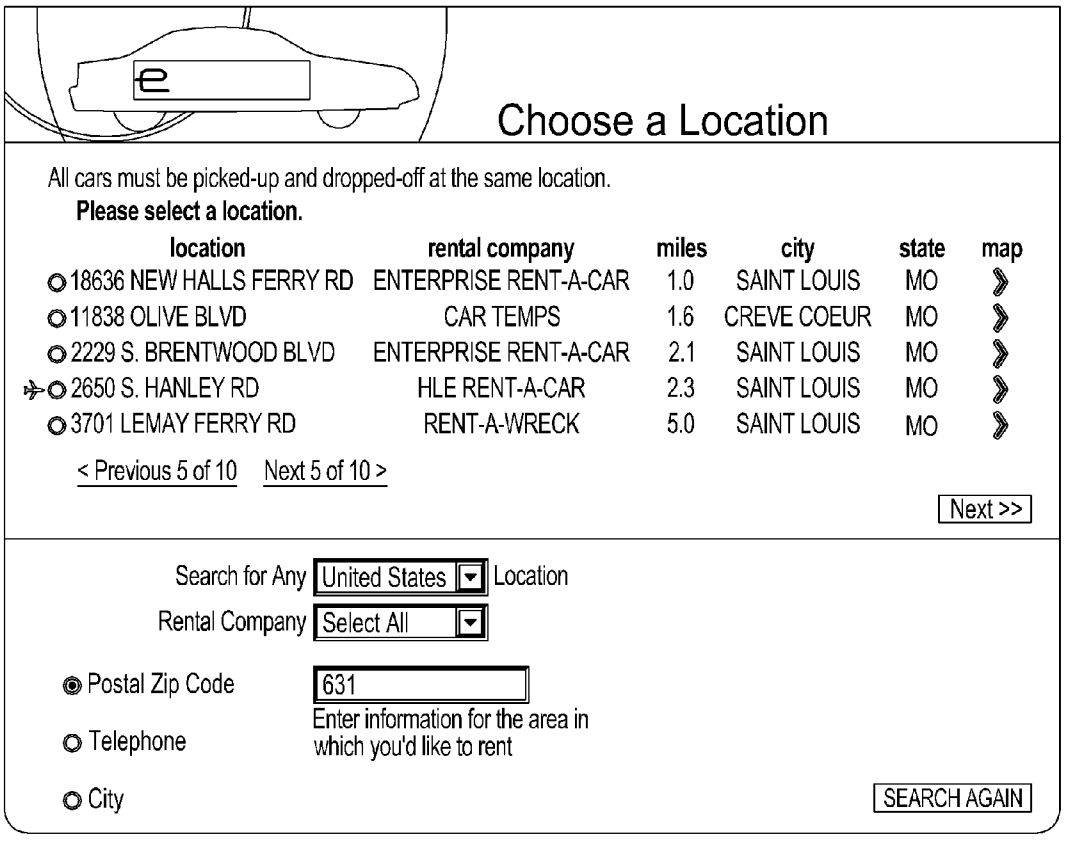


FIG. 109(b)

(ARMS/Web 2.0)

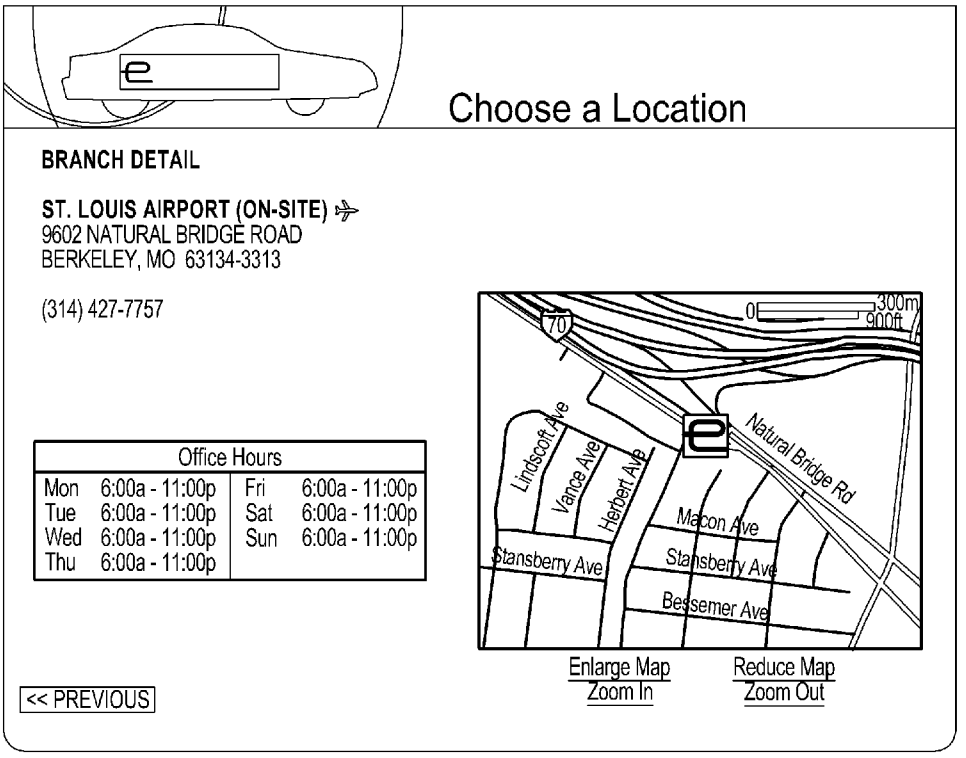


FIG. 110(a)

(ARMS/Web 3.0)

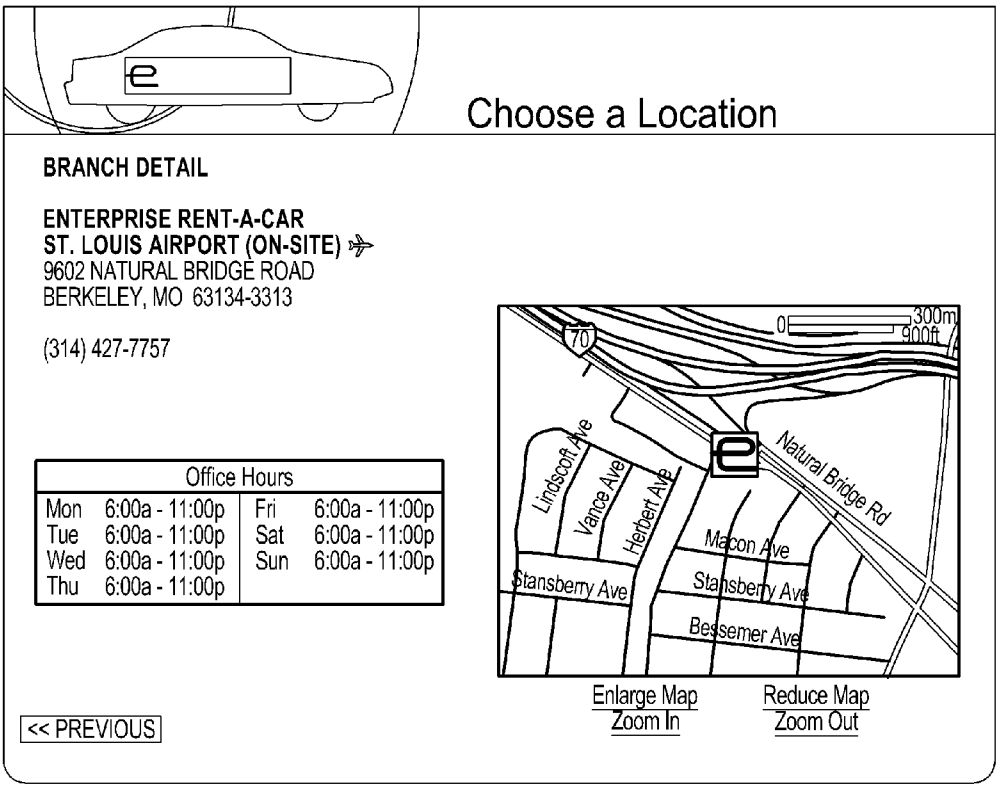


FIG. 110(b)

Send Message Activity Diagram

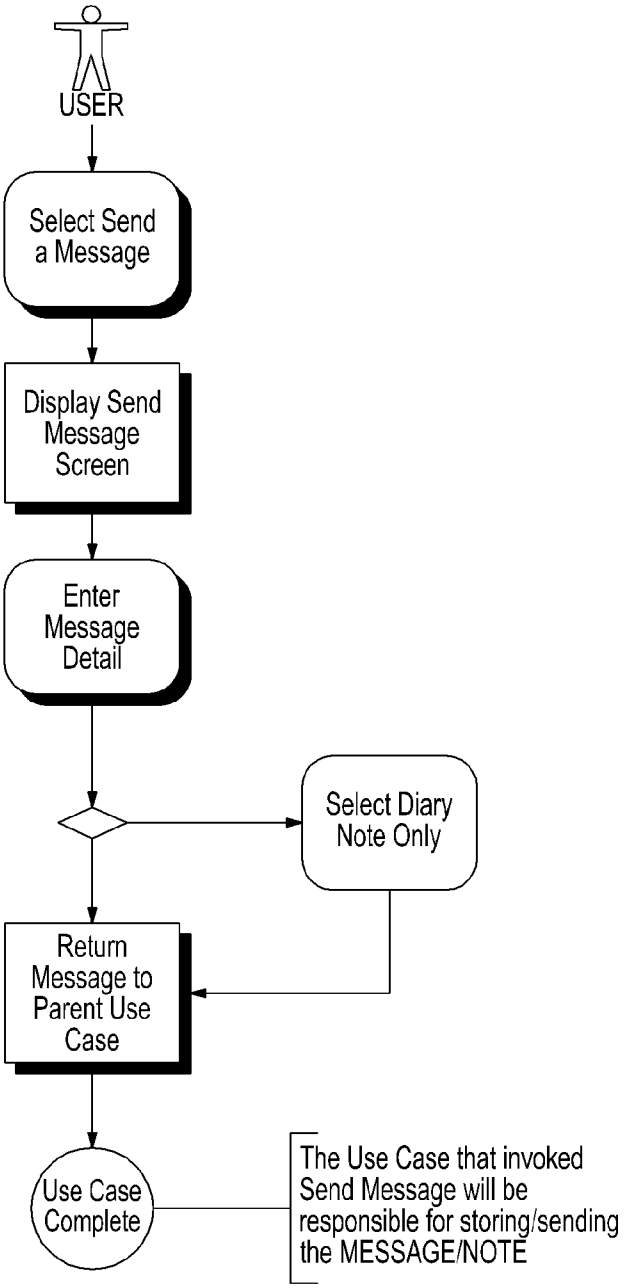


FIG. 111

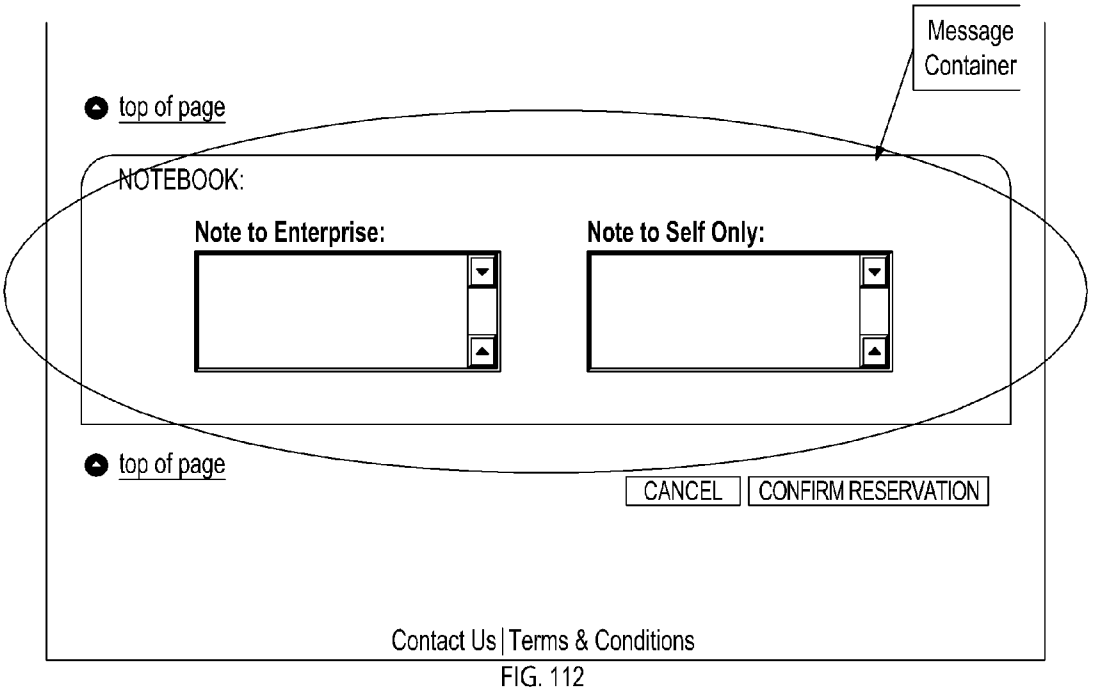

Message Container
top of page
NOTEBOOK:
Note to Enterprise:
Note to Self Only:
top of page
CANCEL
CONFIRM RESERVATION
Contact Us | Terms & Conditions

FIG. 112

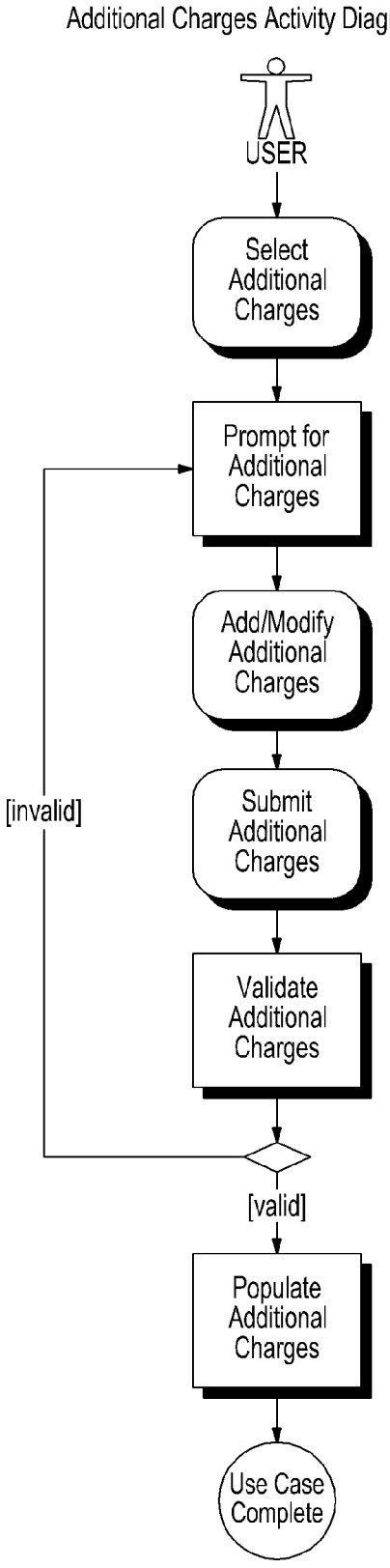

Additional Charges Activity Diagram
USER
Select Additional Charges
Prompt for Additional Charges
Add/Modify Additional Charges
Submit Additional Charges
[invalid]
Validate Additional Charges
[valid]
Populate Additional Charges
Use Case Complete

FIG. 113

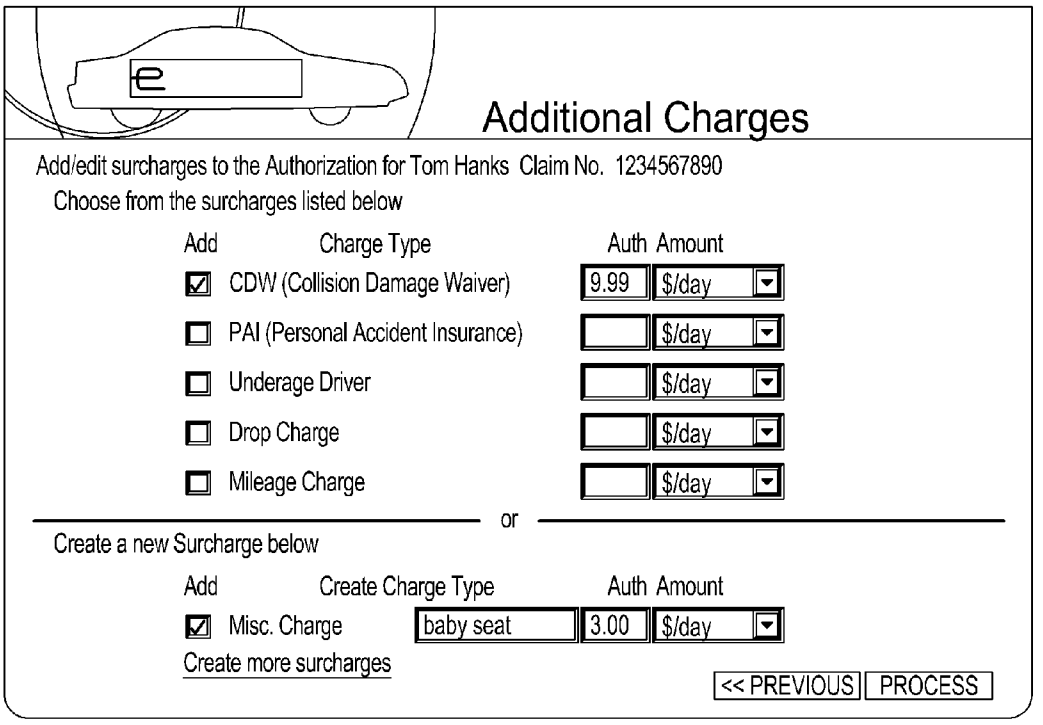

Additional Charges
Add/edit surcharges to the Authorization for Tom Hanks Claim No. 1234567890
Choose from the surcharges listed below
Add
Charge Type
Auth Amount
CDW (Collision Damage Waiver)
9.99
$/day
PAI (Personal Accident Insurance)
$/day
Underage Driver
$/day
Drop Charge
$/day
Mileage Charge
$/day
or
Create a new Surcharge below
Add
Create Charge Type
Auth Amount
Misc. Charge
baby seat
3.00
$/day
Create more surcharges
<< PREVIOUS
PROCESS

FIG. 114

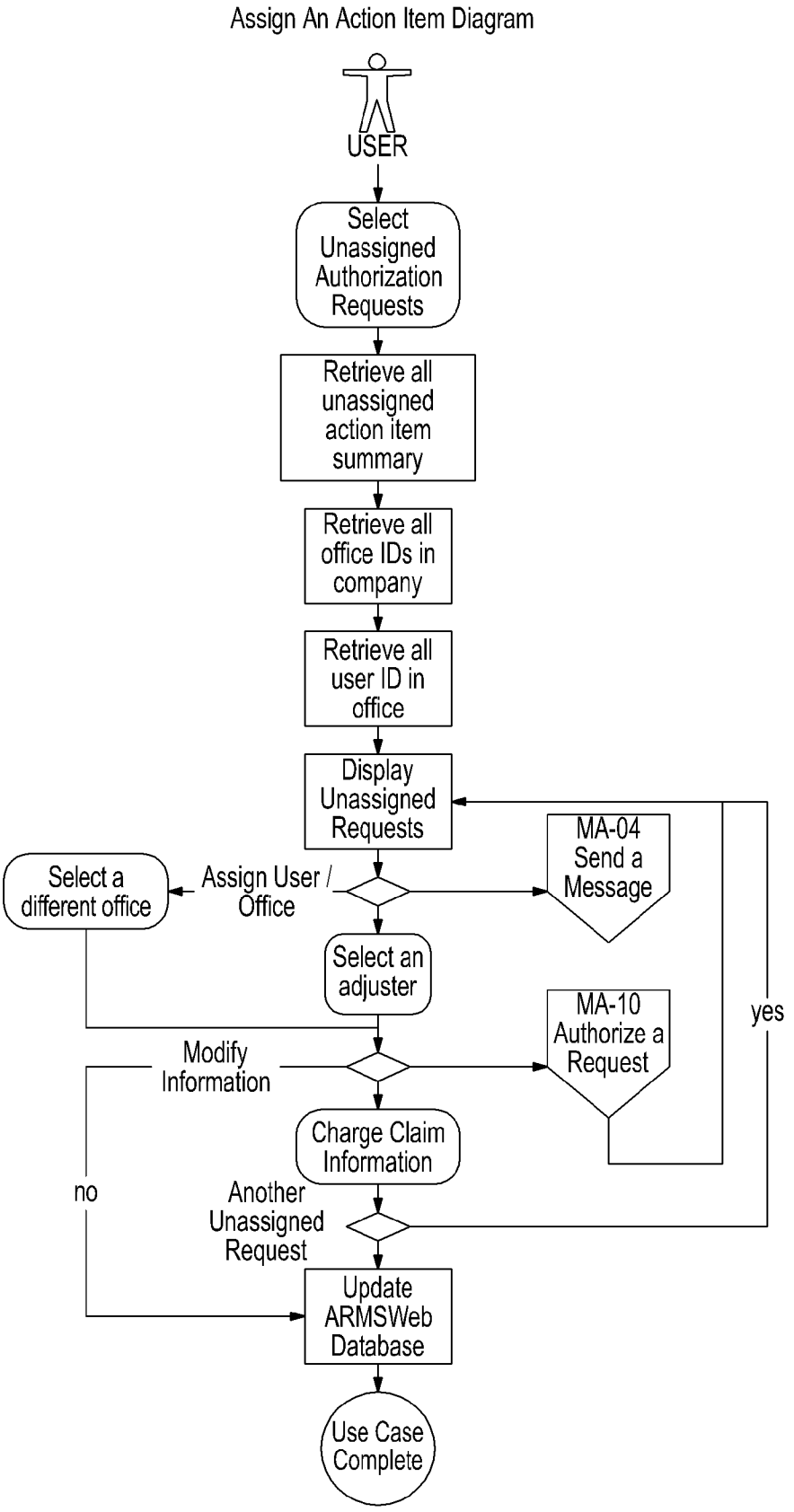

Assign An Action Item Diagram
USER
Select Unassigned Authorization Requests
Retrieve all unassigned action item summary
Retrieve all office IDs in company
Retrieve all user ID in office
Display Unassigned Requests
MA-04 Send a Message
Select a different office
Assign User / Office
Select an adjuster
MA-10 Authorize a Request
yes
Modify Information
Charge Claim Information
no
Another Unassigned Request
Update ARMSWeb Database
Use Case Complete

FIG. 115

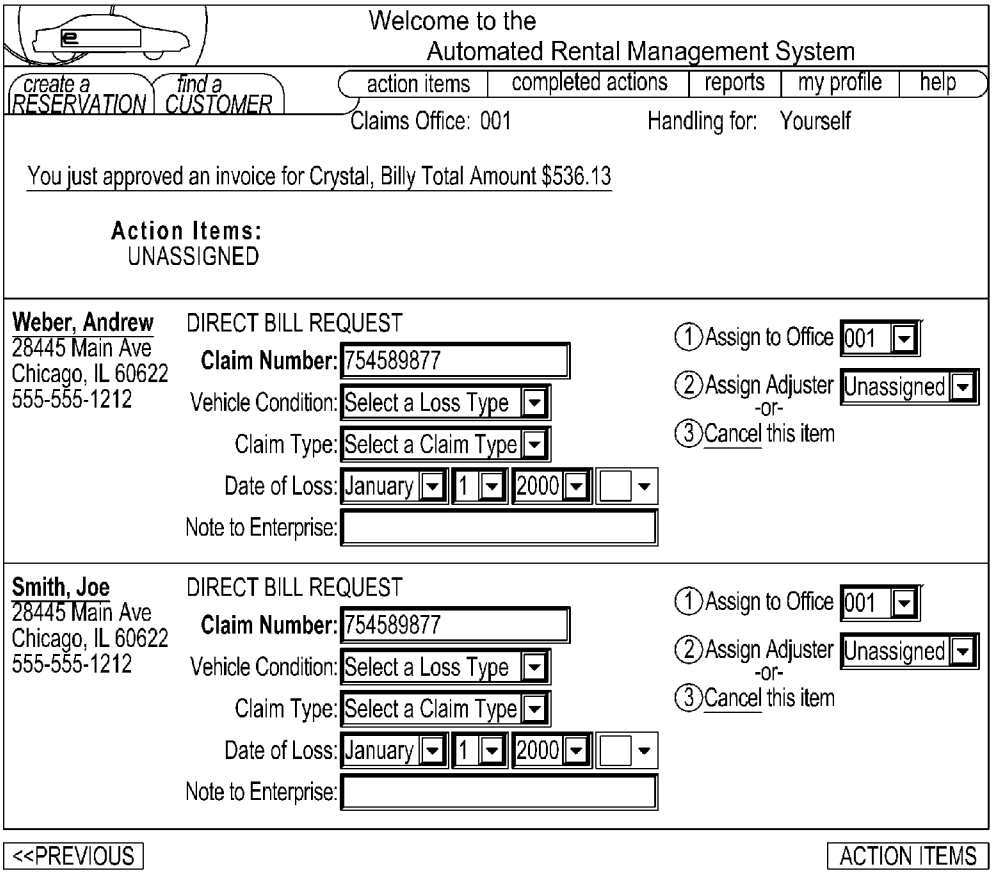

Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims Office: 001
Handling for: Yourself
You just approved an invoice for Crystal, Billy Total Amount $536.13
Action Items:
UNASSIGNED
Weber, Andrew
28445 Main Ave
Chicago, IL 60622
555-555-1212
DIRECT BILL REQUEST
Claim Number: 754589877
Vehicle Condition: Select a Loss Type
Claim Type: Select a Claim Type
Date of Loss: January 1 2000
Note to Enterprise:
1 Assign to Office 001
2 Assign Adjuster Unassigned
-or-
3 Cancel this item
Smith, Joe
28445 Main Ave
Chicago, IL 60622
555-555-1212
DIRECT BILL REQUEST
Claim Number: 754589877
Vehicle Condition: Select a Loss Type
Claim Type: Select a Claim Type
Date of Loss: January 1 2000
Note to Enterprise:
1 Assign to Office 001
2 Assign Adjuster Unassigned
-or-
3 Cancel this item
<<PREVIOUS
ACTION ITEMS
Contact Us | Terms & Conditions | Log Off

FIG. 116

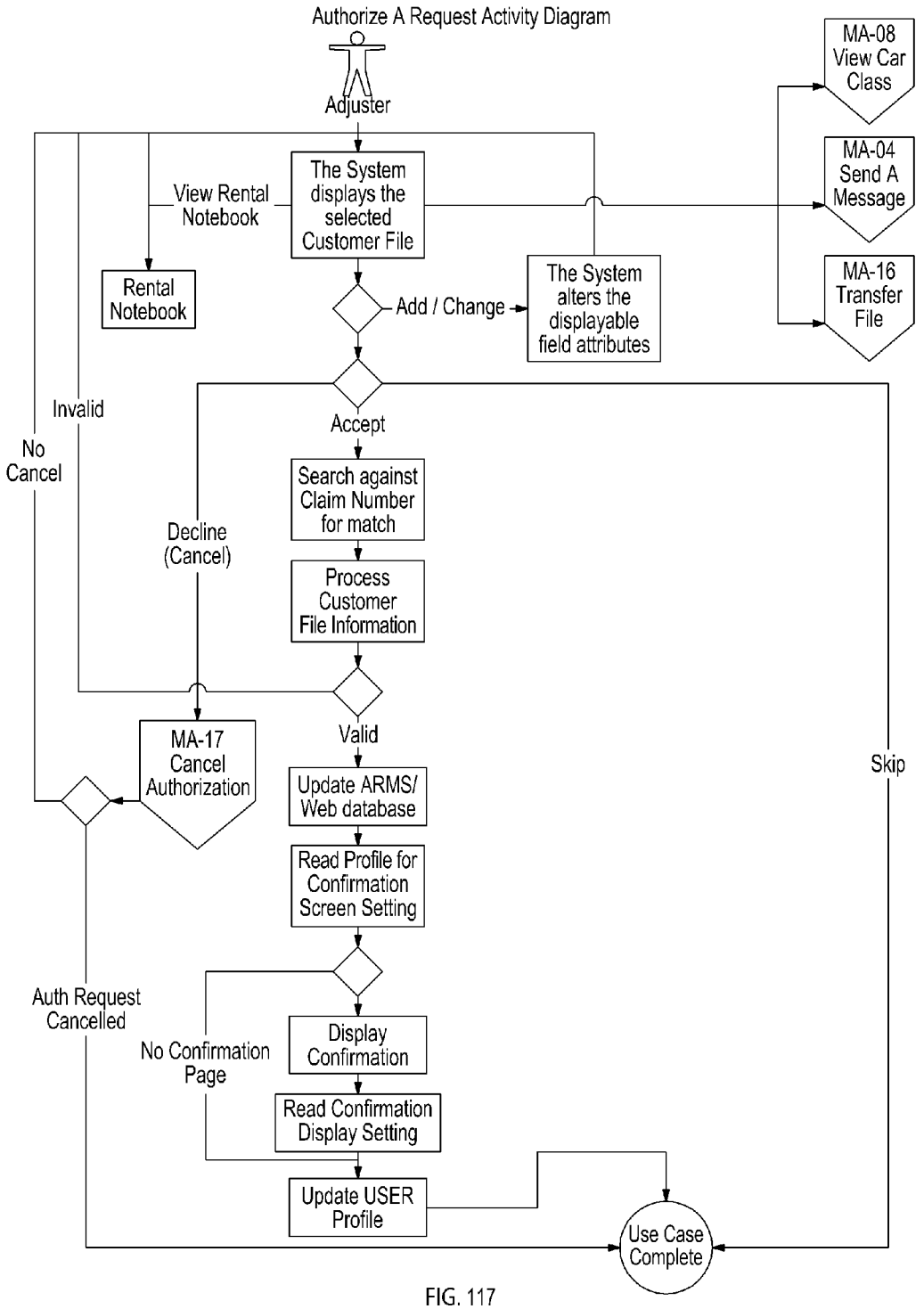
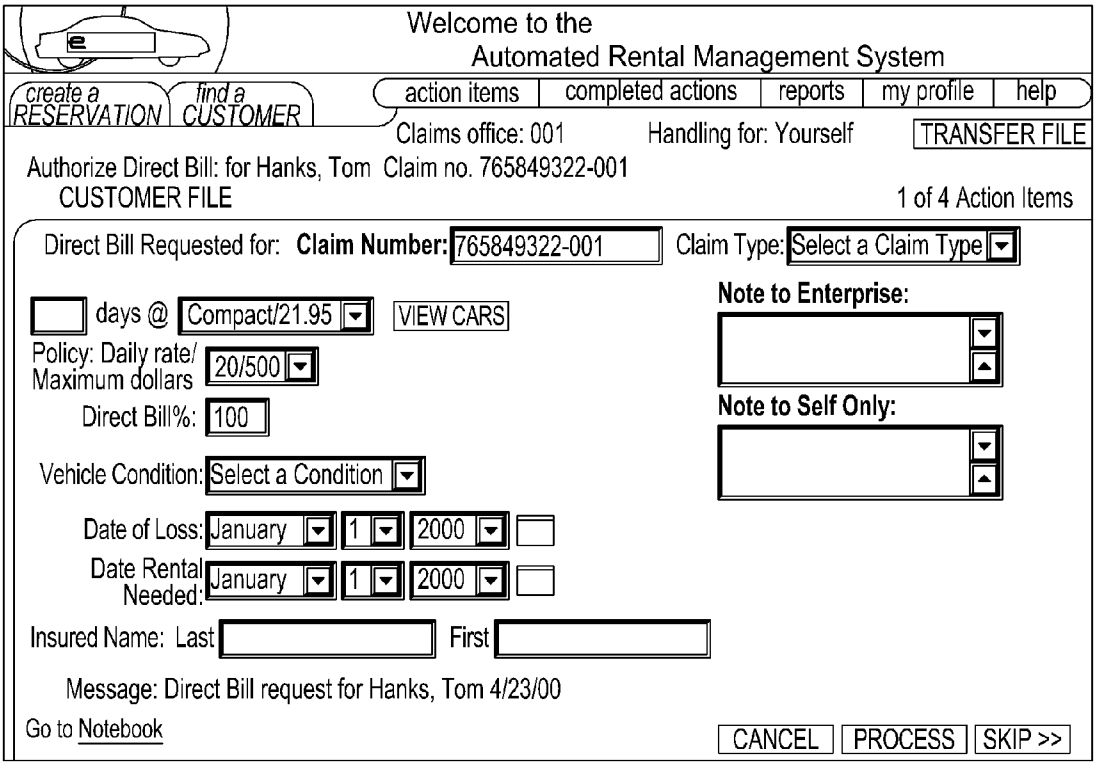

Authorize A Request Activity Diagram
Adjuster
MA-08 View Car Class
MA-04 Send A Message
MA-16 Transfer File
View Rental Notebook
The System displays the selected Customer File
Rental Notebook
Add / Change
The System alters the displayable field attributes
Invalid
No Cancel
Accept
Search against Claim Number for match
Decline (Cancel)
Process Customer File Information
MA-17 Cancel Authorization
Valid
Skip
Update ARMS/ Web database
Read Profile for Confirmation Screen Setting
Auth Request Cancelled
No Confirmation Page
Display Confirmation
Read Confirmation Display Setting
Update USER Profile
Use Case Complete

FIG. 117



[Change or Add]

RENTER INFORMATION:
Hanks, Tom
1735 N. Paulina St.
Chicago, IL 60622

Home: (773)564-6054
Work: (773)395-6200
Email: dbowie@zefer.com
Requested email confirmation

RENTAL INFORMATION:
Authorized Class: Standard
Days/Rate: 5 days @ $21.95/day
Current Class: Compact
Additional Charges: None
Direct Bill %: None
Rental Date: 03/28/2000
Start Date: 03/20/2000

Enterprise Rent-A-Car Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400

ADDITIONAL CLAIM INFORMATION:
Claim Number: 765849322-001
Claim Type: Theft
Insured Name: Lalumandier, Craig
Owner's vehicle: GMC Suburban 1999
Date of Loss: 03/28/2000
Loss Type: Non-Driveable
Policy: Daily rate/
Maximum dollars: 30/600

Repair Facility:
Elco Chevrolet
Chicago, IL 60621
773-334-9832

NOTEBOOK:
Message, Belanger, Hugues, 2/20/00
Note from Enterprise, Sarussi, Marty, 2/21/00
Extension Request, 2/24/00
Extension, 2/25/00

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Contact Us | Terms & Conditions | Log Off

FIG. 118

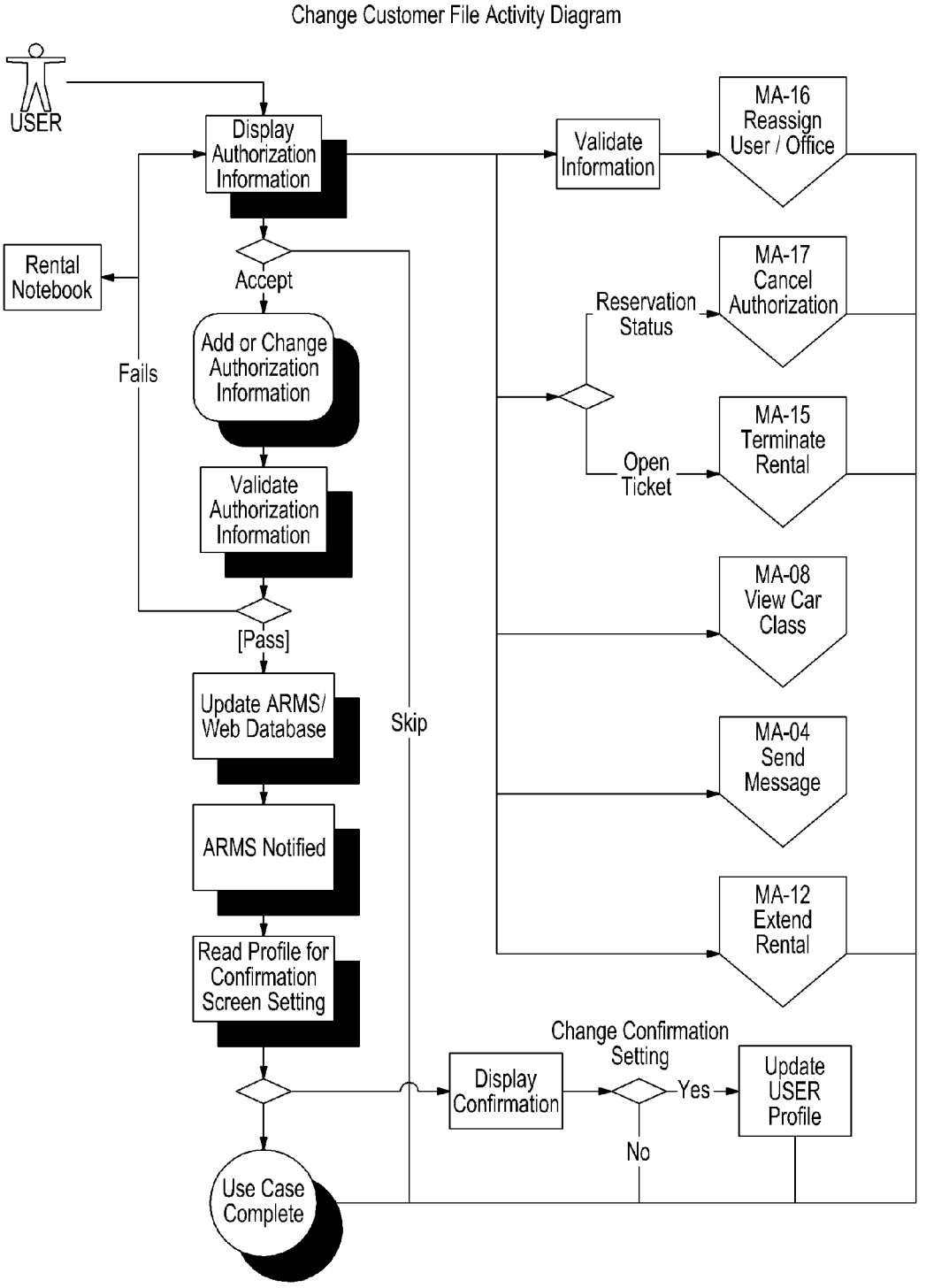
Change Customer File Activity Diagram
USER
Display Authorization Information
Validate Information
MA-16 Reassign User / Office
Rental Notebook
Accept
MA-17 Cancel Authorization
Reservation Status
Fails
Add or Change Authorization Information
MA-15 Terminate Rental
Open Ticket
Validate Authorization Information
MA-08 View Car Class
[Pass]
Update ARMS/ Web Database
Skip
MA-04 Send Message
ARMS Notified
MA-12 Extend Rental
Read Profile for Confirmation Screen Setting
Change Confirmation Setting
Display Confirmation
Yes
Update USER Profile
No
Use Case Complete

FIG. 119

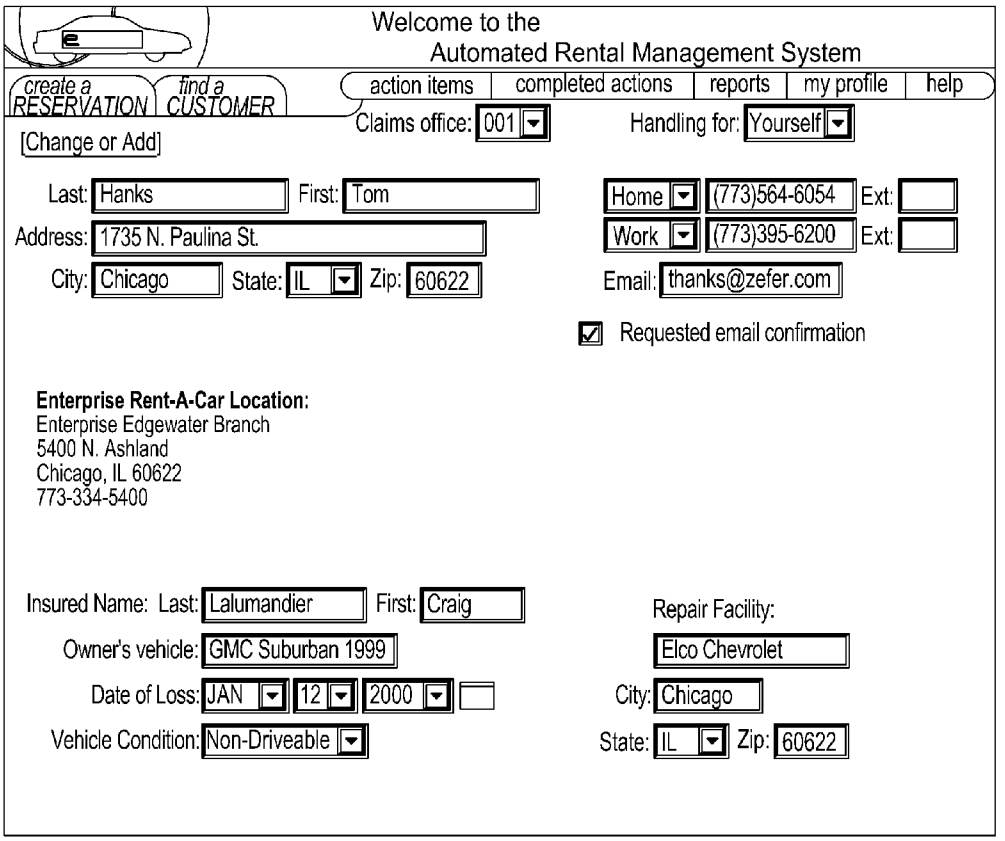
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
[Change or Add]
Last: Hanks
First: Tom
Home (773)564-6054 Ext:
Address: 1735 N. Paulina St.
Work (773)395-6200 Ext:
City: Chicago
State: IL
Zip: 60622
Email: thanks@zefer.com
Requested email confirmation
Enterprise Rent-A-Car Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL 60622
773-334-5400
Insured Name: Last: Lalumandier
First: Craig
Repair Facility:
Owner's vehicle: GMC Suburban 1999
Elco Chevrolet
Date of Loss: JAN 12 2000
City: Chicago
Vehicle Condition: Non-Driveable
State: IL
Zip: 60622

FIG. 120(a)

(Before clicking the Change or Add Link)

Welcome to the
Automated Rental Management System

create a RESERVATION | find a CUSTOMER | action items | completed actions | reports | my profile | help

Claims office: 001 Handling for: Yourself TRANSFER FILE

You just authorized 3 day at $29.39/day for Hanks, Tom

Customer File: for Bowie, David Claim no. 765849322-001
OPEN

2 of 4 Action Items

Extension requested for:

[ ] additional authorized days @ Compact/21.95 VIEW CARS

Policy Limits 20/500

Messages:
08/31/00 BSS 2 more days - Waiting on Parts:
08/30/00 Waiting on fender:
08/29/00 Extension requested through 08/30/00:
3 days extension requested:
Go to Notebook

Note to Enterprise:

Note to Self:

Rental Location:
Enterprise Edgewater Branch
773-334-5400

Current Rental Status*

Rental Start Date:	5/15/00
Last Authorized Date:	04/13/00
Authorized to Date:	5 days
Charges to Date:	$239.00*
Direct Bill %:	100%

Repair Facility:
Elco Chevrolet
(773)-334-9832
Owner Vehicle: 1999 GMC Suburban
Vehicle Condition: Non-Driveable

☐ Extend this rental?

*Does not include taxes and surcharges

SET LAST DAY | PROCESS | SKIP >>

[Change or Add]

RENTER INFORMATION
Bowie, David
1735 N. Paulina St.
Chicago, IL 60622

Home: (773)564-6054
Work: (773)395-6200
Email: dbowie@zefer.com
Requested email confirmation

RENTAL INFORMATION
Authorized Class: Standard
Days/Rate: 5 days @ $21.99/day
Current Class: Full-Size
Additional Charges: None
Direct Bill %: None
Rental Date: 03/28/2000
Start Date: 03/20/2000

Enterprise Rent-A-Car Location:
Enterprise Edgewater Branch
5400 N. Ashland
Chicago, IL60622
773-334-5400

ADDITIONAL CLAIM INFORMATION:
Claim Number: 32323232323232323
Claim Type: Theft
Insured Name: Lalumandier, Craig
Owner's vehicle: GMC Suburban 1999
Date of Loss: 03/28/2000
Loss Type: Non-Driveable
Policy: Daily rate/
Maximum dollars: 30/600

Repair Facility:
Elco Chevrolet
Chicago, IL 60621
(773)334-9832

NOTEBOOK:
Message, Belanger, Hugues, 2/20/00
Note from Enterprise, Sarussi, Marty, 2/21/00
Extension Request, 2/24/00
Extension, 2/25/00

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FIG. 120(b)

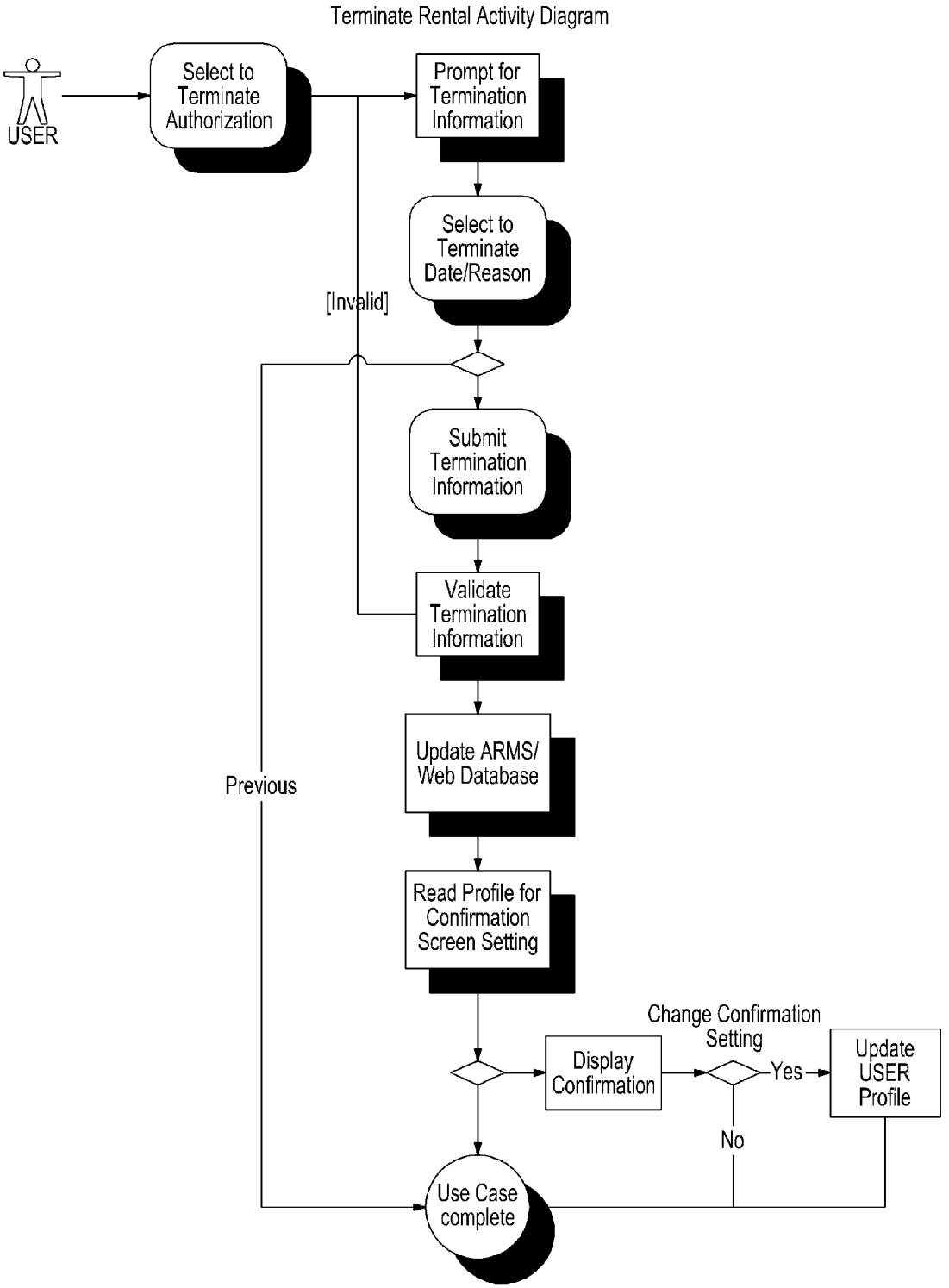
Terminate Rental Activity Diagram
USER
Select to Terminate Authorization
Prompt for Termination Information
Select to Terminate Date/Reason
[Invalid]
Submit Termination Information
Validate Termination Information
Update ARMS/ Web Database
Previous
Read Profile for Confirmation Screen Setting
Change Confirmation Setting
Display Confirmation
Yes
Update USER Profile
No
Use Case complete

FIG. 121

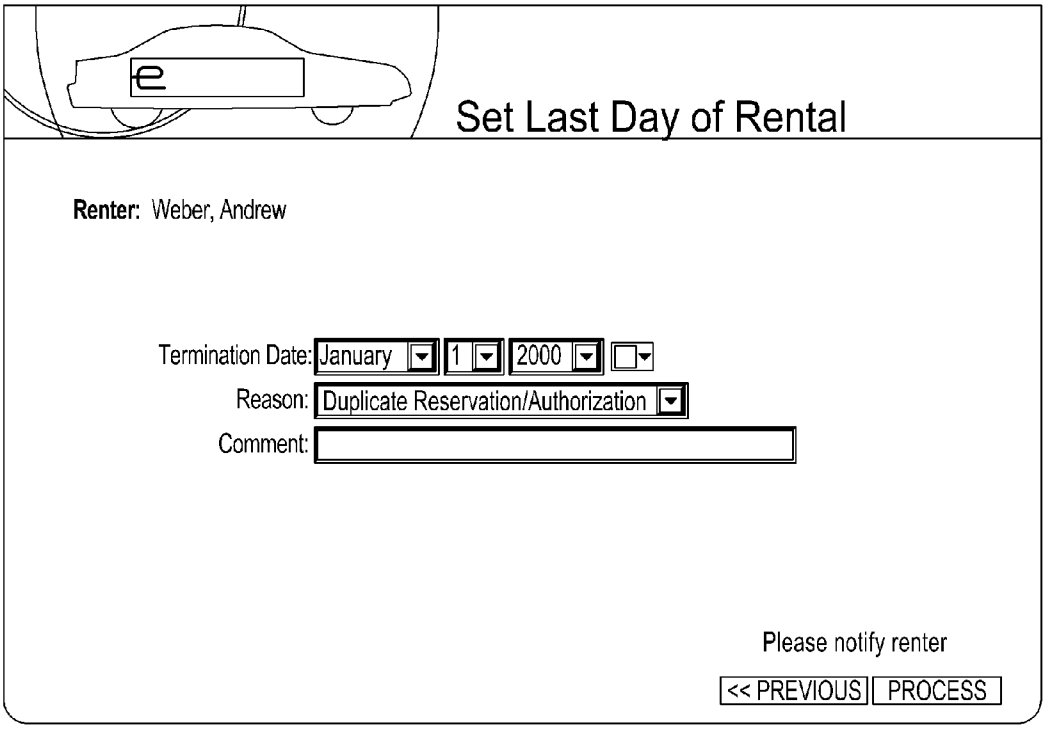
Set Last Day of Rental
Renter: Weber, Andrew
Termination Date: January 1 2000
Reason: Duplicate Reservation/Authorization
Comment:
Please notify renter
<< PREVIOUS
PROCESS

FIG. 122

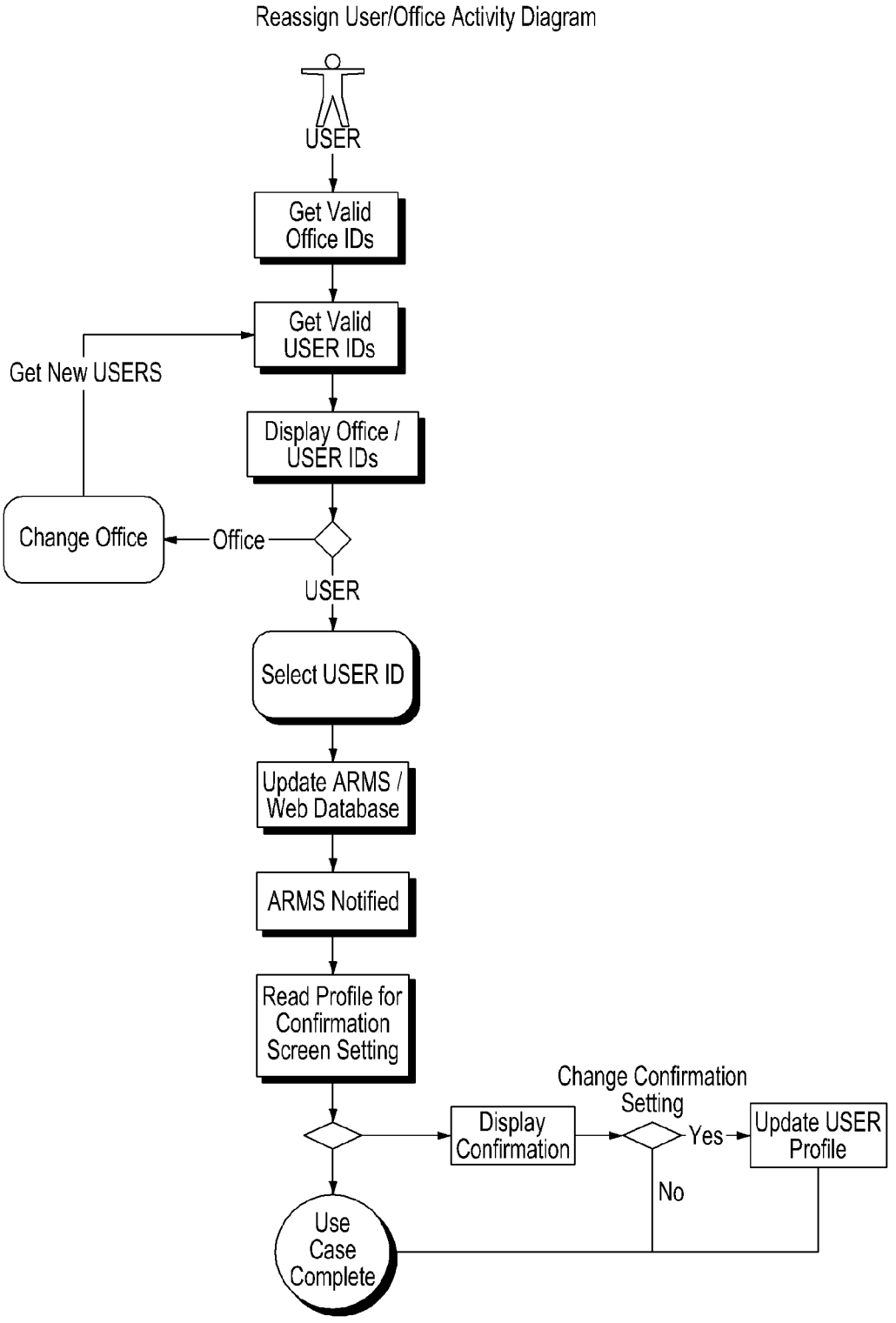
Reassign User/Office Activity Diagram
USER
Get Valid Office IDs
Get Valid USER IDs
Get New USERS
Display Office / USER IDs
Change Office
Office
USER
Select USER ID
Update ARMS / Web Database
ARMS Notified
Read Profile for Confirmation Screen Setting
Change Confirmation Setting
Display Confirmation
Yes
Update USER Profile
No
Use Case Complete

FIG. 123

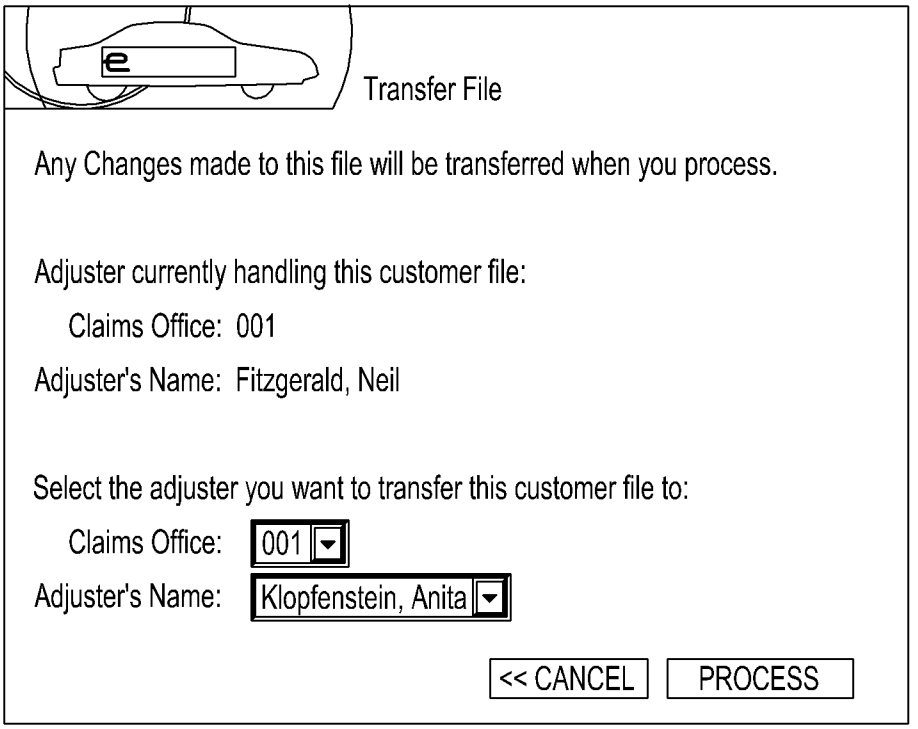
Transfer File
Any Changes made to this file will be transferred when you process.
Adjuster currently handling this customer file:
Claims Office: 001
Adjuster's Name: Fitzgerald, Neil
Select the adjuster you want to transfer this customer file to:
Claims Office: 001
Adjuster's Name: Klopfenstein, Anita
<< CANCEL
PROCESS

FIG. 124

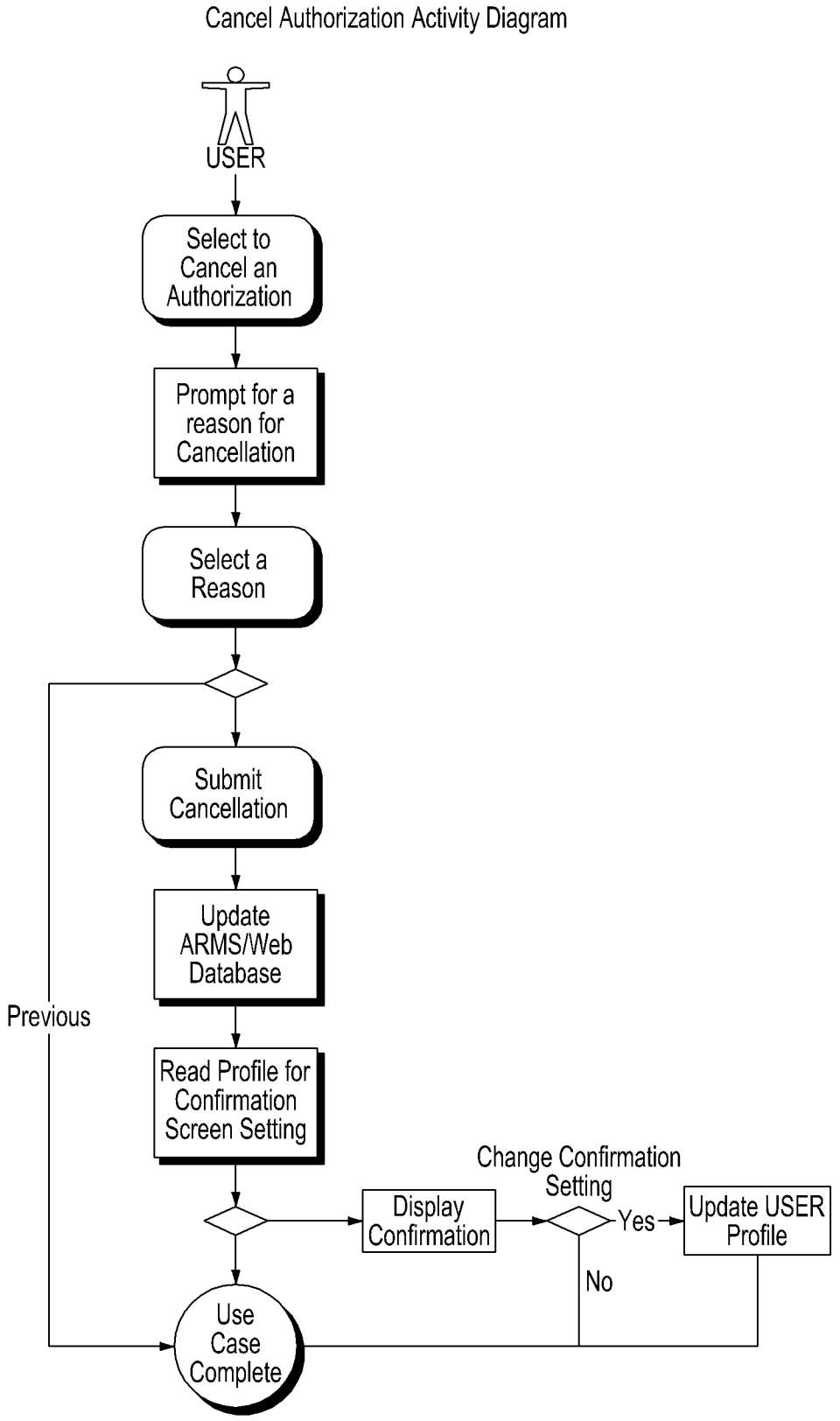
Cancel Authorization Activity Diagram
USER
Select to Cancel an Authorization
Prompt for a reason for Cancellation
Select a Reason
Submit Cancellation
Update ARMS/Web Database
Read Profile for Confirmation Screen Setting
Previous
Change Confirmation Setting
Display Confirmation
Yes
Update USER Profile
No
Use Case Complete

FIG. 125

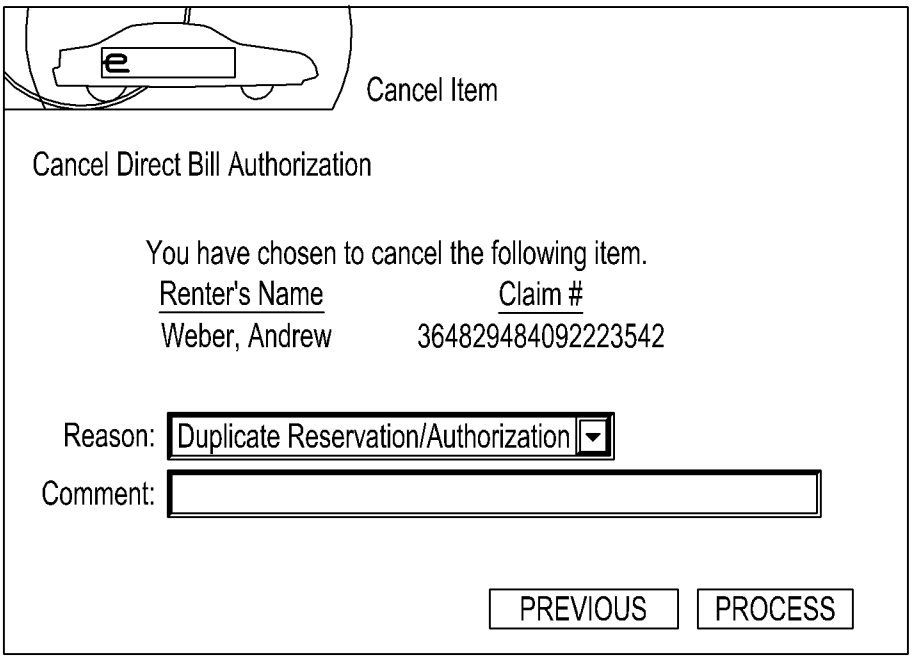
Cancel Item
Cancel Direct Bill Authorization
You have chosen to cancel the following item.
Renter's Name
Claim #
Weber, Andrew
364829484092223542
Reason:
Duplicate Reservation/Authorization
Comment:
PREVIOUS
PROCESS

FIG. 126

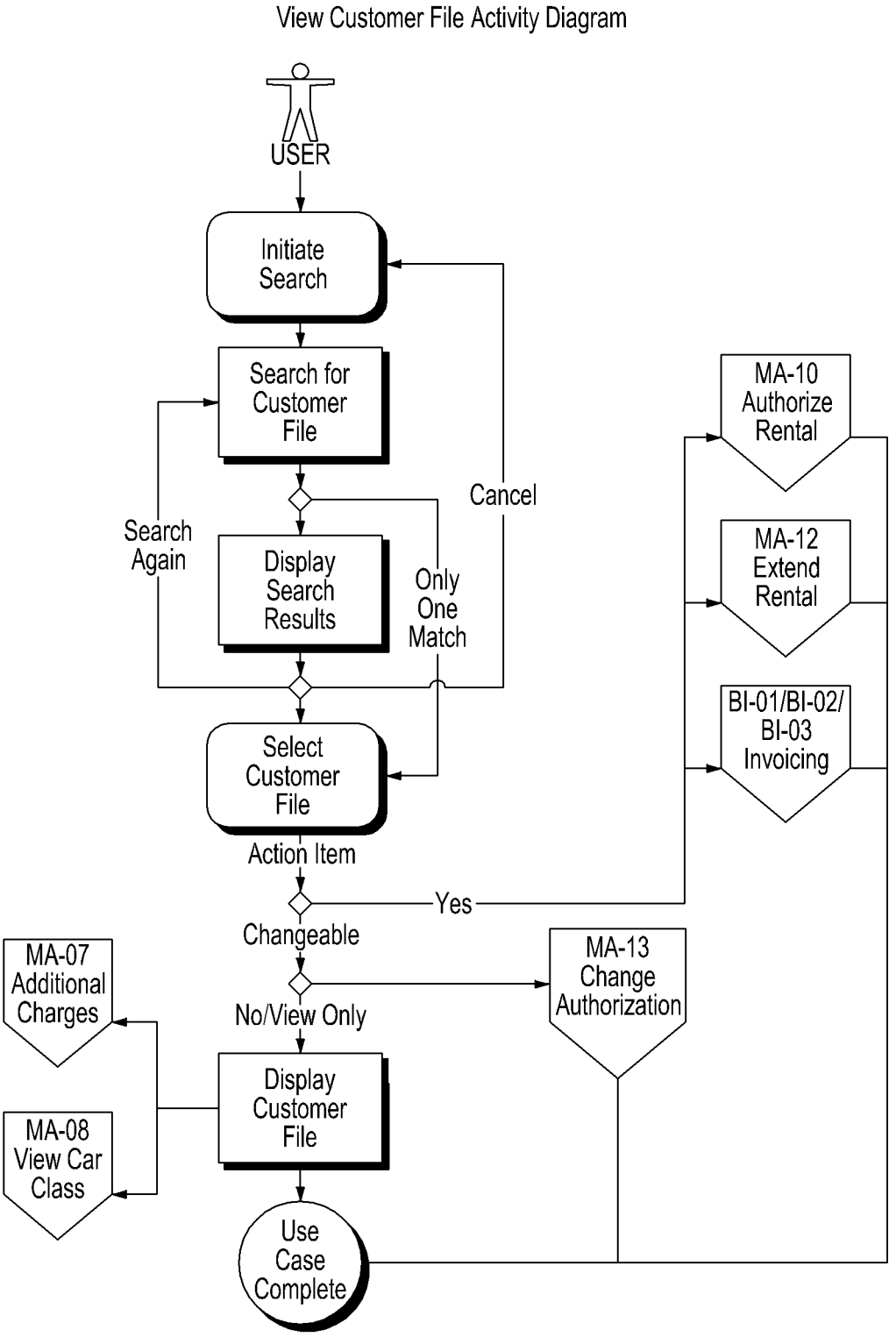
View Customer File Activity Diagram
USER
Initiate Search
Search for Customer File
Search Again
Display Search Results
Cancel
Only One Match
Select Customer File
Action Item
Yes
Changeable
No/View Only
MA-10 Authorize Rental
MA-12 Extend Rental
BI-01/BI-02/ BI-03 Invoicing
MA-13 Change Authorization
MA-07 Additional Charges
MA-08 View Car Class
Display Customer File
Use Case Complete

FIG. 127

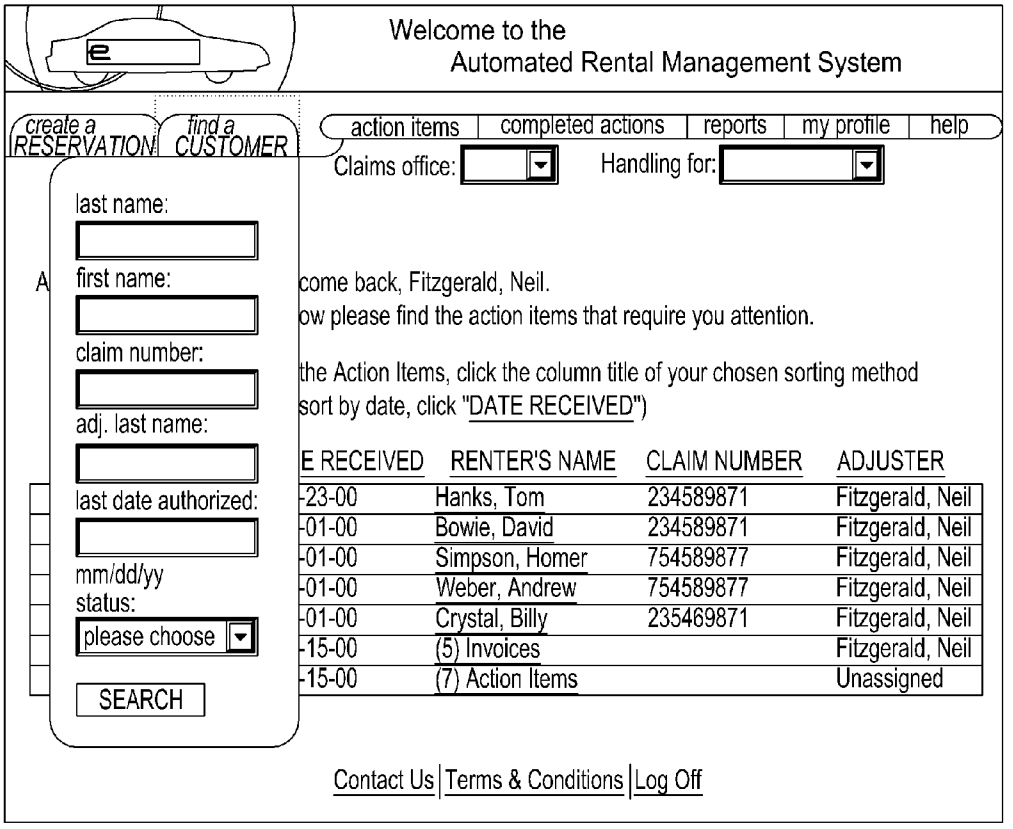
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office:
Handling for:
last name:
first name:
claim number:
adj. last name:
last date authorized:
mm/dd/yy
status:
please choose
SEARCH
come back, Fitzgerald, Neil.
ow please find the action items that require you attention.
the Action Items, click the column title of your chosen sorting method
sort by date, click "DATE RECEIVED")
E RECEIVED
RENTER'S NAME
CLAIM NUMBER
ADJUSTER
-23-00 Hanks, Tom 234589871 Fitzgerald, Neil
-01-00 Bowie, David 234589871 Fitzgerald, Neil
-01-00 Simpson, Homer 754589877 Fitzgerald, Neil
-01-00 Weber, Andrew 754589877 Fitzgerald, Neil
-01-00 Crystal, Billy 235469871 Fitzgerald, Neil
-15-00 (5) Invoices Fitzgerald, Neil
-15-00 (7) Action Items Unassigned
Contact Us
Terms & Conditions
Log Off

FIG. 128

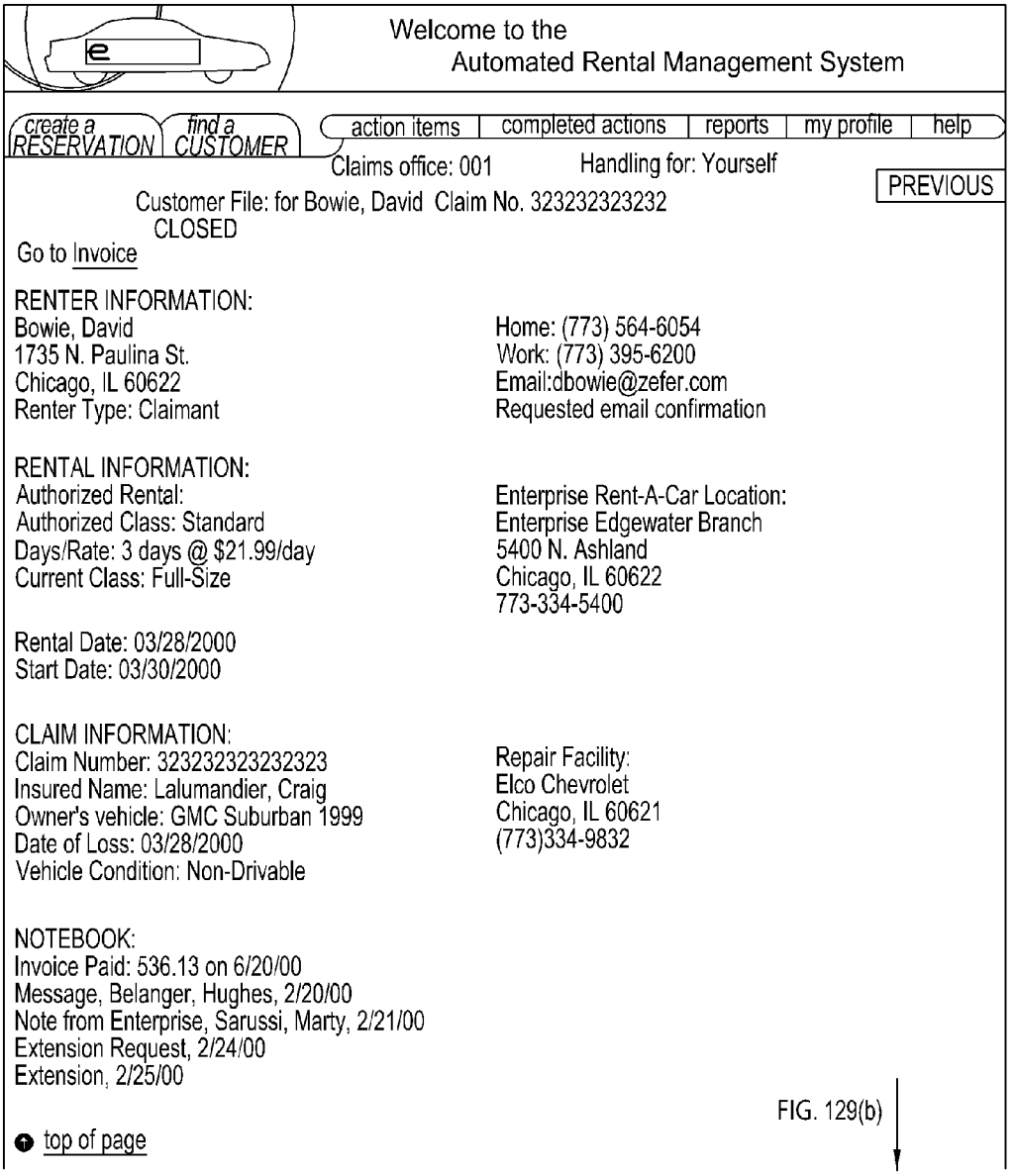

FIG. 129(b)

FIG. 129(a)

FIG. 129(a)

Invoicing: PRINTER FRIENDLY PAGE ☐ Print Rental History too
[Use the "Print" button from your browser after clicking the "Printer-Friendly Version" button.]

RENTAL:
Enterprise Rent-A-Car Location:
6850 Ladue Rd.
Saint Louis, MO 631240001
(314) 512-0294

INVOICE:
Reference: PPGM D073082
Invoice Date: 02/10/00
Federal ID: 4800791835

Authorized
Authorized Period: 02/10/00 to 03/01/00 (20 days)

Days	20
Rate	22.99
Direct Bill Percent	100%
Total authorized:	459.8 Plus Tax & Surcharges

CLAIM:
Renter: Weber, Andrew
Claim Number: 5698754821
Claim Type: Claimant
Vehicle Condition: Non-Driveable
Date of Loss: 02/05/00
Insured Name: Smith, Bob

Actual Rental
Rental Period: 02/10/00 to 03/01/00 (20 days)
Billed Period: 02/10/00 to 03/01/00 (20 days)
Actual Days:
Actual Days:

20 @ $22.99/day =	$505.78
Direct Bill Percent	100%
Sales Tax (6%) =	$30.35
Total Charges:	$536.13
Amount Received:	$0.00
Total Due:	$536.13

top of page

PREVIOUS

Contact Us | Terms & Conditions | Log Off

FIG. 129(b)

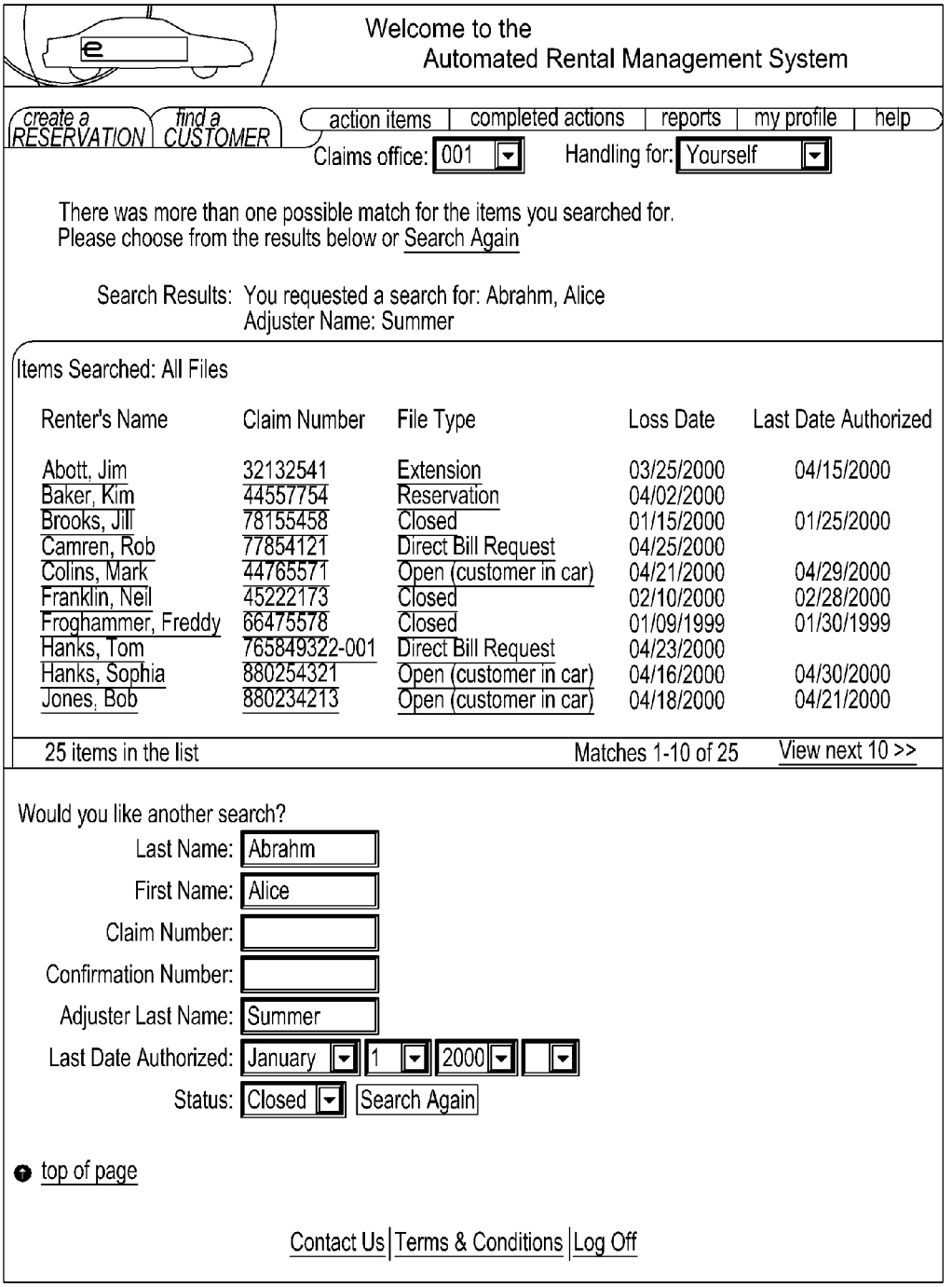
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
There was more than one possible match for the items you searched for.
Please choose from the results below or Search Again
Search Results: You requested a search for: Abrahm, Alice
Adjuster Name: Summer
Items Searched: All Files
Renter's Name
Claim Number
File Type
Loss Date
Last Date Authorized
Abott, Jim 32132541 Extension 03/25/2000 04/15/2000
Baker, Kim 44557754 Reservation 04/02/2000
Brooks, Jill 78155458 Closed 01/15/2000 01/25/2000
Camren, Rob 77854121 Direct Bill Request 04/25/2000
Colins, Mark 44765571 Open (customer in car) 04/21/2000 04/29/2000
Franklin, Neil 45222173 Closed 02/10/2000 02/28/2000
Froghammer, Freddy 66475578 Closed 01/09/1999 01/30/1999
Hanks, Tom 765849322-001 Direct Bill Request 04/23/2000
Hanks, Sophia 880254321 Open (customer in car) 04/16/2000 04/30/2000
Jones, Bob 880234213 Open (customer in car) 04/18/2000 04/21/2000
25 items in the list
Matches 1-10 of 25
View next 10 >>
Would you like another search?
Last Name: Abrahm
First Name: Alice
Claim Number:
Confirmation Number:
Adjuster Last Name: Summer
Last Date Authorized: January 1 2000
Status: Closed
Search Again
top of page
Contact Us
Terms & Conditions
Log Off

FIG. 130

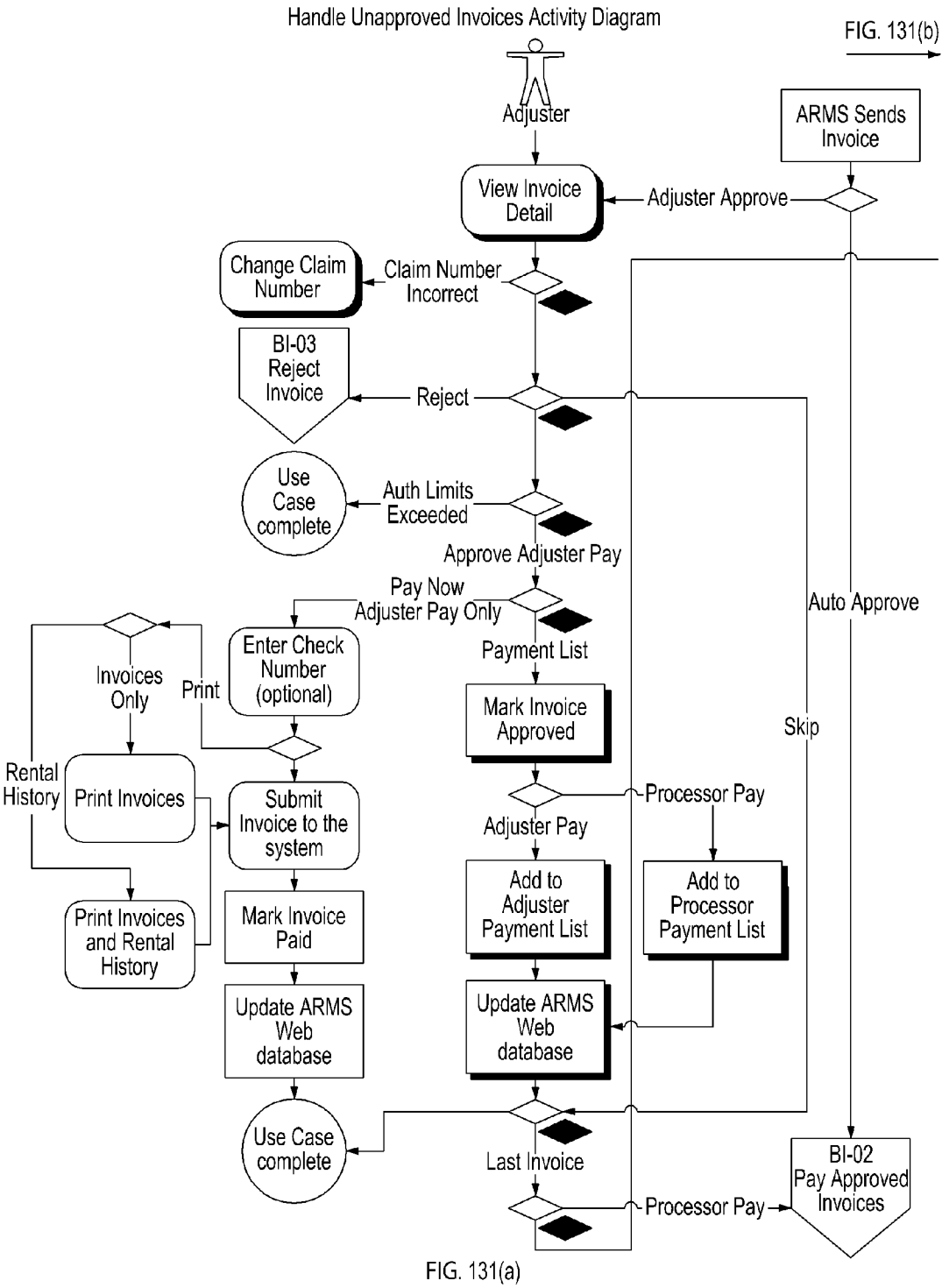
Handle Unapproved Invoices Activity Diagram
FIG. 131(b)
Adjuster
ARMS Sends Invoice
View Invoice Detail
Adjuster Approve
Change Claim Number
Claim Number Incorrect
BI-03 Reject Invoice
Reject
Use Case complete
Auth Limits Exceeded
Approve Adjuster Pay
Pay Now
Adjuster Pay Only
Auto Approve
Payment List
Enter Check Number (optional)
Invoices Only
Print
Mark Invoice Approved
Skip
Rental History
Print Invoices
Submit Invoice to the system
Processor Pay
Adjuster Pay
Add to Adjuster Payment List
Add to Processor Payment List
Print Invoices and Rental History
Mark Invoice Paid
Update ARMS Web database
Update ARMS Web database
Use Case complete
Last Invoice
BI-02 Pay Approved Invoices
Processor Pay

FIG. 131(a)

FIG. 131(a)

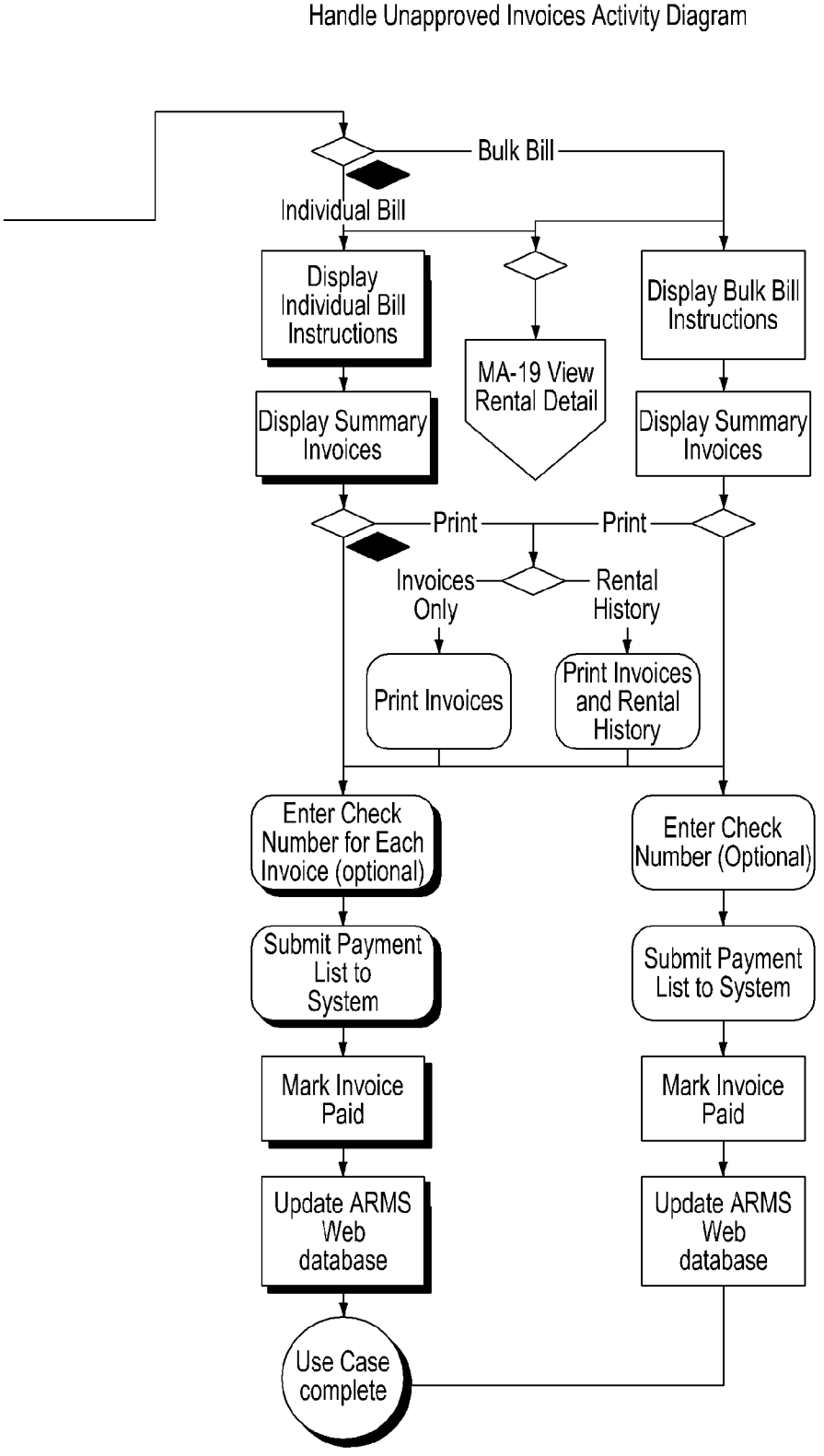

FIG. 131(b)

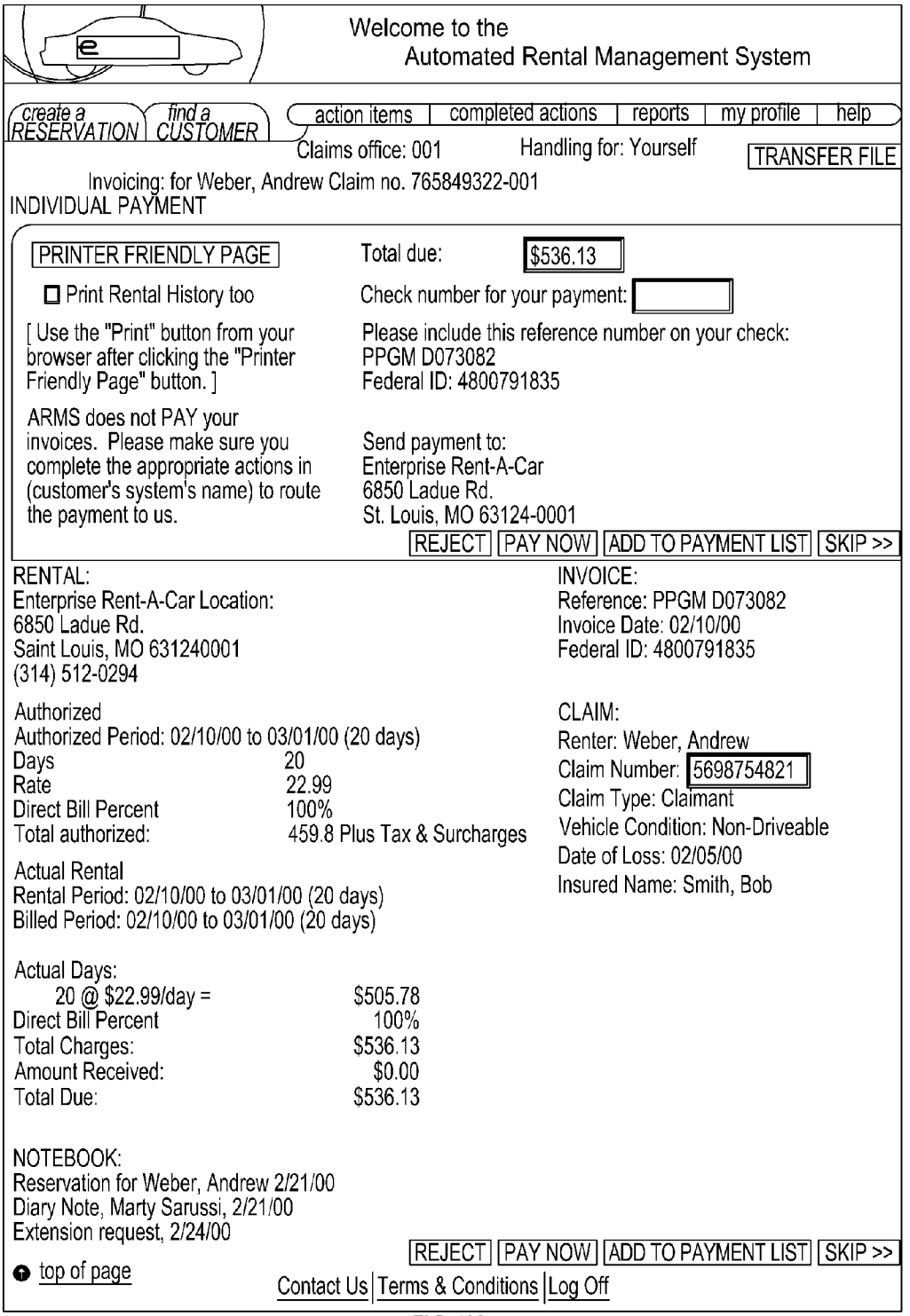
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
TRANSFER FILE
Invoicing: for Weber, Andrew Claim no. 765849322-001
INDIVIDUAL PAYMENT
PRINTER FRIENDLY PAGE
Total due:
$536.13
Print Rental History too
Check number for your payment:
[Use the "Print" button from your browser after clicking the "Printer Friendly Page" button.]
Please include this reference number on your check:
PPGM D073082
Federal ID: 4800791835
ARMS does not PAY your invoices. Please make sure you complete the appropriate actions in (customer's system's name) to route the payment to us.
Send payment to:
Enterprise Rent-A-Car
6850 Ladue Rd.
St. Louis, MO 63124-0001
REJECT
PAY NOW
ADD TO PAYMENT LIST
SKIP >>
RENTAL:
Enterprise Rent-A-Car Location:
6850 Ladue Rd.
Saint Louis, MO 631240001
(314) 512-0294
INVOICE:
Reference: PPGM D073082
Invoice Date: 02/10/00
Federal ID: 4800791835
Authorized
Authorized Period: 02/10/00 to 03/01/00 (20 days)
Days 20
Rate 22.99
Direct Bill Percent 100%
Total authorized: 459.8 Plus Tax & Surcharges
CLAIM:
Renter: Weber, Andrew
Claim Number: 5698754821
Claim Type: Claimant
Vehicle Condition: Non-Driveable
Date of Loss: 02/05/00
Insured Name: Smith, Bob
Actual Rental
Rental Period: 02/10/00 to 03/01/00 (20 days)
Billed Period: 02/10/00 to 03/01/00 (20 days)
Actual Days:
20 @ $22.99/day = $505.78
Direct Bill Percent 100%
Total Charges: $536.13
Amount Received: $0.00
Total Due: $536.13
NOTEBOOK:
Reservation for Weber, Andrew 2/21/00
Diary Note, Marty Sarussi, 2/21/00
Extension request, 2/24/00
REJECT
PAY NOW
ADD TO PAYMENT LIST
SKIP >>
top of page
Contact Us
Terms & Conditions
Log Off

FIG. 132

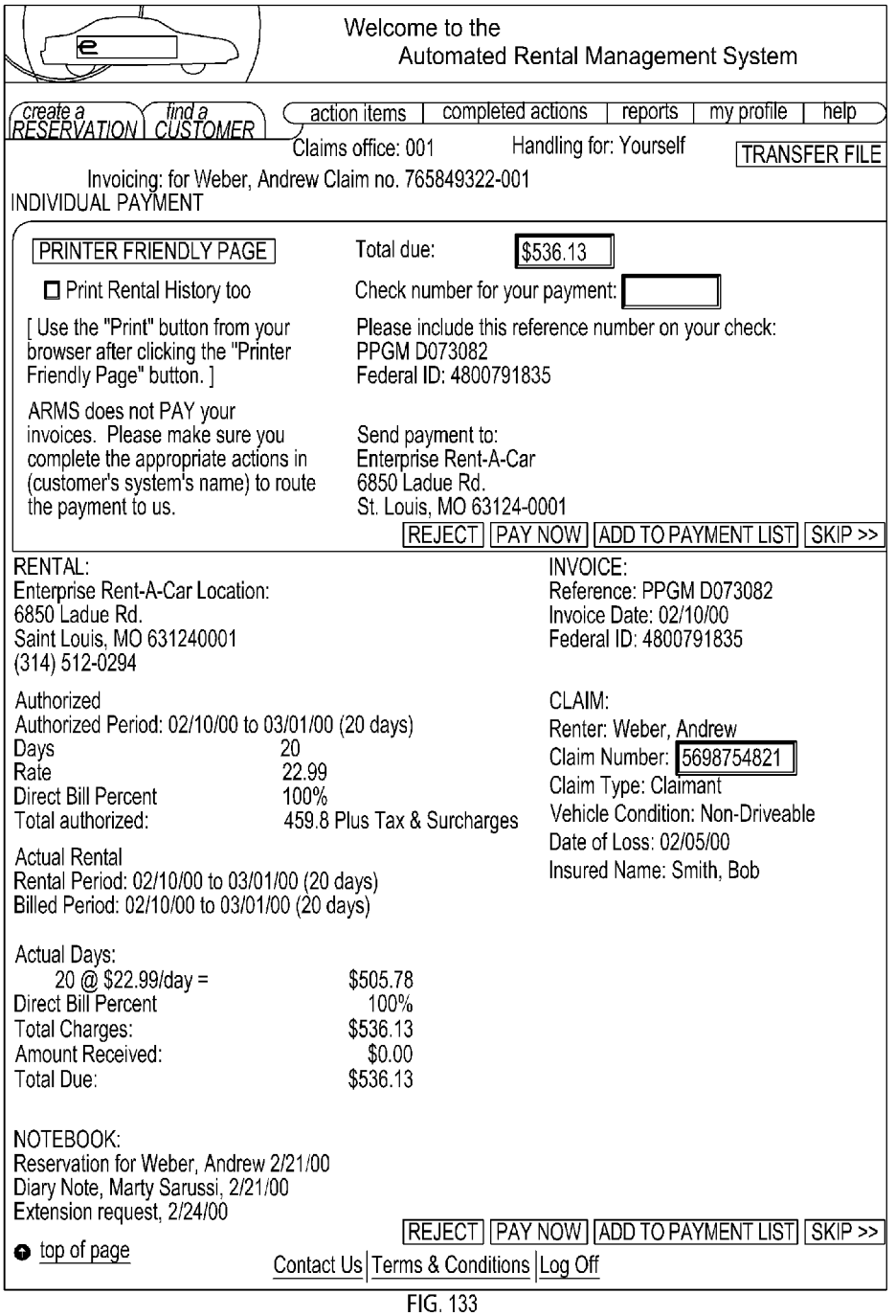
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
TRANSFER FILE
Invoicing: for Weber, Andrew Claim no. 765849322-001
INDIVIDUAL PAYMENT
PRINTER FRIENDLY PAGE
Total due:
$536.13
Print Rental History too
Check number for your payment:
[Use the "Print" button from your browser after clicking the "Printer Friendly Page" button.]
Please include this reference number on your check:
PPGM D073082
Federal ID: 4800791835
ARMS does not PAY your invoices. Please make sure you complete the appropriate actions in (customer's system's name) to route the payment to us.
Send payment to:
Enterprise Rent-A-Car
6850 Ladue Rd.
St. Louis, MO 63124-0001
REJECT
PAY NOW
ADD TO PAYMENT LIST
SKIP >>
RENTAL:
Enterprise Rent-A-Car Location:
6850 Ladue Rd.
Saint Louis, MO 631240001
(314) 512-0294
INVOICE:
Reference: PPGM D073082
Invoice Date: 02/10/00
Federal ID: 4800791835
Authorized
Authorized Period: 02/10/00 to 03/01/00 (20 days)
Days 20
Rate 22.99
Direct Bill Percent 100%
Total authorized: 459.8 Plus Tax & Surcharges
CLAIM:
Renter: Weber, Andrew
Claim Number: 5698754821
Claim Type: Claimant
Vehicle Condition: Non-Driveable
Date of Loss: 02/05/00
Insured Name: Smith, Bob
Actual Rental
Rental Period: 02/10/00 to 03/01/00 (20 days)
Billed Period: 02/10/00 to 03/01/00 (20 days)
Actual Days:
20 @ $22.99/day = $505.78
Direct Bill Percent 100%
Total Charges: $536.13
Amount Received: $0.00
Total Due: $536.13
NOTEBOOK:
Reservation for Weber, Andrew 2/21/00
Diary Note, Marty Sarussi, 2/21/00
Extension request, 2/24/00
REJECT
PAY NOW
ADD TO PAYMENT LIST
SKIP >>
top of page
Contact Us
Terms & Conditions
Log Off

FIG. 133

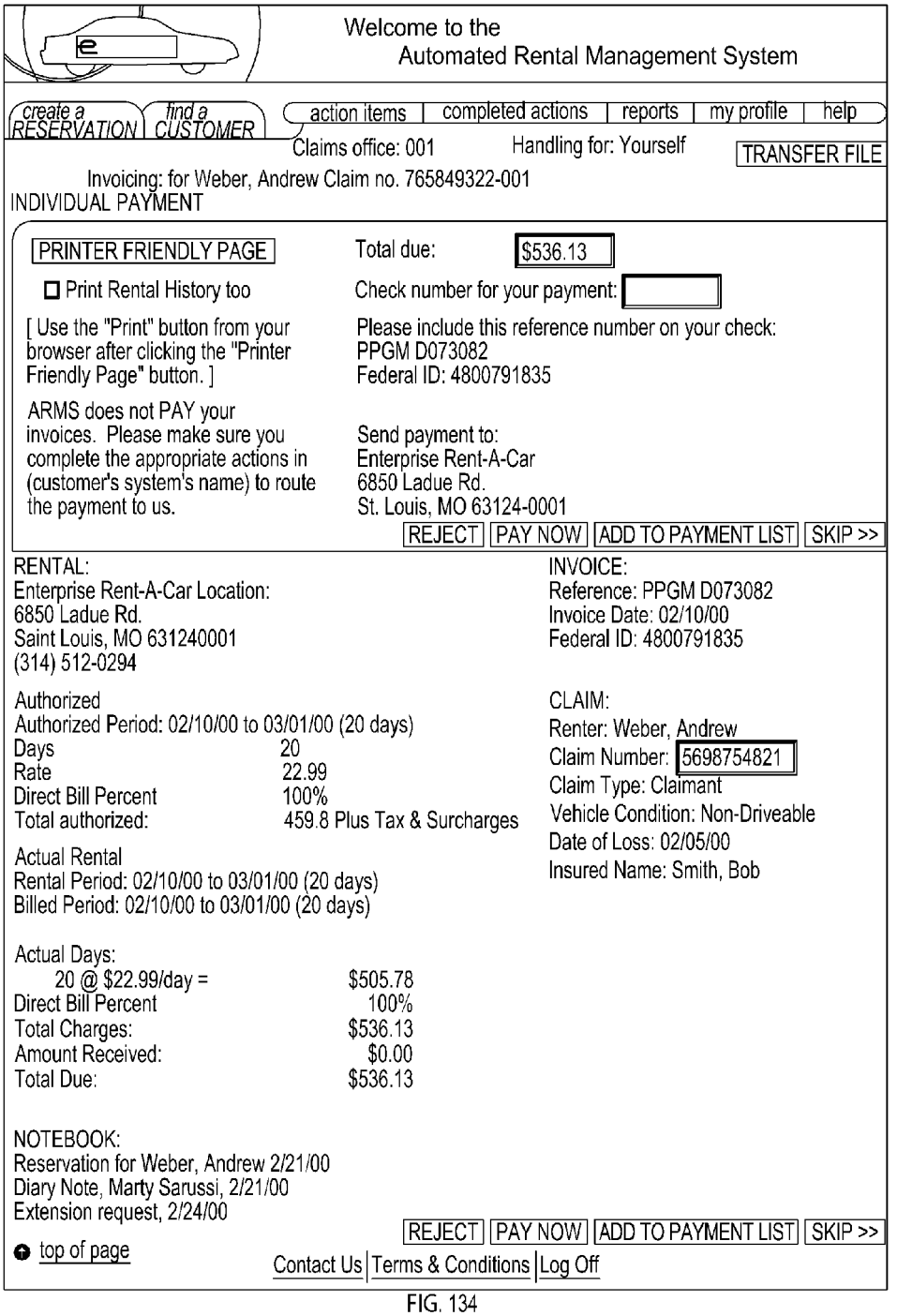
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
TRANSFER FILE
Invoicing: for Weber, Andrew Claim no. 765849322-001
INDIVIDUAL PAYMENT
PRINTER FRIENDLY PAGE
Total due: $536.13
Print Rental History too
Check number for your payment:
[Use the "Print" button from your browser after clicking the "Printer Friendly Page" button.]
Please include this reference number on your check:
PPGM D073082
Federal ID: 4800791835
ARMS does not PAY your invoices. Please make sure you complete the appropriate actions in (customer's system's name) to route the payment to us.
Send payment to:
Enterprise Rent-A-Car
6850 Ladue Rd.
St. Louis, MO 63124-0001
REJECT
PAY NOW
ADD TO PAYMENT LIST
SKIP >>
RENTAL:
Enterprise Rent-A-Car Location:
6850 Ladue Rd.
Saint Louis, MO 631240001
(314) 512-0294
INVOICE:
Reference: PPGM D073082
Invoice Date: 02/10/00
Federal ID: 4800791835
Authorized
Authorized Period: 02/10/00 to 03/01/00 (20 days)
Days 20
Rate 22.99
Direct Bill Percent 100%
Total authorized: 459.8 Plus Tax & Surcharges
CLAIM:
Renter: Weber, Andrew
Claim Number: 5698754821
Claim Type: Claimant
Vehicle Condition: Non-Driveable
Date of Loss: 02/05/00
Insured Name: Smith, Bob
Actual Rental
Rental Period: 02/10/00 to 03/01/00 (20 days)
Billed Period: 02/10/00 to 03/01/00 (20 days)
Actual Days:
20 @ $22.99/day = $505.78
Direct Bill Percent 100%
Total Charges: $536.13
Amount Received: $0.00
Total Due: $536.13
NOTEBOOK:
Reservation for Weber, Andrew 2/21/00
Diary Note, Marty Sarussi, 2/21/00
Extension request, 2/24/00
REJECT
PAY NOW
ADD TO PAYMENT LIST
SKIP >>
top of page
Contact Us
Terms & Conditions
Log Off

FIG. 134

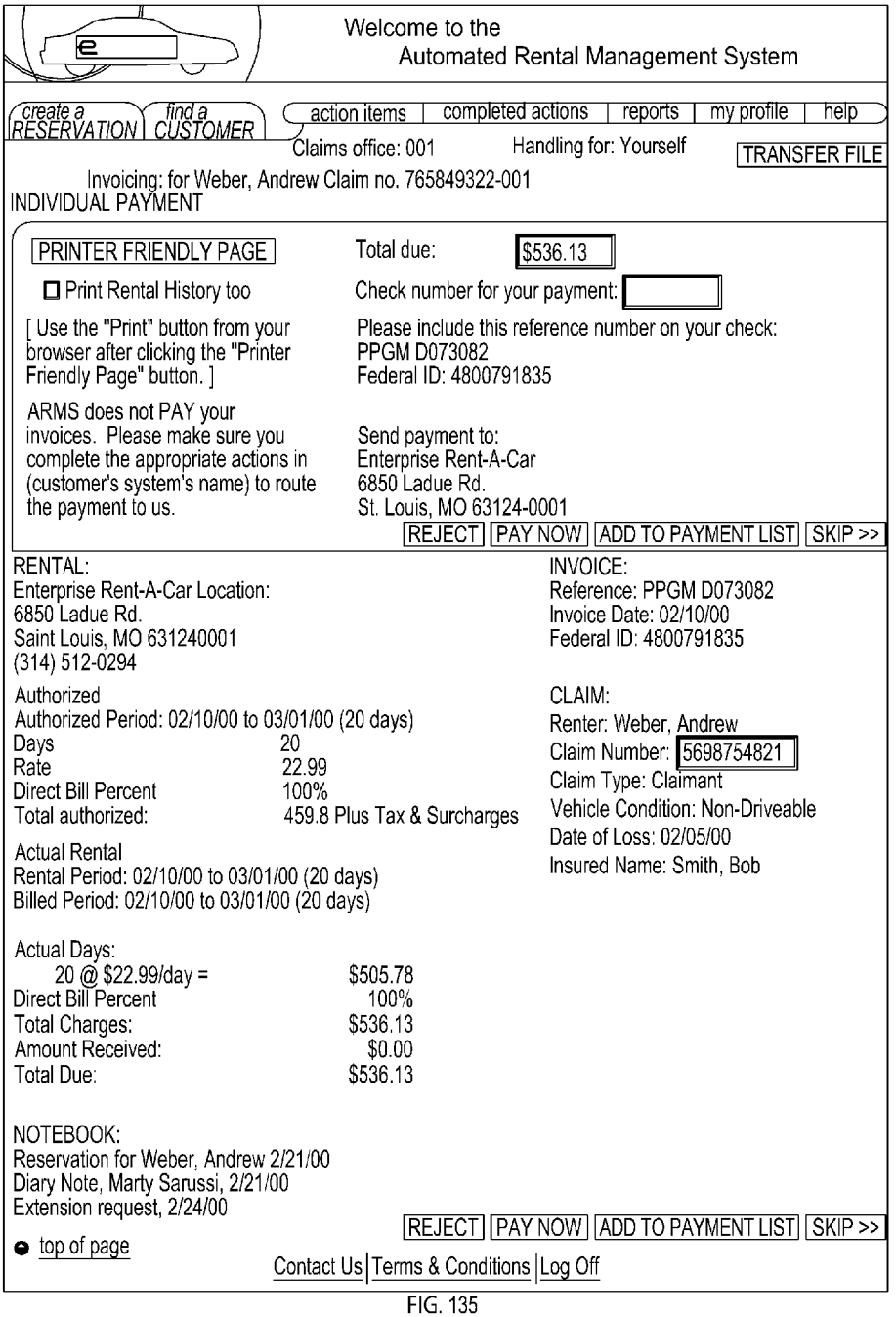
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
TRANSFER FILE
Invoicing: for Weber, Andrew Claim no. 765849322-001
INDIVIDUAL PAYMENT
PRINTER FRIENDLY PAGE
Print Rental History too
[Use the "Print" button from your browser after clicking the "Printer Friendly Page" button.]
ARMS does not PAY your invoices. Please make sure you complete the appropriate actions in (customer's system's name) to route the payment to us.
Total due: $536.13
Check number for your payment:
Please include this reference number on your check:
PPGM D073082
Federal ID: 4800791835
Send payment to:
Enterprise Rent-A-Car
6850 Ladue Rd.
St. Louis, MO 63124-0001
REJECT
PAY NOW
ADD TO PAYMENT LIST
SKIP >>
RENTAL:
Enterprise Rent-A-Car Location:
6850 Ladue Rd.
Saint Louis, MO 631240001
(314) 512-0294
Authorized
Authorized Period: 02/10/00 to 03/01/00 (20 days)
Days 20
Rate 22.99
Direct Bill Percent 100%
Total authorized: 459.8 Plus Tax & Surcharges
Actual Rental
Rental Period: 02/10/00 to 03/01/00 (20 days)
Billed Period: 02/10/00 to 03/01/00 (20 days)
Actual Days:
20 @ $22.99/day = $505.78
Direct Bill Percent 100%
Total Charges: $536.13
Amount Received: $0.00
Total Due: $536.13
NOTEBOOK:
Reservation for Weber, Andrew 2/21/00
Diary Note, Marty Sarussi, 2/21/00
Extension request, 2/24/00
INVOICE:
Reference: PPGM D073082
Invoice Date: 02/10/00
Federal ID: 4800791835
CLAIM:
Renter: Weber, Andrew
Claim Number: 5698754821
Claim Type: Claimant
Vehicle Condition: Non-Driveable
Date of Loss: 02/05/00
Insured Name: Smith, Bob
REJECT
PAY NOW
ADD TO PAYMENT LIST
SKIP >>
top of page
Contact Us
Terms & Conditions
Log Off

FIG. 135

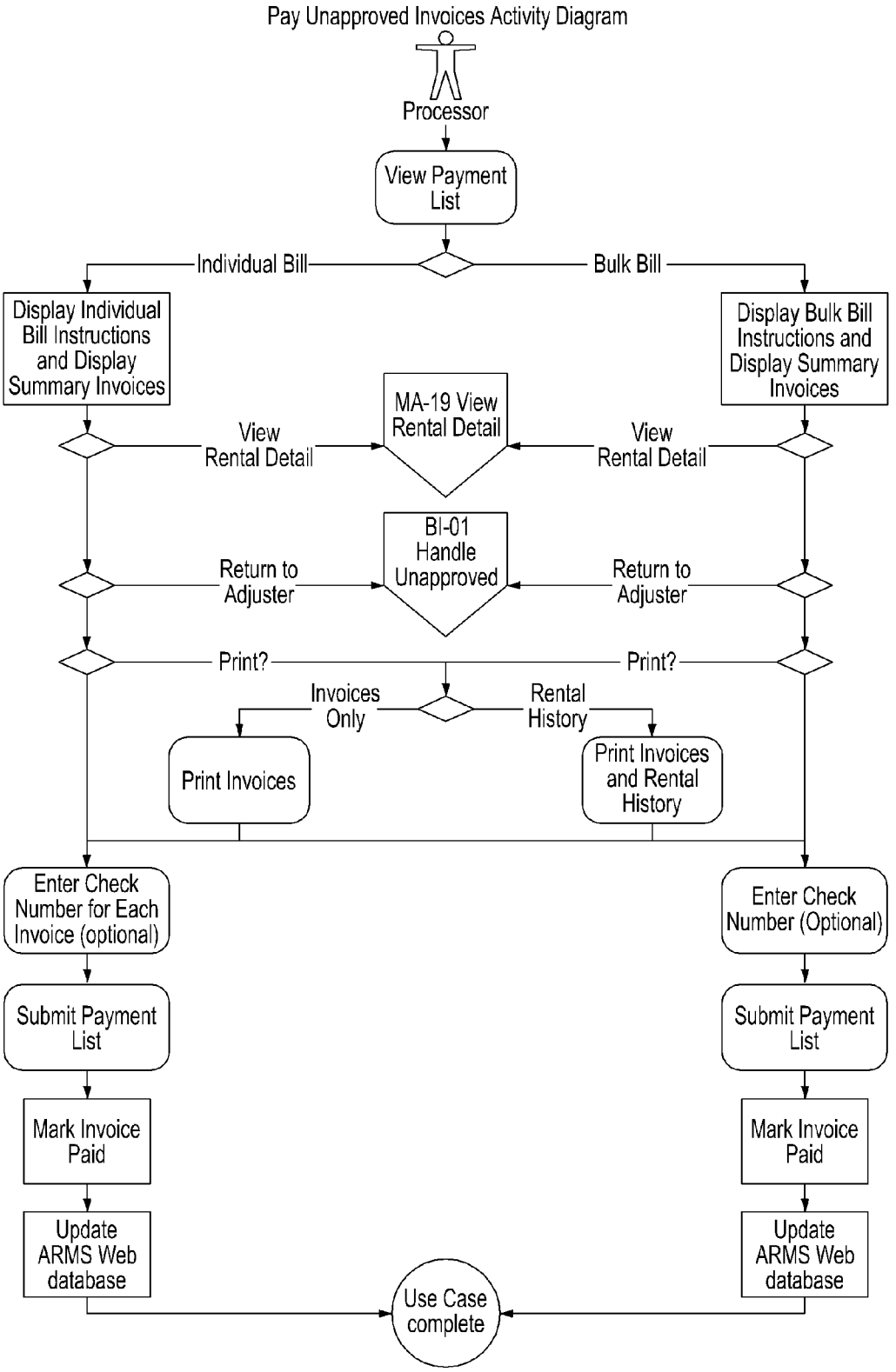
Pay Unapproved Invoices Activity Diagram
Processor
View Payment List
Individual Bill
Bulk Bill
Display Individual Bill Instructions and Display Summary Invoices
Display Bulk Bill Instructions and Display Summary Invoices
MA-19 View Rental Detail
View Rental Detail
View Rental Detail
BI-01 Handle Unapproved
Return to Adjuster
Return to Adjuster
Print?
Print?
Invoices Only
Rental History
Print Invoices
Print Invoices and Rental History
Enter Check Number for Each Invoice (optional)
Enter Check Number (Optional)
Submit Payment List
Submit Payment List
Mark Invoice Paid
Mark Invoice Paid
Update ARMS Web database
Update ARMS Web database
Use Case complete

FIG. 136

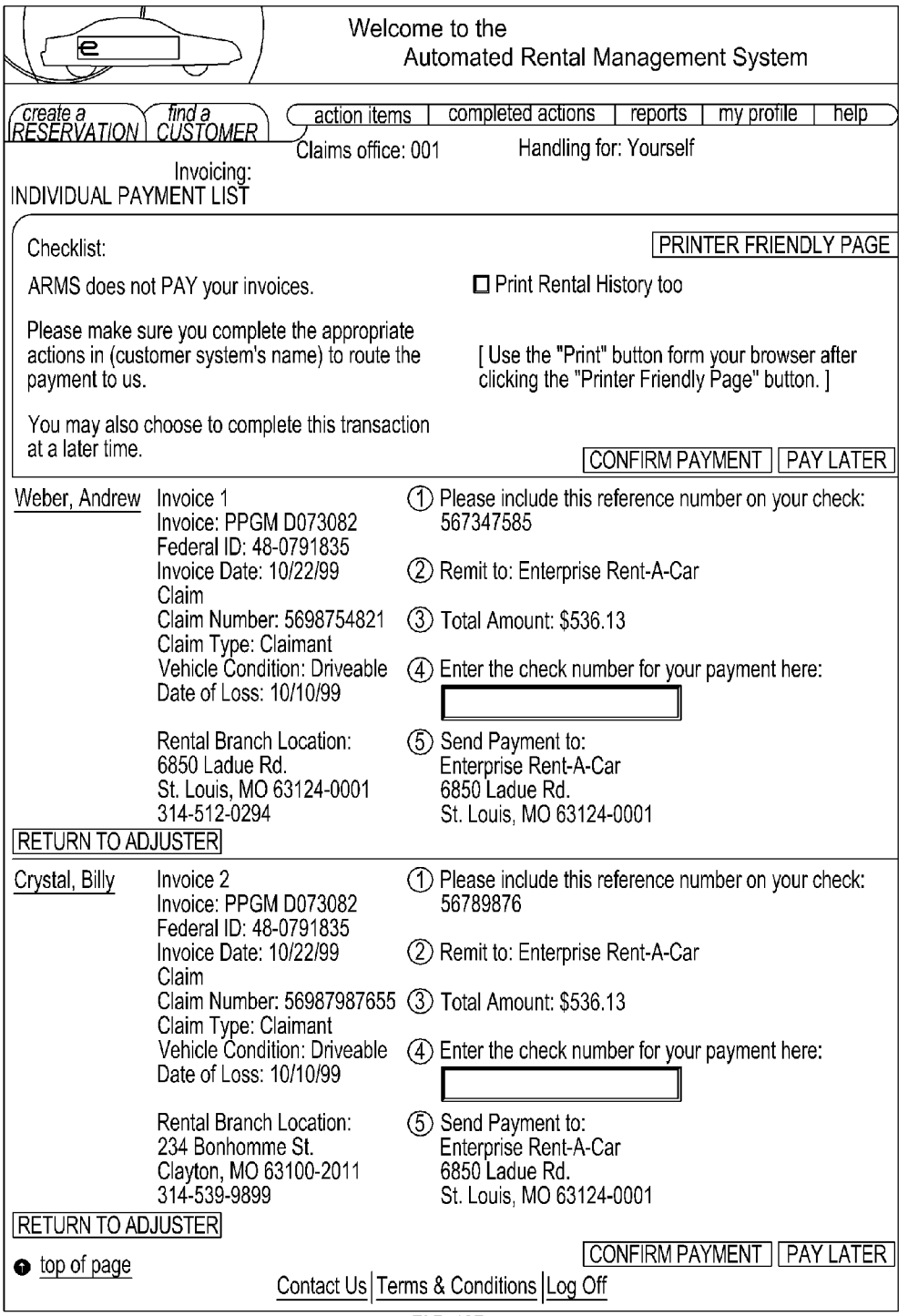
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
Invoicing:
INDIVIDUAL PAYMENT LIST
Checklist:
PRINTER FRIENDLY PAGE
ARMS does not PAY your invoices.
Print Rental History too
Please make sure you complete the appropriate actions in (customer system's name) to route the payment to us.
[Use the "Print" button form your browser after clicking the "Printer Friendly Page" button.]
You may also choose to complete this transaction at a later time.
CONFIRM PAYMENT
PAY LATER
Weber, Andrew
Invoice 1
Invoice: PPGM D073082
Federal ID: 48-0791835
Invoice Date: 10/22/99
Claim
Claim Number: 5698754821
Claim Type: Claimant
Vehicle Condition: Driveable
Date of Loss: 10/10/99
Rental Branch Location:
6850 Ladue Rd.
St. Louis, MO 63124-0001
314-512-0294
1 Please include this reference number on your check: 567347585
2 Remit to: Enterprise Rent-A-Car
3 Total Amount: $536.13
4 Enter the check number for your payment here:
5 Send Payment to:
Enterprise Rent-A-Car
6850 Ladue Rd.
St. Louis, MO 63124-0001
RETURN TO ADJUSTER
Crystal, Billy
Invoice 2
Invoice: PPGM D073082
Federal ID: 48-0791835
Invoice Date: 10/22/99
Claim
Claim Number: 56987987655
Claim Type: Claimant
Vehicle Condition: Driveable
Date of Loss: 10/10/99
Rental Branch Location:
234 Bonhomme St.
Clayton, MO 63100-2011
314-539-9899
1 Please include this reference number on your check: 56789876
2 Remit to: Enterprise Rent-A-Car
3 Total Amount: $536.13
4 Enter the check number for your payment here:
5 Send Payment to:
Enterprise Rent-A-Car
6850 Ladue Rd.
St. Louis, MO 63124-0001
RETURN TO ADJUSTER
CONFIRM PAYMENT
PAY LATER
top of page
Contact Us
Terms & Conditions
Log Off

FIG. 137

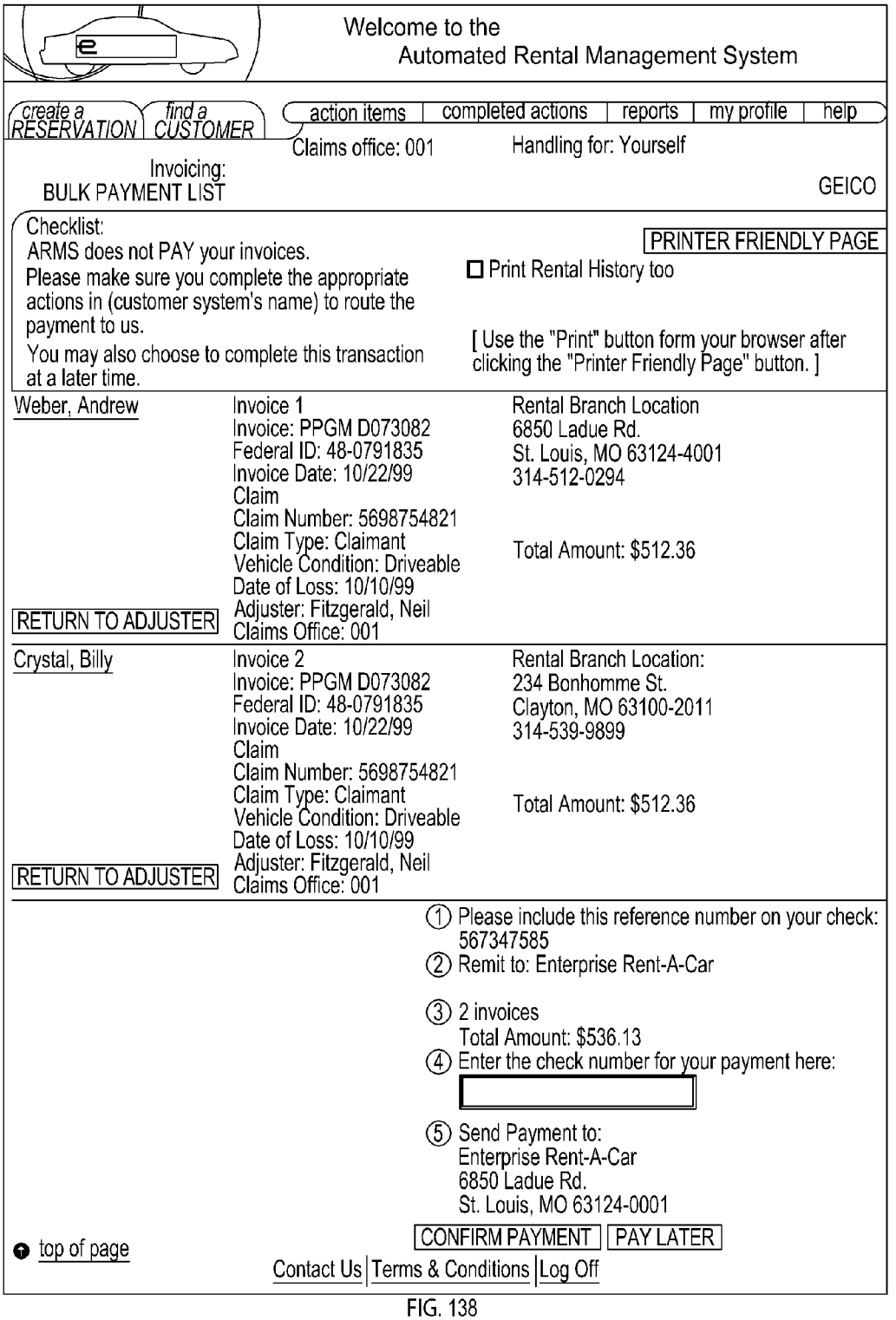
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 001
Handling for: Yourself
Invoicing:
BULK PAYMENT LIST
GEICO
Checklist:
ARMS does not PAY your invoices.
Please make sure you complete the appropriate actions in (customer system's name) to route the payment to us.
You may also choose to complete this transaction at a later time.
PRINTER FRIENDLY PAGE
Print Rental History too
[Use the "Print" button form your browser after clicking the "Printer Friendly Page" button.]
Weber, Andrew
Invoice 1
Invoice: PPGM D073082
Federal ID: 48-0791835
Invoice Date: 10/22/99
Claim
Claim Number: 5698754821
Claim Type: Claimant
Vehicle Condition: Driveable
Date of Loss: 10/10/99
Adjuster: Fitzgerald, Neil
Claims Office: 001
Rental Branch Location
6850 Ladue Rd.
St. Louis, MO 63124-4001
314-512-0294
Total Amount: $512.36
RETURN TO ADJUSTER
Crystal, Billy
Invoice 2
Invoice: PPGM D073082
Federal ID: 48-0791835
Invoice Date: 10/22/99
Claim
Claim Number: 5698754821
Claim Type: Claimant
Vehicle Condition: Driveable
Date of Loss: 10/10/99
Adjuster: Fitzgerald, Neil
Claims Office: 001
Rental Branch Location:
234 Bonhomme St.
Clayton, MO 63100-2011
314-539-9899
Total Amount: $512.36
RETURN TO ADJUSTER
1 Please include this reference number on your check: 567347585
2 Remit to: Enterprise Rent-A-Car
3 2 invoices
Total Amount: $536.13
4 Enter the check number for your payment here:
5 Send Payment to:
Enterprise Rent-A-Car
6850 Ladue Rd.
St. Louis, MO 63124-0001
CONFIRM PAYMENT
PAY LATER
top of page
Contact Us | Terms & Conditions | Log Off

FIG. 138

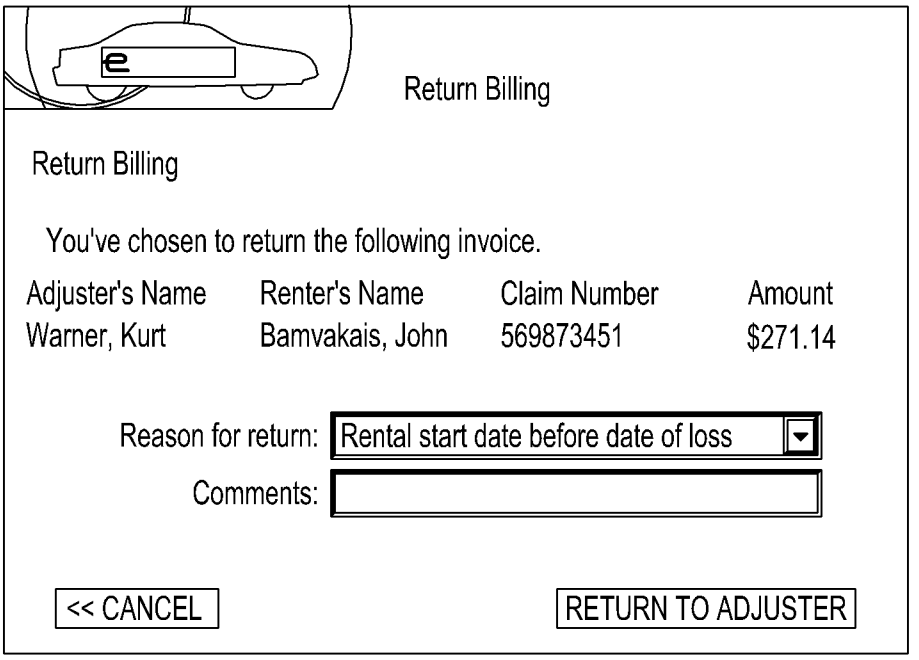
Return Billing
Return Billing
You've chosen to return the following invoice.
Adjuster's Name
Renter's Name
Claim Number
Amount
Warner, Kurt
Bamvakais, John
569873451
$271.14
Reason for return:
Rental start date before date of loss
Comments:
<< CANCEL
RETURN TO ADJUSTER

FIG. 139

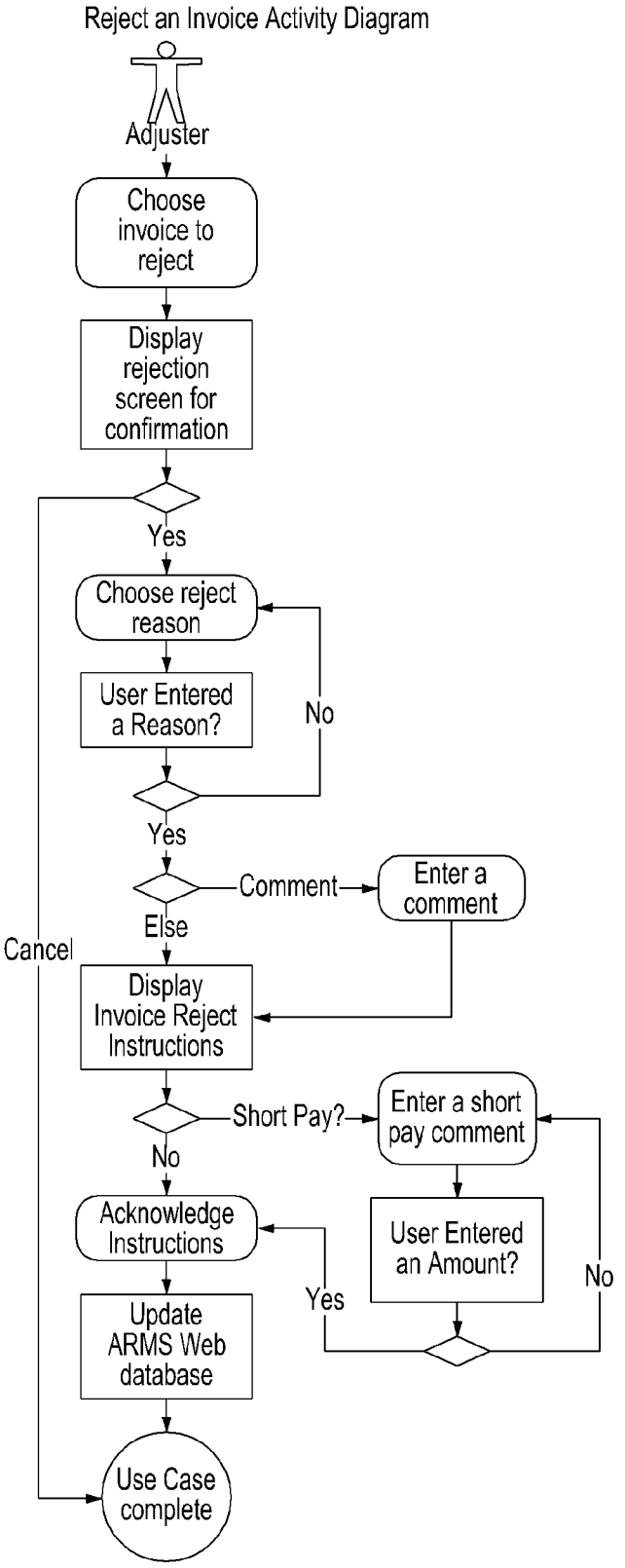
Reject an Invoice Activity Diagram
Adjuster
Choose invoice to reject
Display rejection screen for confirmation
Yes
Choose reject reason
User Entered a Reason?
No
Yes
Comment
Enter a comment
Else
Cancel
Display Invoice Reject Instructions
Short Pay?
Enter a short pay comment
No
Acknowledge Instructions
User Entered an Amount?
No
Yes
Update ARMS Web database
Use Case complete

FIG. 140

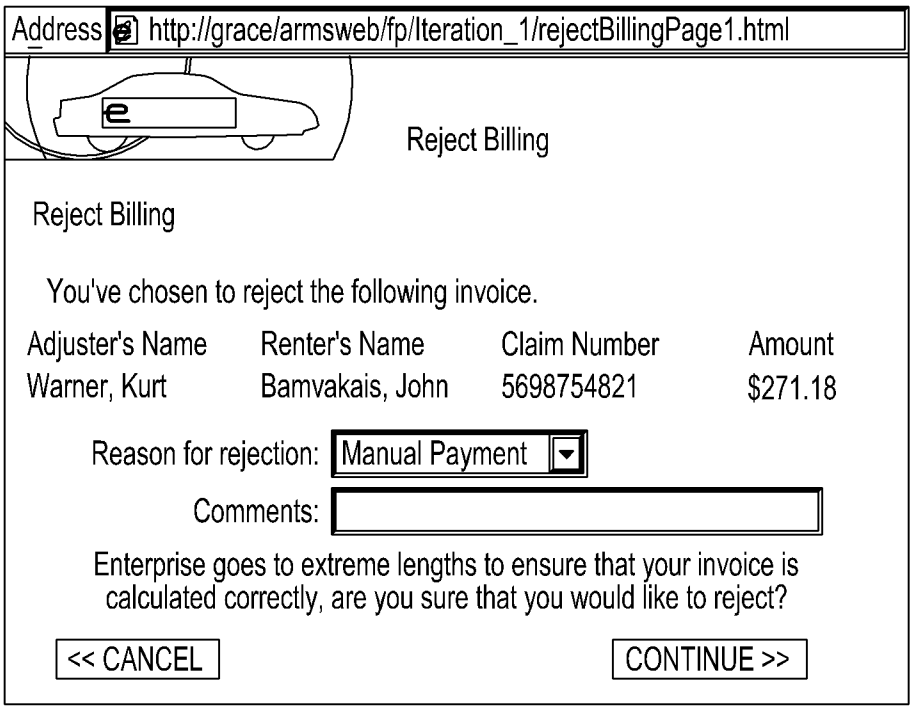
Address http://grace/armsweb/fp/Iteration_1/rejectBillingPage1.html
Reject Billing
Reject Billing
You've chosen to reject the following invoice.
Adjuster's Name
Renter's Name
Claim Number
Amount
Warner, Kurt
Bamvakais, John
5698754821
$271.18
Reason for rejection:
Manual Payment
Comments:
Enterprise goes to extreme lengths to ensure that your invoice is calculated correctly, are you sure that you would like to reject?
<< CANCEL
CONTINUE >>

FIG. 141

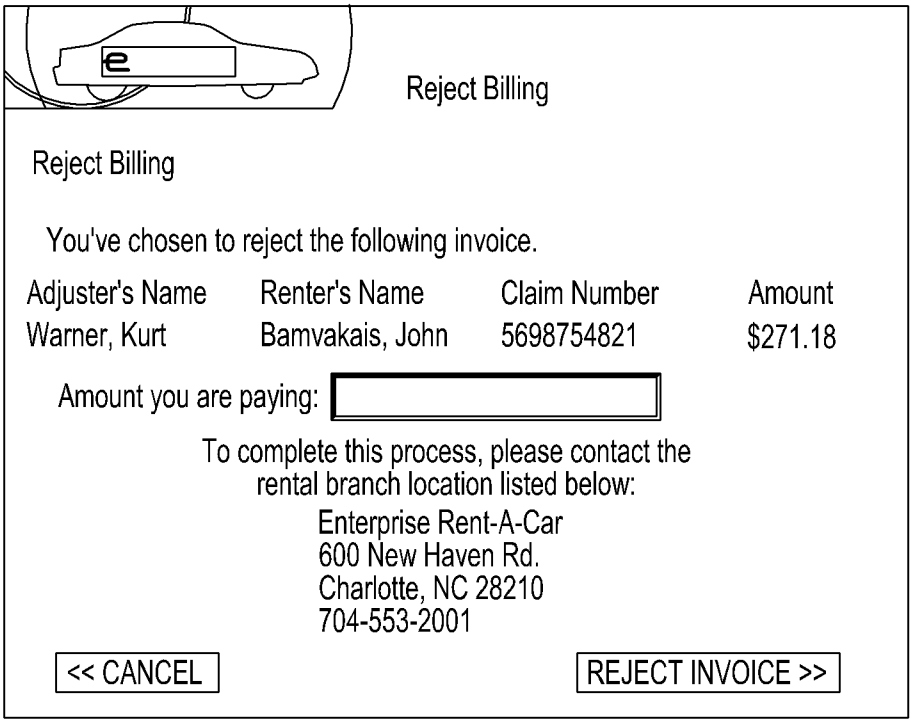
Reject Billing
Reject Billing
You've chosen to reject the following invoice.
Adjuster's Name
Renter's Name
Claim Number
Amount
Warner, Kurt
Bamvakais, John
5698754821
$271.18
Amount you are paying:
To complete this process, please contact the rental branch location listed below:
Enterprise Rent-A-Car
600 New Haven Rd.
Charlotte, NC 28210
704-553-2001
<< CANCEL
REJECT INVOICE >>

FIG. 142

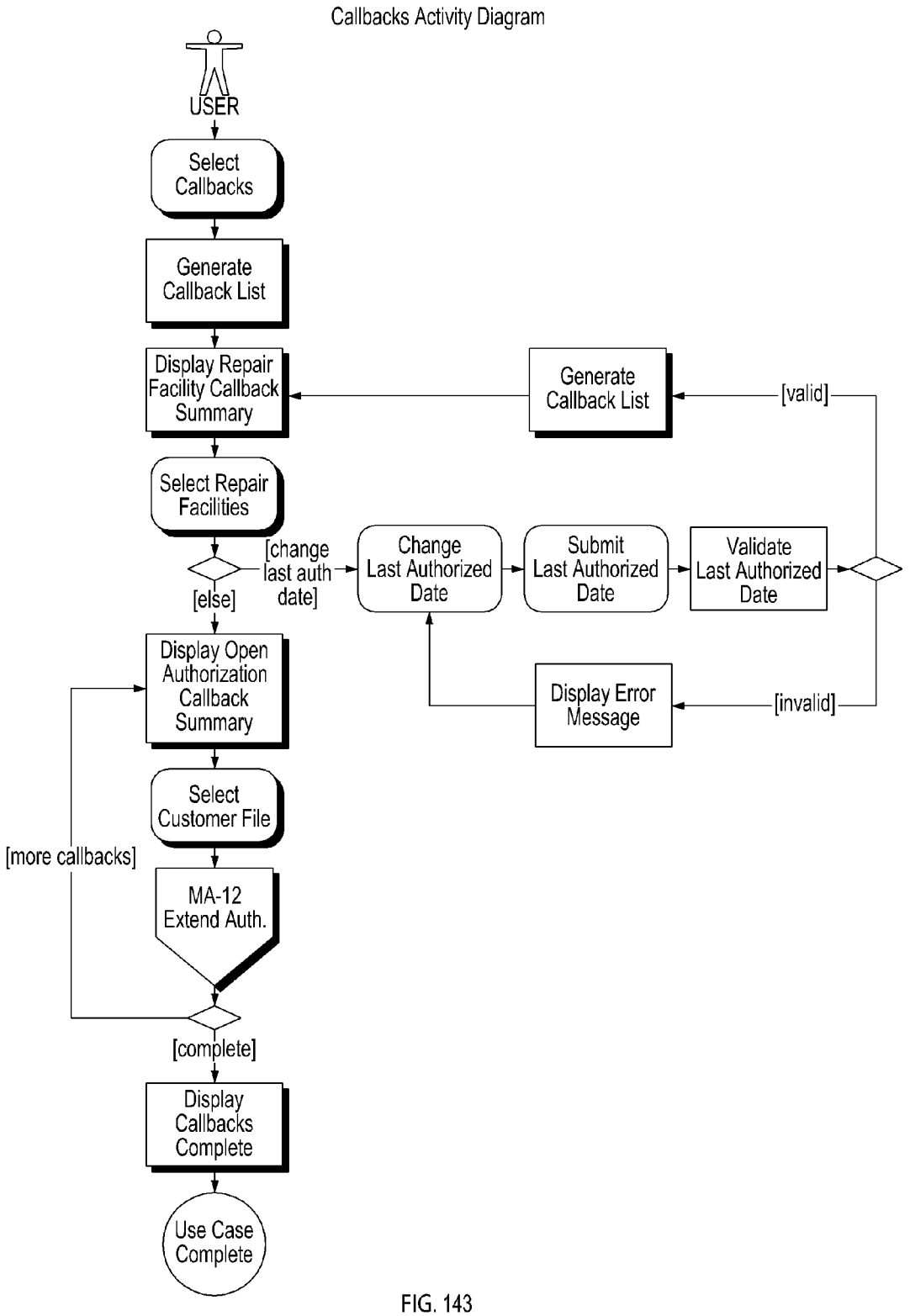
Callbacks Activity Diagram
USER
Select Callbacks
Generate Callback List
Display Repair Facility Callback Summary
Generate Callback List
[valid]
Select Repair Facilities
[change last auth date]
Change Last Authorized Date
Submit Last Authorized Date
Validate Last Authorized Date
[else]
Display Open Authorization Callback Summary
Display Error Message
[invalid]
Select Customer File
[more callbacks]
MA-12 Extend Auth.
[complete]
Display Callbacks Complete
Use Case Complete

FIG. 143

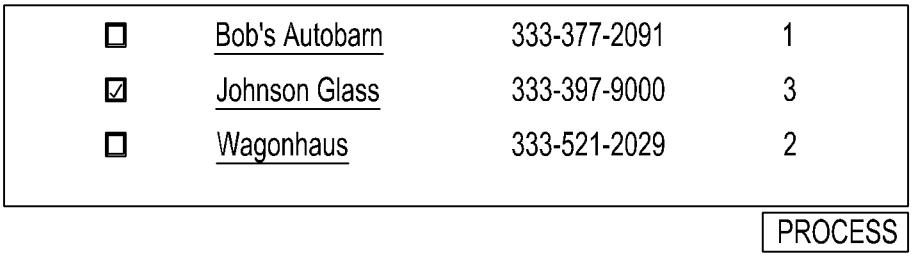
Bob's Autobarn 333-377-2091 1
Johnson Glass 333-397-9000 3
Wagonhaus 333-521-2029 2
PROCESS

FIG. 144

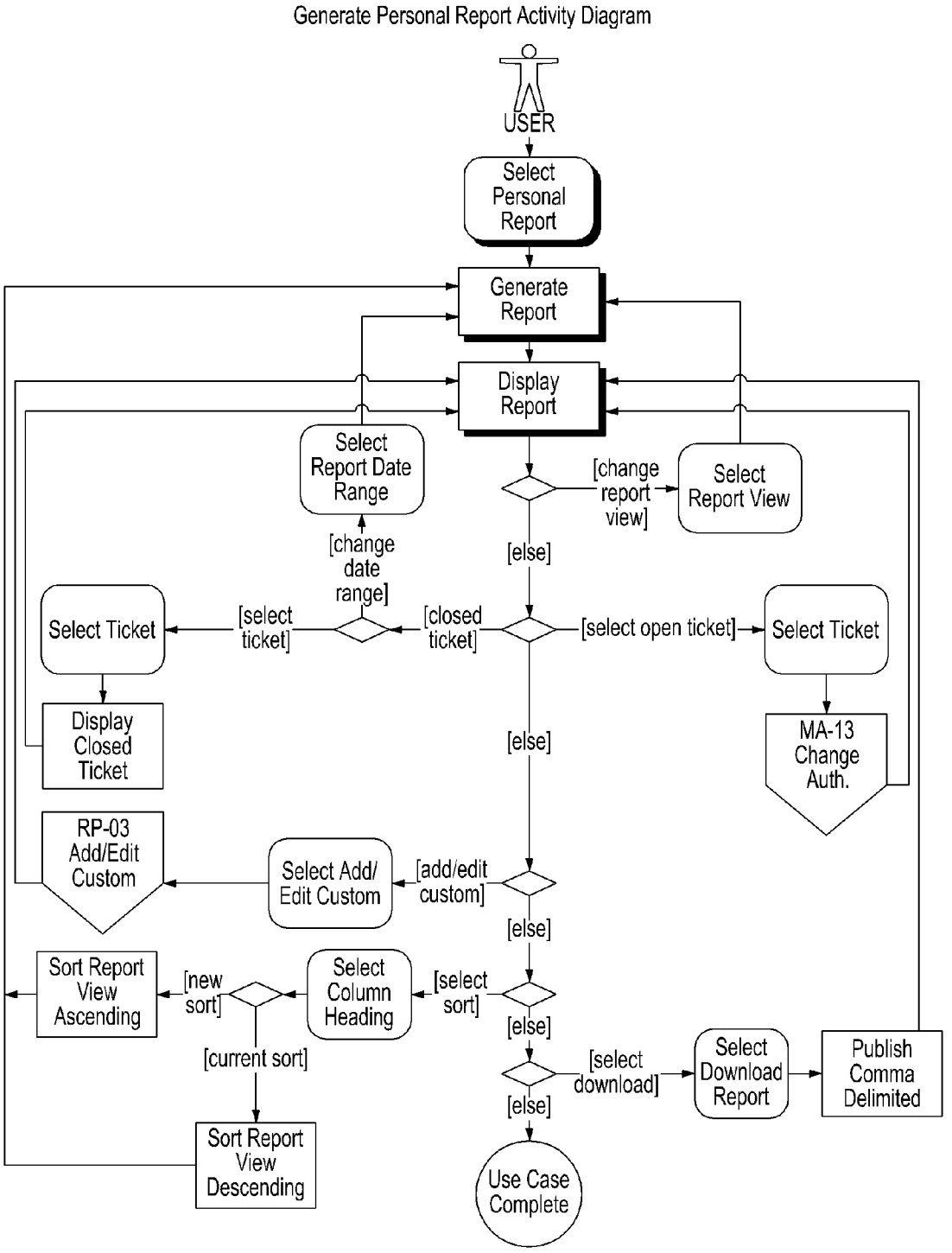
Generate Personal Report Activity Diagram
USER
Select Personal Report
Generate Report
Display Report
Select Report Date Range
[change report view]
Select Report View
[change date range]
[else]
Select Ticket
[select ticket]
[closed ticket]
[select open ticket]
Select Ticket
Display Closed Ticket
MA-13 Change Auth.
[else]
RP-03 Add/Edit Custom
Select Add/ Edit Custom
[add/edit custom]
[else]
Sort Report View Ascending
[new sort]
Select Column Heading
[select sort]
[else]
[current sort]
[select download]
Select Download Report
Publish Comma Delimited
[else]
Sort Report View Descending
Use Case Complete

FIG. 145

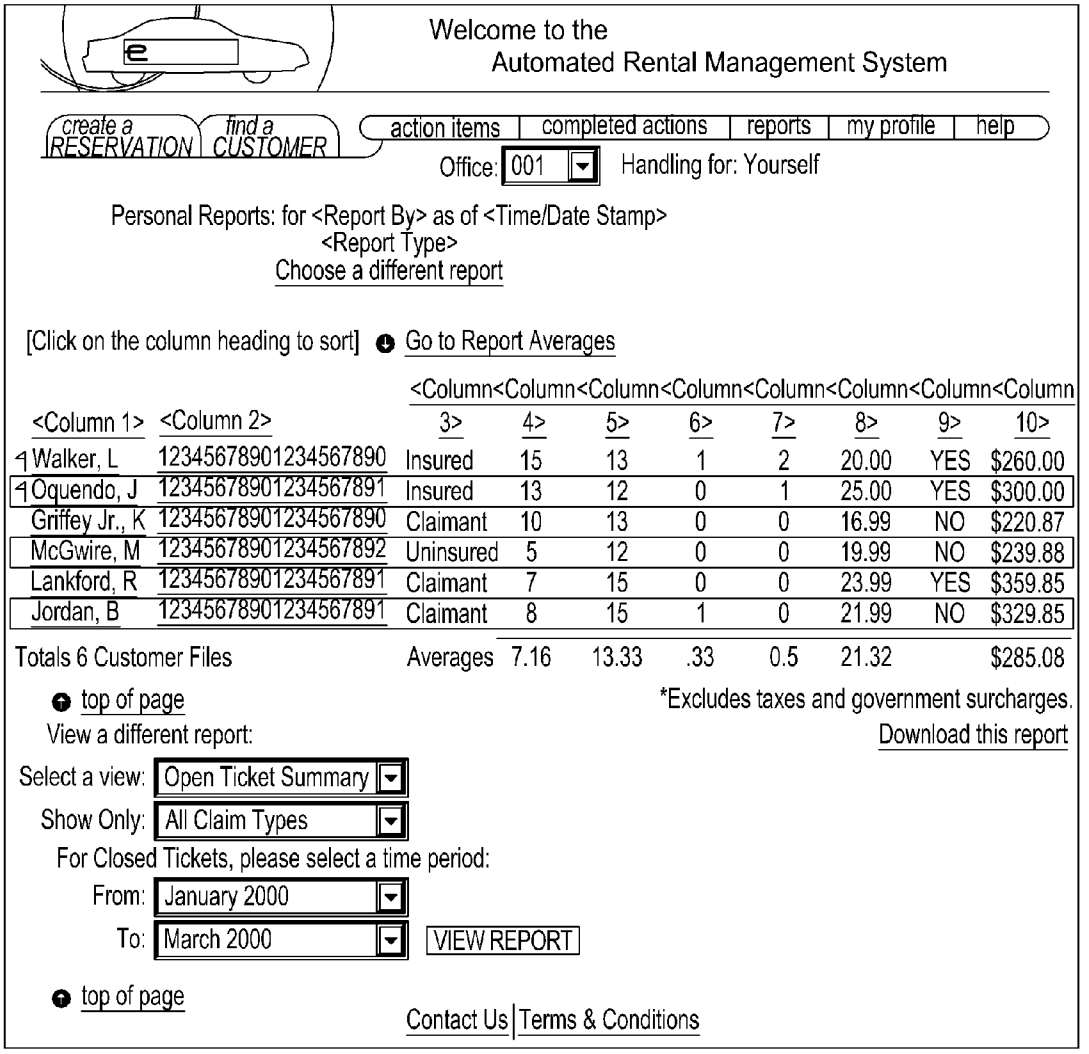
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Office: 001
Handling for: Yourself
Personal Reports: for <Report By> as of <Time/Date Stamp>
<Report Type>
Choose a different report
[Click on the column heading to sort]
Go to Report Averages
<Column 1>
<Column 2>
<Column 3>
<Column 4>
<Column 5>
<Column 6>
<Column 7>
<Column 8>
<Column 9>
<Column 10>
Walker, L 12345678901234567890 Insured 15 13 1 2 20.00 YES $260.00
Oquendo, J 12345678901234567891 Insured 13 12 0 1 25.00 YES $300.00
Griffey Jr., K 12345678901234567890 Claimant 10 13 0 0 16.99 NO $220.87
McGwire, M 12345678901234567892 Uninsured 5 12 0 0 19.99 NO $239.88
Lankford, R 12345678901234567891 Claimant 7 15 0 0 23.99 YES $359.85
Jordan, B 12345678901234567891 Claimant 8 15 1 0 21.99 NO $329.85
Totals 6 Customer Files
Averages 7.16 13.33 .33 0.5 21.32 $285.08
top of page
*Excludes taxes and government surcharges.
View a different report:
Download this report
Select a view: Open Ticket Summary
Show Only: All Claim Types
For Closed Tickets, please select a time period:
From: January 2000
To: March 2000
VIEW REPORT
top of page
Contact Us | Terms & Conditions

FIG. 146

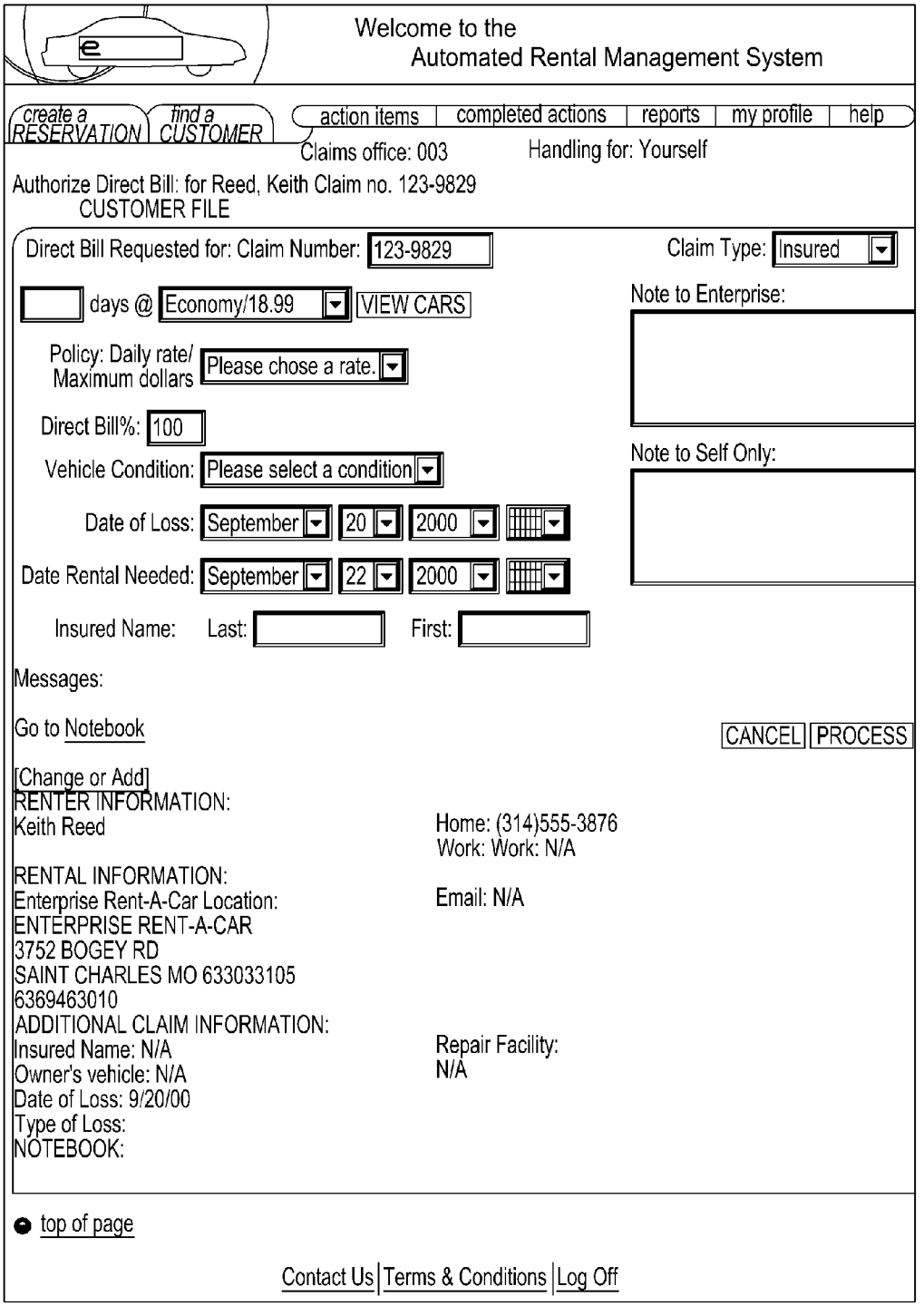
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 003
Handling for: Yourself
Authorize Direct Bill: for Reed, Keith Claim no. 123-9829
CUSTOMER FILE
Direct Bill Requested for: Claim Number: 123-9829
Claim Type: Insured
days @ Economy/18.99
VIEW CARS
Note to Enterprise:
Policy: Daily rate/ Maximum dollars
Please chose a rate.
Direct Bill%: 100
Note to Self Only:
Vehicle Condition: Please select a condition
Date of Loss: September 20 2000
Date Rental Needed: September 22 2000
Insured Name: Last: First:
Messages:
Go to Notebook
CANCEL
PROCESS
[Change or Add]
RENTER INFORMATION:
Keith Reed
Home: (314)555-3876
Work: Work: N/A
RENTAL INFORMATION:
Enterprise Rent-A-Car Location:
ENTERPRISE RENT-A-CAR
3752 BOGEY RD
SAINT CHARLES MO 633033105
6369463010
Email: N/A
ADDITIONAL CLAIM INFORMATION:
Insured Name: N/A
Owner's vehicle: N/A
Date of Loss: 9/20/00
Type of Loss:
NOTEBOOK:
Repair Facility:
N/A
top of page
Contact Us
Terms & Conditions
Log Off

FIG. 147(a)

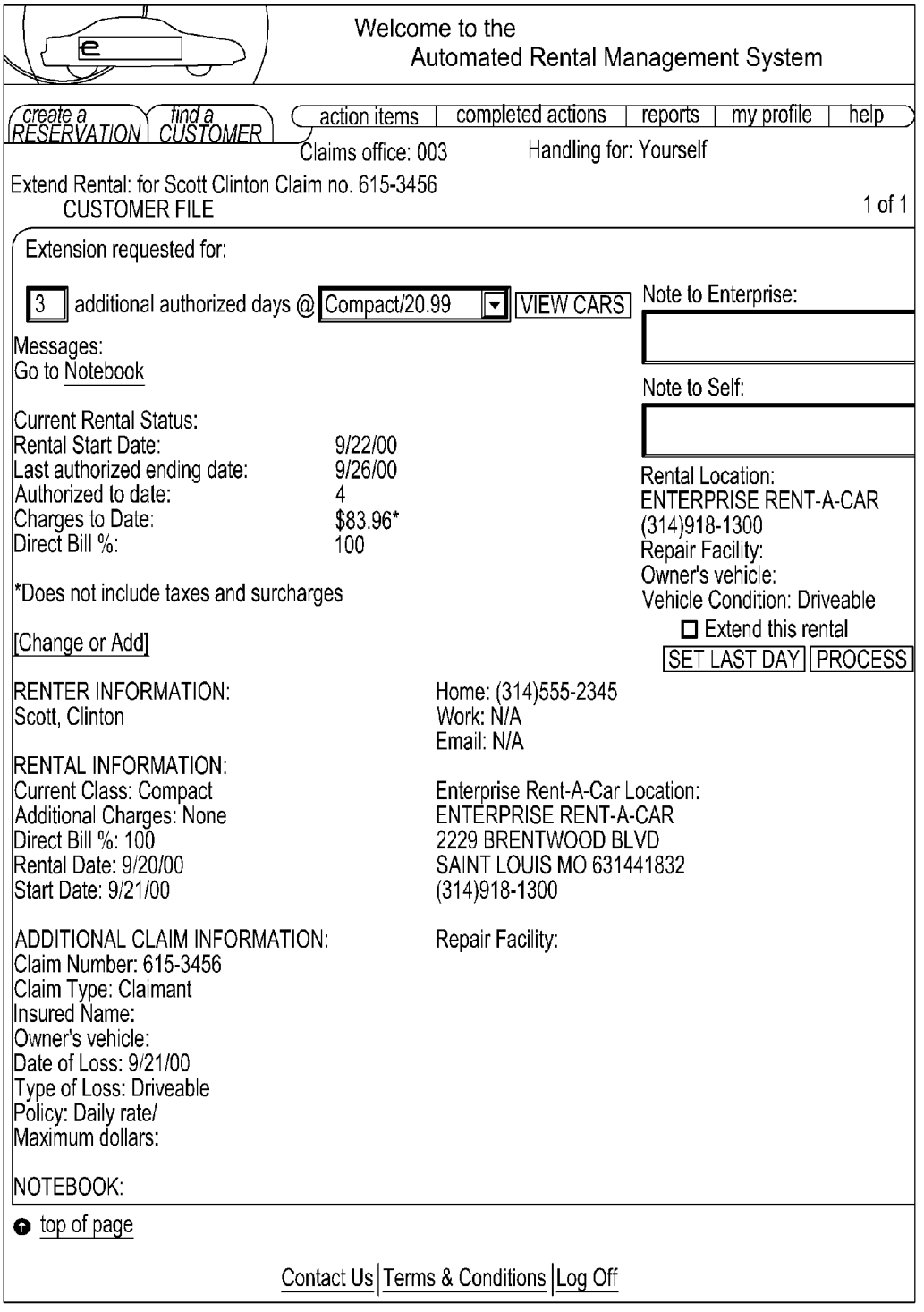
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 003
Handling for: Yourself
Extend Rental: for Scott Clinton Claim no. 615-3456
CUSTOMER FILE
1 of 1
Extension requested for:
3 additional authorized days @ Compact/20.99
VIEW CARS
Note to Enterprise:
Messages:
Go to Notebook
Note to Self:
Current Rental Status:
Rental Start Date: 9/22/00
Last authorized ending date: 9/26/00
Authorized to date: 4
Charges to Date: $83.96*
Direct Bill %: 100
Rental Location:
ENTERPRISE RENT-A-CAR
(314)918-1300
Repair Facility:
Owner's vehicle:
Vehicle Condition: Driveable
*Does not include taxes and surcharges
Extend this rental
[Change or Add]
SET LAST DAY
PROCESS
RENTER INFORMATION:
Scott, Clinton
Home: (314)555-2345
Work: N/A
Email: N/A
RENTAL INFORMATION:
Current Class: Compact
Additional Charges: None
Direct Bill %: 100
Rental Date: 9/20/00
Start Date: 9/21/00
Enterprise Rent-A-Car Location:
ENTERPRISE RENT-A-CAR
2229 BRENTWOOD BLVD
SAINT LOUIS MO 631441832
(314)918-1300
ADDITIONAL CLAIM INFORMATION:
Claim Number: 615-3456
Claim Type: Claimant
Insured Name:
Owner's vehicle:
Date of Loss: 9/21/00
Type of Loss: Driveable
Policy: Daily rate/
Maximum dollars:
Repair Facility:
NOTEBOOK:
top of page
Contact Us
Terms & Conditions
Log Off

FIG. 147(b)

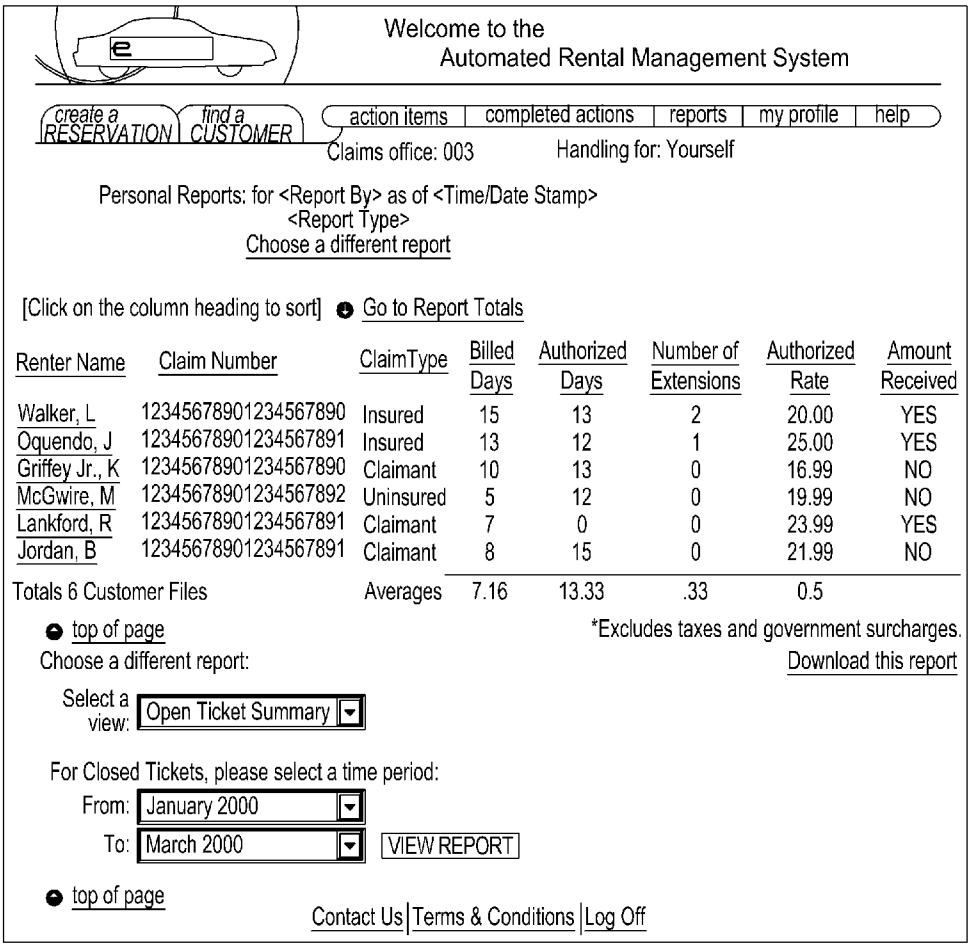
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims office: 003
Handling for: Yourself
Personal Reports: for <Report By> as of <Time/Date Stamp>
<Report Type>
Choose a different report
[Click on the column heading to sort]
Go to Report Totals
Renter Name
Claim Number
ClaimType
Billed Days
Authorized Days
Number of Extensions
Authorized Rate
Amount Received
Walker, L 12345678901234567890 Insured 15 13 2 20.00 YES
Oquendo, J 12345678901234567891 Insured 13 12 1 25.00 YES
Griffey Jr., K 12345678901234567890 Claimant 10 13 0 16.99 NO
McGwire, M 12345678901234567892 Uninsured 5 12 0 19.99 NO
Lankford, R 12345678901234567891 Claimant 7 0 0 23.99 YES
Jordan, B 12345678901234567891 Claimant 8 15 0 21.99 NO
Totals 6 Customer Files
Averages 7.16 13.33 .33 0.5
top of page
*Excludes taxes and government surcharges.
Choose a different report:
Download this report
Select a view:
Open Ticket Summary
For Closed Tickets, please select a time period:
From:
January 2000
To:
March 2000
VIEW REPORT
top of page
Contact Us
Terms & Conditions
Log Off

FIG. 147(c)

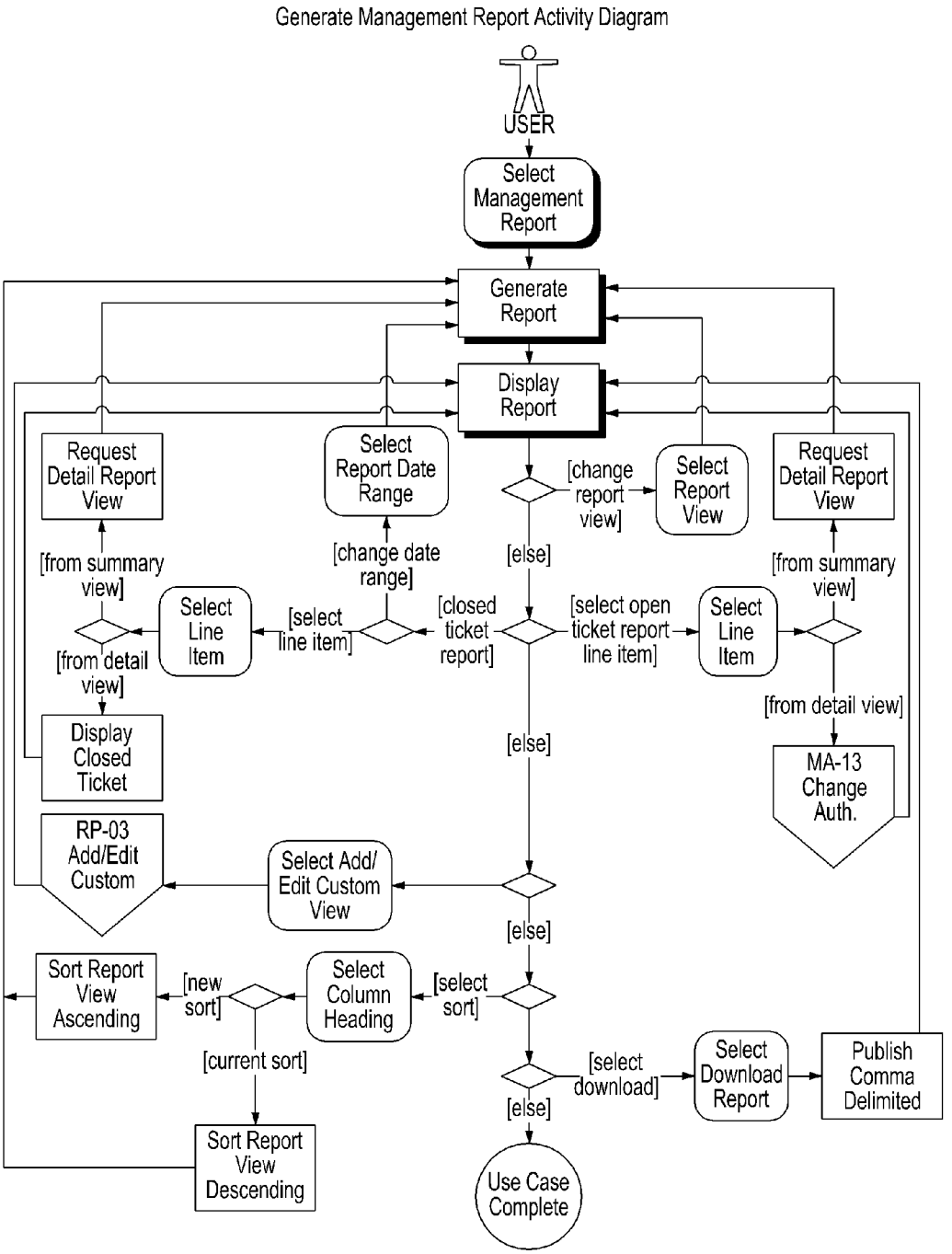
Generate Management Report Activity Diagram
USER
Select Management Report
Generate Report
Display Report
Request Detail Report View
Select Report Date Range
[change report view]
Select Report View
Request Detail Report View
[from summary view]
[change date range]
[else]
[from summary view]
Select Line Item
[select line item]
[closed ticket report]
[select open ticket report line item]
Select Line Item
[from detail view]
[from detail view]
Display Closed Ticket
[else]
MA-13 Change Auth.
RP-03 Add/Edit Custom
Select Add/ Edit Custom View
[else]
Sort Report View Ascending
[new sort]
Select Column Heading
[select sort]
[current sort]
[select download]
Select Download Report
Publish Comma Delimited
[else]
Sort Report View Descending
Use Case Complete

FIG. 148

	Report Sorted By											
	Adjuster				Repair Facility				Office			
	Open Detail	Open Summary	Closed Detail	Closed Summary	Open Detail	Open Summary	Closed Detail	Closed Summary	Open Detail	Open Summary	Closed Detail	Closed Summary
Adjuster Name	X	1	X	1					1		1	
Renter Name	1		1		1		1					
Claim Number	2		2		2		2		2		2	
Claim Type	3		3		3		3		3		3	2
Authorized Days*	6	5	6	5	6	5	6	5	6	5	6	5
Authorized Rate*	4	3	4	3	4	3	4	3	4	3	4	3
Rental Days*	5	4			5	4			5	4		
Billed Days*+			5	4			5	4			5	4
Days Behind*	7	6			7	6			7	6		
Number of Extensions*	8	7	7	6	8	7	7	6	8	7	7	6
Surcharges	9				9				9			
Authorized Amount*	10	8			10	8			10	8		
Amount Received*			9	8			9	8			9	8
Total Charges*			8	7			8	7			8	7
Billed Amount*			10	9			10	9			10	9
Total Contracts	X	2	X	2	X	2	X	2	X	2	X	X
Repair Facility Name					X	1	X	1				
Repair Facility Telephone					X		X					
Office Name									X	1	X	X
Month/Year												1

+ Not available in current state system. Being implemented by the ARMS Maintenance team.

FIG. 149

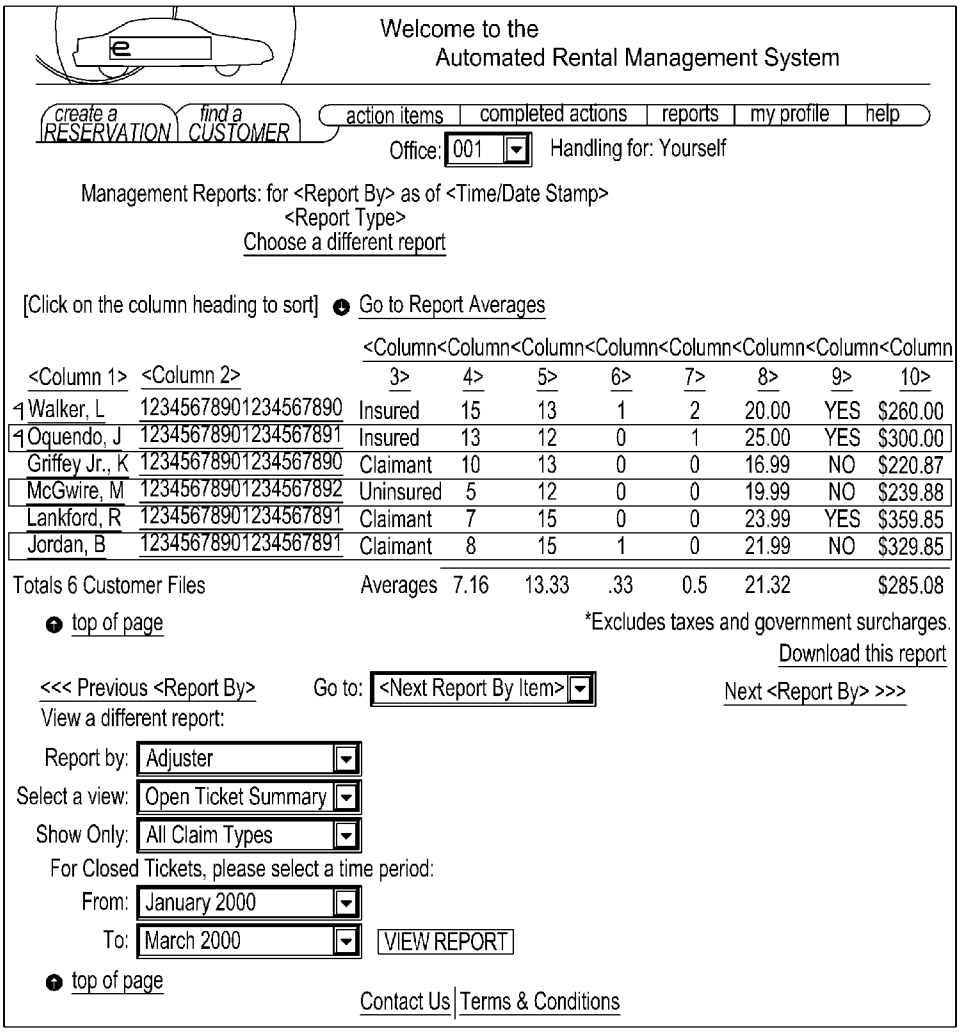
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Office: 001
Handling for: Yourself
Management Reports: for <Report By> as of <Time/Date Stamp>
<Report Type>
Choose a different report
[Click on the column heading to sort]
Go to Report Averages
<Column 1>
<Column 2>
<Column 3>
<Column 4>
<Column 5>
<Column 6>
<Column 7>
<Column 8>
<Column 9>
<Column 10>
Walker, L 12345678901234567890 Insured 15 13 1 2 20.00 YES $260.00
Oquendo, J 12345678901234567891 Insured 13 12 0 1 25.00 YES $300.00
Griffey Jr., K 12345678901234567890 Claimant 10 13 0 0 16.99 NO $220.87
McGwire, M 12345678901234567892 Uninsured 5 12 0 0 19.99 NO $239.88
Lankford, R 12345678901234567891 Claimant 7 15 0 0 23.99 YES $359.85
Jordan, B 12345678901234567891 Claimant 8 15 1 0 21.99 NO $329.85
Totals 6 Customer Files
Averages 7.16 13.33 .33 0.5 21.32 $285.08
top of page
*Excludes taxes and government surcharges.
Download this report
<<< Previous <Report By>
Go to: <Next Report By Item>
Next <Report By> >>>
View a different report:
Report by: Adjuster
Select a view: Open Ticket Summary
Show Only: All Claim Types
For Closed Tickets, please select a time period:
From: January 2000
To: March 2000
VIEW REPORT
top of page
Contact Us
Terms & Conditions

FIG. 150

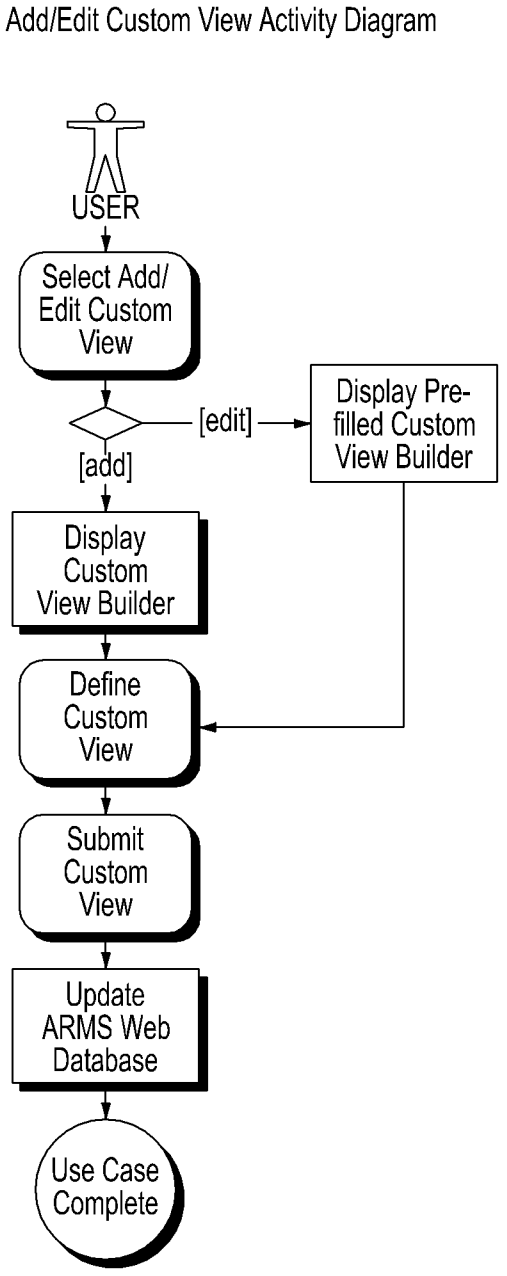
Add/Edit Custom View Activity Diagram
USER
Select Add/ Edit Custom View
[edit]
Display Pre-filled Custom View Builder
[add]
Display Custom View Builder
Define Custom View
Submit Custom View
Update ARMS Web Database
Use Case Complete

FIG. 151

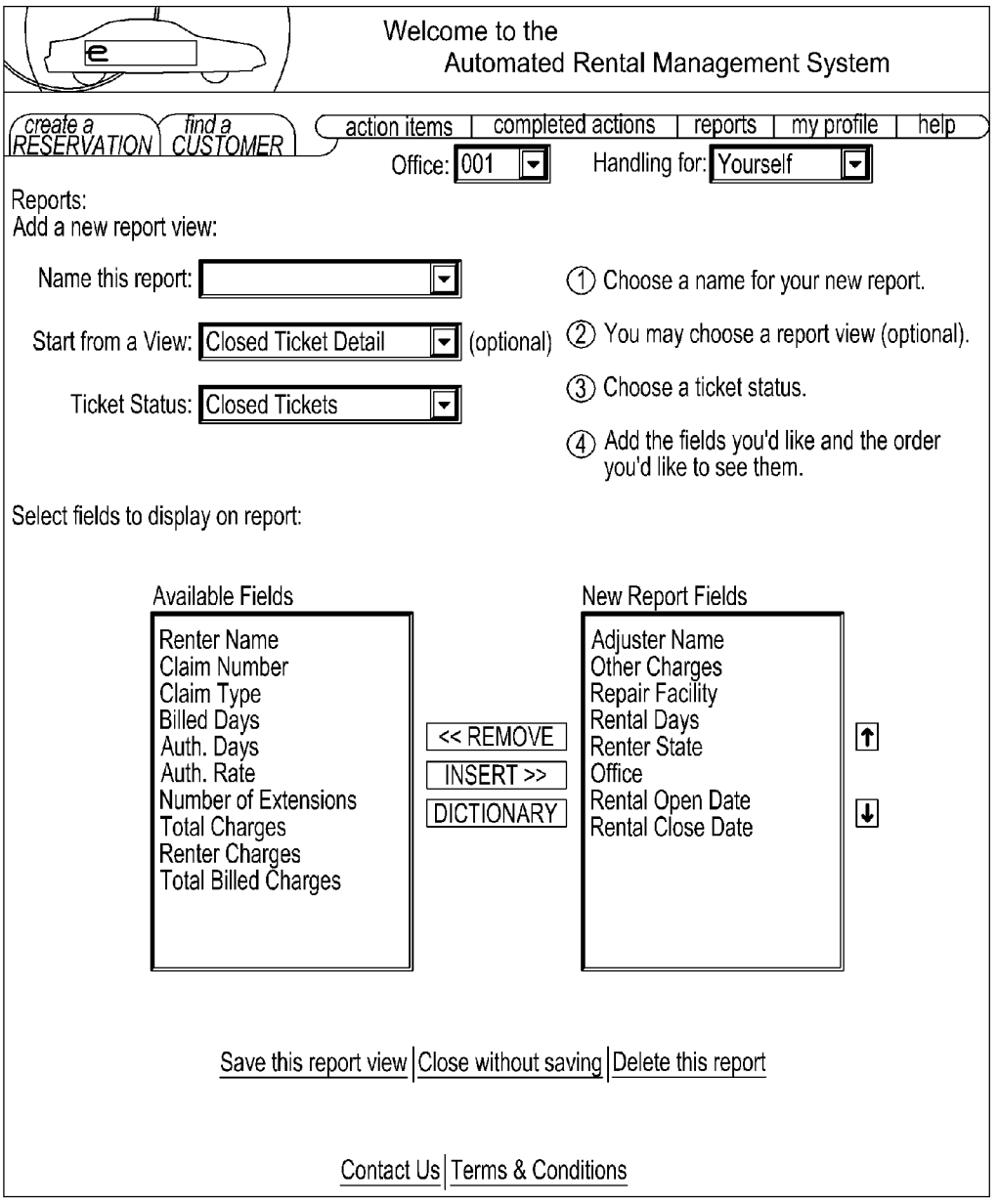
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Office: 001
Handling for: Yourself
Reports:
Add a new report view:
Name this report:
Start from a View: Closed Ticket Detail (optional)
Ticket Status: Closed Tickets
① Choose a name for your new report.
② You may choose a report view (optional).
③ Choose a ticket status.
④ Add the fields you'd like and the order you'd like to see them.
Select fields to display on report:
Available Fields
Renter Name
Claim Number
Claim Type
Billed Days
Auth. Days
Auth. Rate
Number of Extensions
Total Charges
Renter Charges
Total Billed Charges
<< REMOVE
INSERT >>
DICTIONARY
New Report Fields
Adjuster Name
Other Charges
Repair Facility
Rental Days
Renter State
Office
Rental Open Date
Rental Close Date
Save this report view
Close without saving
Delete this report
Contact Us
Terms & Conditions

FIG. 152

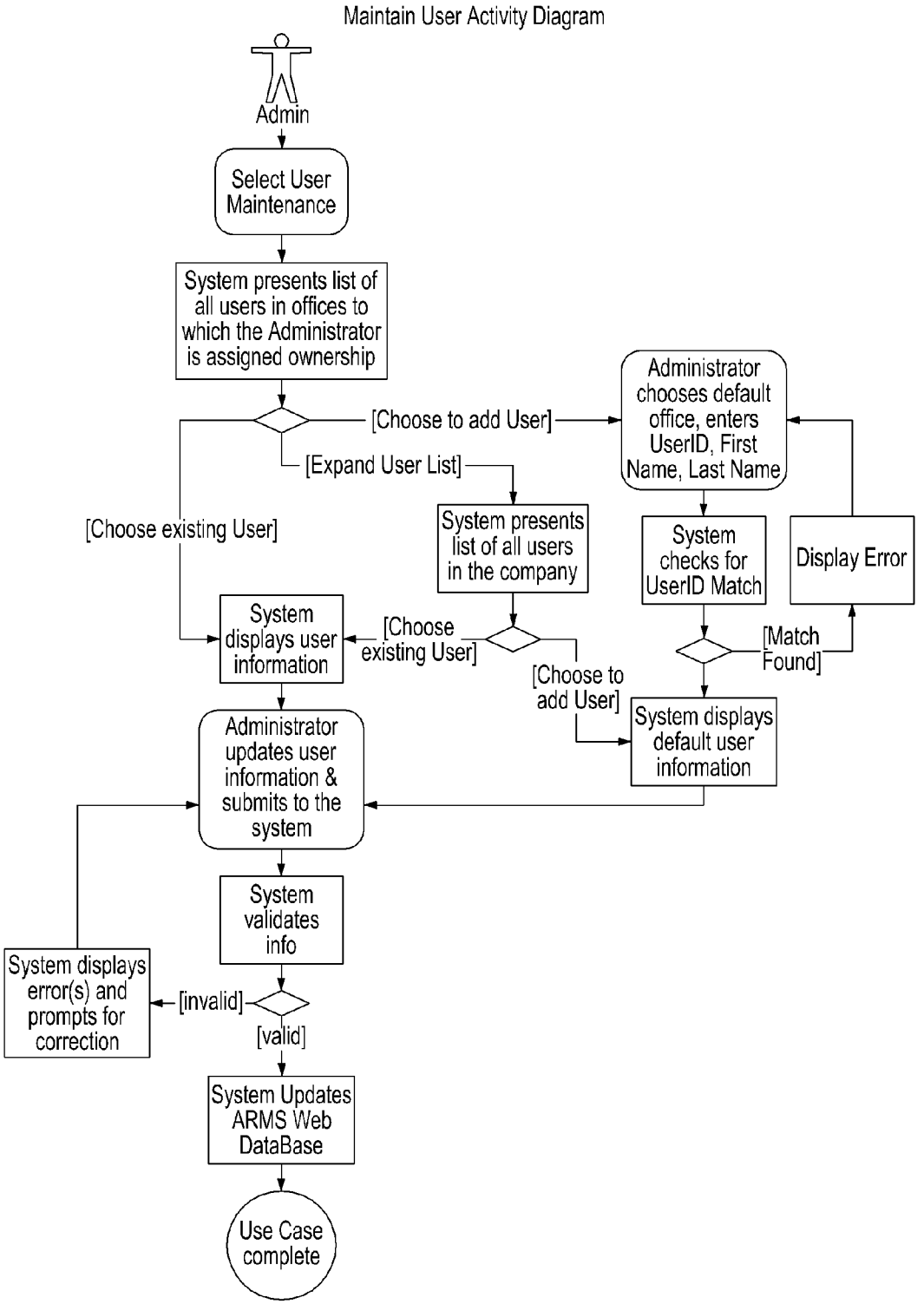
Maintain User Activity Diagram
Admin
Select User Maintenance
System presents list of all users in offices to which the Administrator is assigned ownership
[Choose to add User]
[Expand User List]
[Choose existing User]
Administrator chooses default office, enters UserID, First Name, Last Name
System presents list of all users in the company
System checks for UserID Match
Display Error
System displays user information
[Choose existing User]
[Match Found]
[Choose to add User]
System displays default user information
Administrator updates user information & submits to the system
System validates info
System displays error(s) and prompts for correction
[invalid]
[valid]
System Updates ARMS Web DataBase
Use Case complete

FIG. 153

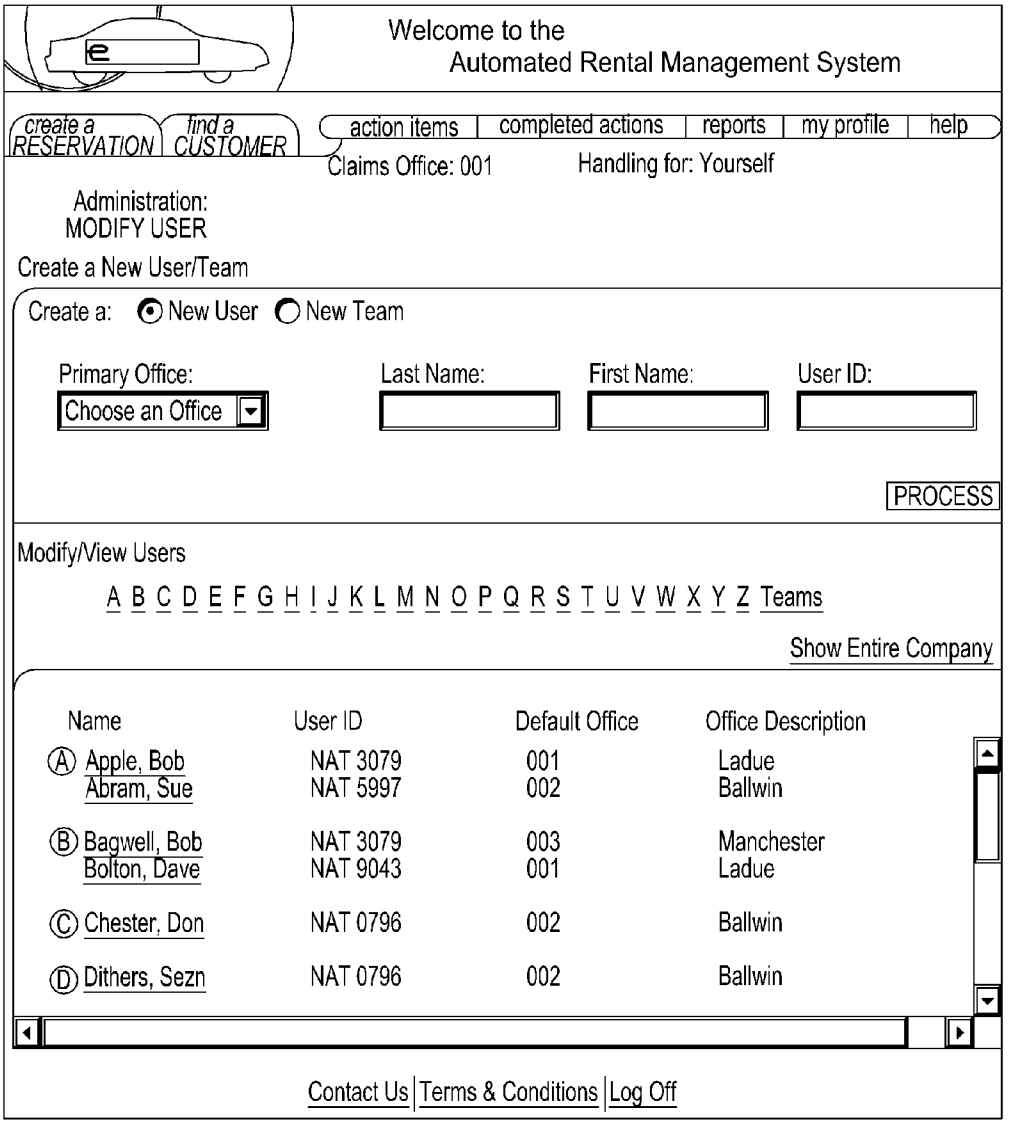
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims Office: 001
Handling for: Yourself
Administration:
MODIFY USER
Create a New User/Team
Create a: New User New Team
Primary Office:
Choose an Office
Last Name:
First Name:
User ID:
PROCESS
Modify/View Users
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Teams
Show Entire Company
Name
User ID
Default Office
Office Description
Ⓐ Apple, Bob
NAT 3079
001
Ladue
Abram, Sue
NAT 5997
002
Ballwin
Ⓑ Bagwell, Bob
NAT 3079
003
Manchester
Bolton, Dave
NAT 9043
001
Ladue
Ⓒ Chester, Don
NAT 0796
002
Ballwin
Ⓓ Dithers, Sezn
NAT 0796
002
Ballwin
Contact Us
Terms & Conditions
Log Off

FIG. 154

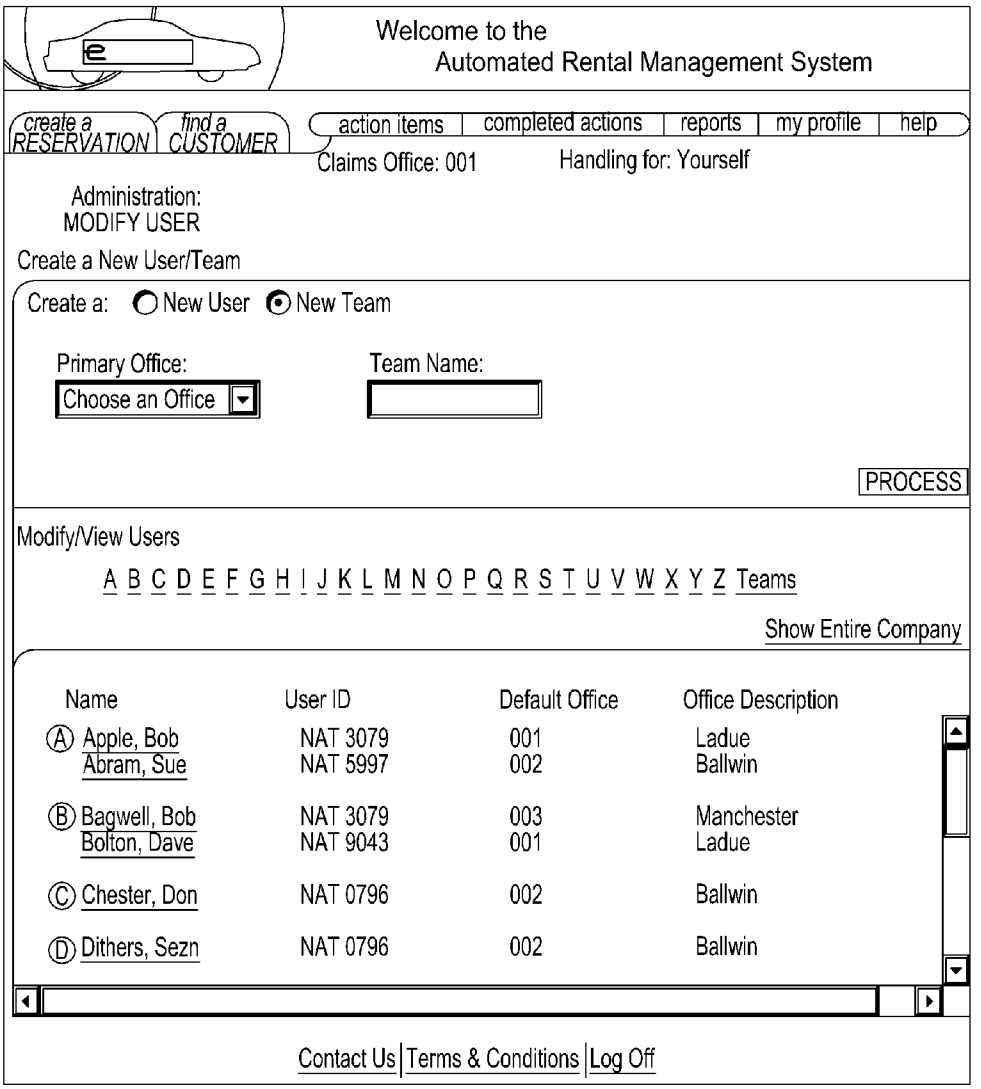
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims Office: 001
Handling for: Yourself
Administration:
MODIFY USER
Create a New User/Team
Create a: New User New Team
Primary Office:
Choose an Office
Team Name:
PROCESS
Modify/View Users
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Teams
Show Entire Company
Name
User ID
Default Office
Office Description
Ⓐ Apple, Bob
NAT 3079
001
Ladue
Abram, Sue
NAT 5997
002
Ballwin
Ⓑ Bagwell, Bob
NAT 3079
003
Manchester
Bolton, Dave
NAT 9043
001
Ladue
Ⓒ Chester, Don
NAT 0796
002
Ballwin
Ⓓ Dithers, Sezn
NAT 0796
002
Ballwin
Contact Us
Terms & Conditions
Log Off

FIG. 155

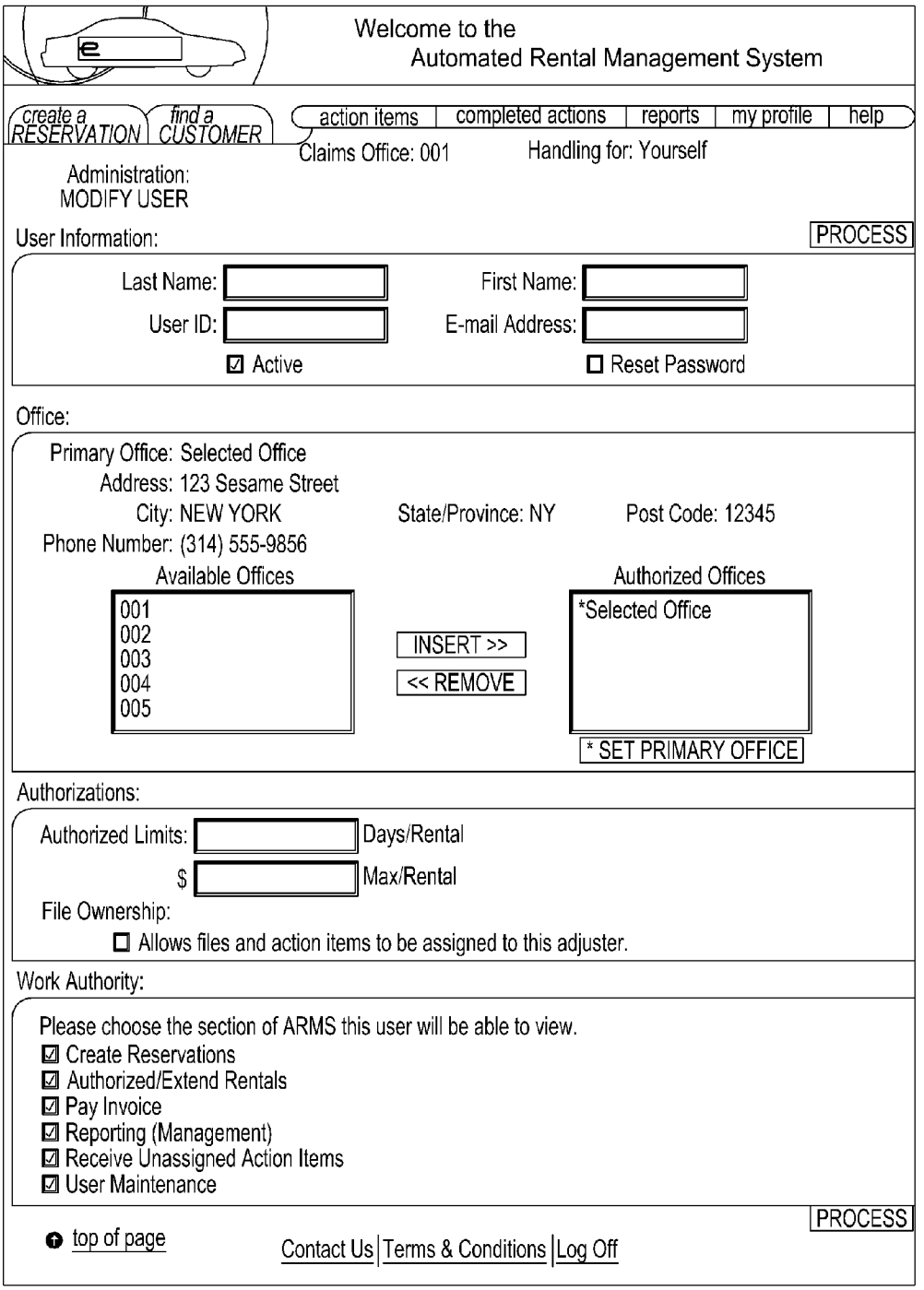
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Claims Office: 001
Handling for: Yourself
Administration:
MODIFY USER
User Information:
PROCESS
Last Name:
First Name:
User ID:
E-mail Address:
Active
Reset Password
Office:
Primary Office: Selected Office
Address: 123 Sesame Street
City: NEW YORK
State/Province: NY
Post Code: 12345
Phone Number: (314) 555-9856
Available Offices
001
002
003
004
005
INSERT >>
<< REMOVE
Authorized Offices
*Selected Office
* SET PRIMARY OFFICE
Authorizations:
Authorized Limits:
Days/Rental
$
Max/Rental
File Ownership:
Allows files and action items to be assigned to this adjuster.
Work Authority:
Please choose the section of ARMS this user will be able to view.
Create Reservations
Authorized/Extend Rentals
Pay Invoice
Reporting (Management)
Receive Unassigned Action Items
User Maintenance
PROCESS
top of page
Contact Us
Terms & Conditions
Log Off

FIG. 156

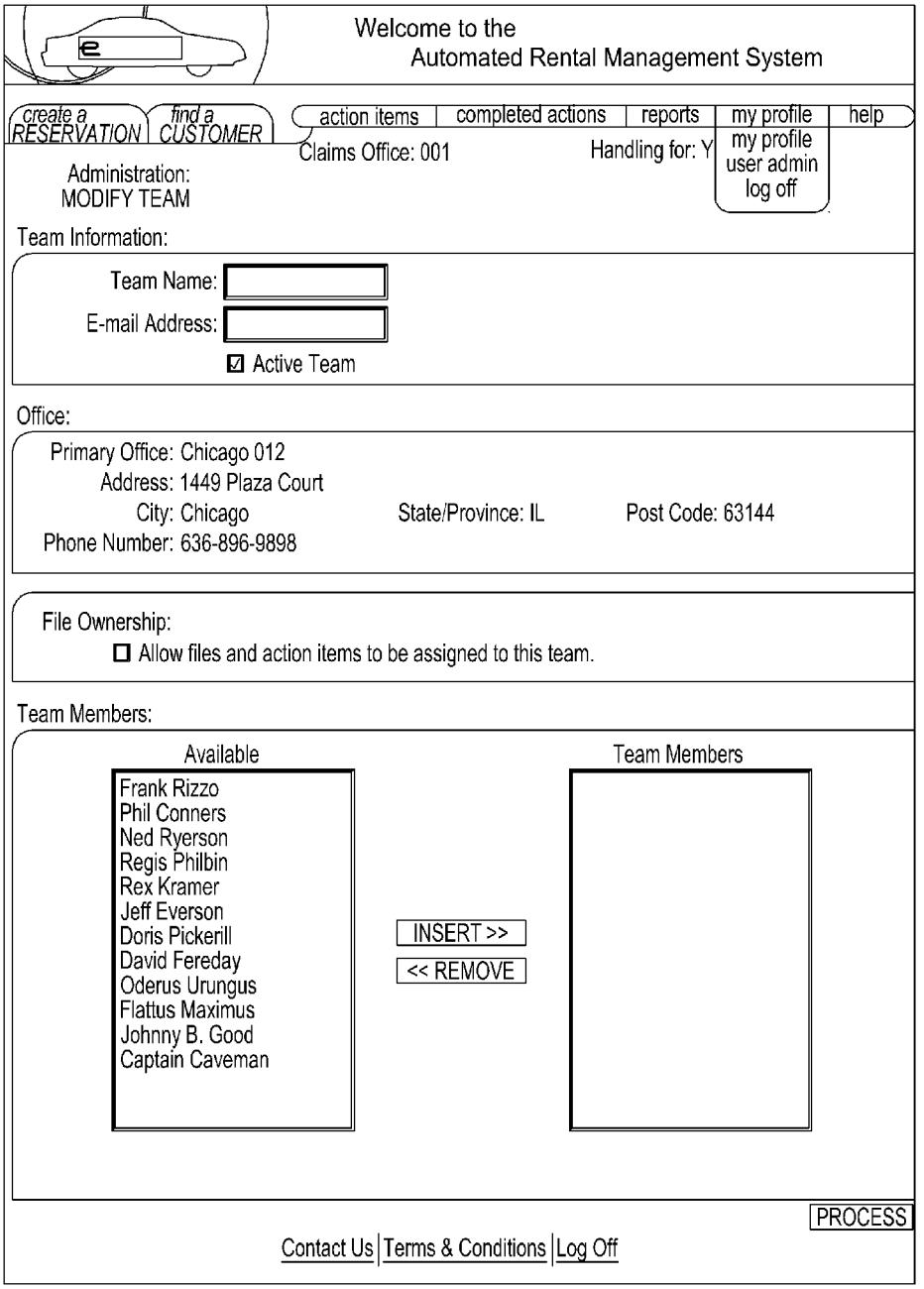
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
my profile
user admin
log off
Claims Office: 001
Handling for: Y
Administration:
MODIFY TEAM
Team Information:
Team Name:
E-mail Address:
Active Team
Office:
Primary Office: Chicago 012
Address: 1449 Plaza Court
City: Chicago
State/Province: IL
Post Code: 63144
Phone Number: 636-896-9898
File Ownership:
Allow files and action items to be assigned to this team.
Team Members:
Available
Frank Rizzo
Phil Conners
Ned Ryerson
Regis Philbin
Rex Kramer
Jeff Everson
Doris Pickerill
David Fereday
Oderus Urungus
Flattus Maximus
Johnny B. Good
Captain Caveman
INSERT >>
<< REMOVE
Team Members
PROCESS
Contact Us
Terms & Conditions
Log Off

FIG. 157

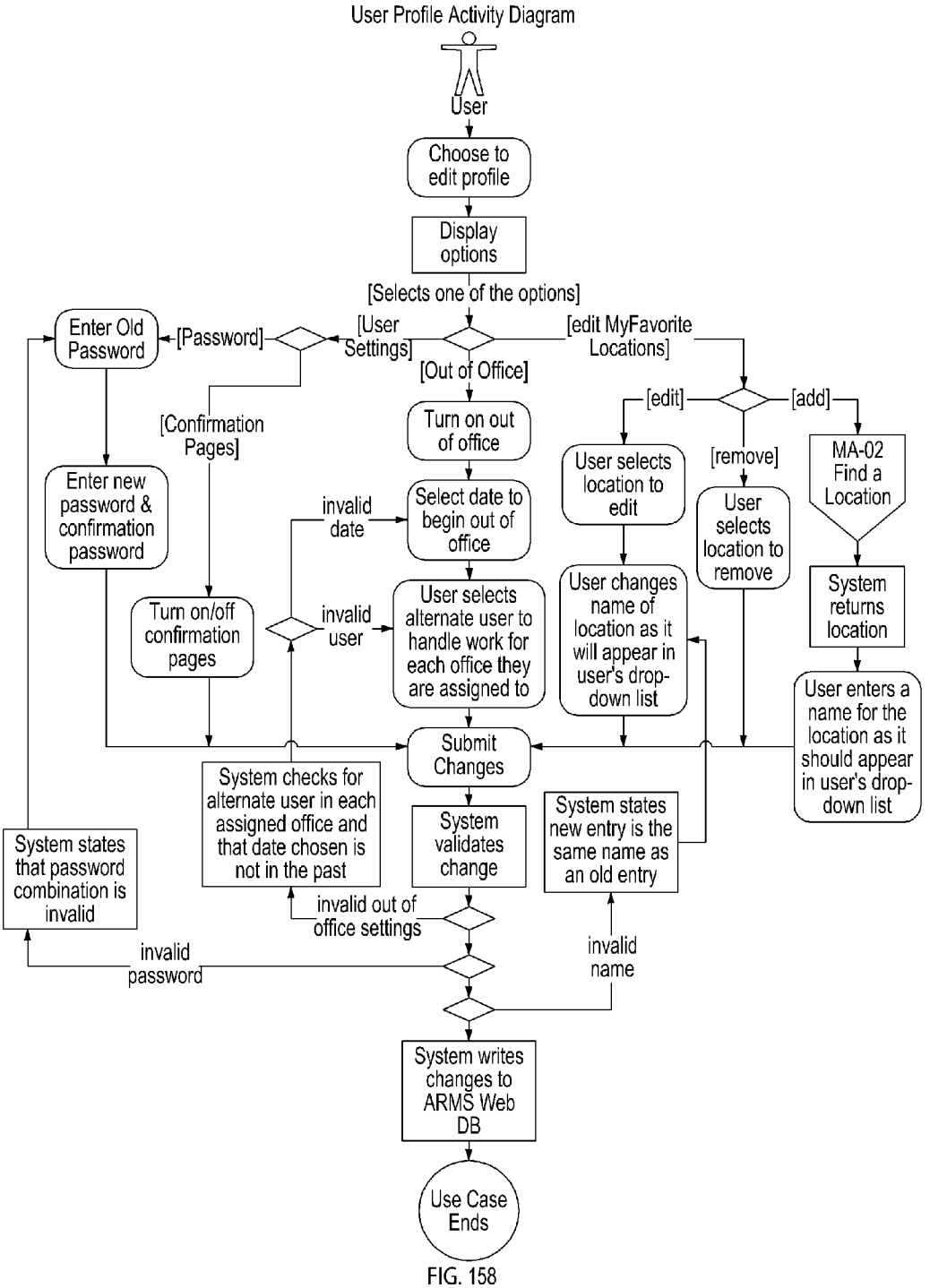
User Profile Activity Diagram
User
Choose to edit profile
Display options
[Selects one of the options]
Enter Old Password
[Password]
[User Settings]
[edit MyFavorite Locations]
[Out of Office]
[Confirmation Pages]
Turn on out of office
[edit]
[add]
[remove]
Enter new password & confirmation password
invalid date
Select date to begin out of office
User selects location to edit
User selects location to remove
MA-02 Find a Location
Turn on/off confirmation pages
invalid user
User selects alternate user to handle work for each office they are assigned to
User changes name of location as it will appear in user's drop-down list
System returns location
User enters a name for the location as it should appear in user's drop-down list
Submit Changes
System checks for alternate user in each assigned office and that date chosen is not in the past
System validates change
System states new entry is the same name as an old entry
System states that password combination is invalid
invalid out of office settings
invalid password
invalid name
System writes changes to ARMS Web DB
Use Case Ends

FIG. 158

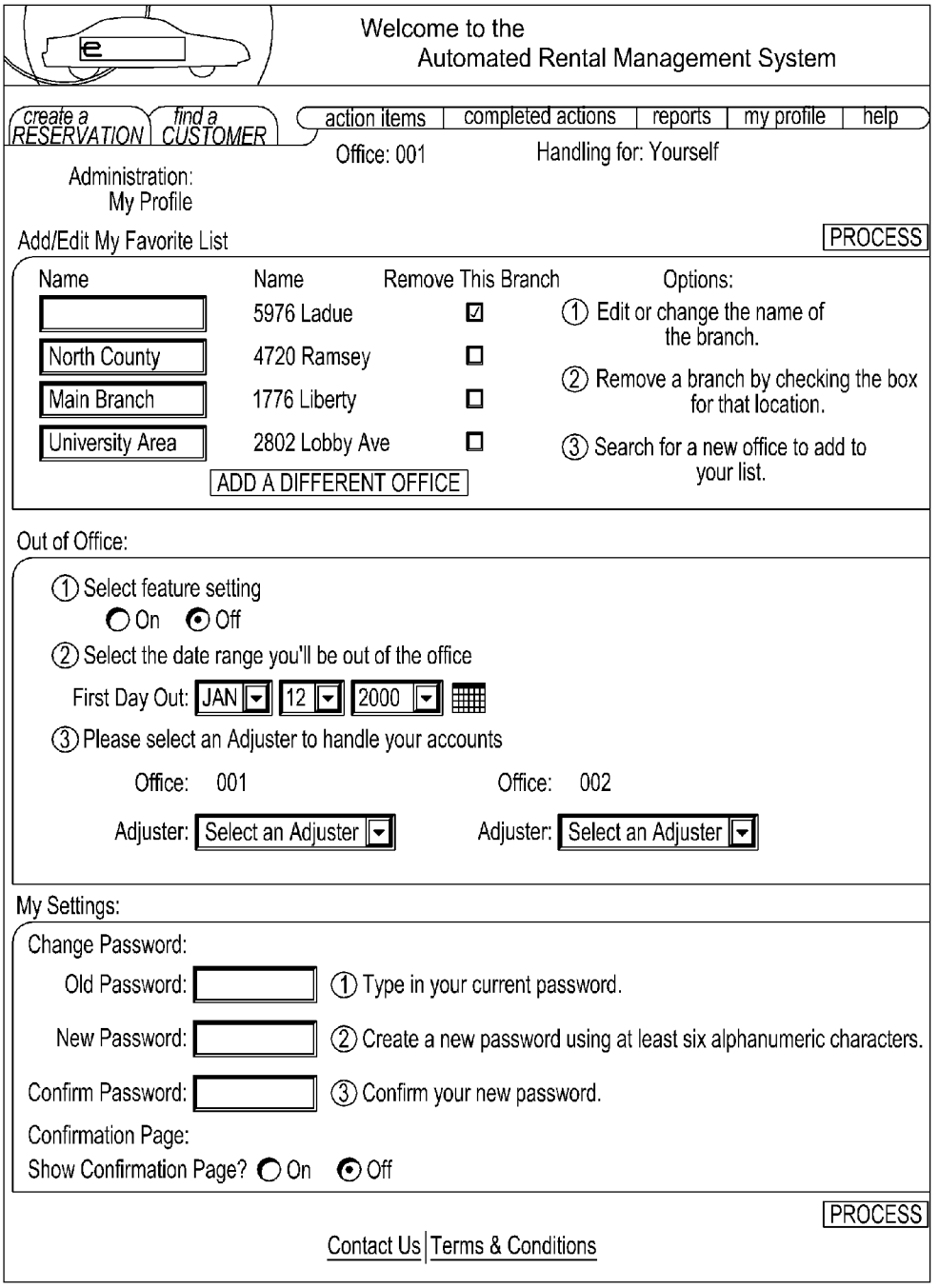
Welcome to the
Automated Rental Management System
create a RESERVATION
find a CUSTOMER
action items
completed actions
reports
my profile
help
Office: 001
Handling for: Yourself
Administration:
My Profile
Add/Edit My Favorite List
PROCESS
Name
Name
Remove This Branch
Options:
5976 Ladue
North County
4720 Ramsey
Main Branch
1776 Liberty
University Area
2802 Lobby Ave
ADD A DIFFERENT OFFICE
① Edit or change the name of the branch.
② Remove a branch by checking the box for that location.
③ Search for a new office to add to your list.
Out of Office:
① Select feature setting
On
Off
② Select the date range you'll be out of the office
First Day Out:
JAN
12
2000
③ Please select an Adjuster to handle your accounts
Office: 001
Office: 002
Adjuster:
Select an Adjuster
Adjuster:
Select an Adjuster
My Settings:
Change Password:
Old Password:
① Type in your current password.
New Password:
② Create a new password using at least six alphanumeric characters.
Confirm Password:
③ Confirm your new password.
Confirmation Page:
Show Confirmation Page? On Off
PROCESS
Contact Us
Terms & Conditions

FIG. 159

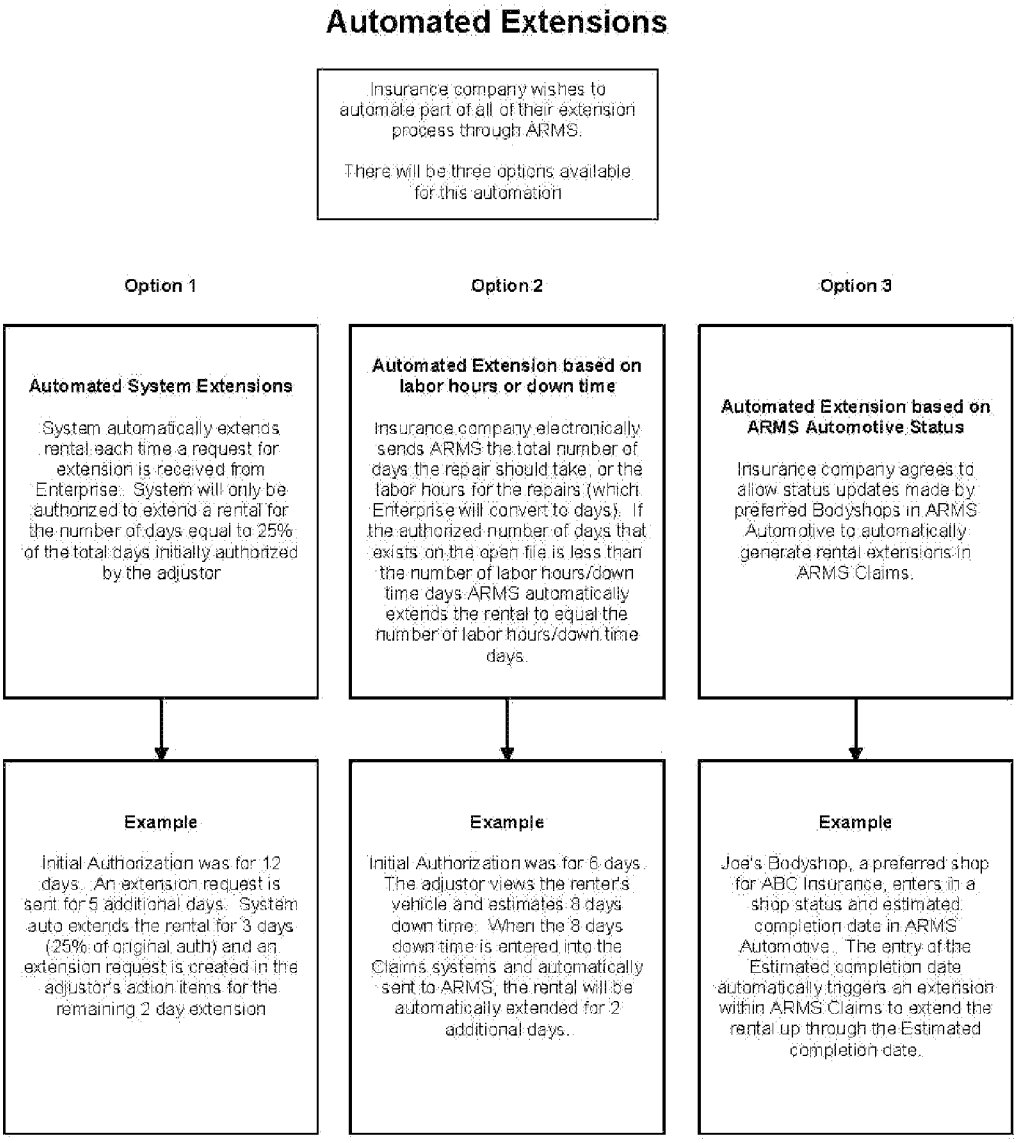
Automated Extensions
Insurance company wishes to automate part of all of their extension process through ARMS.
There will be three options available for this automation
Option 1
Automated System Extensions
System automatically extends rental each time a request for extension is received from Enterprise. System will only be authorized to extend a rental for the number of days equal to 25% of the total days initially authorized by the adjustor
Example
Initial Authorization was for 12 days. An extension request is sent for 5 additional days. System auto extends the rental for 3 days (25% of original auth) and an extension request is created in the adjustor's action items for the remaining 2 day extension
Option 2
Automated Extension based on labor hours or down time
Insurance company electronically sends ARMS the total number of days the repair should take, or the labor hours for the repairs (which Enterprise will convert to days). If the authorized number of days that exists on the open file is less than the number of labor hours/down time days ARMS automatically extends the rental to equal the number of labor hours/down time days.
Example
Initial Authorization was for 6 days. The adjustor views the renter's vehicle and estimates 8 days down time. When the 8 days down time is entered into the Claims systems and automatically sent to ARMS, the rental will be automatically extended for 2 additional days.
Option 3
Automated Extension based on ARMS Automotive Status
Insurance company agrees to allow status updates made by preferred Bodyshops in ARMS Automotive to automatically generate rental extensions in ARMS Claims.
Example
Joe's Bodyshop, a preferred shop for ABC Insurance, enters in a shop status and estimated completion date in ARMS Automotive. The entry of the Estimated completion date automatically triggers an extension within ARMS Claims to extend the rental up through the Estimated completion date.

Figure 160

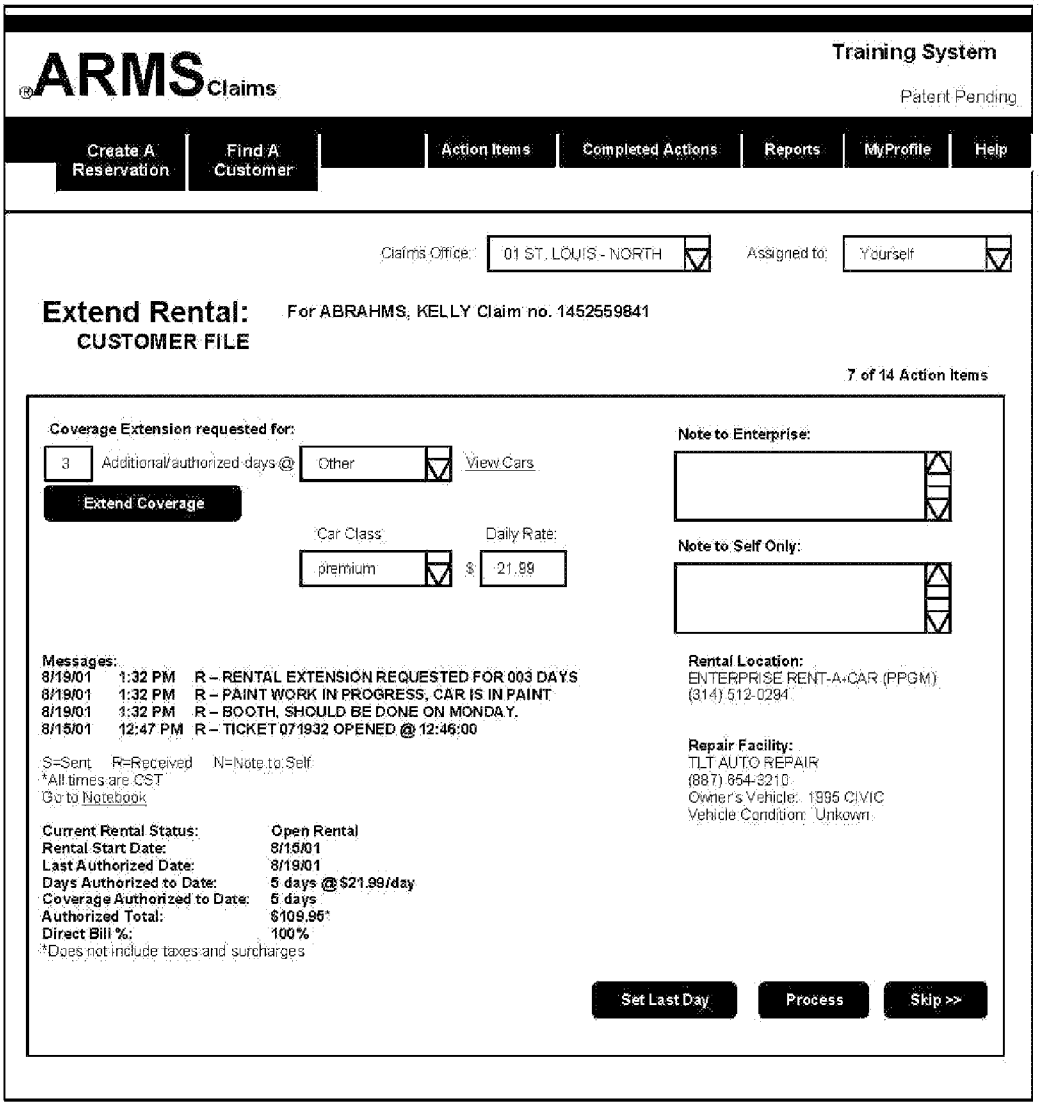
ARMS Claims
Training System
Patent Pending
Create A Reservation
Find A Customer
Action Items
Completed Actions
Reports
MyProfile
Help
Claims Office: 01 ST. LOUIS - NORTH
Assigned to: Yourself
Extend Rental:
CUSTOMER FILE
For ABRAHMS, KELLY Claim no. 1452559841
7 of 14 Action Items
Coverage Extension requested for:
3 Additional/authorized days @ Other View Cars
Extend Coverage
Car Class: premium
Daily Rate: $ 21.99
Note to Enterprise:
Note to Self Only:
Messages:
8/19/01 1:32 PM R – RENTAL EXTENSION REQUESTED FOR 003 DAYS
8/19/01 1:32 PM R – PAINT WORK IN PROGRESS, CAR IS IN PAINT
8/19/01 1:32 PM R – BOOTH, SHOULD BE DONE ON MONDAY.
8/15/01 12:47 PM R – TICKET 071932 OPENED @ 12:46:00
S=Sent R=Received N=Note to Self
*All times are CST
Go to Notebook
Rental Location:
ENTERPRISE RENT-A-CAR (PPGM)
(314) 512-0294
Repair Facility:
TLT AUTO REPAIR
(887) 654-3210
Owner's Vehicle: 1995 CIVIC
Vehicle Condition: Unkown
Current Rental Status: Open Rental
Rental Start Date: 8/15/01
Last Authorized Date: 8/19/01
Days Authorized to Date: 5 days @ $21.99/day
Coverage Authorized to Date: 5 days
Authorized Total: $109.95*
Direct Bill %: 100%
*Does not include taxes and surcharges
Set Last Day
Process
Skip >>

Figure 161

ARMS Claims — Training System — Patent Pending — 8/24/01

Create A Reservation | Find A Customer | Sync | Action Items | Completed Actions | Reports | My Profile | Help | Sync Log | Preferences | History |

Claims Office: 01 ST. LOUIS-NORTH Assigned to: Yourself

Action Items: Welcome Back Cali Summer. Off-line Sync

Below please find the action items that require your attention.
To sort the Action Items, click the column title of your chosen sorting method
ex: to sort by date, click ("DATE RECEIVED")

TYPE	DATE RECEIVED	RENTER'S NAME	CLAIM NUMBER	ADJUSTER
Direct Bill Request	8/10/01	GREEN, SARAH	25698745	SUMMER, CALI
Direct Bill Request	8/10/01	MILLER, KIM	359685112	SUMMER, CALI
Message	7/30/01	HAYES, KARI	4837812588	SUMMER, CALI
Message	8/13/01	MURPHY, RANDY	4597985841	SUMMER, CALI
Message (Pended)	8/13/01	PENA, KALISA	2185635690	SUMMER, CALI
Message (Pended)	8/13/01	RAMEN, PHILIP	5916398212	SUMMER, CALI
Extension	8/12/01	ABRAHMS, KELLY	1452569841	SUMMER, CALI
Extension	8/13/01	JONES, MARK	1458796541	SUMMER, CALI
Extension	8/11/01	MONTANA, KIM	4578145254	SUMMER, CALI
Extension	8/11/01	OWENS, GINA	1452687414	SUMMER, CALI
Extension (Pended)	8/10/01	GEYER, ZACK	3659784212	SUMMER, CALI
Extension (Pended)	8/10/01	GIBBS, PAULA	2587413695	SUMMER, CALI
Extension (Pended)	8/13/01	JOHNSON, KRISTA	58903217875	SUMMER, CALI
Unassigned items	8/10/01	(6) Action items		UNASSIGNED
Item(s) in the list		Action Item(s) 1 to 14 of 14		

Over 24 hours old.

New information has come in.

Top of Page

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FIG. 162

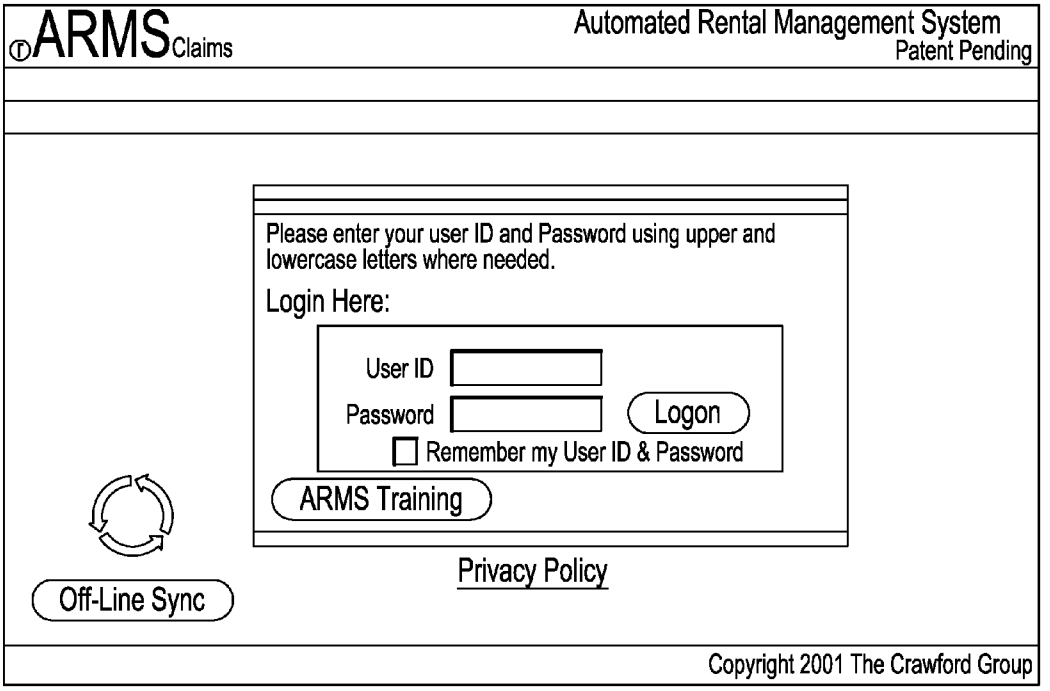
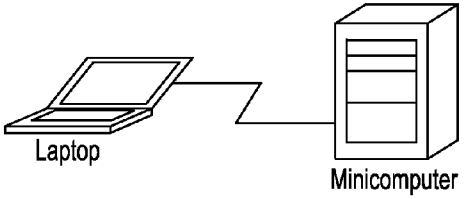

ARMS Claims
Automated Rental Management System
Patent Pending
Please enter your user ID and Password using upper and lowercase letters where needed.
Login Here:
User ID
Password
Logon
Remember my User ID & Password
ARMS Training
Privacy Policy
Off-Line Sync
Copyright 2001 The Crawford Group

FIG. 163

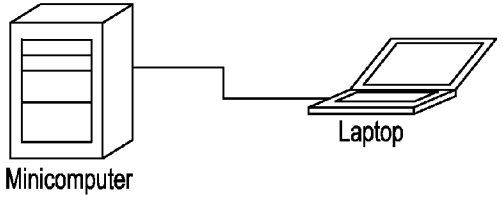
Step 1: Adjust is attached to the ARMS Claims system through an Internet connections



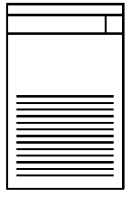
ARMS Claims Offline Access

Step 2: The adjuster selects the synchronize file options to download all of his ARMS Claims data to a database on his system.

Step 3: The adjust then disconnects from the Internet site and can now access the ARMS claims programs on his laptop to work offline. These programs use the data downloaded during the sync process to allow the adjustor to create reservations, authorize direct bills, extend rentals, approve invoices and set last day on rentals.



Step 5: An issue log is displayed to the adjuster if the data they are syncing is older than the current data the adjuster can choose to update the record or ignore.



Step 4: Once the adjust re-establishes a connection to the ARMS Claims product he selects the Re-sync option which will por the data to the main databases.

Step 6: The data is re-synced with the main system. All records and data fields are updated real time.

FIG. 164

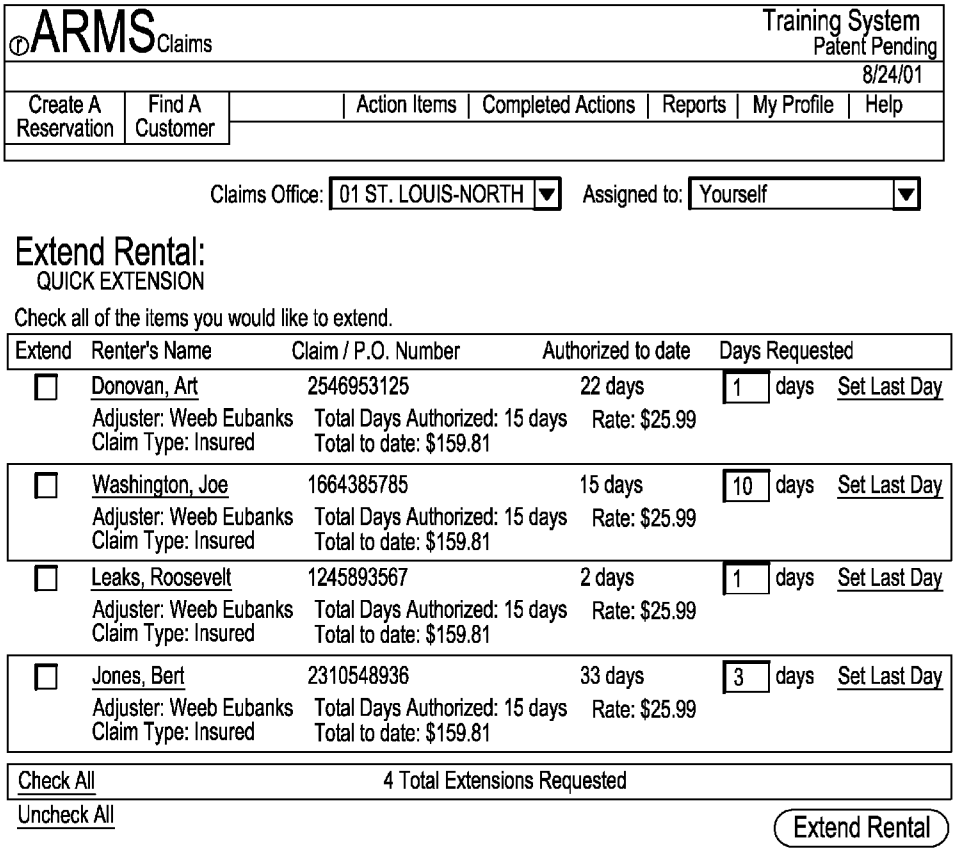

ARMS Claims
Training System
Patent Pending
8/24/01
Create A Reservation
Find A Customer
Action Items
Completed Actions
Reports
My Profile
Help
Claims Office: 01 ST. LOUIS-NORTH
Assigned to: Yourself
Extend Rental:
QUICK EXTENSION
Check all of the items you would like to extend.
Extend
Renter's Name
Claim / P.O. Number
Authorized to date
Days Requested
Donovan, Art
2546953125
22 days
1 days
Set Last Day
Adjuster: Weeb Eubanks
Total Days Authorized: 15 days
Rate: $25.99
Claim Type: Insured
Total to date: $159.81
Washington, Joe
1664385785
15 days
10 days
Set Last Day
Adjuster: Weeb Eubanks
Total Days Authorized: 15 days
Rate: $25.99
Claim Type: Insured
Total to date: $159.81
Leaks, Roosevelt
1245893567
2 days
1 days
Set Last Day
Adjuster: Weeb Eubanks
Total Days Authorized: 15 days
Rate: $25.99
Claim Type: Insured
Total to date: $159.81
Jones, Bert
2310548936
33 days
3 days
Set Last Day
Adjuster: Weeb Eubanks
Total Days Authorized: 15 days
Rate: $25.99
Claim Type: Insured
Total to date: $159.81
Check All
4 Total Extensions Requested
Uncheck All
Extend Rental

FIG. 165

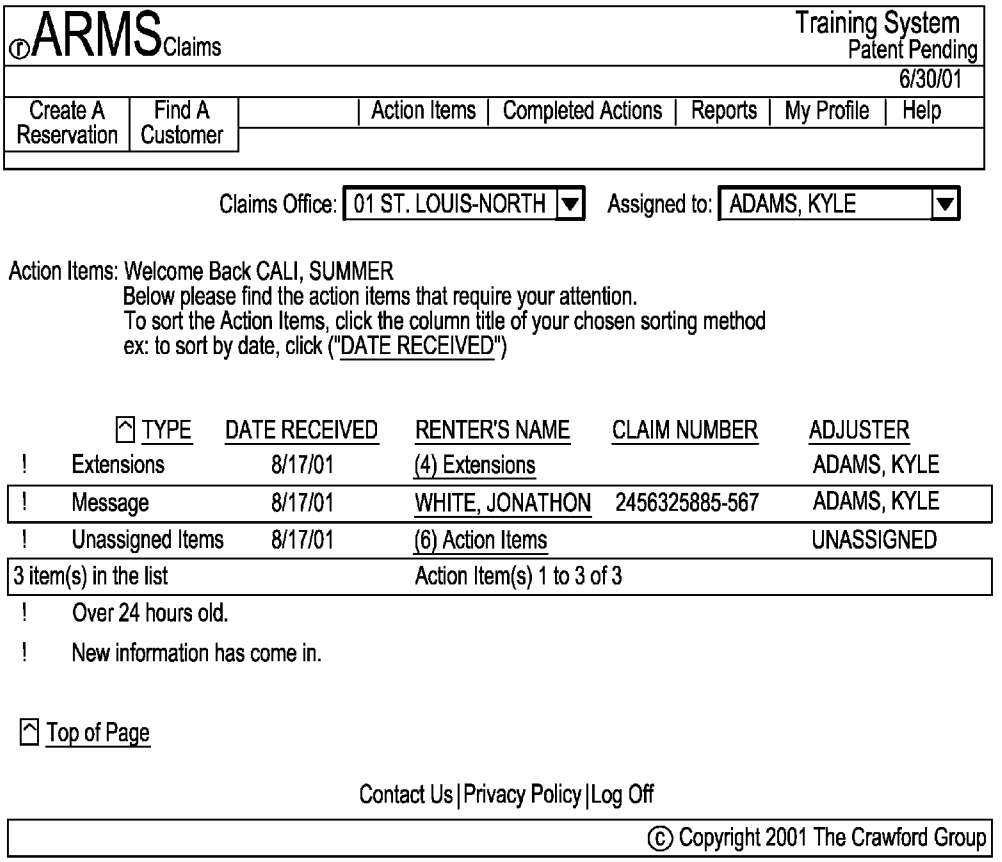

ARMS Claims
Training System
Patent Pending
6/30/01
Create A Reservation
Find A Customer
Action Items
Completed Actions
Reports
My Profile
Help
Claims Office: 01 ST. LOUIS-NORTH
Assigned to: ADAMS, KYLE
Action Items: Welcome Back CALI, SUMMER
Below please find the action items that require your attention.
To sort the Action Items, click the column title of your chosen sorting method
ex: to sort by date, click ("DATE RECEIVED")
TYPE
DATE RECEIVED
RENTER'S NAME
CLAIM NUMBER
ADJUSTER
! Extensions 8/17/01 (4) Extensions ADAMS, KYLE
! Message 8/17/01 WHITE, JONATHON 2456325885-567 ADAMS, KYLE
! Unassigned Items 8/17/01 (6) Action Items UNASSIGNED
3 item(s) in the list
Action Item(s) 1 to 3 of 3
! Over 24 hours old.
! New information has come in.
Top of Page
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FIG. 166

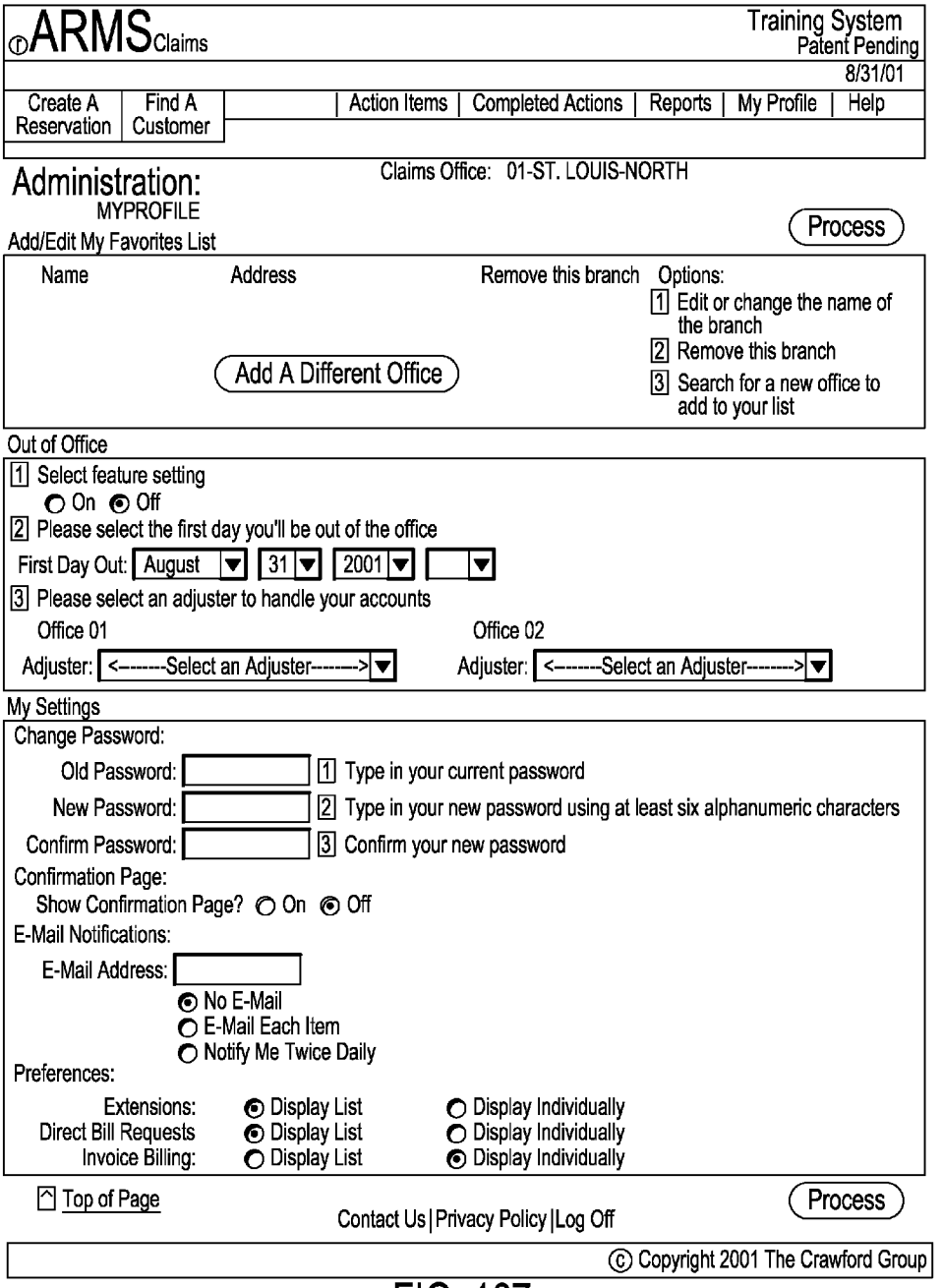
ARMS Claims
Training System
Patent Pending
8/31/01
Create A Reservation
Find A Customer
Action Items | Completed Actions | Reports | My Profile | Help
Administration:
MYPROFILE
Claims Office: 01-ST. LOUIS-NORTH
Process
Add/Edit My Favorites List
Name
Address
Remove this branch
Options:
1 Edit or change the name of the branch
2 Remove this branch
3 Search for a new office to add to your list
Add A Different Office
Out of Office
1 Select feature setting
On Off
2 Please select the first day you'll be out of the office
First Day Out: August 31 2001
3 Please select an adjuster to handle your accounts
Office 01
Adjuster: <-------Select an Adjuster-------->
Office 02
Adjuster: <-------Select an Adjuster-------->
My Settings
Change Password:
Old Password:
1 Type in your current password
New Password:
2 Type in your new password using at least six alphanumeric characters
Confirm Password:
3 Confirm your new password
Confirmation Page:
Show Confirmation Page? On Off
E-Mail Notifications:
E-Mail Address:
No E-Mail
E-Mail Each Item
Notify Me Twice Daily
Preferences:
Extensions: Display List Display Individually
Direct Bill Requests Display List Display Individually
Invoice Billing: Display List Display Individually
Top of Page
Process
Contact Us | Privacy Policy | Log Off
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FIG. 167

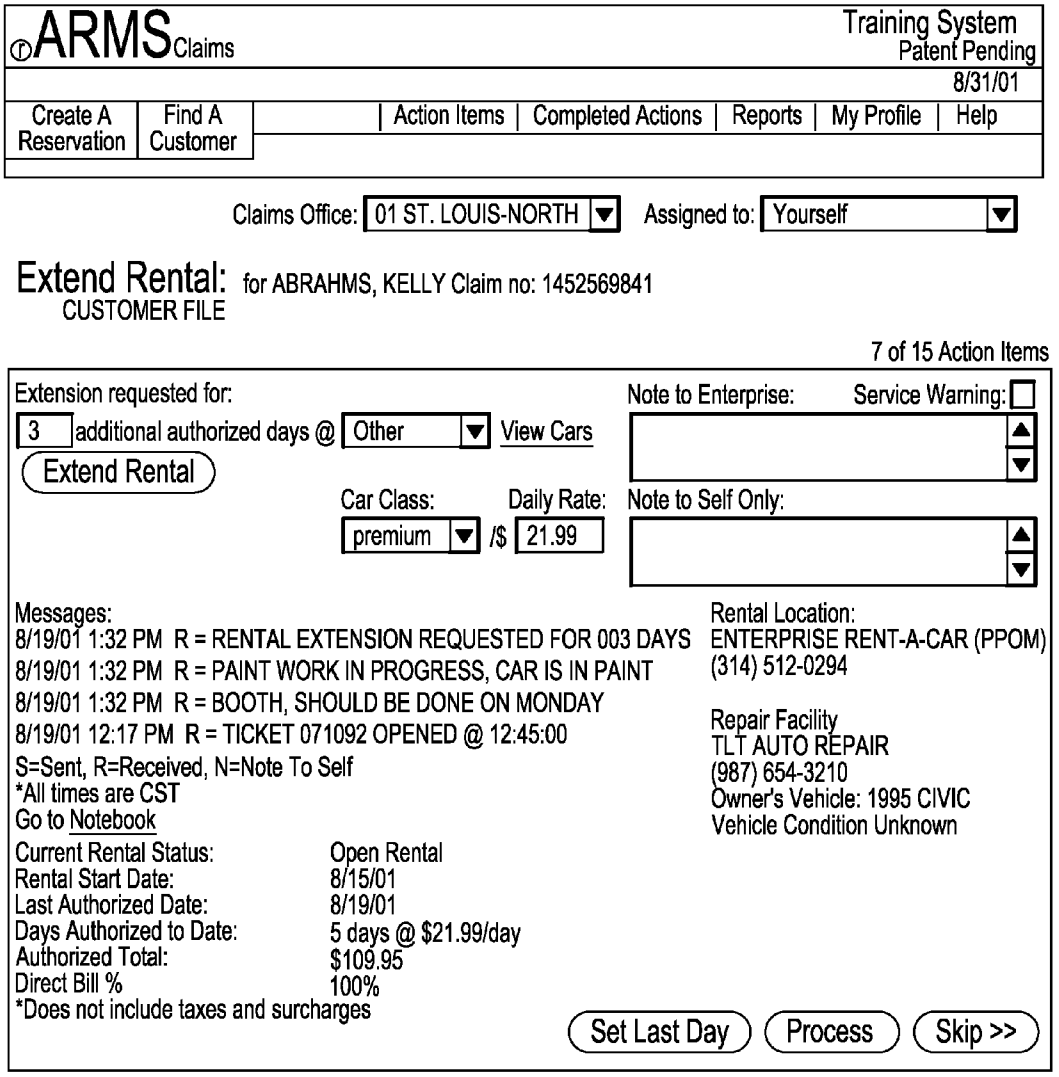
ARMS Claims
Training System
Patent Pending
8/31/01
Create A Reservation
Find A Customer
Action Items
Completed Actions
Reports
My Profile
Help
Claims Office: 01 ST. LOUIS-NORTH
Assigned to: Yourself
Extend Rental: for ABRAHMS, KELLY Claim no: 1452569841
CUSTOMER FILE
7 of 15 Action Items
Extension requested for:
3 additional authorized days @ Other View Cars
Extend Rental
Car Class:
premium
Daily Rate:
/$ 21.99
Note to Enterprise:
Service Warning:
Note to Self Only:
Messages:
8/19/01 1:32 PM R = RENTAL EXTENSION REQUESTED FOR 003 DAYS
8/19/01 1:32 PM R = PAINT WORK IN PROGRESS, CAR IS IN PAINT
8/19/01 1:32 PM R = BOOTH, SHOULD BE DONE ON MONDAY
8/19/01 12:17 PM R = TICKET 071092 OPENED @ 12:45:00
S=Sent, R=Received, N=Note To Self
*All times are CST
Go to Notebook
Rental Location:
ENTERPRISE RENT-A-CAR (PPOM)
(314) 512-0294
Repair Facility
TLT AUTO REPAIR
(987) 654-3210
Owner's Vehicle: 1995 CIVIC
Vehicle Condition Unknown
Current Rental Status: Open Rental
Rental Start Date: 8/15/01
Last Authorized Date: 8/19/01
Days Authorized to Date: 5 days @ $21.99/day
Authorized Total: $109.95
Direct Bill % 100%
*Does not include taxes and surcharges
Set Last Day
Process
Skip >>

FIG. 168

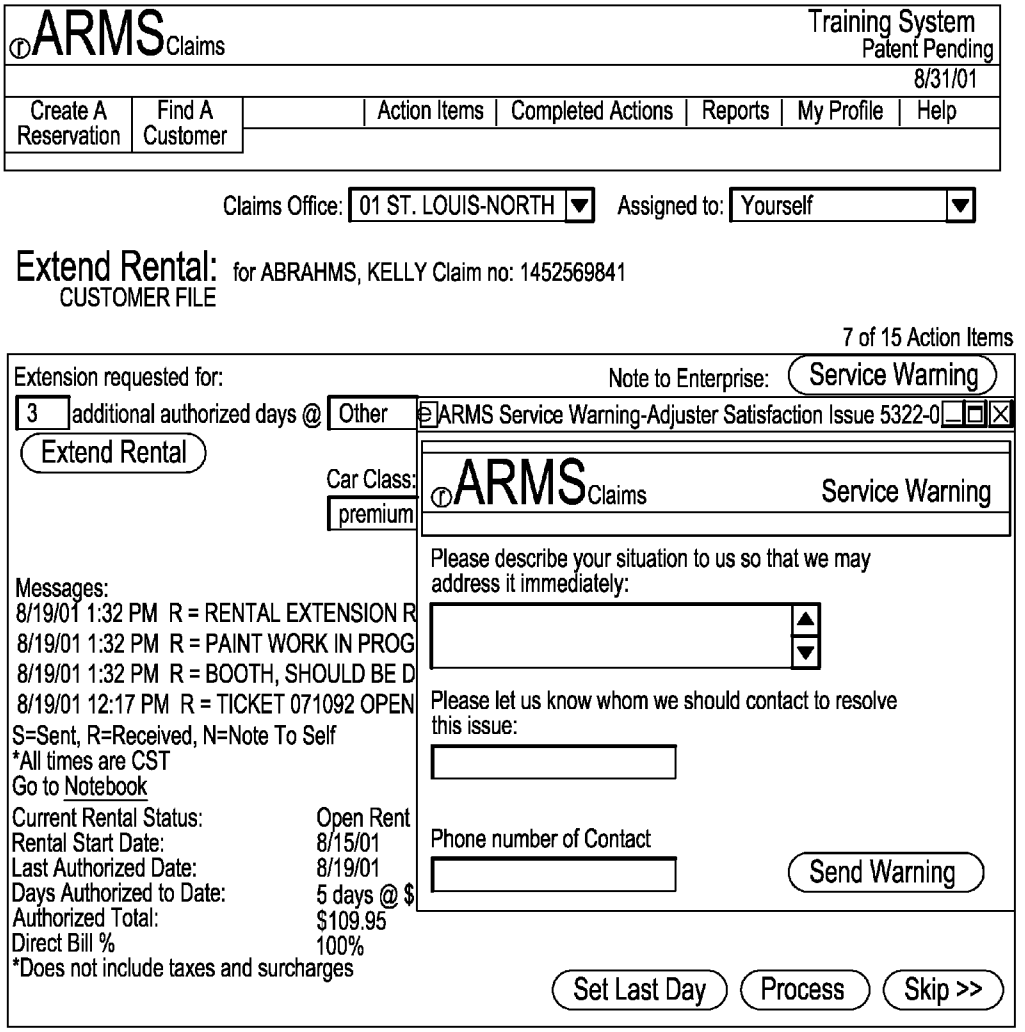
ARMS Claims
Training System
Patent Pending
8/31/01
Create A Reservation
Find A Customer
Action Items
Completed Actions
Reports
My Profile
Help
Claims Office: 01 ST. LOUIS-NORTH
Assigned to: Yourself
Extend Rental: for ABRAHMS, KELLY Claim no: 1452569841
CUSTOMER FILE
7 of 15 Action Items
Extension requested for:
3 additional authorized days @ Other
Extend Rental
Car Class:
premium
Note to Enterprise:
Service Warning
ARMS Service Warning-Adjuster Satisfaction Issue 5322-0
ARMS Claims
Service Warning
Please describe your situation to us so that we may address it immediately:
Please let us know whom we should contact to resolve this issue:
Phone number of Contact
Send Warning
Messages:
8/19/01 1:32 PM R = RENTAL EXTENSION R
8/19/01 1:32 PM R = PAINT WORK IN PROG
8/19/01 1:32 PM R = BOOTH, SHOULD BE D
8/19/01 12:17 PM R = TICKET 071092 OPEN
S=Sent, R=Received, N=Note To Self
*All times are CST
Go to Notebook
Current Rental Status: Open Rent
Rental Start Date: 8/15/01
Last Authorized Date: 8/19/01
Days Authorized to Date: 5 days @ $
Authorized Total: $109.95
Direct Bill % 100%
*Does not include taxes and surcharges
Set Last Day
Process
Skip >>

FIG. 169

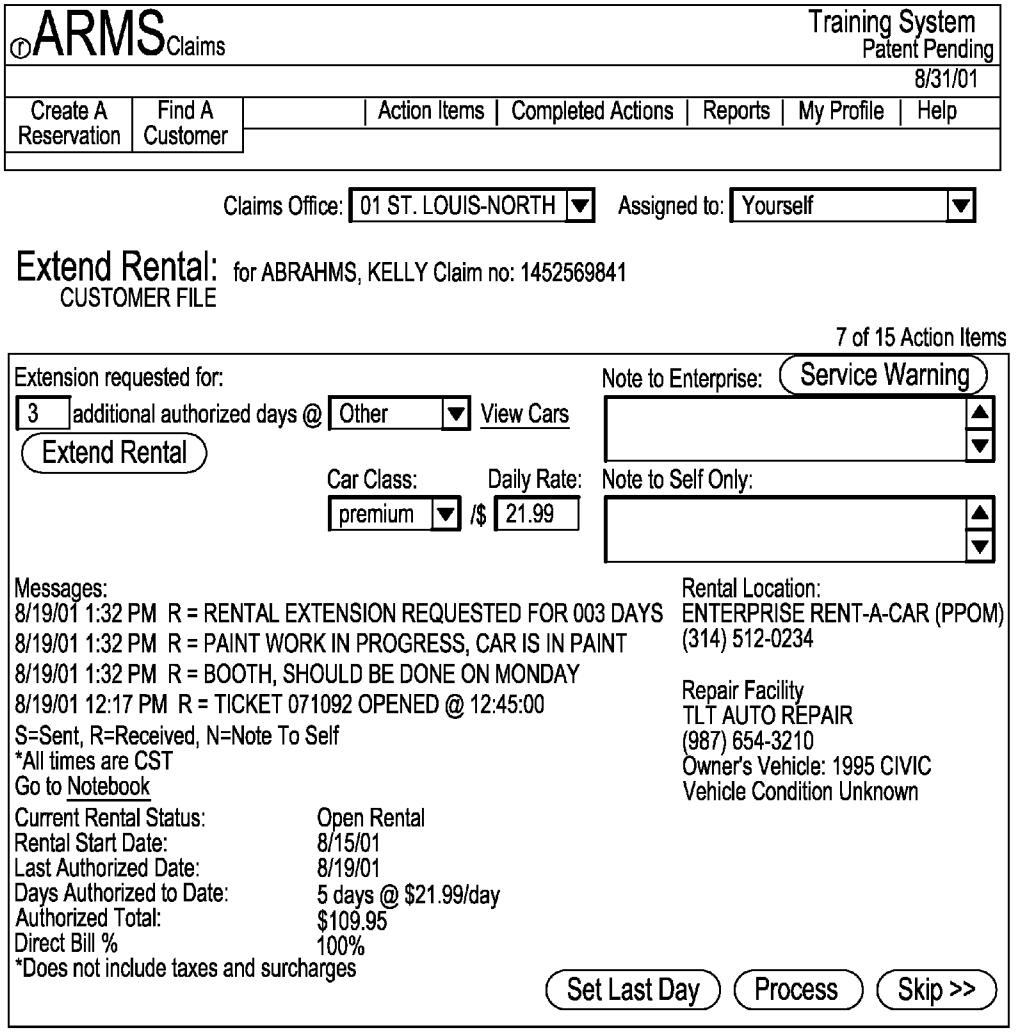
ARMS Claims
Training System
Patent Pending
8/31/01
Create A Reservation
Find A Customer
Action Items | Completed Actions | Reports | My Profile | Help
Claims Office: 01 ST. LOUIS-NORTH
Assigned to: Yourself
Extend Rental: for ABRAHMS, KELLY Claim no: 1452569841
CUSTOMER FILE
7 of 15 Action Items
Extension requested for:
3 additional authorized days @ Other View Cars
Extend Rental
Car Class: premium
Daily Rate: /$ 21.99
Note to Enterprise: Service Warning
Note to Self Only:
Messages:
8/19/01 1:32 PM R = RENTAL EXTENSION REQUESTED FOR 003 DAYS
8/19/01 1:32 PM R = PAINT WORK IN PROGRESS, CAR IS IN PAINT
8/19/01 1:32 PM R = BOOTH, SHOULD BE DONE ON MONDAY
8/19/01 12:17 PM R = TICKET 071092 OPENED @ 12:45:00
S=Sent, R=Received, N=Note To Self
*All times are CST
Go to Notebook
Rental Location:
ENTERPRISE RENT-A-CAR (PPOM)
(314) 512-0234
Repair Facility
TLT AUTO REPAIR
(987) 654-3210
Owner's Vehicle: 1995 CIVIC
Vehicle Condition Unknown
Current Rental Status: Open Rental
Rental Start Date: 8/15/01
Last Authorized Date: 8/19/01
Days Authorized to Date: 5 days @ $21.99/day
Authorized Total: $109.95
Direct Bill % 100%
*Does not include taxes and surcharges
Set Last Day
Process
Skip >>

FIG. 170

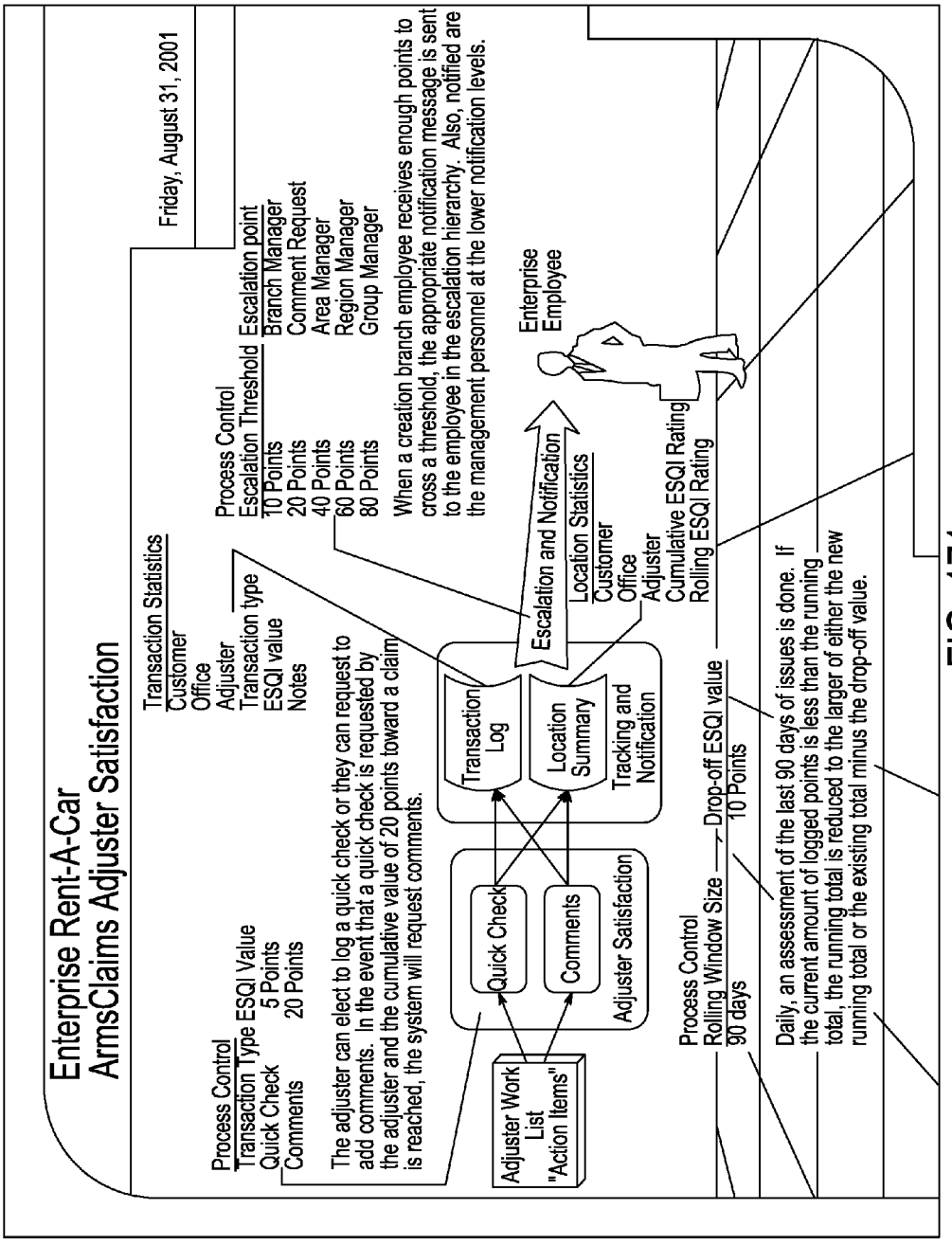
Enterprise Rent-A-Car
ArmsClaims Adjuster Satisfaction
Friday, August 31, 2001
Transaction Statistics
Customer
Office
Adjuster
Transaction type
ESQI value
Notes
Process Control
Transaction Type ESQI Value
Quick Check 5 Points
Comments 20 Points
The adjuster can elect to log a quick check or they can request to add comments. In the event that a quick check is requested by the adjuster and the cumulative value of 20 points toward a claim is reached, the system will request comments.
Process Control
Escalation Threshold Escalation point
10 Points Branch Manager
20 Points Comment Request
40 Points Area Manager
60 Points Region Manager
80 Points Group Manager
When a creation branch employee receives enough points to cross a threshold, the appropriate notification message is sent to the employee in the escalation hierarchy. Also, notified are the management personnel at the lower notification levels.
Escalation and Notification
Enterprise
Employee
Location Statistics
Customer
Office
Adjuster
Cumulative ESQI Rating
Rolling ESQI Rating
Transaction Log
Location Summary
Tracking and Notification
Adjuster Work List "Action Items"
Quick Check
Comments
Adjuster Satisfaction
Process Control
Rolling Window Size
90 days
Drop-off ESQI value
10 Points
Daily, an assessment of the last 90 days of issues is done. If the current amount of logged points is less than the running total, the running total is reduced to the larger of either the new running total or the existing total minus the drop-off value.

FIG. 171

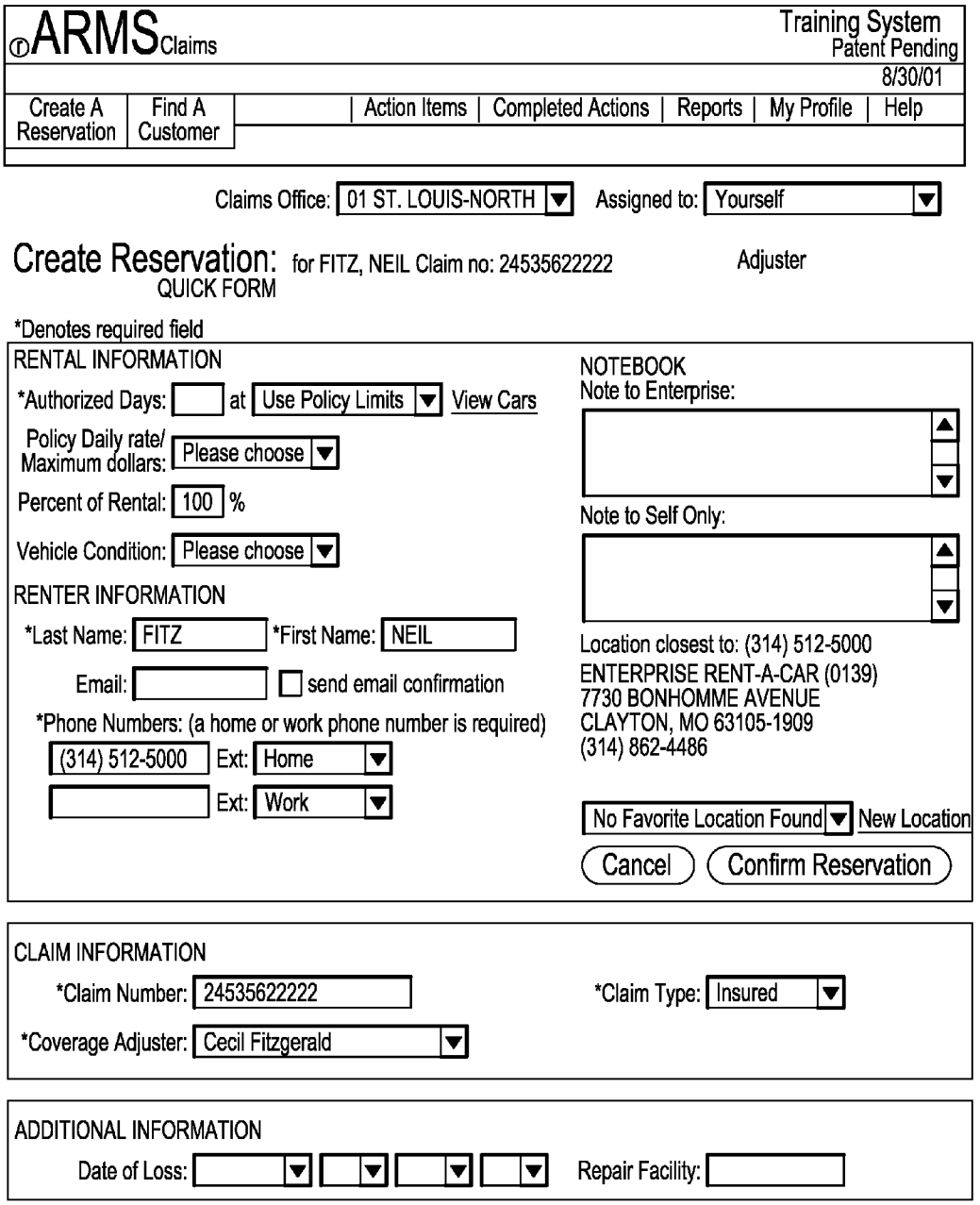
ARMS Claims
Training System
Patent Pending
8/30/01
Create A Reservation
Find A Customer
Action Items | Completed Actions | Reports | My Profile | Help
Claims Office: 01 ST. LOUIS-NORTH
Assigned to: Yourself
Create Reservation: for FITZ, NEIL Claim no: 24535622222
QUICK FORM
Adjuster
*Denotes required field
RENTAL INFORMATION
*Authorized Days:
at Use Policy Limits
View Cars
Policy Daily rate/ Maximum dollars: Please choose
Percent of Rental: 100 %
Vehicle Condition: Please choose
RENTER INFORMATION
*Last Name: FITZ
*First Name: NEIL
Email:
send email confirmation
*Phone Numbers: (a home or work phone number is required)
(314) 512-5000 Ext: Home
Ext: Work
NOTEBOOK
Note to Enterprise:
Note to Self Only:
Location closest to: (314) 512-5000
ENTERPRISE RENT-A-CAR (0139)
7730 BONHOMME AVENUE
CLAYTON, MO 63105-1909
(314) 862-4486
No Favorite Location Found
New Location
Cancel
Confirm Reservation
CLAIM INFORMATION
*Claim Number: 24535622222
*Claim Type: Insured
*Coverage Adjuster: Cecil Fitzgerald
ADDITIONAL INFORMATION
Date of Loss:
Repair Facility:

FIG. 172

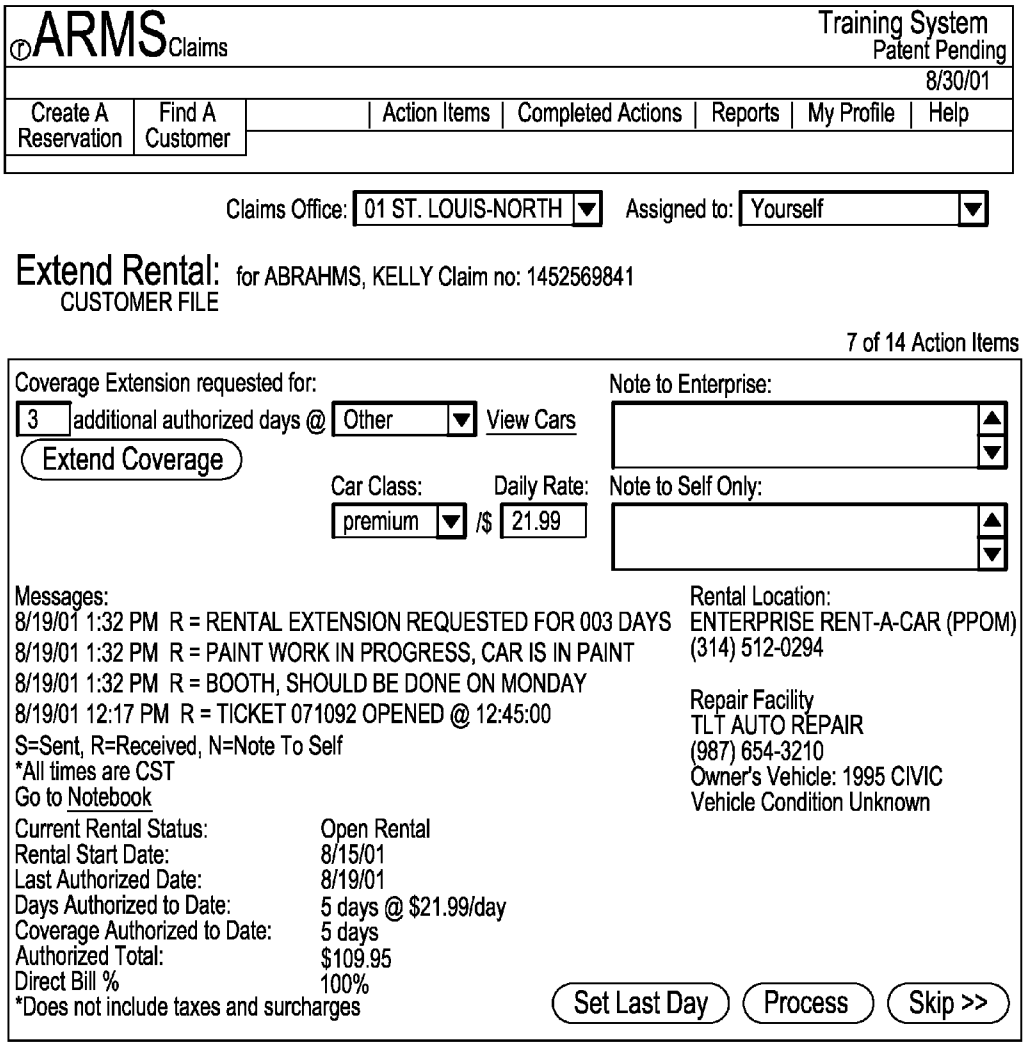
ARMS Claims
Training System
Patent Pending
8/30/01
Create A Reservation
Find A Customer
Action Items
Completed Actions
Reports
My Profile
Help
Claims Office: 01 ST. LOUIS-NORTH
Assigned to: Yourself
Extend Rental: for ABRAHMS, KELLY Claim no: 1452569841
CUSTOMER FILE
7 of 14 Action Items
Coverage Extension requested for:
3 additional authorized days @ Other
View Cars
Extend Coverage
Car Class:
premium
Daily Rate:
/$ 21.99
Note to Enterprise:
Note to Self Only:
Messages:
8/19/01 1:32 PM R = RENTAL EXTENSION REQUESTED FOR 003 DAYS
8/19/01 1:32 PM R = PAINT WORK IN PROGRESS, CAR IS IN PAINT
8/19/01 1:32 PM R = BOOTH, SHOULD BE DONE ON MONDAY
8/19/01 12:17 PM R = TICKET 071092 OPENED @ 12:45:00
S=Sent, R=Received, N=Note To Self
*All times are CST
Go to Notebook
Rental Location:
ENTERPRISE RENT-A-CAR (PPOM)
(314) 512-0294
Repair Facility
TLT AUTO REPAIR
(987) 654-3210
Owner's Vehicle: 1995 CIVIC
Vehicle Condition Unknown
Current Rental Status: Open Rental
Rental Start Date: 8/15/01
Last Authorized Date: 8/19/01
Days Authorized to Date: 5 days @ $21.99/day
Coverage Authorized to Date: 5 days
Authorized Total: $109.95
Direct Bill % 100%
*Does not include taxes and surcharges
Set Last Day
Process
Skip >>

FIG. 173

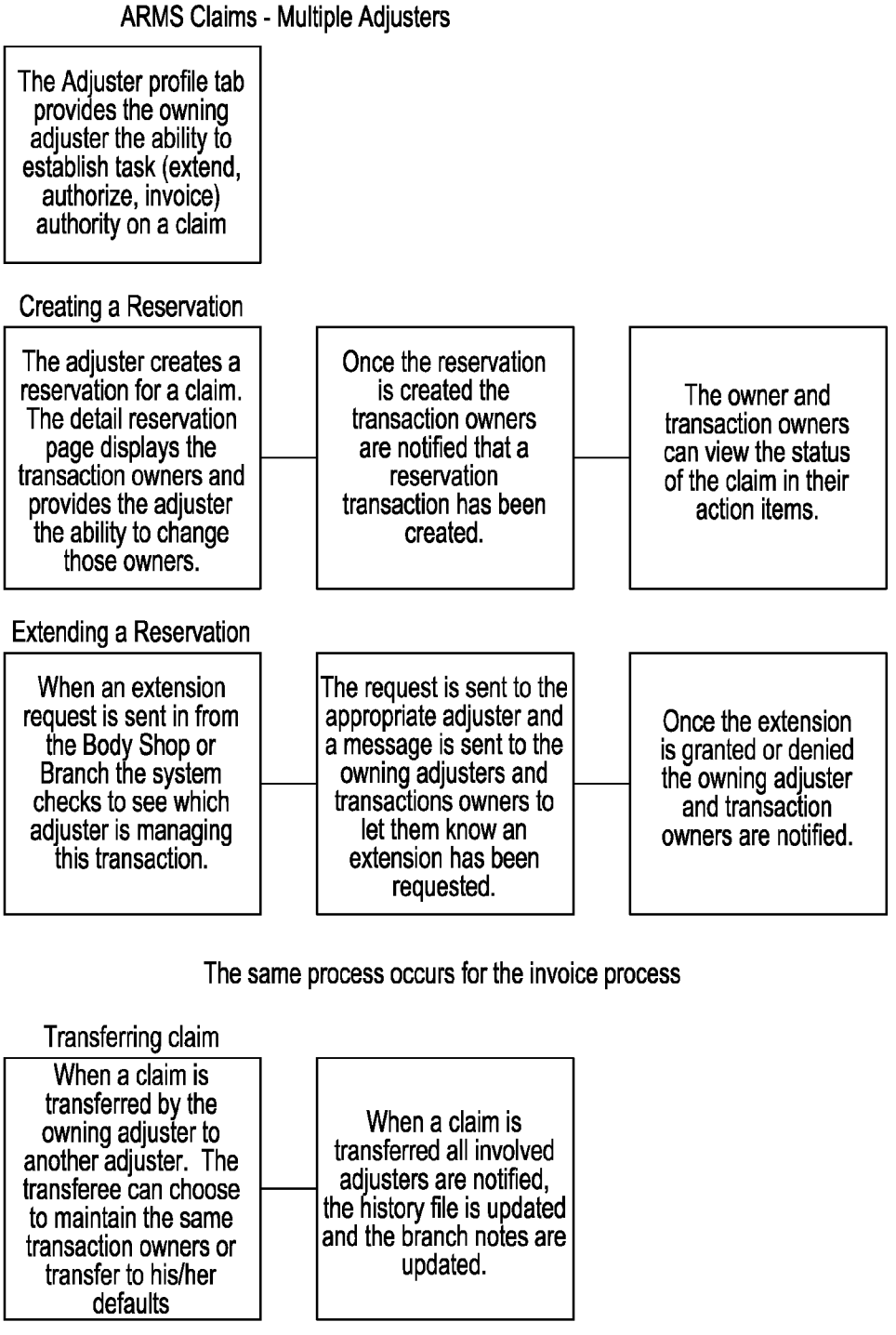
ARMS Claims - Multiple Adjusters
The Adjuster profile tab provides the owning adjuster the ability to establish task (extend, authorize, invoice) authority on a claim
Creating a Reservation
The adjuster creates a reservation for a claim. The detail reservation page displays the transaction owners and provides the adjuster the ability to change those owners.
Once the reservation is created the transaction owners are notified that a reservation transaction has been created.
The owner and transaction owners can view the status of the claim in their action items.
Extending a Reservation
When an extension request is sent in from the Body Shop or Branch the system checks to see which adjuster is managing this transaction.
The request is sent to the appropriate adjuster and a message is sent to the owning adjusters and transactions owners to let them know an extension has been requested.
Once the extension is granted or denied the owning adjuster and transaction owners are notified.
The same process occurs for the invoice process
Transferring claim
When a claim is transferred by the owning adjuster to another adjuster. The transferee can choose to maintain the same transaction owners or transfer to his/her defaults
When a claim is transferred all involved adjusters are notified, the history file is updated and the branch notes are updated.

FIG. 174

Assist Company Example

Third Party Management

The insurance company decides which actions a third party user can make with respect to claims for which the insurance company will ultimately be responsible for payment.

Example:

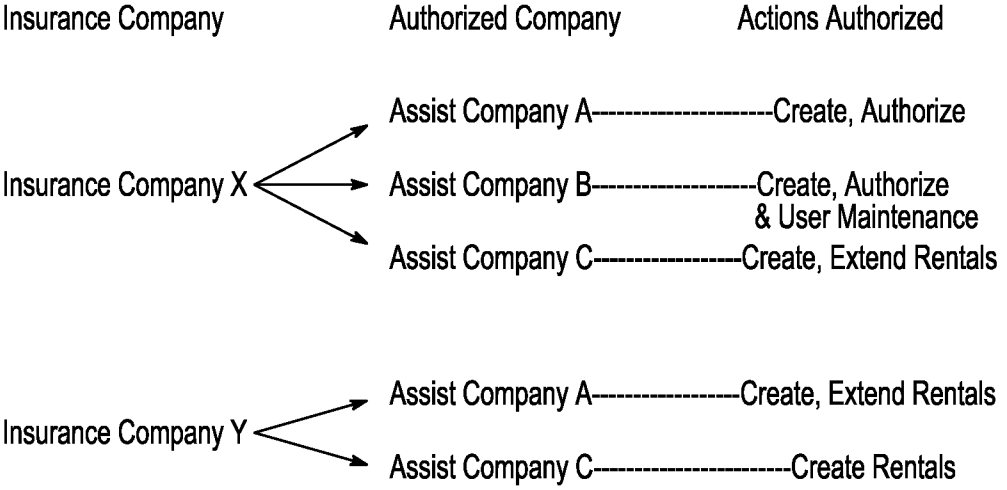

FIG. 175

This means that....

When Mr. A of Assist Company A logs onto ARMS, Mr. A will see a list of action items:

Insurance Company X

Action 1
Action 2
Action 3
Action 4

Mr. A of Assist Company A can Create and Authorize rentals for Insurance Company X, but do nothing more for Company X.

Insurance Company Y

Action 1
Action 2
Action 3

Mr. A of Assist Company A can Create and Extend rentals for Insurance Company Y, but do nothing more for Company Y.

Mr. A cannot see or work on anything that has been assigned to Assist Company B or Assist Company C as he is from Assist Company A and all his access is limited to Assist Company A.

When Mr. B of Assist Company B logs onto ARMS, Mr. B will see a list of action items:

Insurance Company X

Action 1
Action 2
Action 3
Action 4

Mr. B of Assist Company B can Create and Authorize rentals for Insurance Company X and do nothing more for Company X. Mr. B can do nothing for Company Y as they have no authorization from Company Y.

Mr. B will assign and maintain the user access for others at Assist Company B pertaining to Company X as he has been give that access by Company X.

Mr. B cannot see or work on anything that has been assigned to Assist Company A or Assist Company C as he is from Assist Company B and all his access is limited to Assist Company B.

When Mr. C of Assist Company C logs onto ARMS, Mr. C will see a list of action items:

Insurance Company X

Action 1
Action 2
Action 3
Action 4

Mr. C of Assist Company C can Create and Extend rentals for Insurance Company X, but do nothing more for Company X.

Insurance Company Y

Action 1
Action 2

Mr. C of Assist Company C can Create rentals for Insurance Company Y, but do nothing more for Company Y.

Mr. C cannot see or work on anything that has been assigned to Assist Company A or Assist Company BC as he is from Assist Company A and all his access is limited to Assist Company B.

FIG. 176

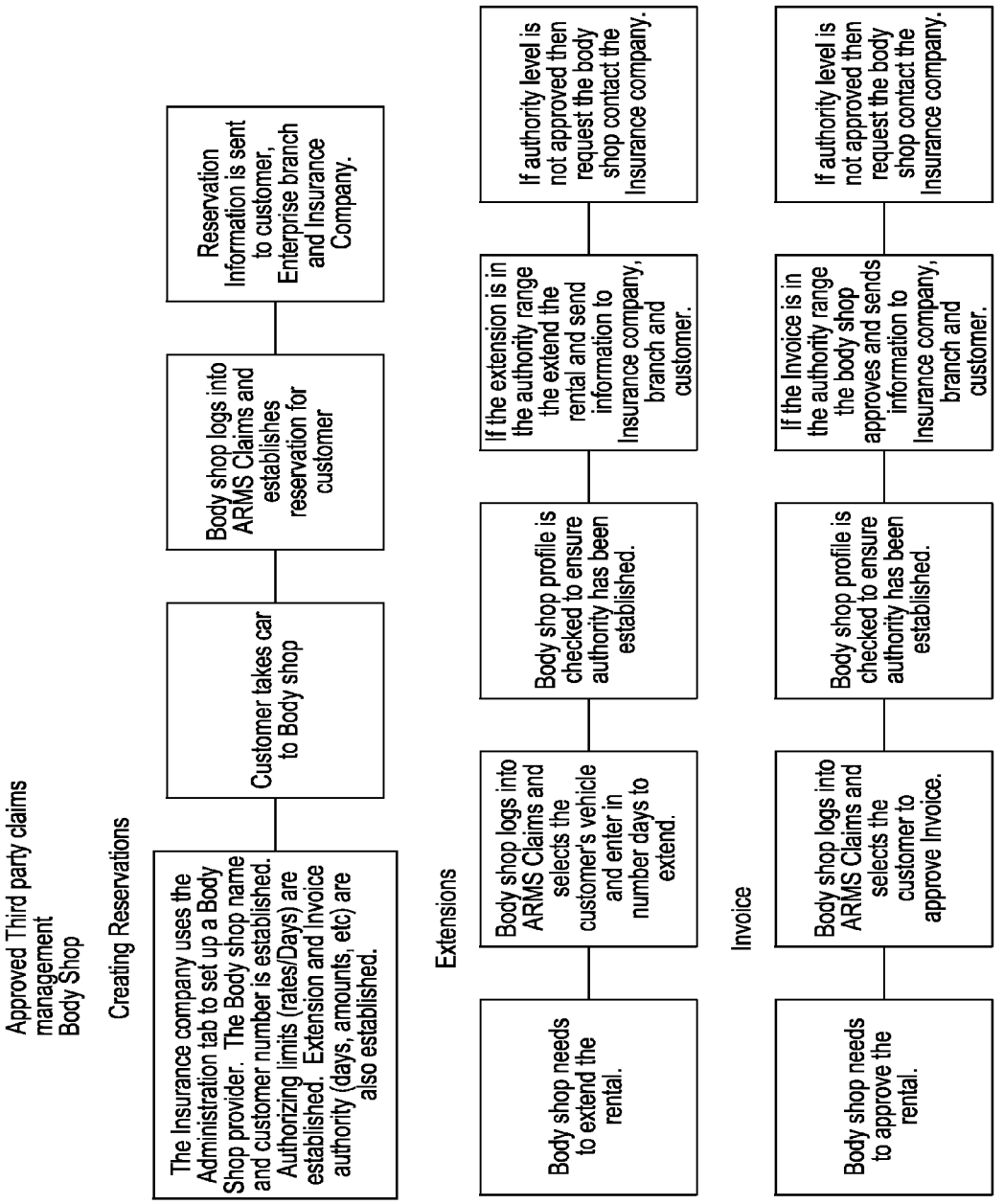
Approved Third party claims management Body Shop
Creating Reservations
The Insurance company uses the Administration tab to set up a Body Shop provider. The Body shop name and customer number is established. Authorizing limits (rates/Days) are established. Extension and Invoice authority (days, amounts, etc) are also established.
Customer takes car to Body shop
Body shop logs into ARMS Claims and establishes reservation for customer
Reservation Information is sent to customer, Enterprise branch and Insurance Company.
Extensions
Body shop needs to extend the rental.
Body shop logs into ARMS Claims and selects the customer's vehicle and enter in number days to extend.
Body shop profile is checked to ensure authority has been established.
If the extension is in the authority range the extend the rental and send information to Insurance company, branch and customer.
If authority level is not approved then request the body shop contact the Insurance company.
Invoice
Body shop needs to approve the rental.
Body shop logs into ARMS Claims and selects the customer to approve Invoice.
Body shop profile is checked to ensure authority has been established.
If the Invoice is in the authority range the body shop approves and sends information to Insurance company, branch and customer.
If authority level is not approved then request the body shop contact the Insurance company.

FIG. 177

Credit Hire Example

The insurance company decides which actions a third party user can make with respect to claims for which the insurance company will ultimately be responsible for payment.

Example:

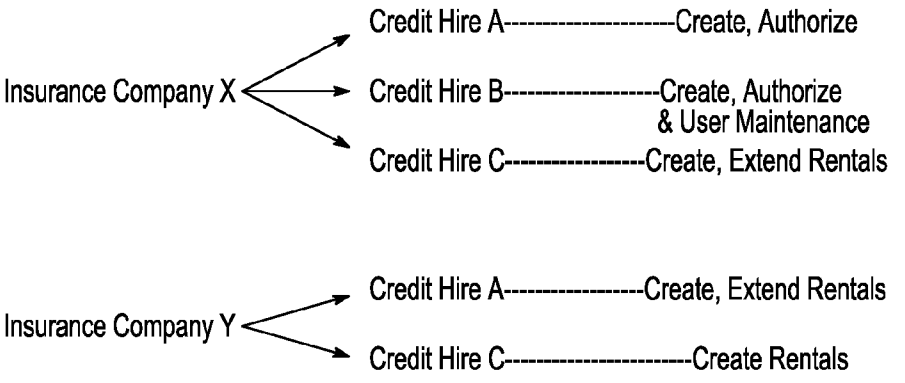

FIG. 178

This means that....

When Mr. A of Credit Hire A logs onto ARMS, Mr. A will see a list of action items:

Insurance Company X

Action 1
Action 2
Action 3
Action 4

Mr. A of Credit Hire A can Create and Authorize rentals for Insurance Company X, but do nothing more for Company X.

Insurance Company Y

Action 1
Action 2
Action 3

Mr. A of Credit Hire A can Create and Extend rentals for Insurance Company Y, but do nothing more for Company Y.

Mr. A cannot see or work on anything that has been assigned to Credit Hire B or Credit Hire C as he is from Credit Hire A and all his access is limited to Credit Hire A.

When Mr. B of Credit Hire B logs onto ARMS, Mr. B will see a list of action items:

Insurance Company X

Action 1
Action 2
Action 3
Action 4

Mr. B of Credit Hire B can Create and Authorize rentals for Insurance Company X and do nothing more for Company X. Mr. B can do nothing for Company Y as they have no authorization from Company Y.

Mr. B will assign and maintain the user access for others at Credit Hire B pertaining to Company X as he has been give that access by Company X.

Mr. B cannot see or work on anything that has been assigned to Credit Hire A or Credit Hire C as he is from Credit Hire B and all his access is limited to Credit Hire B.

When Mr. C of Credit Hire C logs onto ARMS, Mr. C will see a list of action items:

Insurance Company X

Action 1
Action 2
Action 3
Action 4

Mr. C of Credit Hire C can Create and Extend rentals for Insurance Company X, but do nothing more for Company X.

Insurance Company Y

Action 1
Action 2

Mr. C of Credit Hire C can Create rentals for Insurance Company Y, but do nothing more for Company Y.

Mr. C cannot see or work on anything that has been assigned to Credit Hire A or Credit Hire BC as he is from Credit Hire A and all his access is limited to Credit Hire B.

FIG. 179

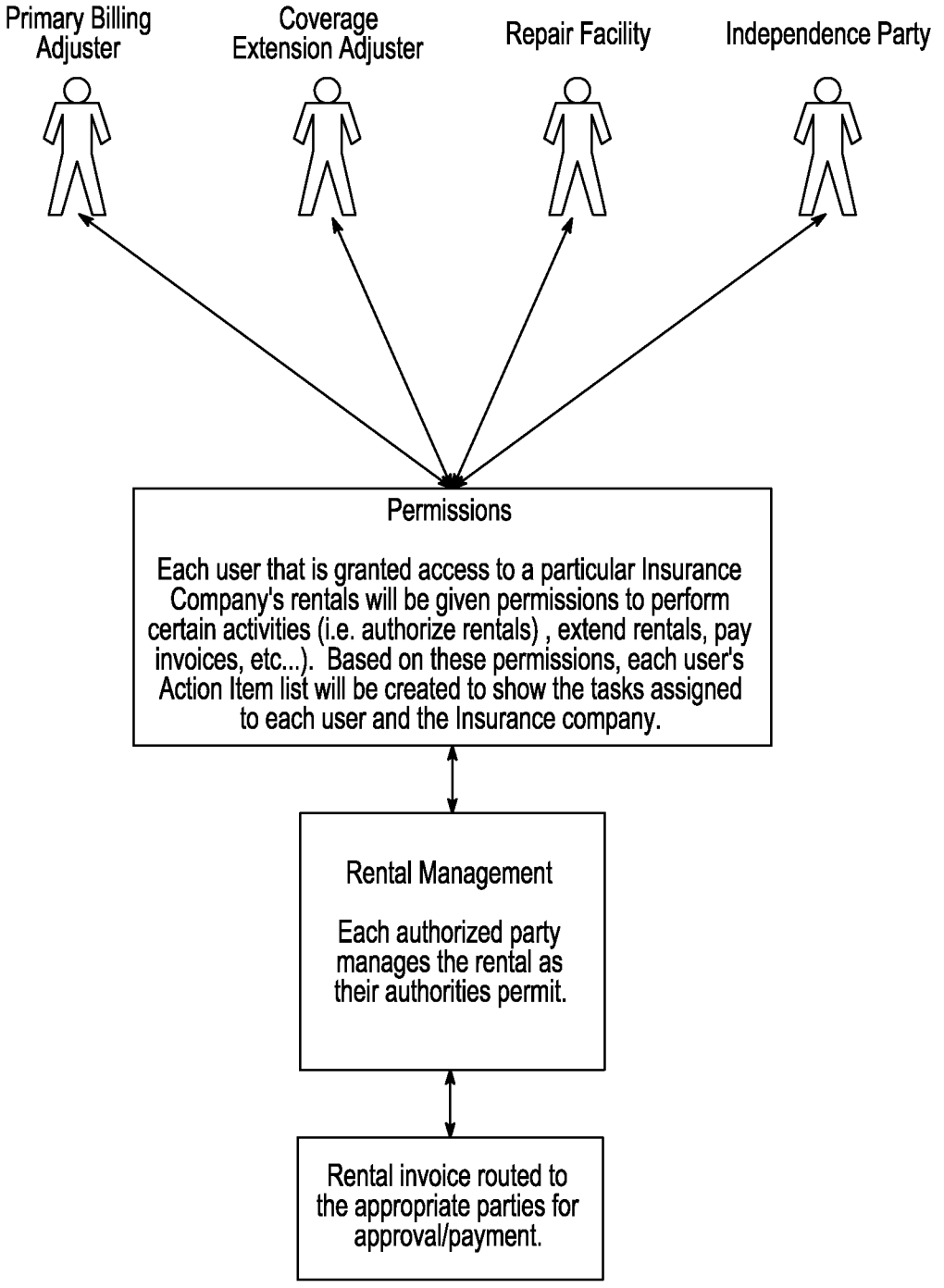
Primary Billing Adjuster
Coverage Extension Adjuster
Repair Facility
Independence Party
Permissions
Each user that is granted access to a particular Insurance Company's rentals will be given permissions to perform certain activities (i.e. authorize rentals) , extend rentals, pay invoices, etc...). Based on these permissions, each user's Action Item list will be created to show the tasks assigned to each user and the Insurance company.
Rental Management
Each authorized party manages the rental as their authorities permit.
Rental invoice routed to the appropriate parties for approval/payment.

FIG. 180

Shop Example

The insurance company decides which actions a third party user can make with respect to claims for which the insurance company will ultimately be responsible for payment.

Example:

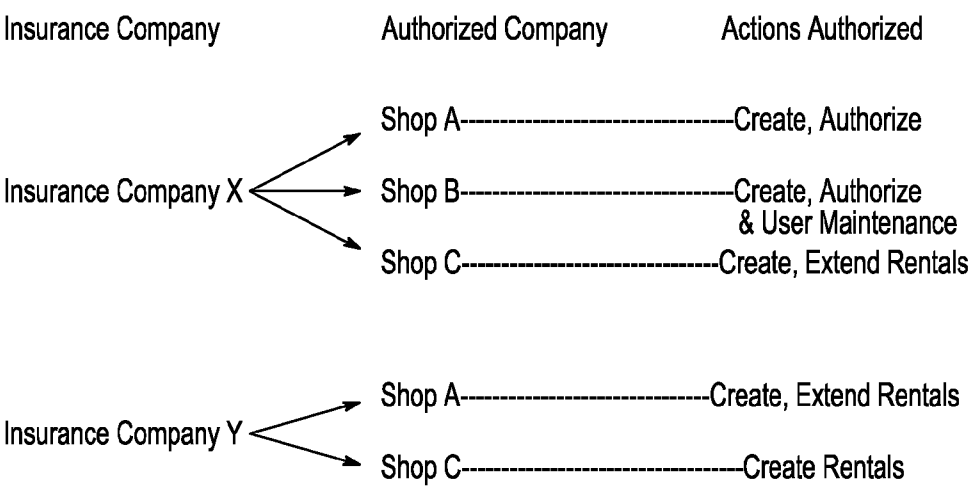

FIG. 181

This means that....

When Mr. A of Shop A logs onto ARMS, Mr. A will see a list of action items:

Insurance Company X

Action 1
Action 2
Action 3
Action 4

Mr. A of Shop A can Create and Authorize rentals for Insurance Company X, but do nothing more for Company X.

Insurance Company Y

Action 1
Action 2
Action 3

Mr. A of Shop A can Create and Extend rentals for Insurance Company Y, but do nothing more for Company Y.

Mr. A cannot see or work on anything that has been assigned to Shop B or Shop C as he is from Shop A and all his access is limited to Shop A.

When Mr. B of Shop B logs onto ARMS, Mr. B will see a list of action items:

Insurance Company X

Action 1
Action 2
Action 3
Action 4

Mr. B of Shop B can Create and Authorize rentals for Insurance Company X and do nothing more for Company X. Mr. B can do nothing for Company Y as they have no authorization from Company Y.

Mr. B will assign and maintain the user access for others at Shop B pertaining to Company X as he has been give that access by Company X.

Mr. B cannot see or work on anything that has been assigned to Shop A or Shop C as he is from Shop B and all his access is limited to Shop B.

When Mr. C of Shop C logs onto ARMS, Mr. C will see a list of action items:

Insurance Company X

Action 1
Action 2
Action 3
Action 4

Mr. C of Shop C can Create and Extend rentals for Insurance Company X, but do nothing more for Company X.

Insurance Company Y

Action 1
Action 2

Mr. C of Shop C can Create rentals for Insurance Company Y, but do nothing more for Company Y.

Mr. C cannot see or work on anything that has been assigned to Shop A or Shop BC as he is from Shop A and all his access is limited to Shop B.

FIG. 182

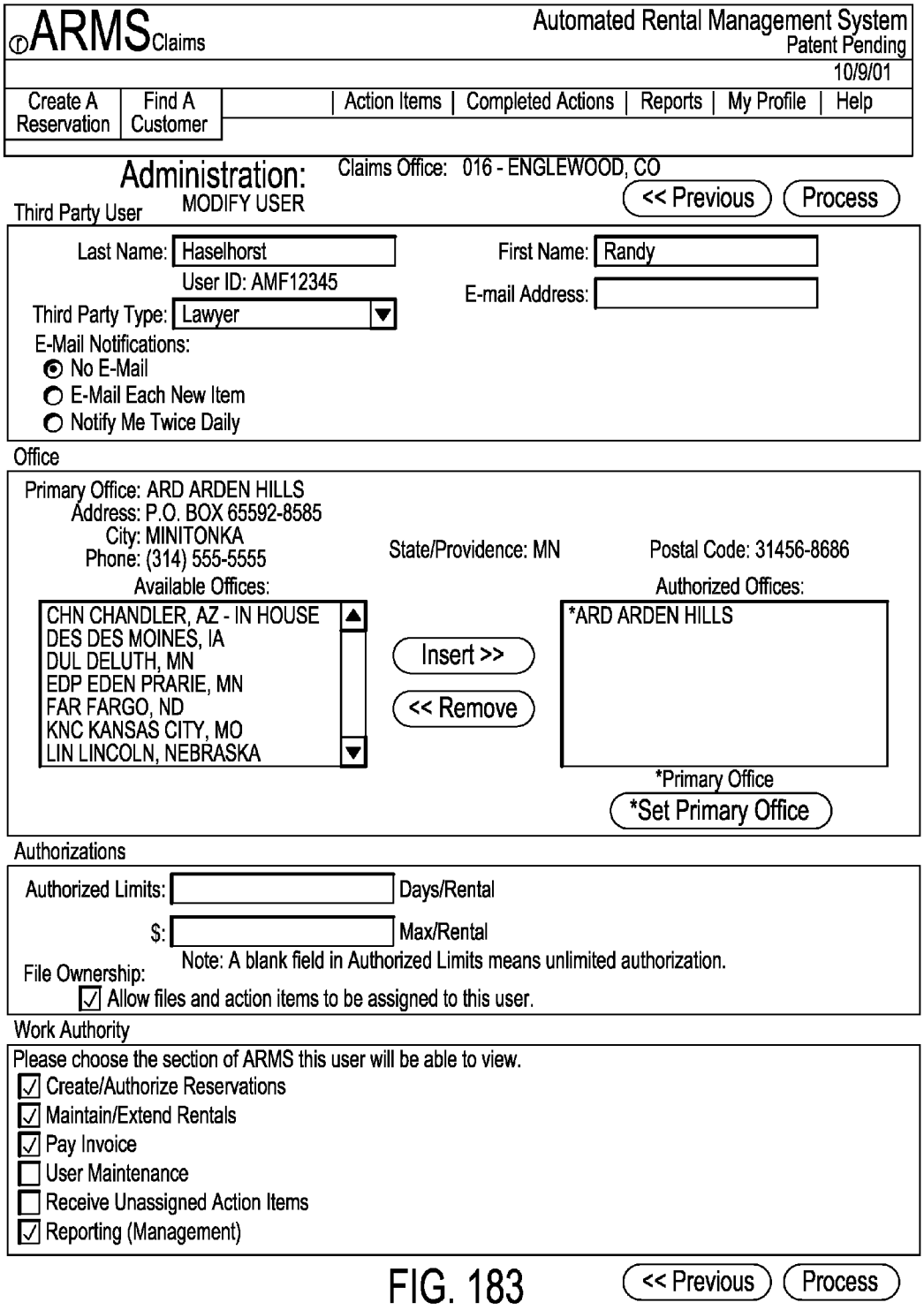
ARMS Claims
Automated Rental Management System
Patent Pending
10/9/01
Create A Reservation
Find A Customer
Action Items | Completed Actions | Reports | My Profile | Help
Administration:
MODIFY USER
Claims Office: 016 - ENGLEWOOD, CO
<< Previous
Process
Third Party User
Last Name: Haselhorst
First Name: Randy
User ID: AMF12345
E-mail Address:
Third Party Type: Lawyer
E-Mail Notifications:
No E-Mail
E-Mail Each New Item
Notify Me Twice Daily
Office
Primary Office: ARD ARDEN HILLS
Address: P.O. BOX 65592-8585
City: MINITONKA
Phone: (314) 555-5555
State/Providence: MN
Postal Code: 31456-8686
Available Offices:
CHN CHANDLER, AZ - IN HOUSE
DES DES MOINES, IA
DUL DELUTH, MN
EDP EDEN PRARIE, MN
FAR FARGO, ND
KNC KANSAS CITY, MO
LIN LINCOLN, NEBRASKA
Insert >>
<< Remove
Authorized Offices:
*ARD ARDEN HILLS
*Primary Office
*Set Primary Office
Authorizations
Authorized Limits: Days/Rental
$: Max/Rental
Note: A blank field in Authorized Limits means unlimited authorization.
File Ownership:
Allow files and action items to be assigned to this user.
Work Authority
Please choose the section of ARMS this user will be able to view.
Create/Authorize Reservations
Maintain/Extend Rentals
Pay Invoice
User Maintenance
Receive Unassigned Action Items
Reporting (Management)
<< Previous
Process

FIG. 183

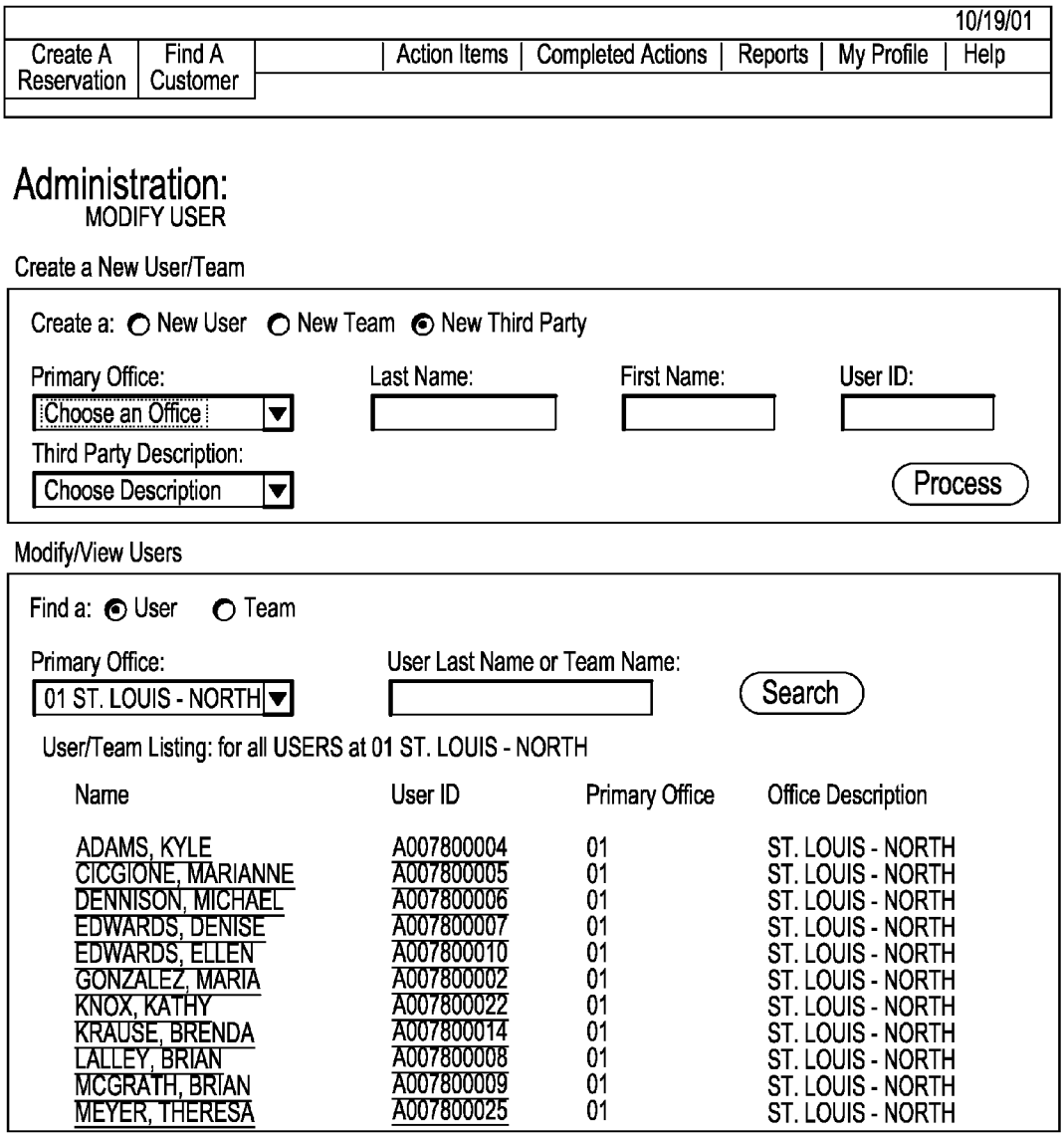
10/19/01
Create A Reservation
Find A Customer
Action Items
Completed Actions
Reports
My Profile
Help
Administration:
MODIFY USER
Create a New User/Team
Create a: New User New Team New Third Party
Primary Office:
Choose an Office
Last Name:
First Name:
User ID:
Third Party Description:
Choose Description
Process
Modify/View Users
Find a: User Team
Primary Office:
01 ST. LOUIS - NORTH
User Last Name or Team Name:
Search
User/Team Listing: for all USERS at 01 ST. LOUIS - NORTH
Name
User ID
Primary Office
Office Description
ADAMS, KYLE A007800004 01 ST. LOUIS - NORTH
CICCIONE, MARIANNE A007800005 01 ST. LOUIS - NORTH
DENNISON, MICHAEL A007800006 01 ST. LOUIS - NORTH
EDWARDS, DENISE A007800007 01 ST. LOUIS - NORTH
EDWARDS, ELLEN A007800010 01 ST. LOUIS - NORTH
GONZALEZ, MARIA A007800002 01 ST. LOUIS - NORTH
KNOX, KATHY A007800022 01 ST. LOUIS - NORTH
KRAUSE, BRENDA A007800014 01 ST. LOUIS - NORTH
LALLEY, BRIAN A007800008 01 ST. LOUIS - NORTH
MCGRATH, BRIAN A007800009 01 ST. LOUIS - NORTH
MEYER, THERESA A007800025 01 ST. LOUIS - NORTH

FIG. 184

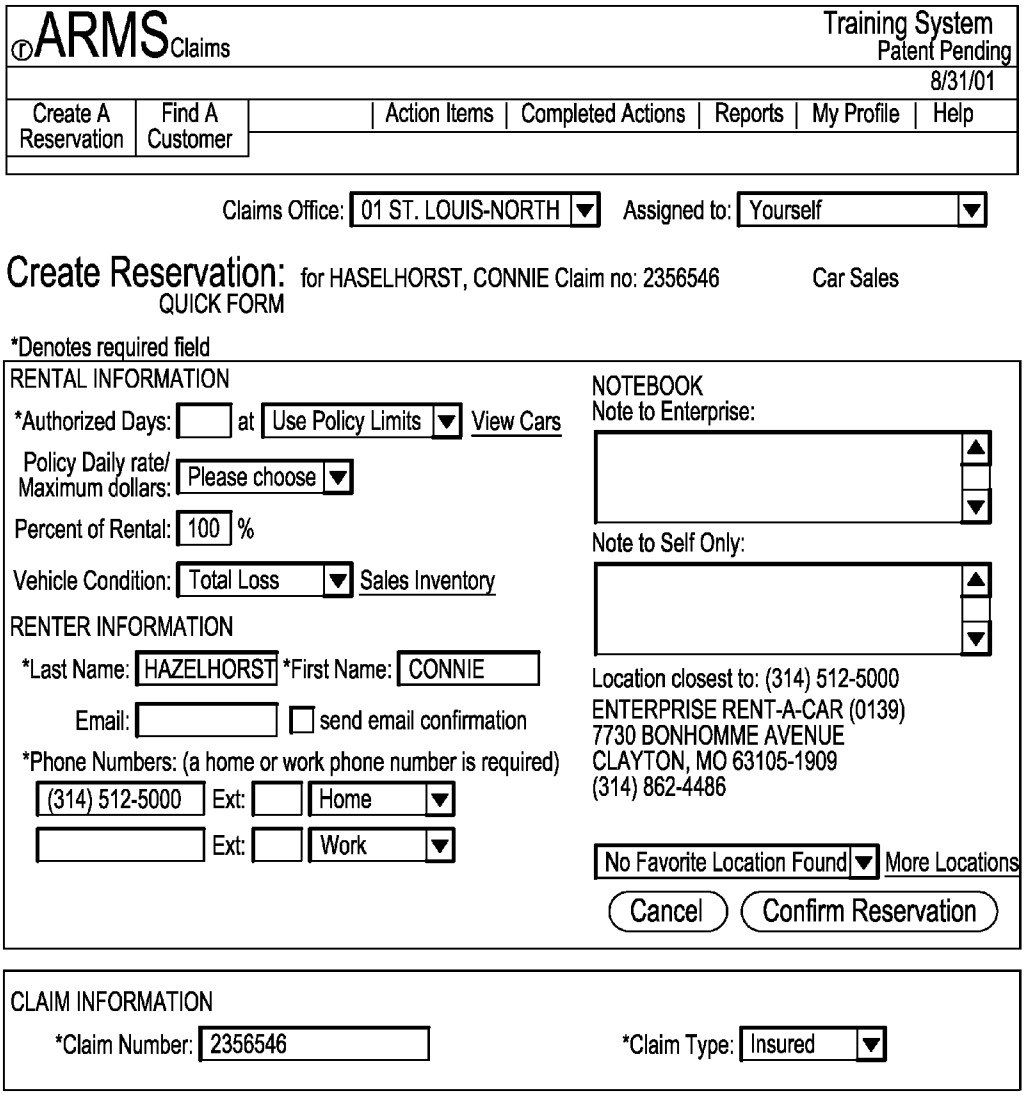
ARMS Claims
Training System
Patent Pending
8/31/01
Create A Reservation
Find A Customer
Action Items | Completed Actions | Reports | My Profile | Help
Claims Office: 01 ST. LOUIS-NORTH
Assigned to: Yourself
Create Reservation: for HASELHORST, CONNIE Claim no: 2356546
Car Sales
QUICK FORM
*Denotes required field
RENTAL INFORMATION
*Authorized Days:
at Use Policy Limits
View Cars
Policy Daily rate/ Maximum dollars: Please choose
Percent of Rental: 100 %
Vehicle Condition: Total Loss
Sales Inventory
RENTER INFORMATION
*Last Name: HAZELHORST
*First Name: CONNIE
Email:
send email confirmation
*Phone Numbers: (a home or work phone number is required)
(314) 512-5000 Ext: Home
Ext: Work
NOTEBOOK
Note to Enterprise:
Note to Self Only:
Location closest to: (314) 512-5000
ENTERPRISE RENT-A-CAR (0139)
7730 BONHOMME AVENUE
CLAYTON, MO 63105-1909
(314) 862-4486
No Favorite Location Found
More Locations
Cancel
Confirm Reservation
CLAIM INFORMATION
*Claim Number: 2356546
*Claim Type: Insured

FIG. 185

8/31/01

Create A Reservation | Find A Customer | Action Items | Completed Actions | Reports | My Profile | Help

Car Sales Inventory:

Welcome Back CALI SUMMER.
Cars available for sale in the Renter's area are listed below.
Results are based off of a search for: Haselhorst, Connie
Area Code 63105
FCAR Find ACV

Here are your search results. Click on the car model to view details.

Year	Make	Model	Mileage	Price	Color (Exterior/Interior)	more details
2001	Buick	Century	20,400	$13,994	SILVER/GREY CLOTH	»
2001	Buick	Century	15,300	$14,489	BEIGE/BEIGE CLOTH	»
2001	Buick	Century	26,765	$13,997	CHARCOAL/GREY CLOTH	»
2001	Buick	Century	19,300	$14,494	SILVER/GREY CLOTH	»
2001	Buick	Century	21,100	$13,994	WHITE/GREY CLOTH	»
2001	Buick	Century	18,000	$14,494	WHITE/GREY CLOTH	»
2001	Buick	Century	18,600	$14,494	WHITE/GREY CLOTH	»
2001	Buick	Century	19,700	$14,489	SILVER/GREY CLOTH	»
2001	Buick	Century	18,500	$14,494	SILVER/GREY CLOTH	»
2001	Buick	Century	16,500	$14,489	MAROON/GREY CLOTH	»

Next 10 of 317 »

Search Again

Zip Code: 63105

Category: Passenger Car/Wagon

OR

Make: Select a make of car

Model: Select a model of car

1-888-Car-Sales (227-7253)

FIG. 186

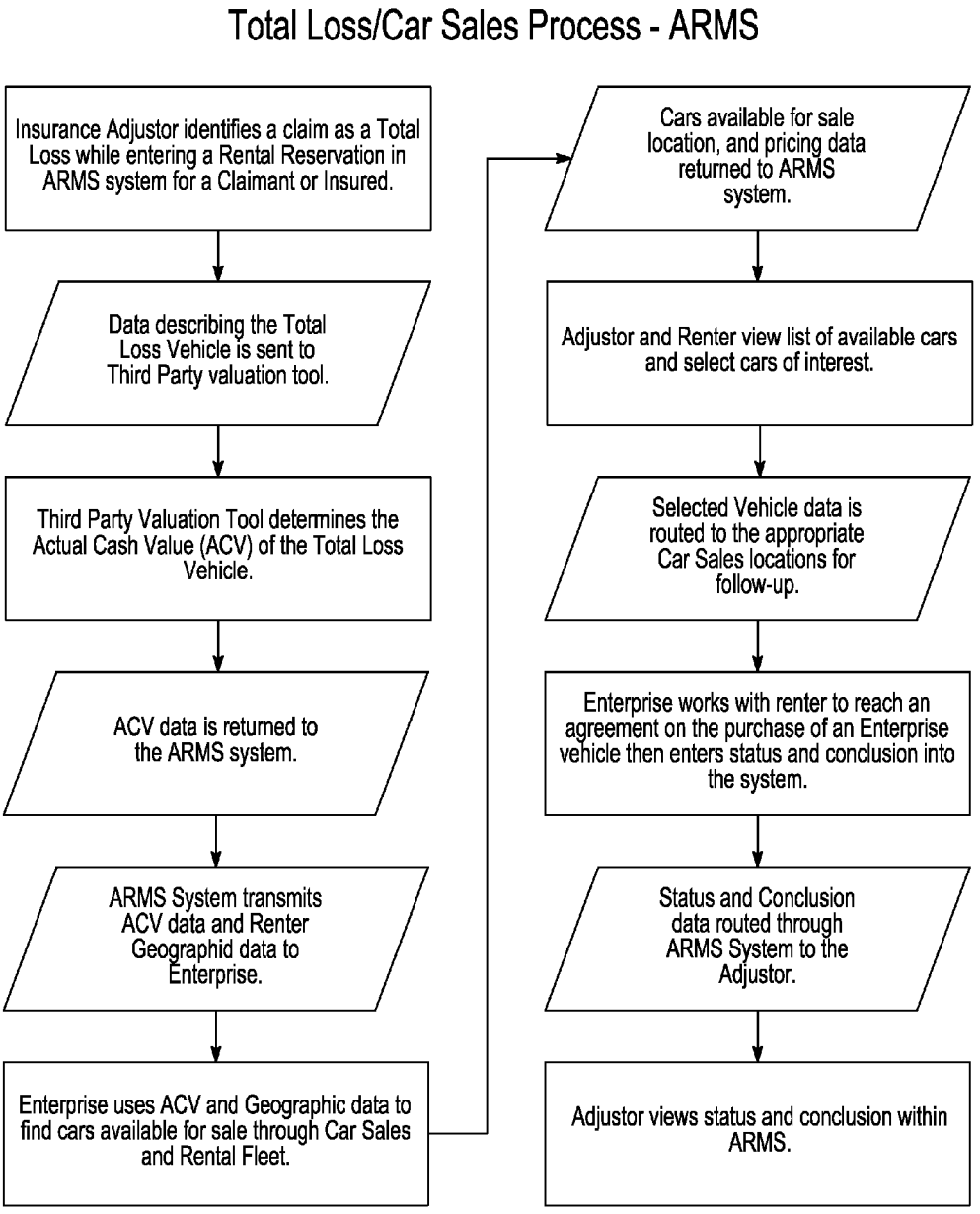
Total Loss/Car Sales Process - ARMS
Insurance Adjustor identifies a claim as a Total Loss while entering a Rental Reservation in ARMS system for a Claimant or Insured.
Data describing the Total Loss Vehicle is sent to Third Party valuation tool.
Third Party Valuation Tool determines the Actual Cash Value (ACV) of the Total Loss Vehicle.
ACV data is returned to the ARMS system.
ARMS System transmits ACV data and Renter Geographid data to Enterprise.
Enterprise uses ACV and Geographic data to find cars available for sale through Car Sales and Rental Fleet.
Cars available for sale location, and pricing data returned to ARMS system.
Adjustor and Renter view list of available cars and select cars of interest.
Selected Vehicle data is routed to the appropriate Car Sales locations for follow-up.
Enterprise works with renter to reach an agreement on the purchase of an Enterprise vehicle then enters status and conclusion into the system.
Status and Conclusion data routed through ARMS System to the Adjustor.
Adjustor views status and conclusion within ARMS.

FIG. 187

EXTENDED WEB ENABLED MULTI-FEATURED BUSINESS TO BUSINESS COMPUTER SYSTEM FOR RENTAL VEHICLE SERVICES

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is a divisional of Ser. No. 10/343,576, filed Jan. 31, 2003, now U.S. Pat. No. _____, which is a national stage entry of PCT Serial No. PCT/US01/51437 filed Oct. 19, 2001, the entire disclosure of which is incorporated herein by reference.

[0002] This application is a continuation-in-part of Ser. No. 13/025,617, filed Feb. 11, 2011, which is a continuation of Ser. No. 09/694,050 filed Oct. 20, 2000, now U.S. Pat. No. 7,899,690, which is a continuation-in-part of Ser. No. 09/641,820, filed Aug. 18, 2000, now U.S. Pat. No. 7,275,038.

REFERENCE TO A COMPUTER PROGRAM LISTING APPENDIX SUBMITTED ON COMPACT DISC

[0003] This application includes a computer program listing appendix submitted on a compact disc, the compact disc containing the files "Exhibit A.txt" (file created Dec. 28, 2010; file size of 316 kilobytes), "Exhibit C.txt" (file created Dec. 28, 2010; file size of 534 kilobytes), and "Exhibit D.txt" (file created Dec. 28, 2010; file size of 262 kilobytes), these files being incorporated herein by reference.

INTRODUCTION

[0004] The invention disclosed and claimed in the first filed parent cross referenced above relates generally to the field of an Internet enabled business-to-business intelligent communication link allowing a first business organization to have intelligent interaction with a second fully integrated business organization to facilitate the placing of orders or reservations for business services or goods, with the services or goods provider having a computer network linking multiple levels of its organization to provide for the smooth conduct of business between the two organizations. More particularly, this field relates to an Internet enabled automatic rental vehicle transaction system to facilitate the conduct of rental vehicle transactions between two multilevel business organizations, one of which provides such rental vehicle transaction services in an integrated manner through business enterprise software to a high volume user of such rental vehicle services wherein an Internet web portal is defined by the rental vehicle service provider which interconnects the two business organizations at multiple levels, providing a graphical user interface (GUI) for the transaction of large amounts of rental vehicle services automatically and virtually without human intervention upon entry. The invention of the second filed parent continuation-in-part application extends the functionality of the first filed parent invention by providing an intelligent portal that is readily configurable to suit any particular customer and any particular provider data requirements or method of doing business. This added functionality allows the invention, for example, to provide the user with access to other suppliers in the same seamless and integrated manner. In other words, the user now has access to not just one integrated business but multiple businesses, some of which may but need not be, integrated businesses thereby extending the invention for use in a generic application to satisfy a users needs for a good or service not just from one vendor but all vendors connected to the invention. The inventions disclosed in this application add to the functionality of the systems first disclosed in the two parent applications by providing features and advantages which increases its flexibility and adaptability to other business models as might be found in different countries for handling rental vehicle transactions.

BACKGROUND OF THE INVENTION

[0005] Computer technology has been embraced by many businesses in order to handle their ever increasing order flow as well as to mitigate the increasing blizzard of paper required to be produced to document this business. A significant benefit which often drives the implementation of technology is its further advantage in increasing productivity to thereby allow fewer people to handle greater volumes of business. One such good example demonstrating the efficiencies and value to be gained by implementing technology is the business model developed and followed by the assignee of the present invention. A rental car company at its heart, the assignee transacts an ever increasing number of time sensitive, relatively low dollar volume, vehicle rentals which in many instances require authorizations to be made in advance, reservations of vehicles from available geographic and vehicle type selections, monitoring of the rental as it progresses including possibly extending the rental under certain circumstances, communications between the various parties involved in the transaction to ensure ultimate customer satisfaction, and financial accounting for the transaction including generating invoices and processing them for payment. While a significant portion of the vehicle rental business involves rental for leisure, business travel, etc., another significant business relationship has developed with insurance companies and the like in what has been termed as the replacement car rental service business. In this business, a vehicle insurance company may have many thousands of policyholders who are eligible to be involved in accidents, and other dislocations of use, requiring that a vehicle be rented for that customer's use while his own vehicle be made ready again for use. Thus, for this business segment, a multi-tiered business organization such as a vehicle insurance company represents a significant customer for repetitive vehicle rental services. To conduct this business in an orderly, time efficient and cost efficient manner, it is necessary that this insurance company has as its business partner a vehicle rental company which is itself multi-tiered, such as the assignee of the present invention. This is because the needs, both geographically and in volume, are significant which require the dedication of a significant amount of resources. To satisfy these needs and to respond to other business growth, in its embrace of technology the assignee hereof has succeeded in developing an in-house computer system and related software which has integrated its business internally. This business integration has been massive and company-wide as is needed to integrate a company having a central office with literally thousands of individual branches located nationally, and even now internationally, with hundreds of thousands of vehicles available for rental. Furthermore, other business partners including other service providers such as vehicle repair shops have also been given access to this system to allow for input of information relating to progress of vehicle repair, extension of rental time, etc. as the rental progresses. This integrated business computer network and software generally includes a mainframe server at the heart of a wide area network (WAN) which facilitates the

transfer of vehicle rental information and orders company-wide. This integrated business model is most efficient and needed in order to satisfy the vehicle rental service needs of a vehicle insurance company which itself may be national or even international in scope.

[0006] As a first step in extending the integration of technology into this business model, the present assignee has previously developed and implemented a computer system which has provided improved communication capabilities between the two business partners. This system generally comprised a second mainframe computer linked to the first mainframe of the integrated business network, with dedicated access lines being provided from this second mainframe to various levels of the multilevel business organization comprising the insurance company. In effect, with this additional mainframe and dedicated pipeline access, various individuals at the insurance company were permitted to directly interact with the integrated business computer network of the vehicle rental company as well as other selected service providers such as body shops where wrecked vehicles were being repaired. The implementation of this system provided a great step forward over the people intensive business activity previously required in order to handle the large number of transactions encountered in this business relationship. Historically, the replacement car market engendered large numbers of telephone calls being placed between the insurance company, the rental company, and the body shop where vehicle repair was being performed in order to authorize the rental, select and secure the desired replacement vehicle to be provided, monitor the progress of the repair work so that scheduling of the rental vehicle could be controlled, extending the vehicle rental in the event of delays in repair, authorizing various activities involved in the rental process including upgrades of vehicles or other charges for services, and subsequent billing of the rental service and processing the billing to the insurance company for payment.

[0007] While the implementation of this system was successful and represented a tremendous step forward in automating the business relationship between the insurance company and the vehicle rental company, it did have certain limitations. For example, a specific communication link had to be established between the rental vehicle company and the particular users at the insurance company designated to have access to this system. Thus, special attention and some modicum of expense was required to establish these "pipelines" and maintain them. Still another aspect to the system implemented was that it was not "browser" based nor did it provide graphical user interface (GUI) menus. Thus, each user had to be specifically trained in the particular "language" used by the system and learn to work with specific menus nested in a specific manner as well as codes for entering commands which were not similar to other computer software programs. This software design thus necessarily required additional training in order to insure that users could gain the full measure of advantage provided by the system and in order to minimize the opportunity for erroneous information or incorrect reservations from being entered or otherwise confusing the business transactions. Furthermore, user efficiency was not immediate and required skill beyond that ordinarily found in casual computer users, as we are all becoming in this computer age. Still another disadvantage to the system was that access was required to a designated entry point in the system in order for a person authorized to be on the system to work with it. As the nature of the insurance and replacement car business requires extreme mobility at multiple levels of both business partners, this represents a limitation to the usefulness and time efficiency with which various business functions could be performed. Therefore, while implementation of the second mainframe allowing for pipeline connections at various levels of the multi-tiered insurance company was a significant step forward in automating the business relationship between the two business partners, significant limitations to this solution were readily apparent to the users thereof.

SUMMARY OF THE INVENTION

[0008] In the first parent application cross-referenced above, the inventors herein have previously succeeded in designing and developing a means for substantially enhancing the business to business communication link between these two businesses which provide significant advantages over its prior embodiment. More particularly, the inventors have succeeded in replacing the dedicated pipeline access of the existing system with a web portal allowing Internet access to the mainframe with a browser based graphical user interface (GUI) presentation. This also made the system more readily accessible to smaller business partners as the expense of the "pipeline" was eliminated. The first parent's invention offers several important technical advantages over the previous system. First of all, by taking advantage of the ubiquitous nature of the Internet, the ultimate in portability and connectivity for this system is now provided in a business environment where mobility and connectivity are at a premium. In other words, a claims adjuster, body shop, or any other business employee authorized to have access to the system may gain access at any site offering Internet access. In present day technology that includes many mobile devices and appliances which are Internet enabled. As technology advances, it is conceivable that this access will extend to permit "24/7" access by any authorized person at any geographic location. This is a marked improvement providing immediate benefit and advantage over the dedicated pipeline access of the prior art system.

[0009] One limitation however, is that with this embodiment, this internet access must support a stateful connection. In this context, a stateful connection refers to a "persistent" conversation, meaning that the client side and server side software components establish a connection to one another once and multiple data transfers may occur without severing that connection. Common examples of a stateful connection include on-line chat, on-line gaming, and for virtually all on-line conferencing. This is distinguishable from the normal operation of web pages which typically establish a connection, transfer the object on the page, and then sever that connection. These types of connections are generally referred to as "stateless" connections.

[0010] A second major advantage of the first parent's invention is its graphical user interface. The inventors have taken full advantage of this browser based GUI to streamline and organize the presentation of information to a user to actually guide him as he interacts in doing his business. One such example is customized design of the menus such that the user is guided and directed to answer only those questions required to be answered in order to conduct the particular transaction being addressed, and further to present choices to the user for his selection to minimize the need for the user to rely on his own memory or to be familiar with complicated and specialized codes to enter data or request transaction

activity. With the recent and continuing explosion of the Internet, more people are becoming familiar with browser programs and their operation through their own daily activities in their personal lives. This familiarity paves the way for easier training and quicker orientation of a new user to the present invention. For large business organizations communicating at multiple levels, this significant advantage cannot be minimized as there are large numbers of people who must be continuously trained due to the growth of the organizations, as well as the replacement of employees due to the inevitable attrition. Thus, the first parent's invention provides an immediate increase in worker productivity, and makes that improved efficiency available to many more workers who are not particularly skilled otherwise in computer usage.

[0011] Still another advantage provided by the first parent's invention is through the implementation of additional functionalities which are engendered by the browser/GUI interface. As the system is continuously used, and feedback is continuously monitored and analyzed, additional features that add value through providing management information as well as by speeding transaction activity over the system may be implemented. For example, several of these features include the ability of a user to create an on demand report for transaction activity including summaries of transactions handled by a particular user or group of users which might either be open or closed. Another example of additional functionality which improves the efficiency of a user is the ability to create a repair facility call back list which allows a user to sort existing open vehicle rental reservations by repair facility (body shop) and date such that a user is presented with the list of open reservations at a particular repair facility which can be readily handled in a single telephone call while at the same time having the system on line to implement any needed changes such as extensions of reservations, etc. Additional functionality has also been provided to speed the processing of invoicing which of course also speeds their payment and cash receipts. For example, it was found that even despite the built-in error checking and correction facilities provided to the users of the system, a repetitive pattern of mistakes involving incorrect claim numbers was discovered. To speed the processing of these, an additional functionality was provided as an "electronic audit" known as invoice return which returns an invoice to a particular adjuster upon detection of an incorrect claim number for his human intervention and correction of the claim number. In this manner, problem invoices exhibiting one of the most common problems encountered may be readily handled within the system and in an efficient manner, instead of manually as before.

[0012] The first parent's invention also has as a significant advantage the ability to be further customized to meet the individual business partners' needs and desires as well as to provide additional functionality by offering additional features which become desirable upon accumulation of user data based on user experience. Furthermore, once implemented, they are immediately available system wide. While this allows for consistent usage, it is limited in the sense that all of the system users are forced to use the same menus, data definitions, etc. This is not seen as a limitation for the one-to-one business application intended to be primarily addressed by the first parent's invention.

[0013] Still another advantage of the first parent's invention is that the graphical user interface incorporates point and click interaction, using buttons and tabs to present or conceal data for the user's attention or inattention as the case may be, and provide a much more robust interaction capability through the creation of menu designs that allow for access to the most commonly needed features from any point in the menu architecture. This is to be contrasted with the prior system which consisted of a main frame character based interface while the first parent's invention with its GUI interface allows a user to point and click to navigate and to make selections by pull down selection, thereby reducing errors. As users become more experienced with the system, and their confidence level grows, they are much more likely to become bored and aggravated with the rigid structure of the prior system requiring them to follow along a certain menu architecture in order to complete certain tasks. On the other hand, the first parent's invention generally increases the interest of the user in using the system. These advantages of the first parent's invention over the prior interface promote employee productivity by allowing a user more control over his work which is critical in achieving savings in human resources to operate the system which is one of its main goals.

[0014] The second parent's invention extends the first parent's invention and expands its capabilities and functionalities. With the second parent's invention, a user may not only have access to its business partner, but also one or more competitors of its business partner through the same Internet portal. In this way, at least two needs are satisfied. First, the user can have access to a variety of providers to choose from where business needs or desires require. This allows the user to use a single portal and not have to sign on to a number of different portals, even should they be available. Furthermore, the user isn't troubled to learn how to access and use different portals even should they be available. Presently, not all providers are operating an Internet portal for offering their services, so by allowing business competitors to be accessible through the same portal, independent development of other portals is forestalled. This is a benefit to the operator of the main portal as it creates and maintains a competitive advantage by handling all of the order flow which creates a data base of useful information for marketing purposes. Although initially the portal services might be offered for no additional cost to a competitor, eventually a fee might be charged which would at least partially offset the cost for owning and operating the portal.

[0015] The design of the portal is elegant and offers great flexibility for customizing not only the menus for presentation to the user, but also in the design of the data base entries needed or desired by the user and/or the competitive provider. For example, some users might not know or care about the features of a vehicle rented and so those data entries may not be provided space on the menu for the user to fill in. The data base as handled by the networked computer system then need not keep track of that data for that customer. This feature is readily accommodated by the data base programming and is conveniently implemented.

[0016] In still another aspect of the second parent's invention, the web portal has the capability to accommodate the varying data requirements also of the various competitive providers, but also the level of their sophistication as evidenced in their respective computer systems and interface facilities. For example, the web portal may be configured to communicate the users order to the competitive provider via email, phone, or even through a connection directly to an integrated computer system having the same or substantially the same inter-operability as the integrated computer system of the assignee hereof. This capability extends to accommo-

dating and matching the competing data requirements of the user and the competitive providers, and having the flexibility to design and implement menus that readily meet these competing needs. Furthermore, the second parent's invention allows for changes to be implemented by simple re-programming of the web portal which minimizes the effort and enhances the "user friendly" aspect to the present invention.

[0017] Not only are these "global" improvements made available with the second parent's invention, there are other more particularized improvements that add functionality within the operating framework of the second parent's invention. For example, one such improvement is the ability to "virtually" assign work groups within the user so that, for example, multiple adjusters might be made into a team with a shared work load so that all of the team members have access to the same pool of work, such as the placing of reservations for the same group of drivers. With this "virtual team" assignment capability, work groups may be readily re-assigned to match changing work loads without worrying about re-configuring hardware or internal network connections. This can be a very valuable feature to accommodate staffing issues over geographical distances that can be nationwide, with access through the web portal to reservation facilities which are themselves nationwide.

[0018] Still another feature is the ability to customize an individual users authorization limits. As can be appreciated, one of the mixed blessings of providing enhanced functionality to the individual users of any integrated computer system is that it places great power in the hands of the user which at the same time creates the potential for abuse. There have been well publicized instances of "rogue" employees making financial decisions or placing instructions which have far reaching financial consequences well beyond the intended authority of an employee, with disastrous results. With the second parent's invention, one feature is the ability to limit the financial commitments that a user may make during any pre-selected time period. For example, the users profile may limit his ability to make only a certain dollar limit of vehicle reservations over any certain number of work days. In this way, added safe guards may be conveniently provided, monitored by reporting capabilities, and changed as circumstances warrant, all with simple programming changes at the web portal.

[0019] There are still other features that are provided by the second parent's invention that find their genesis in the different approach taken over the first parent's invention and owing to the inherent increased flexibility of using a web based programming for the web portal to interface between the user and the providers on the web server and eliminating the need for any custom software on the users terminal. The details of these are to be found and described in the detailed description of the preferred embodiment below. Examples include the ability to send confirmatory communications to the user that the reservation has been received and entered into the providers system for fulfillment, custom report design including the capability to save and re-generate the custom report upon user command, increased flexibility to process and pay invoices, etc.

[0020] Still other advantages and features have been developed and are newly disclosed and claimed more particularly herein. These advantages and features relate to usage of the present invention both domestically and abroad where there are idiosyncrasies in the business model that need to be accommodated. Still other features provide entirely new functionality. One such new feature involves adapting the present invention as a tool to market replacement vehicles for sale or lease to a customer who has had an accident significant enough that repair of his vehicle is not economically feasible. This is commonly referred to "totaling" a vehicle. The insurance industry totals about 3 million cars per year, of which approximately 17% are newer models (defined as within three years of current model year). Once totaled, the owner needs to buy another car. Since car rental companies desire to sell more cars, any opportunity to tap into the total loss market will be bountiful.

[0021] The present invention provides a window into the establishment of a total loss for a renter's/insured's/claimant's automobile. Any car that is deemed to be a total loss would be indicated as such in the present invention for reporting purposes. At this point the stored information could be used to help provide economic benefit to all parties, insurance company, rental car company, and automobile owner.

[0022] Once a renter's/insured's/claimant's (owners) car is determined to be a total loss the adjuster will try to ascertain the actual cash value (ACV) to be settled with the owner. The adjuster can use a third party tool, such as CCC's Pathways® product, to determine what ACV is. Today an adjuster must input this information manually into a separate application. The present invention contains much of the necessary information needed to determine ACV: name, car make, model series, year. The present invention need merely send the necessary information electronically to a total loss product and request an electronic response. Once the necessary information is generated, the present invention would in turn take the ACV and cross reference the car rental database of inventory. Necessary information might include but not be limited to: ACV, year, make, model series, comparable cars, etc.

[0023] The car rental inventory can be filtered by geography and "holding requirements". As a reseller of vehicles, the car rental inventory is generally contractually required to be within the fleet as a rental for a predetermined amount of time prior to being available for sale to third parties. Once a car is past the holding requirement it is generally within the discretion of the car rental company to sell. Thus, instead of X % of cars available to the car rental company for retail sale, a virtual inventory of cars is available for retail sale to the owner of the car.

[0024] Once the filters for geography and holding requirements are active, the present invention delivers a list of available vehicles for sale. At this point the adjuster and owner review the available cars, decide the cars considered to be attractive, and the owner then decides which one he wishes to purchase.

[0025] The user then selects one or more potential vehicles and sends the request to the appropriate car rental location. The car rental location can then contact the owner of the vehicle to buy one of the selected vehicles. In addition, the list of vehicles and ACV information can be sent to the owner for further review and discussion.

[0026] Once the car rental company contacts the owner and comes to a sufficient conclusion, either to buy or not to buy, the adjuster is notified of the conclusion and the transaction is consummated either through the present invention or off-line.

[0027] Still other features are disclosed and claimed herein which extend the functionality of the present invention. These include the following. One such feature is providing for automatic extensions of existing rental authorization, so that some limited extension authority is granted to permit some flexibil-

ity to a particular user without burdening him with the need to obtain approval for the extension. Another feature could be referred to offline usage, and provides the functional advantage of permitting processing of reservation data in a computer not connected into the network, and then uploading/downloading between the offline computer as it is connected into the network, such as by dialing into the network over the internet, or through a portal. The type of data which could be processed includes virtually any related to the processing of vehicle rental transactions and other related data such as car repair scheduling, etc. This functionality provides an extension of the usability to the invention to mobile users who travel beyond the reach of the internet, which even further enhances its applicability to those places not covered by wireless coverage. Alternatively, it allows the invention to bypass special connectivity issues which are thought to be disadvantageous for any reason including cost, unavailability, inconvenience, etc. Still another feature includes further integration of the internal data bases kept by permitting a user to automatically update not just one but several data bases with a single command once that new data is entered into a single menu. For example, in what can be referred to as "power templates", a user may enter a multiple number of rental reservations on a single menu and then click a single "approved" icon which would then enter all of them into the system. This represents an improvement over a previous implementation requiring a user to separately "approve" each reservation, and then suffer the system processing time for each reservation. This "batch" processing can result in significant improvement in throughput, and reduction of user interface time for processing multiple transactions. Still another feature provides the added functionality of processing customer satisfaction feedback through the system. This feature provides the capability for a user to enter customer feedback information, both positive and negative but perhaps more importantly negative, so that immediate awareness of any problem can be obtained and corrective action taken to mitigate or eliminate the difficulty. This feature also allows a user to indicate a suggested supervisory level of interaction, or the system may allow for automatic escalation of involvement for succeeding levels of supervisory attention as the dissatisfaction continues or even escalates. This feature can be significant to a service provider as the ultimate success of a service provider is directly dependent on the perception of satisfaction by the end customer. And, it is well known that the sooner a problem is identified and solved, the more likely a customer will have a satisfactory experience. Furthermore, from a strict economic viewpoint, the sooner some problem is addressed and solved, generally the less expensive the solution. A small accommodation can change a frown to a smile, if promptly offered.

[0028] Still other features are now disclosed that have applicability perhaps in the domestic business model, but certainly offer needed functionality in other business models found in other countries. One of these includes multiple party involvement/management of a rental transaction. While the flexibility of allowing multiple adjusters within a group to "work on" a rental transaction has been previously described, this particular feature is different in that not only may these multiple adjusters not be within the same group, they might not be employed by the same employer, might not be adjusters themselves, and might have different authority for action on the transaction as is commonly found in different countries. For example, in some countries one adjuster authorizes and manages the rental reservation for the car while another adjuster authorizes and manages the insurance coverage for the rental. Still another feature allows third party or "independent party" management of the rental. In some countries a third party other than an insurance company is involved, such as a "credit hire" or "assist companies" or "repair facility" or "lawyer" or "fleet management company". Each of these third parties, or any other third party, may be permitted access to the system and a user profile created for them that defines their authority to process rental transactions through an administrative profile set up in advance through agreement with the authorizing agent, such as an insurance company. As an enhancement, various individualized features may also provide data indigenous to a particular country, such as electronic access to the Schwackliste book for an adjuster to conveniently view a "class" for a car to determine what replacement vehicle is legally authorized for rental. Still another example of a feature needed to accommodate international capability is a need for a tiered rate system, and an hourly rental charge instead of a daily charge which predominates the domestic market. Processing of electronic signatures to satisfy local custom or legal requirement is yet another example of a feature for which the present invention is uniquely suited to provide.

[0029] While the principal advantages and features of the invention have been discussed above, a greater understanding of the invention including a fuller description of its other advantages and features may be attained by referring to the drawings and the detailed description of the preferred embodiment which follow.

BRIEF DESCRIPTION OF THE DRAWINGS

[0030] FIG. **1** is a schematic diagram of the computer systems comprising the first parent's invention;

[0031] FIG. **2** is a flow chart of the software programs which communicate over the computer systems of FIG. **1** to implement the first parent's invention; and

[0032] FIG. **3** is a schematic diagram of the computer systems comprising the second parent's invention;

[0033] FIGS. **4-91** are flow diagrams for software resident on the mainframe AS/400 computer **32** as described in Exhibits B and C;

[0034] FIGS. **92-159** are a series of flow diagrams and screenshots for the ARMS/WEB application software resident on servers **70** as described in Exhibit E;

[0035] FIG. **160** illustrates a plurality of automated extensions process flow options;

[0036] FIG. **161** illustrates an exemplary "Extend Rental" screenshot;

[0037] FIGS. **162-164** describe a synching function for an embodiment;

[0038] FIGS. **165-167** describe a power template function for an embodiment;

[0039] FIGS. **168-171** describe a technique for collecting user satisfaction feedback for an embodiment;

[0040] FIGS. **172-184** describe features for embodiments whereby multiple adjusters and/or multiple parties are able to share management of reservations; and

[0041] FIGS. **185-187** describe a technique for identifying replacement vehicles for total losses.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0042] The overall system architecture for the first parent's invention **20** is best shown in FIG. **1**. As shown therein, an insurance company computer system **22**, which itself may be virtually any computer configuration or even a stand alone PC accesses the Internet **24** through any convenient access point **26** such as even including an ISP (Internet service provider), as known in the art. Also connected to the Internet **24** is a web portal **28** which is preferably provided by a server appropriately programmed as explained herein below. This web portal **28** may be appropriately configured as desired to suit any particular business relationship or arrangement, although preferably the inventors herein and assignee of this invention have determined that a 24/7 or full time connection to the Internet **24** is preferable, except for scheduled downtimes for maintenance, etc. The service provider **30** which for purposes of explaining the first parent's preferred embodiment is preferably a vehicle rental organization, has itself an Internet portal mainframe **32** connected by a bi-directional communication link **34** to a second computer network **36** which may itself preferably have a mainframe server **38**. This second computer system **36** is preferably a network having a database **40** for communication with what may be thousands of branch offices each of which has its own computer interface **44** which communicates to this second mainframe server **38** to conduct the integrated business functions of a service provider organization. Instead of communicating with the branch offices directly, a reservation may be communicated to a centralized location for further processing, such as a call center, and then relayed on to an appropriate branch office. This might be desirable under certain circumstances, such as if a branch office is closed, or when a purchaser requires some specialized service such as close monitoring of the rental. This may be done electronically and automatically, or with human intervention.

[0043] It should be noted that the particular computer configuration chosen as the preferred embodiment of the first parent's invention may itself be subject to wide variation. Furthermore, the term "mainframe" as used herein refers solely to a computer which can provide large scale processing of large numbers of transactions in a timely enough manner to suit the particular business application. Preferably, as is presently used by the assignee hereof, an IBM AS/400 mainframe computer is used as each of computers **32**, **38**. However, as is well known in the art, computer technology is subject to rapid change and it is difficult if not impossible to predict how these computer systems may evolve as technology advances in this art. For example, it is not beyond the realm of possibility that in the not so distant future a network of computers would provide the processing power to conduct these business operations as presently handled by "mainframe" computers. Thus, the term "mainframe" is not used in a limiting sense but merely to indicate that it is descriptive of a computer suited to handle the processing needs for a large scale business application.

[0044] It should also be noted that the communication link **46** extending between the server **42** and each of the branch offices **44** may have alternative configurations. For example, in some applications access over the Internet may itself be adequate, recognizing the vagaries of Internet service availability, reliability, and processing speed. Alternatively, this communication link **46** could well be a dedicated pipeline providing broadband service connection full time with back up connections to ensure continuous communication between a particular branch office or groups of branch offices and the service providers business operations computer system **36**. Some branch offices might even be served through satellite links. Indeed, it is even possible that a mixture of these wide variations of service level be present within a single organization's structure depending upon communication link cost and availability balanced against service needs. It should merely be noted for present purposes that this communication link **46** serves as the electronic umbilical cord through which branch offices **44** communicate with the business computer system **36** of the invention.

[0045] Attached hereto as exhibits are functional descriptions of the software programs resident on the computers comprising the two computer systems **32**, **38** which implement the first parent's invention. More particularly, attached hereto as Exhibit A is a functional description of the software to implement the integrated business functions resident on the AS/400 or mainframe computer **38**. Attached hereto as Exhibits B and C are related flow diagrams (see FIGS. **4-91** of Exhibit B) and explanatory text, respectively, for the software resident on the mainframe AS/400 computer **32**. Attached hereto as Exhibit D is a functional description of the software resident on computer **32** but which also appears on the server **28** which creates the web portal for access to the mainframe **32** and its resident program. Server **28** may use a bi-directional GUI to character based interface translator program, well known to those skilled in the art, to present the displays and information obtained and transmitted between the user and the computer **32**. However, the software of Exhibit D could also be run on server **28**, as would be appreciated by those of skill in the art. It is believed that these functional descriptions and accompanying text as exemplified in these exhibits are adequate to enable an ordinary programmer to implement corresponding software programs for executing the preferred embodiment of the first parent's invention using ordinary programming skills and without inventive effort.

[0046] As a further example of the flow of data and the functional advantages provided by the first parent's invention, reference is made to FIG. **2**. As shown therein, a right hand column is identified as "ECARS" which represents the integrated business software implemented as part of the mainframe operation **38** in computer network **36**. The center column headed "ARMS" is resident on mainframe computer **32** and coordinates the communication of data. The left column headed "ARMS/WEB" represents the software resident on computer but which is presented on server **28** and accessible by users through the Internet. Along the left side of FIG. **2** are designated three separate sections of operational activity. These are "reservation" followed by "open" and concluded by "close". Generally, the functional descriptions are arranged in chronological order proceeding from the top of FIG. **2** to the bottom. However, some functional features are permitted throughout the entirety of one of the three periods designated at the left side of FIG. **2**. One such example is the "message" function which allows messages to be sent between users at one business organization **22** and branch offices **44** and others connected to the other business organization **30**. Proceeding with a description of the transaction, the first set of communications allow for the reservation of the services. These can include requests for authorization or a rescind authorization request to be sent from the service provider to the service purchaser. Correspondingly, authorizations and authorization cancels can be sent from the services

purchaser to the services provider. Confirmations are communicated upon confirmation of an authorized reservation request. Authorization changes may be made and communicated from the services purchaser to the service provider. Corresponding rental transaction changes may be communicated from the services provider to the services purchaser. As indicated, through the entirety of this process messages may be sent between users and others connected or having access to the integrated business software, as desired. The consummation of this portion of the transaction is a reservation that has been placed, authorized, confirmed, and provision is made for changes as necessary. During the next phase of the transaction, a reservation is opened and services intended to be provided are started. Generally, and preferably for the rental of vehicles, a start and end date are established in the reservation process. However, along the way, transactional changes may be made, such as for changing the type of vehicle provided, extensions may be requested and entered from either business partner, messages may be transmitted between the business partners, and the transaction may be terminated such as by voiding the contract by one business partner or terminating the authority by the other business partner. The term "reservation" has been used herein to refer not only to the act of placing the order but also to filling the order for services including providing the rental vehicle to the ultimate user and even invoicing for those services.

[0047] The last phase of the process involves closing the transaction. During this phase of the transaction, the contract is indicated as being closed and invoiced, the services purchaser can approve invoices, reject invoices, and also remit invoices. Such invoice remittance may also include the actual transfer of funds through an electronic funds transfer medium, or otherwise as previously arranged between the business partners.

[0048] It should be understood that this is a streamlined description of the handling of a transaction, and by no means is exhaustive. For example, much more functionality is available to the user including accessing the data base to generate production reports regarding status of open or closed reservations, preparing action item lists to allow a user to organize and prioritize his work, obtaining information available in the system from having been entered by others which would otherwise require phone conversations which are inefficient and occupy still another person's time. A more detailed explanation of the functionality provided is found in the exhibits.

[0049] In summary, the first parent's invention creates almost an illusion that the services purchaser, and the great number of users at various levels of the multi-tier purchaser users, are actually part of the services provider organization in that immediate online access is provided to significant data which enable the user to make reservations for services, monitor those services as they are being provided, communicate with those providing the services, obtain information relating to the status of services as they are being provided, and close transactions, all by interacting with the services provider business organization over that user's PC and without human interaction required by the business providers personnel. By way of contra-distinction, for many years business has been conducted on a human level by customers picking up the telephone and calling services providers and talking to their human counterparts in order to convey information, place orders, monitor orders, including obtaining information as to status, canceling orders, questioning invoices and paying invoices, along with a myriad of other related interactions. Not only did the conduct of business in this manner entail significant amounts of human resources at both ends of the transaction, but it also led to inefficiencies, mistakes and delays all of which increase the cost of doing business and contribute to an increased risk of services being rendered in an unsatisfactory manner in many instances to the end user. The first parent's invention has taken the preexisting solution of providing electronic communication between the business partners to another level by "web enabling" this system for improved connectivity, improved usability, reduced training, enhanced mobility, and other advantages as described herein.

[0050] A schematic diagram of the second parent's invention is shown in FIG. **3** and includes three levels of architecture. As shown in the first level of the architecture **50**, a user **52** such as an insurance company or other user has access through the Internet **54** to the computer system comprising and incorporating the invention. An Internet provider provides a link **56** through which Internet connections may be made to communicate with the further described system. For convenience, this Internet connection may be considered as an Internet site or portal in that a user enters a URL and arrives at this connection. A firewall **58** as is known in the art is used for security purposes and to prevent hackers and the like from unauthorized access to the system. A first set of servers **60** are interconnected in a network **62** and may preferably include an ancillary server **64** for running load balancing software or the like to balance the load and provide redundancy amongst what may be a plurality of web servers **60**. These web servers **60** may preferably be Sun Microsystem servers running Apache web server software, or other such suitable software as would be well known to those of ordinary skill in the art. This first web server network of servers **60**, **62** process the random and disorderly communications flowing to and from this system and the Internet before passing them through a firewall **66** as a further precautionary measure. This first layer of architecture, identified as the Internet space/DMZ layer provides a secure interface and creates order out of the chaos of communications flowing between the system and others, as will be described.

[0051] With this architecture, stateless connections are accommodated, for the first time. By supporting stateless connections, this embodiment eliminates the implementation difficulties encountered with the first parent's embodiment on the client. These implementation difficulties include installing extra software on the client side computers, and eliminates the need for special configuration of the internet access method, such as proxy servers or routers. For example, many proxy server are configured to disallow stateful connections for security reasons, i.e. to prevent unauthorized programs from establishing such connections. Another example is that routers are customarily configured with most ports closed and thereby unable to support stateful connections.

[0052] The next layer of architecture **68** is noted in the figure as the "Enterprise private network" and is comprised of a plurality of servers **70** network connected with a network connection **72**. Again, although the choice of hardware is not considered critical by the inventors hereof, Sun Microsystem's server/work station hardware is preferably used to provide the platform for running the application software for processing the various rental vehicle transactions, as will now be explained. Attached hereto as Exhibit E are a series of functional design specifications for the ARMS/WEB application software resident on servers **70** and which provide the

detailed description of the operational features of the software and system. With these functional design specifications for the individual modules, it would be readily apparent to those of ordinary skill in the art that programmers of ordinary skill would be able to write software to execute these functional specifications without using inventive effort. Furthermore, the details of this implementation are not considered to provide any aspect of the best mode for carrying out the invention which is defined by the claims below.

[0053] Generally, the ARMS/WEB application software permits a user to sign on and, when recognized, provides the series of menus presenting choices for the user to indicate the parameters for his reservation. A plethora of information is provided and accessible to the user through the various menus provided from which the user selects and enters data to process the reservation. An important feature of the ARMS/WEB application software is that it provides the user the opportunity to select to place his vehicle rental reservation not only with the integrated business computer system represented by the third level of architecture **74**, described below, but also to route the reservation information back through the first architectural level **50** and into the Internet **54** for transmission to a competitive service provider **76**. Although the interconnection is depicted in FIG. **3** as being made through the Internet **54**, the network of servers **70** configured in accordance with the ARMS/WEB application software may utilize virtually any electronic means for transmitting the reservation information to a competitive services provider **76**. These include email, automated telephone, facsimile, and other forms of electronic communication. Of course, the competitive services provider **76** may itself comprise an integrated business such that the level of interconnectivity provided to the user **52** may parallel that disclosed and described in connection with the integrated services provider system of the invention as well as the first parent's invention. This integrated business capability is represented as the third level **74** of the architectural topography shown in FIG. **3** which parallels portions of that shown in FIG. **1** in that a pair of network mainframe computers, such as AS/400's **78**, **80** may process reservations to and from various branch offices **82** which are geographically diverse.

[0054] With the invention, the Internet portal provided by the ARMS/WEB network configured servers **70** provide an Internet portal for communication with not only the integrated computer enabled business system of the resident services provider, but also a portal for placing reservations to other competitive services providers **76**. Thus, the user **52** enjoys the capability of accessing multiple service providers for competitive services through a single Internet connection using a single set of protocols, menus, etc. for the conduct of this business activity. Furthermore, the software configured network of servers **70** is readily configured in Web Logic to adapt to changing user requirements, data requirements, unique competitive service provider requirements, and other upgrades or modifications in a convenient manner by simply modifying the software resident therein. No special browser software of other interface software is required by the user and any special interconnecting software or server/hardware requirements may be satisfied as between the service providers such that the user is presented with a seamless interconnection. As the invention is configured and works well with the integrated business and computer systems as disclosed herein, it is anticipated that such interconnection and usability may be readily translated to any other such integrated computer system as might be found in other competitive service providers, as would be apparent to those of ordinary skill in the art. Thus, with the invention, a user is provided with among other things Internet access through a single portal to a plurality of service providers and, to the extent possible, to their integrated computer business systems.

[0055] The invention is sufficiently flexible to accommodate changes which are intended to adapt it for use with other business models, and especially those encountered in other countries. Furthermore, some of these changes add features that are equally applicable domestically. One such example is an "automated extensions" feature. Typically, there are many occasions when a damaged or inconvenienced vehicle is not made available for use when originally scheduled. In the prior art, many times an extension would then need to be requested through the system, with authorization requested and provided. In order to streamline this process, and to minimize delay and involvement of supervisory authority, the system may provide for some form of automatic extension authority. Preferably, this could be provided in any one of three modalities (see FIG. **160**), or some combination thereof. A first modality as exemplified by FIG. **160** (option **1**) would be for the service provider to have automatic extension authority, upon communication to the customer, within certain predetermined limits. For example, an initial authorization may be for 12 days of a vehicle rental. A request for an extension of 5 days may be made by the service provider and of that 5 days 3 days may be authorized automatically as being within 25% of the original rental term and a request for the additional 2 days requiring approval may be automatically generated. Still another variation as exemplified by FIG. **160** (option **2**) would be for the insurance company to set a limit within the system of the total number of authorized days, which could be based on some other parameter such as labor hours or body shop hours or down time for the repairs to take place. Then, upon request for an extension, one may be automatically granted based on the total authority allowed or initially set into the system by the insurance company, and up to that limit. Still another variation as exemplified by FIG. **160** (option **3**) would be for a third party service provider to be involved in the process, such as a body shop, to make direct input into the system of a need for an extension. These authorized third party providers would preferably be pre-selected and their authority limited as described above. This feature may be implemented conveniently in a separate menu, for example as shown in the attached "screen shots" headed "Extend Rental" (see FIG. **161**).

[0056] Another feature is an offline usage feature which allows a user, such as an adjuster, to work with a laptop having loaded thereon a software program that emulates the connected network software for local processing of data, such as claims data (see FIG. **164**). In use, an adjuster would preferably first connect to the system and download or "synch" his laptop data base with the claims data resident in the system. The adjuster would then disconnect and use his local program to work offline. Such work could include the generation of new reservations, authorization of direct billings, extension of rentals, approval of invoices, and setting of termination dates for on-going rentals, among other tasks. The user would then re-connect to the system, such as over an internet connection, sign in, and "synch" his laptop to the system which then transmits or executes his commands/communications to the central processor. The central processor checks the users "synch" data against its data file, advises the user of any

"synch" data that is older than the current data, and requests the user to specify which data should be processed. After the processor is instructed by the user, it will then act on the "synch" data. For clarity, a first "screen shot" (see FIG. **163**) is provided that illustrates a sign in log for a user who wants to initiate a "synch", and a second "screen shot" (see FIG. **162**) is provided to illustrate a listing of activity that could have been created offline and which is available to be input to the system upon "synching". A preferences feature is provided to allow a user to establish defaults for automatic synching of the data. Other preferences would include options on how synching issues when offline and main system transactions are updated. Also, a history feature will allow the user to display all of the synching activity from his connection or portal (e.g., a display of all of the snych events over a specified period of time) including error messages and conflicts noted (e.g., resolution to synch conflicts (i.e., the main system was updated after the local record was updated which record takes precedence)).

[0057] Yet another feature allows for a user to enter, or execute, a full menu of transactions without individually opening them from a summary menu (see FIG. **165**). This has been referred to as a "power template" feature. The purpose of the power templates is to allow the adjuster to quickly update all action items without having to go into the details. The adjuster is presented with the required information to extend, authorize, approve invoice, or set last day on the rental. If the adjuster wishes to view the details, a hyperlink is provided to allow a user to jump into another menu of details for an individual item should it need to be changed and not entered as suggested, requested or listed on a users action list. FIG. **167** shows an administrative feature whereby a user's defined preferences can include options to list management tasks for each of extensions, direct bill requests, and invoice billing as a list or individually. FIG. **166** shows an action items list where 4 extension management tasks are displayed as a group for selection to access the power template of FIG. **165**.

[0058] Still another feature allows for the collection of user satisfaction feedback, and alerts to be entered for the attention to complaints, by the user right at his terminal (see FIGS. **168-171**). This capability allows for a text message to be entered as well as the name and contact information of the party making the feedback. As known in the service industry, and as discussed above, customer satisfaction is important and the faster a complaint can be registered and communicated to the proper person for correction, and then corrected, the more likely that a customer will view his experience favorably. By providing a pop up menu item capability, a user may from any one of a number of menus (see FIGS. **168** and **169**) immediately enter the description of the problem and send it to the proper person electronically with a minimal amount of effort and a high degree of reliability. A convenient record may then be made of these "feedback" issues and entered into the system database. With this information stored electronically, it may be conveniently searched and analyzed for any recurring patterns, thereby identifying any particular person, branch, facility, or type of problem that should be addressed for action beyond the solution of the immediate problem. A "screen shot" is provided to illustrate how the "pop up" menu may appear (see FIG. **169**), although it could be varied to allow for entry of other or additional information such as "trouble codes" allowing for the type of problem to be user classified, etc. A flow diagram (see FIG. **171**) is also provided to illustrate the flow for complaints, a methodology for processing them including escalating their importance and level of attention as the matter remains unresolved over time.

[0059] Still another feature that adds to the flexibility of the invention is a multiple adjuster feature (see FIG. **174**), that can be extended to include an independent party control feature. In some countries, and in some business models either domestically or abroad, it may be preferable to have more than one adjuster be empowered to interact with or authorize certain facets of a vehicle rental transaction. In those situations, the invention can provide the flexibility and control needed to separately empower and control the interaction of multiple adjusters. For each user of the invention, an "Administration" schedule is set up by an authorizing agent, such as someone at the supervisory level of either the insurance company or the service provider, which grants authority for performing certain work activities as well as possibly limiting the amount of monetary authority allowed that adjuster. A "screen shot" (see FIG. **183**) is attached which exemplifies such authorization, with work activities including creating/authorizing reservations, maintain/extend rentals, pay invoices, user maintenance, receive unassigned action items, and reporting. This capability could be used to separately authorize different adjusters acting on behalf of the insurance company and the individual. In other words, the individual may need the car for 5 days but the individual's insurance coverage may only apply for 3 days while the insurance may pay for five days rental. This capability may also be further extended to independent third parties.

[0060] An independent party constitutes a third-party management organization that an insurance company may give permission to manage some or all of the rental transaction. As extended for independent party management, this capability further adapts the invention for use with agencies such as "credit hire" (see FIGS. **178-179**), "lawyer" (see FIG. **183**), "fleet management companies", or "repair facility" (see FIGS. **177** and **181-182**), or "assist companies" (see FIGS. **175-176**), all of which are found in other than domestic markets. A credit hire is a lawyer in England that represents clients before a claim is filed. The lawyer (credit hire) helps his/her client get access to rentals, deals with the body shop and medical providers. The credit hire is hired by the renter, or by the person who was involved in the accident. The "lawyer" is similar to the credit hire—this person manages the claim for his/her client. In England, this role is called "Credit Hire", in Germany it is called "Lawyer". Typically, a fleet management company takes care of a fleet for a company, manages the car hire paperwork and authorizations for replacement rentals that are needed when a fleet car is in the shop. An assist company will take on the task of managing the rental process on behalf of the insurance company in managing the rental portion of the claim due to an accident. Functions for each "role" vary by the insurance company authorizing permissions. The chart and description below attempt to explain each permission as it pertains to each entity outlined above.

	Own files*	Create/ Authorize Reservations	Maintain/ Extend Rentals	Pay Invoice	User Maintenance**	Reporting (Management)	Receive Unassigned Action Items
Credit Hire (Lawyer)	X	X	X		X	X	X
Fleet Management Company	X	X	X	X	X	X	X
Assist Company	X	X	X		X	X	X

*Own files: this authorization, if granted, will allow the user to have a file (or claim) assigned to him or her.

**User Maintenance: A person that is authorized with this capability has the ability to maintain the authorization for other users within his organization. For example, person "B" at ABC company has access to "user maintenance." Person B can assign the access for persons C and A at ABC company, but not for Mr. D at DEF corporation.

Included herewith is FIG. **180** which further explains the different types of independent parties routinely found at present, and examples of "screen shots" (see FIGS. **172**, **173**, **183**, and **184**) which provide the additional functionality of customizing authorizations for each of these independent parties for interacting with a rental transaction.

[0061] Yet another feature provided by the invention is a facility for marketing cars for sale/lease to customers. As explained above, a customer will occasionally be forced to replace his vehicle at the same time that he is renting a vehicle for temporary use. Furthermore, the value of the replacement vehicle, or the approved value that an insurance company will allow under coverage, many times determines the available vehicles from which a customer will be allowed to select without personal expense. The invention is uniquely designed to provide a listing of available cars, and information about the cars, all from the existing rental car data base as is kept in routinely running the rental car company's main business of renting cars. It is a simple matter to provide a menu which allows a user to specify search through the car inventory with parameters such as zip code, vehicle category, make and model. Using any one or more of these parameters, a search inquiry will then produce a listing of available vehicles matching the parameters, along with additional information about the vehicle including mileage, selling price, and color as well as other accessories. A customer could then be advised of the search results and allowed to select a vehicle. The invention may, if agreed to by the insurance company, and possibly conditioned on the physical inspection of the car by the customer, then authorize the transfer of the vehicle to the customer as an outright settlement of his claim.

[0062] In implementing the replacement of the customers vehicle, a process preferably comprises the steps of an adjuster identifying the loss as a total loss which is preferably entered at the same time that a replacement vehicle rental is reserved (see FIG. **185** (the "Total Loss" selection in the "Vehicle Condition" field of the Create Reservation screen), sending the vehicle data to a third party valuation tool for processing, determining the valuation of the vehicle by a suitable measure such as actual cash value (ACV), sending the ACV to the system, using the search function to identify possible replacement vehicles available for the customer (see FIG. **186**), finalizing the replacement process with the customer including executing transfer of title documentation if desired, and posting the results of the vehicle replacement in the system for access by the insurance adjuster so that he can confirm that the customers claim has been satisfied. A flow chart describing this process is attached for further explanation (see FIG. **187**).

[0063] Various changes and modifications to the preferred embodiment as explained herein would be envisioned by those of skill in the art. Examples of these changes and modifications include the utilization of computer systems configured in any one of a myriad of ways using present technology alone. For example, mobile computers are presently available and wireless technology could be used to extend the integrated business network of the services provider, as well as match the mobility needed by the various users connected to and using the present invention. The particular software, and various aspects and features of its design, have been adapted for particular application to the vehicle rental business. Of course, computer software applications satisfying other business needs would necessarily require adaptation to their particular business models. Thus, it is envisioned by the inventors herein that the various software programs described herein would be matched to the particular business application to which the invention is utilized. These and other aspects of the preferred embodiment should not be viewed as limiting and instead be considered merely as illustrative of an example of the practical implementation of the present invention. These changes and modifications should be considered as part of the invention and the invention should be considered as limited only by the scope of the claims appended hereto and their legal equivalents.

Exhibit A

[0064] See the file "Exhibit A.txt" submitted on the incorporated compact disc.

Exhibit B

[0065] See FIGS. **4-91**.

Exhibit C

[0066] See the file "Exhibit C.txt" submitted on the incorporated compact disc.

Exhibit D

[0067] See the file "Exhibit D.txt" submitted on the incorporated compact disc.

Exhibit E

ARMS Web 3.0

Functional Design Specification

Extend Rental

Version 1.1

Extend Rental

1. Extend Rental Use Case

1.1 Application Overview

[0068] The following is a document used to illustrate the process for how the USER will extend a previously authorized rental using ARMS/Web 3.0. The intent for this release of the ARMS/Web application is to reach a much wider audience. This application will target a Multi-Vendor, Multi-Segment, and International customer base.

1.2 Brief Description

[0069] This use case will describe how the USER will extend a previously authorized rental. The rental company (via an Authorization Request), the RENTAL ADMINISTRATOR (via a Customer Search), or Reporting (via the Callback feature) can initiate this use case.

1.3 Use Case Actors

[0070] The following actors will interact with this use case:

[0071] RENTAL ADMINISTRATOR—The RENTAL ADMINISTRATOR will use the system to extend a previously authorized rental. This use case refers to a USER in the role of a rental administrator. There are various types of customers that the USER would represent, which include corporate account holders, car dealerships, insurance companies, and others.

[0072] ARMS—The ARMS system will receive/send transactions to ARMS/Web to confirm the extended rental.

[0073] RENTAL CAR COMPANY—A wide variety of rental car companies will be able to use this system as well. Each company will have the ability to initiate and manage their rentals through the use of this application.

1.4 Pre-Conditions

[0074] The USER must have logged into the ARMS/Web system.

[0075] The USER must have selected a previously authorized, open rental.

1.5 Flow of Events

[0076] The Flow of Events will include the necessary steps to make changes and updates to "Extend Rental".

[0077] 1.5.1 Activity Diagram—see FIG. **92**.

[0078] 1.5.2 Basic Flow

[0079] 1. The system will display the details of the Rental.

[0080] 2. The USER will enter the number of days to extend the rental.

[0081] 3. The USER will submit the Extended Rental Details.

[0082] 4. The system will validate the number of days the rental will be extended.

[0083] 5. The system will update the ARMS/Web database with the Extend Rental Details.

[0084] 6. The system will read the profile for the confirmation screen setting.

[0085] 7. For non-Enterprise rentals, the extension is sent to the non-ERAC rental car company's rental system.

[0086] 8. This ends the use case.

[0087] 1.5.3 Alternative Flows

[0088] 1.5.3.1 View Rental Notebook

[0089] At step 1 of the basic flow, the USER may choose to view the history of a rental. The USER will be able to see the diary notes associated with the Reservation/Rental.

[0090] 1.5.3.2 Display Confirmation

[0091] After step 7, the USER may wish to have a confirmation page displayed, indicating that some type of change has taken place. The confirmation page is completely optional; therefore, at anytime the USER wants to set their profile to bypass this screen, he/she may do so.

[0092] 1.5.3.3 Update USER Profile

[0093] During the confirmation process, the USER has the option of changing their profile setting to display or hide the confirmation page. Each time the setting is changed, the USER profile must be updated to reflect the new requirements set by the USER.

[0094] 1.5.3.4 Validate Changes

[0095] If the USER changes or adds information, which does not pass validation, an error message will notify the USER and return them to step 1 of the Basic Flow.

[0096] If an error is discovered in the validation of the reservation/rental information submitted by the USER, the system would present the USER with an error message and return them to the Detailed Reservation/Rental Display. If the error is specific to a data field within the form, the field should be highlighted and the error described.

[0097] 1.5.3.5 Change Customer File

[0098] Prior to step 3, the USER has the option to make changes to the customer file. After clicking the change/add link, the screen will refresh with all editable fields opened and available for the USER to make changes.

[0099] 1.5.3.6 Update ARMS/Web Database

[0100] After successfully validating the recent changes, the system must update the ARMS/Web Database. The system goes through the same process as in the Basic Flow, as the database is updated to reflect the latest changes.

1.6 Post-Conditions

[0101] If the use case was successful then the rental has been extended and the ARMS/Web system has been notified.

[0102] If the use case was unsuccessful then the system has remained unchanged.

1.7 Special Requirements

[0103] The number of days to extend a rental must be an integer greater than zero.

[0104] If a USER attempts to extend an insured rental beyond their limits for number of days and dollar amount, the system should return an error message.

1.8 Extension Points

[0105] 1.8.1 MA-16 Reassign USER/Office (Transfer)

[0106] After the extend rental detail is displayed, the USER may choose to transfer the current office/USER. First, the USER would select to change the current office/USER. Second, the system would display a list of authorized offices/USERs. Third, the USER would select a new office/USER. If additional changes are made to the customer file, the new data will also be passed through the transfer process.

[0107] 1.8.2 MA-08 View Car Class

[0108] The View Car Class use case will be used to allow the USER to view details about and select a car class to apply to a reservation. Details will include the average number of passengers and luggage items that can be served by a vehicle in the specific car class. The car class selected by the USER should be applied to the reservation.

[0109] 1.8.3 MA-15 Terminate Rental

[0110] After the extend rental detail is displayed, the USER may choose to terminate the rental. If termination is selected, the USER must enter a reason for the termination of the rental. Termination means the insurance company is no longer willing to pay for the rental.

[0111] 1.8.4 MA-04 Send Message

[0112] The Send Message will be used to allow the USER to capture messages and diary notes associated with extending a rental. The USER can elect to either have the message sent to the rental company responsible for the reservation/authorization, or (Depending on the user segment if this option is available) to store the note in the ARMS/Web system without sending the message to rental company. All MESSAGES and DIARY NOTES captured must be related to a specific reservation/authorization.

2. Screen Design

[0113] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Extend Rental Detail

[0114] This screen (see FIGS. **93**(*a*)-(*e*)) will allow the USER to pick which functions that he/she may want to change.

[0115] 2.1.1 Screen Layout—Extend Rental Detail—see FIGS. **93**(*a*)-(*e*)

[0116] 2.1.3 Extend Rental Detail

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Additional Charges	Output	15	Additional Charges		
Handling For:	Output	30	Handling for Adjuster's Name	First Name + Last Name	Last Name + First Name
Note to Self Only	Input	50	Message	NOTE	
Messages:	Output	8	Message Creation Date	Add Date	N/A.
Note to Enterprise:	Input	50	Message Text	NOTE	N/A.
	Output	50	Message Text	NOTE	N/A.
Claim Number: Purchase Order Number Corporate Class Number	Output	11	Claim Number Purchase Order Number Corporate Class Number	Insurance Claim Number, PO#, CC#	
Days Authorized to Date:	Output	2	Number of Days Authorized	Number of Days Authorized	N/A.
__ additional authorized days	Output	2	Number of Days to Extend	Number of Days to Extend	
Policy Limits	List Box	5	Policy Maximum and Dollars per day	Max $ Covered + Dollars Per Day Covered	
	Output	30	Rental Location Branch Name	Rental Location	

-continued

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
days @:	List Box	6	Rental Location Rate	Vehicle Rate	N/A.
Date of Rental	Output	10	Rental Start Date	Start Date	N/A.
Insured Name:	Output	30	Insured's Name	First Name + Last Name	
	Output	30	Rental Location Address	Address Line + Address Line2	N/A.
	Output	25	Rental Location City Name	City	N/A.
	Output	10	Rental Location Postal/Zip Code	Zip Code	N/A.
	Output	3	Rental Location State/ Province Code	State	N/A.
	Output	13	Rental Location Telephone Number	Telephone Number	N/A.
Date of Loss:	Output	10	Date of Loss	Date of Loss	
	Output	20	Renter City Name	City	
	Output	10	Rental Postal/Zip Code	Zip Code	
	Output	3	Renter State/ Province Code	State	
	Output	30	Renter Street Address	Address Line	
Home:	Output	16	Renter's Home Phone	Renters Night Phone + Renters Night Phone Extension	Not editable if ticket is Open.
	Output	30	Renter's Name	First Name + Last Name	Will not be editable if ticket is open. First Name + Last Name
Renter Information:	Output	30	Renter's Name	First Name + Last Name	N/A.
Work Phone:	Output	16	Renter's Work Phone	Day Phone + Renters Day Phone Extension	Will not be able to edit if ticket is Open.
Owner's vehicle:	Output	4	Vehicle Year, Make and Model	Renter Make/Model + Renter Vehicle Year	
Repair Facility:	Output	20	Body Shop Name	Repair Facility Name	
	Input	16	Body Shop Phone Number	Telephone Number	
	Output	15	Repair Facility City	City	
	Output	3	Repair Facility State	State	
	Output	7	Repair Facility zip code	Zip Code	
Last Day authorized	Output	10	Date rental is authorized through	CALCULATED	Calculated field. Populated with an Open Ticket only.
Charges to Date:	Output	10	Total Charges	CALCULATED	
Renter Type	Output	10	Claim type	claim type description	
Claims Office:	Output	3	Office Id	external organization abbreviated name	N/A.
Vehicle Condition	Output	15	Type of Loss	loss type description	
Renter Email:	Output	20	Renter's Email	renter email	Will not be able to edit if ticket is Open.

[0117] 2.1.4 Screen Function Definition

[0118] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0119] 2.1.4.1 Skip

[0120] When clicked, the USER will be taken out of the use case without changing the current status of the request. Any changes made by clicking Change or Add and keying data in the bottom section will be saved.

[0121] 2.1.4.2 Process

[0122] When clicked, the system will validate the input and accept the changes made to the customer file. The ARMS/Web database will be updated. The use case will then end and the USER will return to the process from which they came.

[0123] 2.1.4.3 Notebook

[0124] When clicked, the USER will be taken to the Note Book section at the bottom of the screen to view all messages for this rental.

[0125] 2.1.4.4 Set Last Date

[0126] When clicked, the system will terminate the rental. The USER will be prompted to enter a ter-

mination date for this rental. This coincides with the use case MA-17—Terminate Rental.

[0127] 2.1.4.5 Transfer File

[0128] When clicked, the USER will be taken to the Transfer File screen. This screen allows the USER to change the office or adjuster currently assigned to the customer file. The required information in the Extend Rental/Customer File will be passed to the Transfer File screen. Upon completion of the transfer, the USER will then be returned to the next action item or the profiled start page, depending on the screen from which the USER began.

[0129] 2.1.4.6 Change or Add

[0130] When clicked, the system will refresh the current screen and make all editable fields in the bottom section (outside the gray box area) input capable. The changes on the top of the screen will not be lost.

[0131] 2.1.4.7 Top of page

[0132] When clicked, the USER will be taken to the top of the current page.

[0133] 2.1.4.8 View Car Class

[0134] When clicked, the USER will be taken to the View Car Class Use Case. No changes will be lost. Once the USER is finished with this use case, the USER will return to the Extend Rental Use Case.

[0135] 2.1.4.9 Extend Rental

[0136] When clicked, the system will validate the input and accept the extension AND the changes made to the customer file. The ARMS/Web database will be updated. The use case will then end and the USER will return to the process from which they came.

ARMS Web 3.0

Functional Design Specification

Review List—Action Items

Version 1.1

Review List—Action Items

1. Review List Action Items Use Case

1.1 Application Overview

[0137] The following is a document used to illustrate the process for how the USER would view and/or select any outstanding action items assigned to them using ARMS/Web 3.0. The intent for this release of the ARMS/Web application is to reach a much wider audience. This application will target a Multi-Vendor, Multi-Segment, and International customer base.

1.2 Brief Description

[0138] This use case describes how the USER would view and/or select any outstanding action items assigned to them.

1.3 Use Case Actors

[0139] The following actors will interact with this use case.

[0140] RENTAL ADMINISTRATOR—The RENTAL ADMINISTRATOR will use the system to review outstanding action items to be completed. This use case refers to a USER in the role of a USER. There are various types of customers that the USER would represent, which include corporate account holders, car dealerships, insurance companies, and others.

[0141] ARMS—The ARMS system will receive/send transactions to ARMS/Web based on actions of the USER, retrieving and acting action items.

[0142] RENTAL CAR COMPANY—A wide variety of rental car companies will be able to use this system as well. Each company will have the ability to initiate and manage their rentals through the use of this application.

1.4 Pre-Conditions

[0143] The USER must be logged into the ARMS/Web system.

[0144] The USER must have selected to Review a List of Action Items.

[0145] The system must retrieve and confirm the USER ID and access authority.

1.5 Flow of Events

[0146] The Flow of Events will include the necessary steps for a USER to review and assign outstanding action items.

[0147] 1.5.1 Activity Diagram—see FIG. **94**.

[0148] 1.5.2 Basic Flow

[0149] 1. The USER selects to review the outstanding action items list.

[0150] 2. The system retrieves the list of outstanding action items associated with the USER ID.

[0151] 3. The system sorts and builds the list based on the appropriate USER profile.

[0152] 4. The system will display a list of all outstanding action items assigned to the USER, which could include:

[0153] Authorize a Request

[0154] Extend a Rental

[0155] Handle Unapproved Invoices/Pay Approved Invoices

[0156] Send a Message

[0157] 5. The USER will select an item from the action items list.

[0158] 6. The system displays the detail appropriate to the action item status.

[0159] 7. Upon completion of the selected action item, the system will determine the next action item and display until the current list has been completed.

[0160] 8. This ends the use case.

[0161] 1.5.3 Alternative Flows

[0162] 1.5.3.1 Handle For A Different USER

[0163] Until step 5, the USER may choose to handle requests for another USER. At this time, the USER must select the appropriate USER to handle for. The system will then validate the ID of the alternate USER, and then rebuild the action list to include all outstanding items associated with the new ID.

[0164] 1.5.3.2 Re-sort Action Items List

[0165] After displaying the action item list using the default from the profile, the USER may decide

to sort the list based on some other criteria. At any time, the USER may choose to re-sort the action item list (Depending on the USER segment) based on Item Type, Date Received, Renter's Name, Claim Number or Corporate Class Number or Purchase Order Number, Rental Company, and Administrator.

[0166] 1.5.3.3 No Items Found

[0167] If there are no Action Items available for the USER work on, the system will display a message indicating that there are no available action items to display.

1.6 Post-Conditions

[0168] None

1.7 Special Requirements

[0169] 1.7.1 Sort Request

[0170] The default sort order has been specified by the USERs profile, which governs the order in which action items have been presented. If invoices have been added to the USER's payment list, a link displays for them to proceed to the 'Payment List'. Alternatively, after the last invoice has been approved, the system automatically proceeds to the 'Payment List' before resuming the outstanding action items. If the USER has been designated with the responsibility of handling the 'Unassigned Requests,' a link at the bottom of the action item list displays.

1.8 Extension Points

[0171] An extension point indicates a link between this use case and another use case. Extension points associated with the use case are indicated below. Clicking on the extension point will open the related use case.

[0172] 1.8.1 MA-12—Extend Rental

[0173] At step 5, the USER must select an action item to perform. At this point, the USER may elect to extend a previously authorized rental. Extensions may be performed due to prolonged body shop delays and other scenarios. Upon completion of the Extend Rental process, the USER should be returned to step 5 of the Basic Flow. The action item that called for the extension should no longer appear in the USER's action item list.

[0174] 1.8.2 MA-10—Authorize Request

[0175] At step 5, the USER must select an action item to perform. At this point, the USER may elect to authorize a direct bill request. Upon completion of the authorization, the USER should be returned back to step 5 of the Basic Flow. The request needing authorization should no longer appear in the USER's action item list.

[0176] 1.8.3 Invoicing—BI-01—Handle Unapproved Invoices & BI-02 Pay Approved Invoices & BI-03 Reject an Invoice

[0177] At step 5, the USER must select an action item to perform. At this point, the USER may elect to pay approved invoices, handle unapproved invoices, or reject an invoice. Upon completion of this process, the USER should be returned back to step 5 of the Basic Flow. The invoices that were processed should no longer appear in the USER's action item list.

[0178] 1.8.4 MA-19—View Customer File (Message)

[0179] At step 5, the USER must select an action item to perform. At this point, the USER may elect to view a message from the rental company. Upon completion of the message, the USER should be returned back to step 5 of the Basic Flow. The message should no longer appear in the USER's action item list.

2. Screen Design

[0180] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Action Items

[0181] This screen (see FIGS. **95**(*a*)-(*e*)) will allow the USER to pick which functions that he/she may want to change.

[0182] 2.1.1 Screen Layout—Action Items—see FIGS. **95**(*a*)-(*e*)

[0183] 2.1.2 Action Items—Summary

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Date Received	Output	0	Date Received	action item assigned date	N/A.
Type	Output	15	Action Item Type	action item type description	N/A.
USER	Output	0	USER's Name	First Name + Last Name	N/A.
Handling For:	List Box	30	Handling for USER's Name	First Name + Last Name	N/A.
Welcome Back	Output	30	User's Name	First Name + Last Name	N/A.
Claim Number Purchase Order Number Corporate Class Number	Output	0	Claim Number Purchase Order Number Corporate Class Number	Insurance Claim Number, PO#, CC#	N/A.
Renter's Name	Output	30	Renter's Name	First Name + Last Name	N/A.
Claims Office:	List Box	3	Office	external organization abbreviated name	

[0184] 2.1.3 Screen Function Definition

[0185] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0186] 2.1.3.1 Renter's Name

[0187] When clicked on a specific hyperlink under the "Renter's Name" heading, the USER will go into the details of that particular action item and will begin any of the following use cases:

[0188] MA-12—Extend Rental

[0189] MA-10—Authorize Request

[0190] Invoicing—BI-01—Handle Unapproved Invoices & BI-02—Pay Approved Invoices & BI-03 Reject an Invoice

[0191] MA-19—Customer File (Message)

ARMS Web 3.0

Functional Design Specification

Assign a Request

Version 1.1

Assign a Request

1. Assign a Request Use Case

1.1 Application Overview

[0192] The following is a document used to illustrate the process for assigning the unassigned authorization requests to the appropriate user. The assignments will be made using the ARMS Web 3.0 system. The intent for this release of the ARMS Web application is to reach a much wider audience. This application will target a Multi-Vendor, Multi-Segment, and International customer base.

1.2 Brief Description

[0193] This use case describes the process of how a USER will review unassigned authorization request and assign them to a USER for further handling.

1.3 Use Case Actors

[0194] The following actors will interact with this use case:

[0195] RENTAL ADMINISTRATOR—RENTAL ADMINISTRATOR will use the system to assign the unassigned authorization requests. This use case refers to a USER in the role of a rental administrator. There are various types of customers that the rental administrator would represent, which include corporate account holders, car dealerships, insurance companies, and others.

[0196] ARMS—The ARMS system will receive/send transactions to ARMS Web to manage each phase of the rental process.

[0197] RENTAL CAR COMPANY—A wide variety of rental car companies will be able to use this system as well. Each company will have the ability to initiate and manage their rentals through the use of this application.

1.4 Pre-Conditions

[0198] The USER must be signed-on to the ARMS Web system.

[0199] The USER should be authorized to assign a request.

[0200] If there are unassigned requests present, the USER has selected the link from the Review List Action Items Use Case to enter this use case.

1.5 Flow of Events

[0201] The Flow of Events will include the necessary steps to make changes and updates to "Assign an Action Item".

[0202] 1.5.1 Activity Diagram—see FIG. **96**.

[0203] 1.5.2 Basic Flow

[0204] 1. The USER selects the unassigned authorizations link.

[0205] 2. The system retrieves all unassigned request summaries.

[0206] 3. The system retrieves all OFFICE IDs within ARMS Web.

[0207] 4. The system retrieves all USER IDs within the OFFICE.

[0208] 5. The system displays the unassigned authorization summaries with the offices and users.

[0209] 6. The USER selects a user to assign to the request.

[0210] 7. The system will update the ARMS Web database.

[0211] 8. This ends the use case.

[0212] 1.5.3 Alternative Flows

[0213] 1.5.3.1 Cancel Use Case

[0214] The USER should be capable of leaving the use case at any point prior to assigning the of the reservation information.

[0215] 1.5.3.2 Modify a Request

[0216] Before step 6 of the basic flow, the USER should be able to make changes to the authorization.

[0217] 1.5.3.3 Select a different office

[0218] Before step 6 of the basic flow, the USER should be able to select a different office for this authorization request. If a different office has been selected, the user cannot assign the file to a new user. The new office must now assign the file.

1.6 Post-Conditions

[0219] If the use case is successful, the system will change the request type from an unassigned authorization request to direct bill. If the user has authority to authorize this request, the system will change the request to Authorized status and assign the adjuster picked in Step 5 of the basic flow.

[0220] If the use case is unsuccessful, the system state will remain unchanged.

1.7 Special Requirements

[0221] None

1.8 Extension Points

[0222] 1.8.1 MA-04 Send Message

[0223] The Send Message function will be used to allow the user to capture messages and diary notes associated with a rental reservation/authorization. The USER can elect to have the message sent to the rental branch location responsible for the reservation/authorization. The USER may also send a message without assigning the file to a user/office. All MESSAGES and DIARY NOTES captured must be related to a specific reservation/authorization.

[0224] 1.8.2 MA-10 Authorize a Request

[0225] The USER may decide to enter into the full detail screen of the unassigned request, which would invoke the Authorize a Request use case.

2. Screen Design

[0226] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Action Items—Unassigned

[0227] This screen (see FIGS. **97**(*a*)-(*e*)) will allow the USER to assign action items to an office or USER. The USER may also cancel an item or change specified information in the Customer File through this screen.

[0228] 2.1.1 Screen Layout—Action Items—Unassigned (ARMS Web 2.0)—see FIGS. **97**(*a*)-(*e*)

[0229] 2.1.2 Action Items—Unassigned

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Claims Office:	Output	3	Office Id	external organization abbreviated name	N/A.
Handling For:	Output	30	Handling for Adjuster's Name	First Name + Last Name	N/A.
	Output	30	Renter's Name	First Name + Last Name	This should be a link. The USER should be able to get to the authorize page from this screen field
	Output	30	Renter's Address	Address Line	
	Output	10	Renter's City	City	
	Output	3	Renter's State	State	
	Output	10	Renter's Zip Code	Zip Code	
	Output	16	Renter's Home Phone	Renters Night Phone + Renters Night Phone Extension	If these fields are populated, add a label to the screen to differentiate between Home Phone and Work Phone
	Output	16	Renter's Work Phone	Day Phone + Renters Day Phone Extension	If these fields are populated, add a label to the screen to differentiate between Home Phone and Work Phone
Claim Number Purchase Order Number Corporate Class Number	Input	30	Claim Number Purchase Order Number Corporate Class Number	Insurance Claim Number, PO#, CC#	N/A.
Vehicle Condition	List Box	15	Loss Type	loss type description	
Claim Type Bill Type	List Box	15	Claim Type Bill Type	Rental type description	N/A.
Date of Loss:	Input	10	Date of Loss	Date of Loss	N/A.
Note to Enterprise	Input	30	Message Text	NOTE	N/A.
Assign to office:	List Box	5	Office Id	external organization abbreviated name	
Assign adjuster:	List Box	30	Adjuster Name	First Name + Last Name	Lists only those adjusters the USER has authority to assign

[0230] Screen Function Definition

[0231] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0232] 2.1.2.1 <<Previous

[0233] When clicked, the USER will be taken back to the previous screen.

[0234] 2.1.2.2 Process

[0235] When clicked, the USER will be taken to the next item in the action item list or a detail of the completed action items. This button ends the use case.

[0236] 2.1.2.3 Cancel

[0237] When clicked, the USER will be allowed to cancel the authorization. If this occurs, the rental becomes unauthorized and the rental is no longer responsibility of the company.

ARMS/Web 3.0

Functional Design Specification

View Car Class

Version 1.3

View Car Class

1. View Car Class Use Case

1.1 Application Overview

[0238] The following is a document used to illustrate the process for how the USER would view examples of automobiles that are part of each rental company car class using ARMS/Web 3.0. The intent for this release of the ARMS/Web application is to reach a much wider audience. This application will target a Multi-Vendor, Multi-Segment, and International customer base.

1.2 Brief Description

[0239] This use case will allow the USER to view examples of automobiles that are part of each rental company car class. The USER will have the ability to select a car class and have the rate for the car class apply to the reservation/authorization.

1.3 Use Case Actors

[0240] The following actors will interact with this use case:

[0241] RENTAL ADMINISTRATOR—The RENTAL ADMINISTRATOR will use the system to view and/or select the car class that will apply to a reservation. This use case refers to a USER in the role of a USER. There are various types of customers that the USER would represent, which include corporate account holders, car dealerships, insurance companies, and others.

[0242] ARMS—The ARMS system will receive/send transactions to ARMS/Web to retrieving information regarding the automobiles.

[0243] RENTAL CAR COMPANY—A wide variety of rental car companies will be able to use this system as well. Each company will have the ability to initiate and manage their rentals through the use of this application.

1.4 Pre-Conditions

[0244] The USER must be signed-on to the ARMS/Web system.

[0245] The USER must have a reservation or open ticket selected.

1.5 Flow of Events

[0246] The Flow of Events will include the necessary steps to view and/or select the car class to apply to a rental reservation.

[0247] 1.5.1 Activity Diagram—see FIG. **98**.

[0248] 1.5.2 Basic Flow

[0249] The Basic Flow of the View Car Class use case includes all of the required steps to view and/or select a car class for a rental reservation. If a car class is selected, it will be used to populate rate information on a rental authorization.

[0250] 1. The USER will select View Car Class from the active reservation or open ticket.

[0251] 2. The system will display a car class detail screen. If the USER had previously selected a car class (for example, on the Create Reservation screen), the car class selected will be displayed. If no car class has been selected, the system will display the Standard car class.

[0252] 3. The USER will select the car class to apply to the reservation or open ticket.

[0253] 4. The system will return the USER to the active reservation or open ticket and populate car class information based on the car class selected.

[0254] 5. This ends this use case.

[0255] 1.5.3 Alternative Flows

[0256] 1.5.3.1 Select Alternate Car Class

[0257] From Step 2 of the Basic Flow, the USER will have the ability to view an alternate car class. The car classes that will be available to view include:

[0258] Economy

[0259] Compact

[0260] Intermediate

[0261] Standard

[0262] Full Size

[0263] Premium

[0264] If the USER selects an alternate car class, the system will refresh and present the details of the new car class.

[0265] 1.5.3.2 Populate Car Class Rates

[0266] If a rental branch location has already been selected prior to entering this use case, the selection of a car class will populate the rates that apply to the selected car class on the active reservation or open ticket. This alternate flow returns the USER to Step 4 of the Basic Flow.

1.6 Post-Conditions

[0267] If successful, the selected Car Class will be returned to the active reservation or open ticket.

[0268] If unsuccessful, the system state is unchanged.

1.7 Special Requirements

[0269] The additional requirements of the business use case are included here. These are requirements not covered by the flow as they have been described in the sections above.

[0270] 1.7.1 Modify Car Class Selection Results

[0271] The USER may change the results of this use case as part of the active reservation or open ticket.

1.8 Extension Points

[0272] None.

2. Screen Design

[0273] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Car Class Detail Screen

[0274] This screen (see FIGS. **99**(*a*)-(*b*)) will allow the USER to view detailed information about the rental company's car classes. The USER will also have the ability to select a car class to apply to a rental reservation/authorization.

[0275] 2.1.1 Screen Layout—see FIGS. **99**(*a*)-(*b*)

[0276] 2.1.2 Car Class Details

[0277] 2.1.3 Screen Function Definition

[0278] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0279] 2.1.3.1 Select This Car Class

[0280] The continue screen function will allow the USER to select the car class to apply to a reservation.

[0281] 2.1.3.1.1 The Continue screen function is invoked through either a button click or through an Enter keystroke.

[0282] 2.1.3.2 Previous

[0283] The Previous screen function allows the USER to return to the previous screen.

[0284] 2.1.3.2.1 The Previous screen function is invoked through a button click.

3. Questions and Answers

[0285] None.

ARMS/Web 3.0

Functional Design Specification

Authorize a Request

Version 1.1

Screen Label	Type	Length	Screen Field Name	Data Field	Screen Specific Rule
	Output	20	Car Class Name		This should be the name of the currently selected car class.
	Output	40	Rental Company Name		
(Person Image)	Output	2	Car Class Person Capacity		This should provide the average person capacity of the selected car class.
(Luggage Image)	Output	2	Car Class Luggage Capacity		This should provide the average luggage capacity of the selected car class.
	Hidden	255	Car Class Image Source		This should provide a picture of an example car within the selected car class.
	Output	120	Car Class Detail Description		This should provide a description of the selected car class.
Economy	Output		Economy Car Class		This should be a hyperlink to the Economy car class detail.
Compact	Output		Compact Car Class		This should be a hyperlink to the Compact car class detail.
Intermediate	Output		Intermediate Car Class		This should be a hyperlink to the Intermediate car class detail.
Standard	Output		Standard Car Class		This should be a hyperlink to the Standard car class detail.
Full Size	Output		Full Size Car Class		This should be a hyperlink to the Full Size car class detail.
Premium	Output		Premium Car Class		This should be a hyperlink to the Premium car class detail.

Authorize a Request

1. Authorize Request Use Case

1.1 Application Overview

[0286] The following is a document used to illustrate the process for how a USER authorizes a direct bill request using ARMS/Web 3.0. The intent for this release of the ARMS/Web application is to reach a much wider audience. This application will target a Multi-Vendor, Multi-Segment, and International customer base.

1.2 Brief Description

[0287] This use case describes how a USER authorizes a direct bill request.

1.3 Use Case Actors

[0288] The following actors will interact with this use case:

[0289] RENTAL ADMINISTRATOR—The RENTAL ADMINISTRATOR will use the system to authorize a direct bill request. This use case refers to a USER in the role of a rental administrator. There are various types of customers that the USER would represent, which include corporate account holders, car dealerships, insurance companies, and others.

[0290] ARMS—The ARMS system will receive/send transactions to ARMS/Web to confirm the direct bill request.

[0291] RENTAL CAR COMPANY—A wide variety of rental car companies will be able to use this system as well. Each company will have the ability to initiate and manage their rentals through the use of this application.

1.4 Pre-Conditions

[0292] The USER must be logged into the ARMS/Web system.

[0293] The USER must have the authority to authorize a request.

[0294] At least one outstanding unauthorized direct bill request must be assigned that the USER may handle.

[0295] The USER must have selected an Unauthorized Direct Bill Request from the Review Action Items Screen or from the Search Results page.

1.5 Flow of Events

[0296] The Flow of Events will include the necessary steps to make changes and updates to "Authorize Request".

[0297] 1.5.1 Activity Diagram—see FIG. **100**.

[0298] 1.5.2 Basic Flow

[0299] 1. The USER selects an outstanding direct bill to authorize.

[0300] 2. The system displays the Customer file.

[0301] 3. The USER reviews the renter's information.

[0302] 4. The USER inputs a number of Authorized Amounts, days and required fields.

[0303] 5. The USER submits the Authorization.

[0304] 6. The system validates information in the Customer File.

[0305] 7. If the USER assigned to the Customer File is 'UNKNOWN' or 'UNASSIGNED', the System will assign the Customer File to the current USER.

[0306] 8. The system will update the ARMS/Web database with the Authorization.

[0307] 9. The System reads the USER profile to see if the confirmation page should display.

[0308] 10. If the profile indicates 'Show Confirmation Page', the System will display the confirmation page.

[0309] 11. For non-Enterprise rentals, the authorization request is sent to the non-ERAC rental car company's rental system.

[0310] 12. This ends the use case.

[0311] 1.5.3 Alternative Flows

[0312] 1.5.3.1 View Notebook

[0313] At step 3 of the Basic Flow, the USER can select to view the transaction history (Notebook) by selecting the Go To Notebook link.

[0314] 1.5.3.2 Add Notes to Customer File

[0315] At step 3 of the Basic Flow, the USER can add notes to the Customer File by typing in the appropriate notes field on the Customer File page.

[0316] 1.5.3.3 Skip Customer File

[0317] At step 3 of the Basic Flow, the USER can get out of the Customer File by selecting the skip button on the Customer File page.

[0318] 1.5.3.4 Change Customer File

[0319] At step 3 of the Basic Flow, the USER can make changes to the additional details of the Customer File. This is done by selecting the Add/Change link which will invoke an editable page with all *appropriate information editable.

1.6 Post-Conditions

[0320] If the use case was successful then the changes should go into effect immediately and the screen should revert back to the original screen of entry.

[0321] If the use case was successful, then the ARMS/Web system will be notified of authorization changes.

[0322] If the use case was unsuccessful then the system state will be unchanged.

1.7 Special Requirements

[0323] 1.7.1 Requirements for Claim Type Authorizations (Insurance Users Only)

[0324] The following are a set of requirements surrounding the type of authorized amounts that are allowable based on the Claim Type associated with a rental. These restrictions DO NOT APPLY to reservations that are submitted with a Direct Billing Percentage of zero (0).

[0325] 1.7.1.1 When the Claim Type selected is 'Insured, 'Theft', or 'Uninsured Motorist'

[0326] 1.7.1.1.1 For insurance USERs, the reservation/rental must always include an Authorized Rate or both Policy Daily and Maximum Limits as defined by the renter's insurance policy. Zero (0) is an acceptable Policy Daily Limit.

[0327] 1.7.1.1.2 For insurance USERs, the reservation/rental must include an Authorized Rate or Policy Daily Limit if a Policy Maximum Limit is included. Zero (0) is an acceptable Policy Daily Limit.

[0328] 1.7.1.2 When the Claim Type selected is 'Claimant' (Insurance Users Only)

[0329] 1.7.1.2.1 The reservation/rental must always include an Authorized Rate.

[0330] 1.7.1.2.2 The reservation/rental may not include a Policy Daily/Maximum Limits selection.

[0331] 1.7.1.3 Requirements for editable fields based on reservation/ticket status

[0332] 1.7.1.3.1 Depending on the status of the Customer File the USER may change the following fields:

Field Name (Depending on USER Segment)	Unassigned/ Unauthorized Reservation/ Ticket	Assigned but Unauthorized Reservation or Ticket	Authorized Ticket
CLAIM NUMBER (Insurance & Fleet)	X	X	X
PURCHASE ORDER NUMBER (Dealership)			
CORPORATE CLASS NUMBER (Corporate)			
CLAIM TYPE (Insurance)	X	X	X
BILL TYPE (Dealership)			
VEHICLE CONDITION	X	X	X
DATE OF LOSS (Removed for corporate)	X	X	X
INSURED INFORMATION	X	X	X
RENTER INFORMATION	X		
DATE RENTAL IS NEEDED	X		
NUMBER OF AUTHORIZED DAYS	X	X	
DIRECT BILL PERCENT (Insurance Only)	X	X	X
POLICY LIMITS (Insurance and Corporate Only)	X	X	X
AUTHORIZED RATE	X	X	X

[0333] If the Customer File is an Unauthorized Reservation, the USER can Reject the Authorization Request, Send a Message, and/or Transfer (Assign) the file to a USER.

[0334] 1.7.1.3.2 If the status of the Customer File is an open ticket the following rules apply:

Actions	Authorized Reservation	Unauthorized Reservation/ Ticket	Authorized Open Ticket
Send Message	X	X	X
Extension			X
Terminate Rental			X
Cancel Authorization	X	X	
Transfer/Assign Adjuster	X	X	X
View Car Class	X	X	X

1.8 Extension Points

[0335] An extension point indicates a link between this use case and another use case. Extension points associated with the use case are indicated below. Clicking on the extension point will open the related use case.

[0336] 1.8.1 MA-04 Send A Message

[0337] The Send Message will be used to allow the USER to capture messages and diary notes associated with extending a rental. The USER can elect to either have the message sent to the rental company responsible for the reservation/authorization, or (Depending on the USER segment if this option is available) to store the note in the ARMS/Web system without sending the message to rental company. All MESSAGES and DIARY NOTES captured must be related to a specific reservation/authorization.

[0338] 1.8.2 MA-07 Additional Charges

[0339] The USER may choose to select the additional charges button that displays a page showing all the additional items at the branch with the branch charges displayed. The USER can select the items and enter in the authorized amounts.

[0340] 1.8.3 MA-16 Transfer Work

[0341] The USER may choose to transfer an authorization to a different USER in his/her office or transfer the authorization to another USER in a different office.

[0342] 1.8.4 MA-08 View Car Class

[0343] The USER may choose to view the car class. This button invokes the View Car Class use case.

[0344] 1.8.5 MA-17 Cancel Authorization

[0345] The USER may choose to deny the authorization. When the USER selects the CANCEL button, it will invoke the Cancel Authorization use case to reject the authorization.

2. Screen Design

[0346] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Authorize Rental Detail

[0347] This screen (see FIGS. **101**(*a*)-(*e*)) will allow the USER to work the currently selected authorization request. The USER (Depending on the USER segment) may set the authorization amounts and policy coverage limits or may assign the request to another USER.

[0348] 2.1.1 Screen Layout—Authorize Rental Detail—see FIGS. **101**(*a*)-(*e*)

[0349] 2.1.2 Authorize Rental Detail

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Handling For:	List Box	30	Handling for USER's Name	First Name + Last Name	

-continued

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Note to:	Input	0	Message	NOTE	
Notebook	Output	50	Message	NOTE	
	Output	8	Message Creation Date	Add Date	
Message	Output	50	Message Text	NOTE	
	Output	10	Notebook creation date	Add Date	
Claim no Corporate Class no Purchase Order no	Output	30	Claim Number Corporate Class Number Purchase Order Number	Insurance Claim Number	Claim number for an insurance USER Corporate Class number is for a corporate USER Purchase order number is for a dealership USER
Claim Number: Corporate Class Number Purchase Order Number	Input	11	Claim Number Corporate Class Number Purchase Order Number	Insurance Claim Number	Claim number for an insurance USER Corporate Class number is for a corporate USER Purchase order number is for a dealership USER
____ days @	Input	4	Number of Days Authorized	Number Of Days Authorized	
Direct Bill %:	Input	6	Percent Covered	Bill To %	Only visible to insurance USER
Policy: Daily rate/Maximum dollars:	List Box	5	Policy Maximum and Daily Rates	Dollars Per Day Covered	Only visible to insurance and fleet USERs.
Policy: Daily rate/Maximum dollars:	List Box	5	Policy Maximum and Daily Rates	Max $ Covered	Only visible to insurance and fleet USERs.
	Output	30	Rental Location Branch Name	Rental Location	
Date Rental Needed:	List Box	10	Rental Start Date	Start Date	
days @ ____	List Box	6	Vehicle Rate	Vehicle Rate	
Insured Name:	Input	30	Insured's Name	First Name + Last Name	
Insured Name:	Output	20	Insured's Name	First Name + Last Name	
	Output	30	Rental Location Address	Address Line + Address Line2	
	Output	25	Rental Location City Name	City	
	Output	10	Rental Location Postal/ Zip Code	Zip Code	
	Output	3	Rental Location State/ Province Code	State	
	Output	13	Rental Location Telephone Number	Telephone Number	
Date of Loss:	List Box	10	Date of Loss	Date of Loss	Remove for corporate USERs
Date of Loss	Output	10	Date of Loss	Date of Loss	Remove for corporate USERs
	Output	30	Renter's Address Line	Address Line	
Renter's Address	Output	20	Renter's City	City	
	Output	3	Renter's State/Province Code	State	
	Output	15	Renter's Zip/Postal Code	Zip Code	
Home Phone:	Output	16	Renter's Home Phone	Renters Night Phone + Renters Night Phone Extension	This field is input if the ticket is not opened. It will not be editable if the ticket is open.
Authorize Direct Bill: for	Output	30	Renter's Name	First Name + Last Name	N/A.
Renter:	Output	30	Renter's Name	First Name + Last Name	N/A.
	Output	16	Renter's Work Phone	Day Phone + Renters Day Phone Extension	

-continued

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Owner's Vehicle	Output	20	Vehicle Year, Make and Model	Renter Vehicle Year + Renter Make/Model	
	Output	15	Repair Facility City	City	
Repair Facility	Output	20	Repair Facility Name	Repair Facility Name	
	Output	3	Repair Facility State	State	
	Output	10	Repair Facility Telephone Number	Telephone Number	
	Output	7	Repair Facility Zip Code	Zip Code	
Claim Type:	List Box	15	Claim Type	claim type description	N/A.
Claims Office:	Output	3	Office Id	external organization abbreviated name	N/A.
Vehicle Condition	List Box	20	Loss Type	loss type description	
Vehicle Condition	Output	20	Type of Loss	loss type description	
	Input	20	Renter's Email	renter email	

[0350] 2.1.3 Screen Function Definition

[0351] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0352] 2.1.3.1 Skip

[0353] When clicked, the USER will be taken out of the use case without changing the current status of the request. Any changes made by clicking Change or Add and keying data in the bottom section will be saved.

[0354] 2.1.3.2 Process

[0355] When clicked, the system will validate the input and accept the changes made to the customer file. The ARMS/Web database will be updated. The use case will then end and the USER will return to the process from which they came.

[0356] 2.1.3.3 Notebook

[0357] When clicked, the USER will be taken to the Note Book section at the bottom of the screen to view all messages for this rental.

[0358] 2.1.3.4 Set Last Date

[0359] When clicked, the system will terminate the rental. The USER will be prompted to enter a termination date for this rental. This coincides with the use case MA-17—Terminate Rental.

[0360] 2.1.3.5 Transfer File

[0361] When clicked, the USER will be taken to the Transfer File screen. This screen allows the USER to change the office or USER currently assigned to the customer file. The required information in the Extend Rental/Customer File will be passed to the Transfer File screen. Upon completion of the transfer, the USER will then be returned to the next action item or the profiled start page, depending on the screen from which the USER began.

[0362] 2.1.3.6 Change or Add

[0363] When clicked, the system will refresh the current screen and make all editable fields in the bottom section (outside the gray box area) input capable. The changes on the top of the screen will not be lost.

[0364] 2.1.3.7 Top of page

[0365] When clicked, the USER will be taken to the top of the current page.

[0366] 2.1.3.8 View Car Class

[0367] When clicked, the USER will be taken to the View Car Class Use Case. No changes will be lost. Once the USER is finished with this use case, the USER will return to the Extend Rental Use Case.

ARMS Web 3.0

Functional Design Specification

Create Reservation

Version 1.4

Create Reservation

1. Create Reservation Use Case

1.1 Application Overview

[0368] The following is a document used to illustrate the process for creating a reservation using ARMS Web 3.0. The intent for this release of the ARMS Web application is to reach a much wider audience. This application will target a Multi-Vendor, Multi-Segment, and International customer base.

1.2 Brief Description

[0369] This use case will describe how a USER would create a rental reservation in the ARMS Web system. When creating a reservation, the USER is also creating an authorization for payment. The USER may also submit a reservation without authorizing payment.

1.3 Use Case Actors

[0370] The following actors will interact with this use case:

[0371] RENTAL ADMINISTRATOR—The RENTAL ADMINISTRATOR will use the system to create an authorized reservation. This use case refers to a USER in the role of a rental administrator. There are various types of customers that the rental administrator would represent, which include corporate account holders, car dealerships, insurance companies, and others.

[0372] ARMS—The ARMS system will receive/send transactions to ARMS Web to confirm the extended rental.

[0373] RENTAL CAR COMPANY—A wide variety of rental car companies will be able to use this system as well. Each company will have the ability to initiate and manage their rentals through the use of this application.

1.4 Pre-Conditions

[0374] The USER must be signed in to the ARMS Web system.

[0375] The USER must the authority to create a reservation.

1.5 Flow of Events

[0376] The Flow of Events includes all steps necessary to create a reservation using the ARMS Web system.

[0377] 1.5.1 Activity Diagram—see FIG. **102**.

[0378] 1.5.2 Basic Flow

[0379] The Basic Flow of the Create Reservation use case includes all of the required steps for a new reservation to be created in the ARMS Web system. Shadowed boxes in the Activity Diagram indicate the Basic Flow.

[0380] 1. The USER selects to create a reservation from the top navigation menu.

[0381] 2. The system prompts the USER to enter initial information about the renter (Depending on the user segment):

[0382] Corporate Class Number or Claim Number (The use case will refer to this as 'Reference Number')

[0383] Bill type

[0384] Renter First Name

[0385] Renter Last Name

[0386] Rental Company

[0387] Telephone Number or Postal Code where the renter would like to be picked up

[0388] 3. The USER enters initial information about the renter.

[0389] 4. The USER submits the initial reservation information to the system.

[0390] 5. The system will validate the initial information entered by the USER. (See section 1.5.3.1 Initial Reservation Information Invalid in Alternative Flows on page 4 for validation rules.)

[0391] 6. The system will perform a search for previous authorizations that may correlate directly to the rental reservation that the USER is beginning to establish. The system will search for two key types of records:

[0392] Unauthorized Request Matches

[0393] An Unauthorized Request is defined as a rental Authorization Request that is generated when The Rental Company creates a reservation or contract for the customer that has not been approved. This search helps to prevent the USER from creating a new reservation for a customer that has an outstanding Unauthorized Request in the ARMS system. The Unauthorized Request search is completed using the first three characters of the Renter Last Name and is limited to unauthorized requests (requests in unassigned or direct bill request statuses) for the selected Office. If matches are found, the Unauthorized Request/Authorized Request Search Matches Alternative Flow will be invoked.

[0394] Authorized Matches

[0395] Reference numbers that have already been associated with a rental reservation or contract (i.e., Authorized Rentals) should be brought to the attention of the USER to help prevent over-authorization situations. The system will search for an exact corporate class number match on any reservation or ticket (open or closed) related to the company in the last six months. This search will be completed using the exact Reference Number on all authorized requests (requests in any status other than unassigned or direct bill request).

[0396] If no matching records are found, the Basic Flow continues.

[0397] 7. The system will retrieve a rental branch location where the rental is needed based on the Telephone Number or Postal Code entered by the USER. If no allocation is found, a message should be generated notifying the USER that no location was available for the search criteria and that Claims Connection will handle the reservation (include the search criteria in message).

[0398] 8. The system will retrieve the current applicable rates for that rental branch location. If no rental branch location is available, the system will display an open text box to allow the USER to type in a rate.

[0399] 9. The system will display the Quick Reservations screen.

[0400] 10. The USER will enter the reservation information.

[0401] 11. The USER submits the reservation to the system.

[0402] 12. The system will validate the reservation information submitted by the USER. (See section 1.5.3.3 Reservation Information Invalid in Alternative Flows on page 5 for validation rules.)

[0403] 13. The system updates the database.

[0404] 14. The system sends the reservation to ARMS.

[0405] 15. The system will display the reservation confirmation to the USER. The reservation confirmation will not include a confirmation number, but will incorporate a message that The Rental Company has received the reservation.

[0406] 16. If the reservation is a non-Enterprise reservation, then the transaction is electronically transmitted to the intended rental car company's rental system.

[0407] 17. This ends the use case.

[0408] 1.5.3 Alternative Flows

[0409] The Alternative Flows of this use case can occur when conditions exist or specific USER feedback is provided.

[0410] 1.5.3.1 Initial Reservation Information Invalid

[0411] If the initial reservation information is invalid (Step 5 of the Basic Flow), the system should present an error message to the USER and force the USER back into Step 2 of the Basic Flow.

[0412] 1.5.3.1.1 It will be considered invalid if the Reference Number, Renter First Name, Renter Last Name, Rental Company, or Where Needed Value (Postal Code or Telephone Number) have not been included.

[0413] 1.5.3.1.2 It will be considered invalid if the 'where needed' search criteria is a U.S. or Canadian telephone number and the first three digits (i.e., area code) meet the criteria below:

[0414] 0XX

[0415] 1XX

[0416] the second and third digits equal (e.g., 800, 877, 888, etc.)

[0417] Where X equals any digit 0 through 9.

[0418] 1.5.3.1.3 It will be considered invalid if the 'where needed' search criteria is a U.S. or Canadian telephone number that does not consist of 10 digits.

[0419] 1.5.3.1.4 It will be considered invalid if the 'where needed' search criteria is a U.S. postal code that does not consist of 5 or 9 digits.

[0420] 1.5.3.1.5 It will be considered invalid if the 'where needed' search criteria is a Canadian postal code that does not consist of 6 alphanumeric characters in the format AXAXAX where A is an alpha character and X is a digit between 0 and 9.

[0421] 1.5.3.2 Unauthorized Request/Authorized Request Search Matches

[0422] If either the search for Unauthorized Requests or the search for Authorized Request matches returns a positive result (Step 6 of the Basic Flow), the matching records will be presented to the USER. The matching records should be provided in summary form, and be distinctly identified as either Authorized Request matches or potential Unauthorized Request matches.

[0423] For Authorized Request matches, the USER will have the ability to select the Authorized Request and move into the MA-19 View Customer File use case to view the details of the previously authorized rental. The USER will have the option of continuing or canceling this use case from the MA-19 View Customer File use case.

[0424] For Unauthorized Request matches, the USER will have the ability to select the Unauthorized Request and move into the MA-10 Authorize Request use case to review and/or perform operations on the Unauthorized Request.

[0425] If the customer does not appear as an Unauthorized Request or Corporate Class Number match, the USER can select to continue to Step 7 of the Basic Flow.

[0426] 1.5.3.3 Reservation Information Invalid

[0427] If an error is discovered in the validation of the reservation information submitted by the USER (Step 12 of the Basic Flow), the system will present the USER with an error message and return them to Step 9 of the Basic Flow (NOTE: If the USER submitted information from the Detailed Reservation screen, they should be returned to the Display Detailed Reservation Alternative Flow above). If the error is specific to a data field within the form, the field should be highlighted and the error described.

[0428] 1.5.3.3.1 It will be considered invalid if the Reference Number, Renter First Name, Renter Last Name, Vehicle Condition, Rental Location, Authorized Number of Days, and at least one Renter Telephone number have not been included.

[0429] 1.5.3.3.2 It will be considered invalid if the customer has established Reference Number editing and the Reference Number format does not meet the requirements of the customer's Reference Number definition. Reference Number definition is completed as part of the company profile. (Claim Number format definition will be defined in some cases in both the ARMS Web system and in the ARMS/400 system (e.g., Nationwide, GEICO). Claim number definition will have to be maintained in BOTH systems in cases where this overlap exists. We are unable to reuse the claim number format definitions due to technical complications.)

[0430] 1.5.3.3.3 It will be considered invalid if any field identified as REQUIRED in the company/office profile is not included.

[0431] 1.5.3.3.4 It will be considered invalid if any data entered violates the data type as specified by the ARMS Web database (i.e., alpha characters in a numeric field).

[0432] 1.5.3.3.5 A warning will be presented to the USER if any defined limits identified in the company/office/user profile are exceeded (e.g., Maximum Number of Days Authorized). The system will allow the USER to submit the authorization from the warning.

[0433] 1.5.3.3.6 It will be considered invalid if the Authorized Number of Days is included and is less than zero (0).

[0434] 1.5.3.3.7 It will be considered invalid if the Date of Loss is greater than the current date.

[0435] 1.5.3.3.8 It will be considered invalid if the first three digits (i.e., area code) of any U.S. or Canadian telephone number meet the criteria below:

[0436] 0XX

[0437] 1XX

[0438] The second and third digits equal (e.g., 800, 877, 888, etc.)

[0439] Where X equals any digit 0 through 9.

[0440] 1.5.3.3.9 It will be considered invalid if a U.S. or Canadian telephone number does not consist of 10 digits.

[0441] 1.5.3.3.10 It will be considered invalid if a U.S. postal code does not consist of 5 or 9 digits.

[0442] 1.5.3.3.11 It will be considered invalid if a Canadian postal code does not consist of 6 alphanumeric characters in the format AXAXAX where A is an alpha character and X id a digit between 0 and 9.

[0443] 1.5.3.3.12 It will be considered invalid if an E-mail address is included that does not include an '@' character.

[0444] 1.5.3.4 Cancel Use Case

[0445] The USER should be capable of canceling the use case at any point prior to the submission of the reservation to the ARMS Web database. The USER should be returned to the previous activity/page that the USER was on prior to entering this use case.

1.6 Post-Conditions

[0446] If successful, a reservation authorization is sent to ARMS.

[0447] If unsuccessful, the system state will be unchanged.

1.7 Special Requirements

[0448] 1.7.1 Requirements for Reference Number Formatting

[0449] The following statements are a set of requirements for providing custom reference number formatting for a customer. The ARMS Web system will allow customer companies to define a specific layout or format that they use as their standard reference number format, so that the reference number field used in the system is presented as separate fields and are easily recognizable and 'intuitive' to the USER. These requirements will be implemented to all system functions where the customer reference number is used.

[0450] 1.7.1.1 Customers must have the ability to define their reference number format (and in some cases, validations on specific portions of the reference number format) as part of the company profile. More than one reference number format can be stored per company, and each reference number format definition must have a unique identifier/name. The selection of which reference number format to use should be defined as part of the office profile using the reference number format unique identifier/name.

[0451] 1.7.1.2 Reference numbers will be defined in 'segments'. Each segment will be presented to the USER as a separate field. For example, if the reference number format for the COMPANY were 45-A7456-1207, the reference number format would be defined to the system as a 2-character numeric field, a 5-character alphanumeric field, and a 4-character numeric field.

[0452] 1.7.1.3 Customers must have the ability to define a set of 'valid values' for any given segment of the reference number format. Valid Values allow the customer to dictate what the valid entries for a given reference number segment would include. For example, if the second segment in the customer's reference number format must be a state abbreviation, the customer could define valid values for that segment as 'AL', 'AR', 'AK', etc. If the USER does not enter one of the valid values, an error would be generated to notify the USER to enter a 'valid' value. If no valid values are included for a reference number segment, all entry in to the field will be considered valid (assuming that the data type is correct). If valid values are specified, entry into the reference number segment MUST MATCH ONE OF THE VALID VALUES IDENTIFIED.

[0453] 1.7.1.4 The system will display the reference number field(s) as it is described by the reference number format definition for the office.

[0454] 1.7.2 Requirements for Finding Rental Location

[0455] Below are the requirements for finding a rental location, across multiple rental car companies, in the ARMS Web system. ARMS Web will resolve a rental location and pass the location to ARMS for routing (which is a deviation from current state handling). These requirements were derived from the current state business requirements for the ARMS locator system.

[0456] 1.7.2.1 ARMS Web will always return a Rental Company's branch location for a reservation. For all ARMS Web reservations, the following rules for finding a rental location apply:

[0457] 1.7.2.1.1 For United States locations, the locator will search a 50-mile radius around the renter's phone number or postal code for the closest branch that accepts ARMS reservations.

[0458] 1.7.2.1.2 For International locations, the locator will search a 50-mile radius around the renter's phone number or postal code for the closest open branch that accepts ARMS reservations. If no open branches are found, the closest branch that accepts ARMS reservations should be returned.

[0459] 1.7.2.2 When the rental branch location is determined, the system will retrieve the name, shipping address, telephone number and rates of the rental branch location and present them to the USER on the Create Reservation screen(s).

[0460] 1.7.2.3 The system will only display Claims Connection (7680) as the location (with no rates) when no location can be found within the 50-mile radius. If Claims Connection is displayed, a message should be included to indicate that no rental branch location was found within a 50-mile radius of the search criteria, and Claims Connection will ensure that the reservation is handled appropriately.

[0461] 1.7.3 Requirements for Routing a Reservation

[0462] When a reservation is submitted to the ARMS Web system, routing of the reservation is required to ensure that the renter is called within two hours to confirm rental details. Routing is done AFTER the reservation has been submitted to the ARMS Web system, and is transparent to the USER. The reservation can be routed to the selected rental branch, to Claims Connection, or to a regional call center based on the following rules:

[0463] NOTE: These requirements were derived from the current state business requirements for the ARMS locator system.

[0464] 1.7.3.1 The system should automatically route submitted reservations to Claims Connection between Friday 11:00 pm and Sunday 11:00 pm, regardless of whether the selected rental branch location is open or not.

[0465] 1.7.3.2 The system should determine if the selected rental branch location on a submitted reservation is open or closed.

[0466] 1.7.3.2.1 If the selected branch is open, the submitted reservation should be routed directly to the rental branch location (except in cases where a regional call center exists, see 1.7.3.3 below).

[0467] 1.7.3.2.2 If the selected rental branch location is closed, the system will determine if the company that submitted the reservation has established after-hours handling of reservations. If the company has not established after-hours handling, the reservation is routed to the selected rental branch location (except in cases where a regional call center exists, see 1.7.3.3 below). If the company has established after-hours handling, the following rules apply:

[0468] 1. The system will check the hours of availability for Claims Connection. Claims Connections Hours are 5:00 a.m.-11:00 p.m. CST, 7 days a week. (Although we receive reservations 24 hours/day, 7 days/week, we do not route them between 11:45 pm and 4:30 am (CST). The only exception to this is Saturday night to Sunday.)

[0469] a. If Claims connection is open, the reservation will be routed to Claims Connection. (The insurance company customer, National Marketing and the Claims Connection Manager will determine whether or not Claims Connection makes a courtesy call to the renter).

[0470] b. If Claims Connection is closed, the closest branch hours are checked to see if they will be open within 8 hours. If the branch will be open in 8 hours, the reservation will be routed to the rental branch location (except in cases where a regional call center exists, see 1.7.3.3 below). If the branch will not be open in the next 8 hours, the reservation will be routed to Claims Connection.

[0471] 1.7.3.3 The system should determine if the selected rental branch location on a submitted reservation has a regional call center.

[0472] 1.7.3.3.1 If the selected rental branch location has a call center to handle customer callbacks, the reservation should be routed to the call center.

[0473] 1.7.3.3.2 If the selected rental branch location does not have a call center to handle customer callbacks, the reservation should be routed to the rental branch location.

[0474] 1.7.3.4 The system should provide specific feedback indicating the reason a reservation was re-routed when the Authorization Confirmation is received. This will allow the USER to be aware of the reason for the change of location if they access the reservation while it is owned by someone other than the rental branch location selected when the reservation was originally submitted.

[0475] 1.7.3.4.1 If the reservation is re-routed to Claims Connection because the selected rental branch location was closed, the system should provide a message (that will be accessible through the diary notes/notebook) that states the reservation was routed to Claims Connection because the rental branch location was closed when the reservation was submitted.

[0476] 1.7.3.4.2 If the reservation is re-routed to a regional call center to expedite the callback process, the system should provide a message (that will be accessible through the diary notes/notebook) that states the reservation was routed to a regional call center to expedite the renter callback process.

[0477] 1.7.3.5 The system should include a message/note with the group/branch number and address of the rental branch location selected by the USER if the reservation is routed to any location (i.e., Claims Connection or otherwise) other than the rental branch location selected by the USER.

[0478] 1.7.4 Maintenance of Source Systems

[0479] This use case requires that information in the existing Locator and Special Instructions (AS/400) databases be kept current and it is assumed that the group responsible for maintaining these databases will continue to do so in the future. Locator is used to retrieve Rental Branch Location information, and Special Instructions is used to retrieve rate information for a selected rental branch location.

1.8 Extension Points

[0480] An extension point indicates a link between this use case and another use case. Extension points associated with the use case are indicated below.

[0481] 1.8.1 MA-10—Authorize Request

[0482] The Authorize Request use case will be used to allow the USER to view and perform operations on an outstanding Unauthorized Request. The USER will not be returned to this use case on completion of the Authorize Request use case.

[0483] 1.8.2 MA-19—View Customer File

[0484] The View Customer File use case will be used to allow the USER to view the customer file when a matching authorized request is found and selected. The USER will have the option of ending the use case or be returned to Step 9 of the Basic Flow on completion of the View Customer File use case.

[0485] 1.8.3 MA-02—Find Rental Location

[0486] The Find Rental Location use case will be used to allow the user to find one or more alternate rental branch locations that can provide service to the customer. The USER should be returned to Step 9 of the Basic Flow upon completion of the Find Rental Location use case. If the USER selects a rental branch location, branch information (i.e., address, phone) should be returned and the appropriate fields should be populated on the Reservation screen.

[0487] 1.8.4 MA-04—Send Message

[0488] The Send Message use case will allow the USER to send a message to the Rental Company branch regarding the reservation, or select to store the message text with the reservation as a diary note (which is not sent to the branch). The USER should be returned to Step 9 of the Basic Flow upon completion of the Send Message use case.

[0489] 1.8.5 MA-07—Additional Charges

[0490] The Additional Charges use case will be used to add special charges to the reservation being created by the USER. The USER should be returned to Step 9 of the Basic Flow upon completion of the Additional Charges use case. Any Additional Charges captured

should be returned and applied to the reservation. The existence of Additional Charges should be reflected on the reservation screen.

[0491] 1.8.6 MA-08—View Car Classes

[0492] The View Car Classes use case will be used to allow the USER to view details about and select a car class to apply to a reservation. Details will include the average number of passengers and luggage items that can be served by a vehicle in the specific car class. The USER should be returned to Step 9 of the Basic Flow upon completion of the View Car Classes use case. The car class selected by the USER should be applied to the reservation.

2. Screen Design

[0493] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Initial Reservation Screen

[0494] The Initial Reservation screen provides the user interface and functions to support Steps 2 through 4 of the Basic Flow. The information captured on this screen will allow the system to perform several background search activities, and help to better construct the Quick/Detailed Reservation screen. All information captured on the Initial Reservation screen is required to create a new reservation, and is reused later in the reservation creation process.

[0495] 2.1.1 Screen Layout—see FIGS. **103**(*a*)-(*e*)

[0496] 2.1.2 Screen Field Definition

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Renter First Name	Text	15	Renter First Name	First Name	Renter First Name is a required field.
Renter Last Name	Text	20	Renter Last Name	Last Name	Renter Last Name is a required field.
Claim Number Purchase Order Number Corporate Class Number	Text	30	Claim Number Purchase Order Number Corporate Class Number	Insurance Claim Number, PO#, CC#	'Reference' Number is a required field. 'Reference' number should be presented in separate fields to correspond to the reference number format (segments) that has been defined by the USER profile. Insurance User - Claim Number Fleet User - Claim Number Dealership User - Purchase Order Number Corporate User - Corporate Class Number
Claim Type Bill Type	Combo Box	20	Rental Type Description	Rental type description	The values of the Rental Type field for the Insurance user class are: 'Insured', 'Claimant', 'Theft' and 'Uninsured'. The default value is '-Select Claim Type-'. Claim Type is a required field.
	Text	15	Where Needed Value	Day Phone or Zip Code	Where Needed Value is a required field.
Postal Code	Radio Button	1	Where Needed Postal Code Indicator	NOT STORED	If the Where Needed Postal Code Indicator is set, the Where Needed Value should pre-populate the Renter Zip/Postal Code on the Quick/Detailed Reservation screen.
Phone	Radio Button	1	Where Needed Telephone Indicator	NOT STORED	This should be the default radio button selected. If the Where Needed Telephone Indicator is set, the Where Needed Value should pre-populate the Renter Phone Number 1 on the Quick/Detailed Reservation screen.

[0497] 2.1.3 Screen Function Definition

[0498] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0499] 2.1.3.1 Create Reservation

[0500] The Create Reservation screen function will allow the USER to submit the information on the Initial Reservation screen and move on in the create reservation process. The system will use this information to perform background searches for Unauthorized Requests and Corporate Class Number Matches, and to build the Quick/Detailed Reservation screen appropriately.

[0501] 2.1.3.1.1 The Create Reservation screen function is invoked through either a button click or an Enter keystroke.

[0502] 2.1.3.1.2 The information captured on the Initial Reservation screen will be used to pre-populate the corresponding fields on the Quick/Detailed Reservation screen.

[0503] 2.1.3.1.3 If the information submitted to the ARMS Web application is invalid or incomplete, this screen function should prompt the USER with an error. The error should be specific as to the cause of the failure. All information previously entered should remain populated in each field, with the problem field highlighted or otherwise identified.

2.2 Authorization Matches Found Screen

[0504] The Authorization Matches Found screen provides the functions to support the Unauthorized Request/Authorized Request Search Matches alternative flow.

[0505] 2.2.1 Screen Layout—see FIGS. **104**(*a*)-(*e*)

[0506] 2.2.2 Screen Field Definition

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Handling for:	Output	35	User Name	First Name + Last Name	Should be presented as User First Name + User Last Name
Office	Combo Box	10	Office Location	external organization abbreviated name	The values presented in the Office Location list should be limited to the offices that the user has been granted the authority to create a reservation. The default selection is the last selected office location. If the user has not selected an office, the default selection is the user's default office as defined in the user profile. Office is a required field.
Renter Name	Output	35	Renter Name	First Name + Last Name	Should be presented as 'Renter Last Name + "," + Renter First Name' Should provide a hyperlink to the corresponding Authorize Request record (see MA-10 Authorize Request use case). This field is in the "Unauthorized Request Matches" section of the "Authorization Matches Found" screen
Claim Number Purchase Order Number Corporate Class Number	Output	30	Claim Number Purchase Order Number Corporate Class Number	Insurance Claim Number, PO#, CC#	Should provide a hyperlink to the corresponding Unauthorized Request record. This field is in the "Unauthorized Request Matches" section of the "Authorization Matches Found" screen. Insurance User - Claim Number Fleet User - Claim Number Dealership User - Purchase Order Number Corporate User - Corporate Class Number
Status	Output	15	Authorization Status	Status Description	This field is in the "Unauthorized Request Matches" section of the "Authorization Matches Found" screen.
Renter Name	Output	20	Renter Name	First Name + Last Name	Should be presented as Renter Last Name + Renter First Name

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Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
					Should provide a hyperlink to the corresponding Customer File. This field is in the "Authorized Request Matches" section of the "Authorization Matches Found" screen.
Claim Number Purchase Order Number Corporate Class Number	Output	30	Claim Number Purchase Order Number Corporate Class Number	Insurance Claim Number, PO#, CC#	Should provide a hyperlink to the corresponding Customer File. This field is in the "Reference Number Matches" section of the "Authorization Matches Found" screen. Insurance User - Claim Number Fleet User - Claim Number Dealership User - Purchase Order Number Corporate User - Corporate Class Number
Claim Type Bill Type	Output	20	Rental Type Description	Rental type description	This field is in the "Reference Number Matches" section of the "Authorization Matches Found" screen. Insurance User - Claim Type Fleet User - Claim Type Dealership User - Bill Type
Status	Output		Authorization Status	Status Description	This field is in the "Reference Number Matches" section of the "Authorization Matches Found" screen.
Authorized Amount	Output	9	Authorized Total Amount	CALCULATED	This field is in the "Reference Number Matches" section of the "Authorization Matches Found" screen.

[0507] 2.2.4 Screen Function Definition

[0508] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0509] 2.2.3.1 New Reservation

[0510] The New Reservation screen function button will allow the USER to close/continue beyond the Authorization Matches Found screen.

[0511] 2.2.3.1.1 The New Reservation screen function is invoked through either a button click or through an Enter keystroke.

2.3 Quick Reservation Screen

[0512] The Quick Reservation screen provides support for Step 9 of the Basic Flow.

[0513] IMPORTANT NOTE: This is the minimum allowable set of fields on the Quick Reservation screen. The Quick Reservation screen will also include any fields indicated as QUICK RESERVATION in the company/office profile! See the Detail Reservation screen for all available fields.

[0514] 2.3.1 Screen Layout see FIGS. **105**(*a*)-(*e*)

[0515] 2.3.2 Screen Field Definition

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
	Output	35	User Name	First Name + Last Name	Should be presented as User First Name + User Last Name
Office	Combo Box	10	Office Location	external organization identifier	The default value should be the primary office of the current user. The values presented in the Office Location list should be limited to the offices that the user has been granted the authority to create a reservation. If changed, the system should automatically refresh the screen and update the

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Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
					"Handling for" list to the users in the newly selected office with the ability to create a reservation.
Handling for	Combo Box	35	Handling for	First Name + Last Name	The combo list should include the users for the selected office location that have the authority to create a reservation. The default value should be 'Yourself'. The handling for users should be presented as User Last Name + User First Name in alphabetical order.
Claim Number Purchase Order Number Corporate Class Number	Text Box	30	Claim Number Purchase Order Number Corporate Class Number	Insurance Claim Number, PO#, CC#	Should be populated by the Reference Number entered on the Initial Reservation screen. Reference number should be presented in separate fields to correspond to the claim number format (segments) that has been defined by the USER profile. If changed, the system should validate that no matching reference numbers exist (i.e., reference number matching). The user should be notified if a match exists. Reference Number is a required field. Insurance User - Claim Number Fleet User - Claim Number Dealership User - Purchase Order Number Corporate User - Corporate Class Number
Claim Type Bill Type	Combo Box	20	Rental Type Description	Rental type description	Should be populated by the Rental Type selected on the Initial Reservation screen. The values of the Rental Type field for the Insurance user class are: 'Insured', 'Claimant', 'Theft', and 'Uninsured'. Claim Type is a required field.
Vehicle Condition	Combo Box	20	Vehicle Condition	Driveable Flag + Repairable Flag	The values of the Vehicle Condition field should include: 'Driveable', 'Non-Driveable', and 'Total Loss'. the default value should be '-Select Vehicle Condition-'.
Renter First Name	Text	15	Renter First Name	First Name	Should be populated by the Renter First Name entered on the Initial Reservation screen. If the Renter First Name changes, and an exact/ Unauthorized request match exists on the Renter First Name + Renter Last Name combination, the user will be notified of this match. Renter First Name is a required field.
Renter Last Name	Text	20	Renter Last Name	Last Name	Should be populated by the Renter Last Name entered on the Initial Reservation screen. If the Renter Last Name changes, and an exact/ Unauthorized request match exists on the Renter First

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Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
					Name + Renter Last Name combination, the user will be notified of this match. Renter Last Name is a required field.
	Combo Box	10	Renter Phone Type 1		The combo list should include the values: 'Home', 'Work', 'Mobile', and 'Pager'. The default value should be 'Select Type'
	Text	15	Renter Phone Number 1	Day Phone	If the Where Needed criteria entered on the Initial Reservation or Find a Rental Location screen was 'Telephone', the Where Needed Value from the screen should be populated in this field. At least one renter phone number is required.
	Text	5	Renter Phone Extension 1	Renters Day Phone Extension	N/A
Post Code	Text	10	Renter Postal Code	Zip Code	If the Where Needed criterion entered on the Initial Reservation or Find a Rental Location screen was 'Postal Code', the Where Needed Value from the screen should be populated in this field.
Email address	Text Box	50	email Address		N/A
Send email confirmation to the renter	Check Box	1	email Confirmation Indicator		This field will default to unchecked.
Authorized Days	Text	3	Authorized Number of Days	Number Of Days Authorized	The Number of Days is a required field.
Policy Limits	Combo Box	10	Policy Daily Limit and Policy Maximum	Dollars Per Day Covered + Max $ Covered	The combo list should include the policy daily and maximum limits as defined in the company/office profile. The policy limits should be presented as 'Policy Daily Limit + "/" + Policy Maximum Limit'. This field should default to 'Select Policy Limits' if the Claim Type is 'Insured', 'Uninsured Motorist', or 'Theft' If the Claim Type is 'Claimant', this field should NOT be displayed. 'Other' should be a selection in the list of options. If selected, the system will automatically replace the combo box with an open text box to allow the USER to type in a Daily Policy Limit, and a second open text box to allow the USER to type in a Maximum Policy Limit.
	Combo Box	20	Authorized Rate	Vehicle Rate	This field should be a combo box that lists all of the rates and car classes for the rental branch location in the format 'Rate + "" + Car Class' 'Other' should be a selection in the list of options. If selected, the system will automatically replace the combo box with an open text box to allow the USER to type in a rate. A combo box

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Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
					should also be included that allows the USER to select a car class with selections to include 'Economy', 'Compact', 'Intermediate', 'Standard', and 'Full Size'. If the reservation is for an 'Insured', 'Uninsured', or 'Theft' Claim Type, the default selection for the field should be '-Policy Limits-' If the reservation is for a 'Claimant' Claim Type, the default selection for the field should be '-Select a rate-'.
Additional Charge	Output		Additional Charges		Should include the Additional Charge Description, the Additional Charge Value, and the Additional Charge Type. More than one additional charge can exist.
Direct Billing %	Text	3	Authorized Direct Bill Percent	Bill To %	The Direct Bill % should default to 100%. The Direct Bill % is a required field.
Authorized Total Amount	Output	9	Authorized Total Amount	CALCULATED	The authorized total amount field should show the total amount (w/o taxes and gov't surcharges) authorized based on the Number of Days Authorized, Rate, Policy Limits, and Direct Bill percent entered by the user. This field will calculate the total amount to be authorized (based on entry) when the USER clicks the Calculate screen function.
Rental Location	Output	30	Rental Location Branch Name	Branch Name	N/A
	Output	30	Rental Location Address	Address Line	N/A
	Output	30	Rental Location Address	Address Line2	N/A
	Output	25	Rental Location City Name	City	N/A
	Output	10	Rental Location Postal/Zip Code	Zip Code	N/A
	Output	3	Rental Location State/Province Code	State	N/A
	Output	20	Rental Location Telephone Number	Telephone Number	N/A
Add the current location to my list of favorites	Check box	1	Add to Favorites Indicator	NOT STORED	Should default to false (unchecked). If checked, the system should add the current rental branch location to the favorites list in the user profile on the basis of the reservation. The branch location address will appear in the combo box on subsequent attempts until a description.
Favorite Locations	Combo Box	30	Favorite Location	location name	The combo list should include the descriptions of each favorite location as identified in the user profile. This field should default to '-Select a Favorite Location-'. If a favorite location is selected, the application will

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Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
					instantly retrieve the favorite location and refresh the reservation screen.
Note to Enterprise	Text	400	Authorization Message	message text	N/A
Note to Self Only	Text	400	Diary Note	diary note text	The system will store the text entered into this field in the ARMS Web database with the authorization, but the message will not be sent to the branch.

[0516] 2.3.3 Screen Function Definition

[0517] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0518] 2.3.3.1 More Locations

[0519] The More Locations screen function allows the USER to select a different rental branch location using the Find Rental Location use case. Invoking this screen function will launch the USER into the Find a Rental Location use case.

[0520] 2.3.3.1.1 The More Locations screen function is invoked through a button click.

[0521] 2.3.3.2 Additional Charges

[0522] The Additional Charges screen function allows the USER to add, view, and modify any additional charges that they might authorize for a rental reservation (e.g., CDW). Invoking this screen function will launch the USER into the Additional Charges use case.

[0523] 2.3.3.2.1 The Additional Charges screen function is invoked through a button click.

[0524] 2.3.3.3 View Car Class

[0525] The View Car Class screen function allows the USER to view and select a Rental Car Class to apply to a reservation. Invoking this screen function will launch the USER into the View Car Classes use case.

[0526] 2.3.3.3.1 The View Car Class screen function is invoked through a button click.

[0527] 2.3.3.4 Select a Favorite Location

[0528] The Select a Favorite Location screen function allows the USER to change the rental branch location to one of the rental branch locations identified as a 'favorites' in their USER profile.

[0529] 2.3.3.4.1 The Select a Favorite Location is invoked by selecting a value from the Favorite Locations drop-down list. The system should automatically retrieve the favorite location (and rates) when the value of this field is selected.

[0530] 2.3.3.5 Confirm Reservation

[0531] The Confirm Reservation screen function allows the USER to submit all reservation information to the ARMS Web system, which will create a new reservation.

[0532] 2.3.3.5.1 The Confirm Reservation screen function is invoked either through a button click or by an Enter keystroke.

[0533] 2.3.3.5.2 If the information submitted to the ARMS Web application is invalid or incomplete, this screen function should prompt the USER with an error. The error should be specific as to the cause of the failure. All information previously entered should remain populated in each field, with the problem field highlighted or otherwise identified.

[0534] 2.3.3.6 Cancel

[0535] The Cancel Reservation screen function will allow the USER to leave the screen and return to their ARMS Web start page. No information is saved and no reservation is created.

[0536] 2.3.3.6.1 The Cancel screen function is invoked through a button click.

2.4 Reservation Confirmation Screen

[0537] The Reservation Confirmation screen provides the user interface and functions to support Step 16 of the Basic Flow. This provides the USER with confirmation feedback on successful submission of the reservation.

[0538] 2.4.1 Screen Layout—see FIGS. **106**(*a*)-(*c*)

[0539] 2.4.2 Screen Field Definition

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Office	Output	10	Office Location	external organization abbreviated name	
Handling for	Output	35	Handling for	First Name + Last Name	
	Output	150	Confirmation Statement	Authorized Days + Authorized Rate + Renter	The screen should provide a statement that reads 'You just authorized' + Authorized Days + 'days at' + Authorized

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Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
				Last Name + Renter First Name	Rate/Policy Limits + '/day for' + Renter Last Name + ',' + Renter First Name
Don't show me this confirmation page again	Check box	1	Delete confirmation page		If checked, the system should not show this page again. Instead the system will provide the confirmation statement (above) in the feedback section of the page that the user is returned to (the area of the EVERY page reserved for feedback, error messages, etc.)

[0540] 2.4.3 Screen Function Definition

[0541] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0542] 2.4.3.1 Return to Home Page

[0543] The Return to Home Page screen function will allow the USER to return to their home page from the reservation confirmation screen.

[0544] 2.4.3.1.1 The Return to Home Page screen function is invoked through either a button click or an Enter keystroke.

[0545] 2.4.3.2 Change Reservation

[0546] The Change Reservation screen function will allow the USER to go back into the Quick Reservation or Detailed Reservation screen and change any errors.

[0547] 2.4.3.2.1 The Change Reservation screen function is invoked by clicking on the feedback hyperlink (e.g., You just authorized 3 days at $29. 39/day for Tom Hanks).

ARMS Web 3.0

Functional Design Specification

Find a Rental Location

Version 1.3

Find a Rental Location

1. Find a Rental Location Use Case

1.1 Application Overview

[0548] The following is a document used to illustrate the process of finding and selecting an alternate rental location for a reservation created using ARMS/Web 3.0. The intent for this release of the ARMS/Web application is to reach a much wider audience. This application will target a Multi-Vendor, Multi-Segment, and International customer base.

1.2 Brief Description

[0549] This use case describes the process of finding and selecting an alternate rental location for a reservation created in the ARMS/Web system. The USER will have the ability to select the location search criteria they want to use (i.e. phone number or postal code), select the rental company and select to either review a list of nearby rental company locations or have the system automatically determine a rental company location based on the location search criteria. (The USER will also have the ability to select an alternate location by using the 'Favorite Locations' functionality built into the Create Reservation screens.) This use case provides the mechanism to return rental company location information, including address, rental company, and phone number to create a new reservation or define a favorite location.

1.3 Use Case Actors

[0550] The following actors will interact with this use case:

[0551] RENTAL ADMINISTRATOR—The RENTAL ADMINISTRATOR will use the system to find and select a rental location for creating a reservation. This use case refers to a USER in the role of a rental administrator. There are various types of customers that the rental administrator would represent, which include corporate account holders, car dealerships, insurance companies, and others.

[0552] LOCATOR—The LOCATOR system will determine the nearest rental branch location(s) based on the search criteria provided in this use case.

[0553] ARMS—The ARMS system will receive/send transactions to ARMS/Web to retrieve the information regarding the rental company.

[0554] RENTAL CAR COMPANY—A wide variety of rental car companies will be able to use this system as well. Each company will have the ability to initiate and manage their rentals through the use of this application.

1.4 Pre-Conditions

[0555] The USER must be logged on to the ARMS/Web system.

[0556] The USER must be creating a reservation or defining a favorite location.

1.5 Flow of Events

[0557] The Flow of Events includes all steps necessary to select rental location search criteria and retrieve an alternate rental branch location(s).

[0558] 1.5.1 Activity Diagram—see FIG. **107**.

[0559] 1.5.2 Basic Flow

[0560] The Basic Flow of the Find a Rental Location use case includes all of the required steps for the USER to select and input search criteria to find an alternate rental location. The USER will have the ability to view detailed information about a rental branch, and select a rental branch location to apply to a new reservation.

[0561] 1. The USER selects to find an alternate rental location.

[0562] 2. The system will prompt the USER for pick up location search criteria (also referred to as 'where needed' search criteria). This allows the USER to input a telephone number, city, or postal code to find a rental branch (or branches) that accepts ARMS/Web reservations in a given area. (Rental branch locations have the ability to opt out of accepting ARMS/Web reservations.) The USER may also narrow the search by selecting a particular rental company along with the location search criteria. The USER will be given the option to view a list of rental branch locations matching the search criteria, or to have the ARMS/Web system automatically select the rental branch considered the Nearest Match.

[0563] 3. The USER enters the required search criteria.

[0564] 4. The USER submits the rental branch location search criteria.

[0565] 5. The system will validate the rental branch location search criteria.

[0566] 6. The system will retrieve/return a rental branch location (The requirements for retrieving a rental branch location can be found on page 5 of this document (Section 1.7.1 Requirements for Finding Rental Location).) (based on USER search/selection criteria) to be used by the Create Reservation use case. (This use case is also used to define favorite locations from the 'My Profile' use case. The location will be returned to the 'My Profile' use case when the use case is entered from a 'My Profile' screen.) The rental branch location information for the selected branch on the Create Reservation screens will be automatically populated with the list below for the current Create Reservation transaction.

[0567] Branch name (The Branch name has been included for future usability purposes (e.g., Network Allocation).)

[0568] Address

[0569] Telephone number

[0570] Rates

[0571] 7. The use case is complete.

[0572] 1.5.3 Alternative Flows

[0573] 1.5.3.1 Search Criteria Entered is Invalid

[0574] If the USER enters an invalid Postal Code or Phone Number as location search criteria, an error message should be displayed to the USER and the USER should be forced back into Step 2 of the Basic Flow. If the error is specific to a data field, the field should be highlighted and the error described.

[0575] 1.5.3.1.1 It will be considered invalid if the 'where needed' search criteria is a telephone number and the first three digits (i.e., area code) meet the criteria below:

[0576] 0XX

[0577] 1XX

[0578] the second and third digits equal (e.g., 800, 877, 888, etc.)

[0579] Where X equals any digit 0 through 9.

[0580] 1.5.3.1.2 It will be considered invalid if the 'where needed' search criteria is a U.S. or Canadian telephone number that does not consist of 10 digits.

[0581] 1.5.3.1.3 It will be considered invalid if the 'where needed' search criteria is a U.S. postal code that does not consist of 5 or 9 digits.

[0582] 1.5.3.1.4 It will be considered invalid if the 'where needed' search criteria is a Canadian postal code that does not consist of 6 alphanumeric characters in the format AXAXAX where A is an alpha character and X is a digit between 0 and 9.

[0583] 1.5.3.2 No Rental Branch Locations Found

[0584] If the system cannot determine a rental branch location based on the search criteria entered by the USER, Claims Connection will be returned as the location and the use case will end. Please refer to section 1.7.1 Requirements for Finding Rental Location on beginning on page 5 of this functional specification for handling of this situation.

[0585] 1.5.3.3 View a List of Rental Branch Locations

[0586] If the USER opts to view a list of matching rental locations, the list of matching locations will be displayed after Step 5 of the Basic Flow. The USER will have the ability to select one of these locations, view more detail about the locations (i.e., maps, hours of operation), or perform another location search by entering new search criteria.

[0587] 1.5.3.3.1 If the USER requests additional detail on a specific rental branch in the View a List of Rental Branch Locations Alternate Flow, the system should display a screen with the selected branch's additional information (Rental Company, Branch name, Addresses, telephone/fax numbers, Map to the rental branch location, Hours of operation). The USER should either select the location from this screen (and be returned to Step 6 of the Basic Flow), or be returned to the list of matching locations by closing/continuing from this screen.

[0588] 1.5.3.3.2 If the USER wishes to perform another rental branch location search in the View a List of Rental Branch Locations Alternate Flow, the system should return the USER to Step 2 of the Basic Flow.

[0589] 1.5.3.4 Use Case Cancellation

[0590] The USER should be capable of leaving the use case at any time.

1.6 Post-Conditions

[0591] If successful, a rental branch location will have been determined and returned to the Create Reservation use case.

[0592] If unsuccessful, the system state remained unchanged.

1.7 Special Requirements

[0593] The additional requirements of the business use case are included here. These are requirements not covered by the flow as they have been described in the sections above.

[0594] 1.7.1 Requirements for Finding Rental Location

[0595] Below are the requirements for finding a rental location in the ARMS/Web system. ARMS/Web will resolve a rental location and pass the location to ARMS for routing (which is a deviation from current state handling). These requirements were derived from the current state business requirements for the ARMS locator system.

[0596] 1.7.1.1 ARMS/Web will always return a rental branch location for a reservation.

[0597] For all ARMS/Web reservations, the following rules for finding a rental location apply:

[0598] 1.7.1.1.1 For United States locations, the locator will search a 50-mile radius around the renter's phone number or postal code for the closest branch (or branches) that accepts ARMS reservations. If the USER selects to review a list of rental branch locations, an array of rental branch locations meeting these criteria should be returned.

[0599] 1.7.1.1.2 For Canadian locations, the locator will search a 50-mile radius around the renter's phone number or postal code for the closest open branch (or branches) that accepts ARMS reservations. If no open branches are found, the closest branch (or branches) that accepts ARMS reservations should be returned. If the USER selects to review a list of rental branch locations, an array of rental branch locations meeting these criteria should be returned.

[0600] 1.7.1.2 When the rental branch location is determined, the system will retrieve the group/branch number, name, shipping address, and telephone number of the rental branch location and present them to the USER on the Create Reservation screen(s).

[0601] 1.7.1.3 The system will only display Claims Connection (7680) as the location (with no rates) when no location can be found within the 50-mile radius. If Claims Connection is displayed, a message should be included to indicate that no rental branch location was found within a 50-mile radius of the search criteria, and Claims Connection will ensure that the reservation is handled appropriately.

[0602] 1.7.2 Maintenance of Source Systems

[0603] This use case requires that several existing AS/400 databases be used to query for information:

[0604] Locator Database

[0605] Office Information Database

[0606] The use case requires that the information in these databases be kept current and it is assumed that the group responsible for maintaining these databases will continue to do so in the future.

1.8 Extension Points

[0607] None.

2. Screen Design

[0608] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Location Search Criteria Screen

[0609] This screen allows the USER to select/input the search criteria they want to use to find a rental location. This screen supports Steps 2 and 3 of the Basic Flow.

[0610] 2.1.1 Screen Layout—see FIGS. **108**(*a*) and (*b*)

[0611] 2.1.2 Search for Rental Location

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Country	Combo box	14	Country	country code	This list should consist of United States and Canada. This will expand in future releases. The selection will default to the home country of the USER as defined in the USER profile.
	Input Text	20	Where Needed Value	Where Needed Value	
Rental Company	Combo box	20	Rental Company		This is a list of all the rental companies that are participating.
Postal/Zip Code	Radio Button	1	Postal/Zip Code Button	NOT STORED	
Telephone	Radio Button	1	Telephone Button	NOT STORED	This should be the default radio button selection.
City	Radio Button	1	City Radio Button	NOT STORED	
Automatically select the nearest office	Checkbox	1	Nearest match Selection		This checkbox should default to checked.

[0612] 2.1.3 Screen Function Definition

[0613] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0614] 2.1.3.1 Next

[0615] The Next screen function will allow the USER to submit the information on the Location Search Criteria screen and initiate the search for matching locations.

[0616] 2.1.3.1.1 The Next screen function is launched through either a button click or by using the Enter keystroke.

[0617] 2.1.3.1.2 If the information submitted to the ARMS/Web system is invalid or incomplete, this screen function should prompt the USER with an error. The error should be specific as to the cause of the failure. All information previously entered should remain populated in each field, with the problem field highlighted or otherwise identified.

2.2 Matching Location Screen

[0618] This screen allows the USER to review/select a rental location based on the search criteria entered on the Location Search Criteria screen. The screen will present 5 matching records at a time to the USER. The USER is given the option of viewing additional detail on a location or entering new search criteria. If there are more locations selected by the search, the USER will view the next locations (up to 5). This screen supports Step 4 of the Basic Flow.

[0619] 2.2.1 Screen Layout—see FIGS. **109**(*a*) and (*b*)

[0620] 2.2.2 Screen Field Definition

Screen Label	Type	Length	Screen Field Name	Data Field	Screen Specific Rule
	Radio Button	1	Selector Radio Button		A radio button should be presented for every rental branch location record in the list. Only one radio button may be selected. The rental branch location that is the shortest distance from the search criteria entered should be the default.
Location	Output	30	Rental Location Address	Address Line	A location should be presented for every rental branch location record in the list.
Rental Company	Output	30	Rental Company name		The name of the rental company that is available from the search criteria.
Miles	Output	4	Miles from Search Criteria		Miles from search criteria should be presented for every rental branch location record in the list.
City	Output	18	Rental Location City Name	City	A city should be presented for every rental branch location record in the list.
State/Province	Output	2	Rental Location State/Province Code	State	A state/province should be presented for every rental branch location record in the list.
Country	Drop Down	14	Country	NOT STORED	This list should consist of United States and Canada. This will expand in future releases. The selection will default to the home country of the USER as defined in the USER profile.
	Input Text	12	Where Needed Value	Where Needed Value	
Rental Company	Combo box	20	Rental Company		This is a list of all the rental companies that are participating.
Postal/Zip Code	Radio Button	1	Postal/Zip Code Button	NOT STORED	
Telephone	Radio Button	1	Telephone Button	NOT STORED	This should be the default radio button selection.
City	Radio Button	1	City Radio Button	NOT STORED	
Automatically select the nearest office	Checkbox	1	Nearest Match Selection	NOT STORED	This should default to checked.

[0621] 2.2.3 Screen Function Definition

[0622] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0623] 2.2.3.1 Select this Location

[0624] The Select this Location screen function will submit the selected rental branch location in the Rental Location Information Container to the ARMS/Web system, to be used by the Create Reservation use case.

[0625] 2.2.3.1.1 The Select this Location screen function is launched through either a button click or by using the Enter keystroke.

[0626] 2.2.3.2 Next X of Y

[0627] The Next X of Y screen function will allow the USER to view the next five rental locations (unless less than five records exist) that match the search criteria. For example, if a total of 8 locations were returned as part of the search, this screen function would be presented as Next 3 of 8.

[0628] 2.2.3.2.1 The Next X of Y screen function is launched through a button click.

[0629] 2.2.3.2.2 The Next X of Y screen function should not be presented if 5 or fewer records are retrieved.

[0630] 2.2.3.2.3 The Next X of Y screen function should have the X values replaced by the number of records remaining to view (up to five) in this search.

[0631] 2.2.3.2.4 The Next X of Y screen function should have the Y value replaced by the number of total records returned in the search.

[0632] 2.2.3.3 Previous 5 of Y

[0633] The Previous 5 of Y screen function will allow the USER to view the previous five rental locations that matched the search criteria (and were previously reviewed).

[0634] 2.2.3.3.1 The Previous 5 of Y screen function is launched through a button click.

[0635] 2.2.3.3.2 The Previous 5 of Y screen function should not be presented on the initial search results screen. The Previous 5 of Y screen function should only be available if the USER has selected the Next X of Y screen function.

[0636] 2.2.3.3.3 The Previous 5 of Y screen function should have the Y value replaced by the number of total records returned in the search.

[0637] 2.2.3.4 Details/Map

[0638] The Details/Map screen function allows the USER to review additional information about a rental location presented in the list of matching records. Selecting this screen function will open the Location Details screen for the rental branch selected.

[0639] 2.2.3.4.1 The Details/Map screen function is launched through a button click.

[0640] 2.2.3.4.2 Each rental branch location presented in the list of matching locations should have its own Details/Map button.

[0641] 2.2.3.5 Search Again

[0642] The Search Again screen function will allow the USER to submit the Location Search Criteria Container information on the Matching Location screen and re-initiate the search for matching locations.

[0643] 2.2.3.5.1 The Search Again screen function is launched through a button click.

[0644] 2.2.3.5.2 If the information submitted to the ARMS/Web system is invalid or incomplete, this screen function should prompt the USER with an error. The error should be specific as to the cause of the failure. All information previously entered should remain populated in each field, with the problem field highlighted or otherwise identified.

2.3 Location Details Screen

[0645] This screen allows the USER to view additional details for a given rental location. This screen supports the View Location Detail alternate flow.

[0646] 2.3.1 Screen Layout—see FIGS. **110**(*a*) and (*b*)

[0647] 2.3.2 Screen Field Definition

Screen Label	Type	Length	Screen Field Name	Data Field	Screen Specific Rule
	Output		Rental Location Name	Rental Location	
	Output		Rental Companies Name		
	Output		Rental Location Address	Address Line	
	Output		Rental Location City Name + "," + Rental Location	State + City + Zip Code	Rental Location City Name + "," + Rental Location State/Province Code + "" + Rental Location Postal/Zip Code
	Output Text		Rental Location Telephone Number	Telephone Number	
Mon	Output Text		Rental Location Start Hours of Operation + "-" + R		Rental Location Start Hours of Operation + "-" + Rental Location End Hours of Operation This should be filled with the start and end hours of operation for the 'Monday' value in the hours of operation array.

-continued

Screen Label	Type	Length	Screen Field Name	Data Field	Screen Specific Rule
Tue	Output Text		Rental Location Start Hours of Operation + "-" + R		Rental Location Start Hours of Operation + "-" + Rental Location End Hours of Operation This should be filled with the start and end hours of operation for the 'Tuesday' value in the hours of operation array.
Wed	Output Text		Rental Location Start Hours of Operation + "-" + R		Rental Location Start Hours of Operation + "-" + Rental Location End Hours of Operation This should be filled with the start and end hours of operation for the 'Wednesday' value in the hours of operation array.
Thu	Output Text		Rental Location Start Hours of Operation + "-" + R		Rental Location Start Hours of Operation + "-" + Rental Location End Hours of Operation This should be filled with the start and end hours of operation for the 'Thursday' value in the hours of operation array.
Fri	Output Text		Rental Location Start Hours of Operation + "-" + R		Rental Location Start Hours of Operation + "-" + Rental Location End Hours of Operation This should be filled with the start and end hours of operation for the 'Friday' value in the hours of operation array.
Sat	Output Text		Rental Location Start Hours of Operation + "-" + R		Rental Location Start Hours of Operation + "-" + Rental Location End Hours of Operation This should be filled with the start and end hours of operation for the 'Saturday' value in the hours of operation array.

[0648] 2.3.3 Screen Function Definition

[0649] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0650] 2.3.3.1 Select this Location

[0651] The Select This Location screen function will submit the selected rental branch location to the ARMS/Web system, to be used in other parts of the system.

[0652] 2.3.3.1.1 Clicking on the Select This Location hyperlink launches the Select This Location screen function.

[0653] 2.3.3.2 Previous

[0654] The Previous screen function will return the USER to the list of locations that was presented based on the search criteria that were entered.

[0655] 2.3.3.2.1 Clicking on the Prey button launches the Previous screen function.

[0656] 2.3.3.3 Enlarge Map

[0657] The Enlarge Map Screen function will retrieve a larger graphic image of the map to the location. The larger image will be placed in the same screen location of the Location Details screen.

[0658] 2.3.3.3.1 Clicking on the Enlarge Map hyperlink launches the Enlarge Map screen function.

[0659] 2.3.3.4 Reduce Map

[0660] The Reduce Map Screen function will retrieve a smaller graphic image of the map to the location. The smaller image will be placed in the same screen location of the Location Details screen.

[0661] 2.3.3.4.1 Clicking on the Reduce Map hyperlink launches the Reduce Map screen function.

[0662] 2.3.3.5 Zoom In

[0663] The Zoom In screen function will retrieve a more specific (more detailed) graphic image of the map to the location. The more specific image will be placed in the same screen location of the Location Details screen.

[0664] 2.3.3.5.1 Clicking on the Zoom In hyperlink launches the Zoom In screen function.

[0665] 2.3.3.6 Zoom Out

[0666] The Zoom Out screen function will retrieve a more general (less specific) graphic image of the map to the location. The more general image will be placed in the same screen location of the Location Details screen.

[0667] 2.3.3.6.1 Clicking on the Zoom Out hyperlink launches the Zoom Out screen function.

3. Questions and Answers

[0668] Issue Number: 307

[0669] Question: We have heard from the business that the search by name criteria needs to be better. Today we search by the first three letters of the last name. We need to know what criteria is the preferred method of search to be done.

[0670] For example: Do we search the entire last name and first name?

[0671] Do we search by the first three letters of the last name and the first letter for the first name?

[0672] Do we search by first letter of last name and first letter of first name? Need the Business Rule.

[0673] Status: 12 User Review

[0674] Resolution: 4-17-00, Sean O'Donnell—We have spoken to the Rental Redesign folks to find out how they are doing last/first name matching, and they are not planning to search by name in the new rental system (Telephone Number, Driver's License, and SSN only). They were going to have an 'implied wildcard' search by name, but it was taken out in USER review.

[0675] Issue Number: 310

[0676] Question: Do we want the ARMS/Web to have search available by phone, zip code/postal code, city and state. Current state only allows for phone number searches. Do we want to search other than phone number

[0677] For example: Do we want to search by phone number or zip code?

[0678] Do we want to search by phone number or zip code or city?

[0679] Need Business Rule

[0680] Status: Closed—Resolved

[0681] Resolution: 3-16-00, Jen Cavanaugh—Talking with Dave Smith. 3-22-00, Issue Mtg. Search by phone # & zip code only.

[0682] (SHOULD THE ANSWER BE "SEARCH BY PHONE # AND/OR ZIP CODE?) yes it is and/or could be both or one.

[0683] Issue Number: 311

[0684] Question: If a daily rental branch is closed, how do we want the system to work?Current state it defaults to Claims Connection. We need clarification on how this should work in the ARMS/Web environment.

[0685] 3-17-00, Application Team—What do we want to see in the locator, do we want to see just open only or all? If no branch is open do we return to Claims Connection?

[0686] Status: Closed—Resolved

[0687] Resolution: 3-16-00, Jen Cavanaugh—Stan's team is going to get w/claims Connection to see how this process works after hours. From there we will make some business decisions 3-20-00, Jennifer Cavanaugh—Stan's team needs to research how ARMS & Retail Res Locator works & how they differ. Then we will re-review the question.

[0688] 3-27-00, Sean—I talked with Trent Tinsley and Kim Devallance on this topic, which was EXTREMELY helpful. If the adjuster selects a closed branch, the system will route the ticket based on the type of service established in the insurance company profile:

[0689] Insurance companies that do NOT have 24-hour service, the reservation will be routed to the branch that was selected. The branch will do a callback in the morning when they re-open. Insurance companies that have 24-hour service have their reservations re-routed to Claims Connection (who will do a callback prior to 9 pm in any time zone unless otherwise specified by an adjuster) if the selected office is not open. This determination is made in the background after the adjuster submits the reservation. Claims connection will re-route the reservation to the appropriate branch when the customer is contacted. Essentially, the way that location selection is handled today can/should be supported in the future version of ARMS/Web (location selection is implied through the F2-Rates function of ARMS/400). Please let me know if you have questions with regard to this issue update/resolution.

[0690] Issue Number: 374

[0691] Question: In the Create Reservation functional specification, we have stated that the system will pull a location and rates immediately for the USER. The issue arises when we have no location to retrieve, in cases that the 'where needed' search criteria is weak or we don't have a branch within 50 miles of the search area. In the current state, we show Claims Connection as if it were a branch in this situation. This can be somewhat confusing (to see the location of Hanley Road in St. Louis if you are in Delaware). In the future state, we think it may be a good idea to notify the USER that no location was found, and that the reservation would be handled by Claims Connection (see example message below). Any thoughts on this question . . . .

[0692] Example Message:

[0693] A rental branch could not be found within 50 miles of 555-512-5000. Claims Connection will ensure your reservation is handled immediately. Please call 800-CLAIMSCONNECTION for additional assistance.

[0694] Status: Pending

[0695] Resolution: 5-8-00, Response from Sean O'Donnell: Dave liked the idea, and so did Kim. Have not heard from Randy on this one, though. Let me know if you need me to follow up, otherwise this will be written in to the specification for Finding a rental location.

ARMS Web 3.0

Functional Design Specification

Send Message

Version 1.1

Send Message

1. Send Message Use Case

1.1 Brief Description

[0696] This use case describes the process of capturing messages and diary notes associated with a rental reser-

vation/authorization. The USER can elect to either have the message sent to the Enterprise rental branch location responsible for the reservation/authorization (MESSAGE in this document), or to store the note in the ARMS Web system without sending the message to Enterprise (DIARY NOTE in this document). All MESSAGES and DIARY NOTES captured must be related to a specific reservation/authorization.

[0697] NOTE: This is a sub-use case that must be accessed from another use case. For example, a USER may send a message while creating a reservation, maintaining an authorization, or completing an extension.

1.2 Use Case Actors

[0698] The following actors will interact with this use case. All actors are referred to as USER throughout this use case:

[0699] ADJUSTER—The ADJUSTER will use this use case to enter and send a message about a reservation/authorization to the rental branch location that is responsible for the reservation/authorization. The ADJUSTER may also use this use case to capture diary notes.

[0700] PROCESSOR—The PROCESSOR will use this use case to enter and send a message about a reservation/authorization to either the rental branch location or the ADJUSTER that is responsible for the reservation/authorization.

[0701] ENTERPRISE ADMINISTRATOR—The ENTERPRISE ADMINISTRATOR will use this use case to send a message on a specific transaction to notify the rental branch location or other user of issues/complications in transmission of the transaction.

1.3 Pre-Conditions

[0702] The USER must be signed-on to the ARMS Web system.

[0703] The USER must have selected an authorization that is in a state that allows MESSAGES or DIARY NOTES.

1.4 Flow of Events

[0704] The Flow of Events includes all steps necessary to enter MESSAGES and DIARY NOTES.

[0705] 1.4.1 Activity Diagram—see FIG. **111**.

[0706] 1.4.2 Basic Flow

[0707] The Basic Flow of the Send Message use case includes all of the required steps for the USER to enter a MESSAGE or DIARY NOTE.

[0708] 1. The USER will indicate that they want to send a MESSAGE for a reservation/authorization.

[0709] 2. The system will display a screen that will capture the message/note text.

[0710] 3. The USER will enter the message/note text.

[0711] 4. The USER returns to the parent use case, and the system stores the text message to be sent at a later time (see Special Requirements).

[0712] 5. This ends this use case.

[0713] 1.4.3 Alternative Flows

[0714] 1.4.3.1 Send Diary Note Only

[0715] The USER will have the ability to indicate that the MESSAGE text should be stored as a DIARY NOTE only in Step 3 of the Basic Flow. This text should not be sent to the Enterprise rental branch location handling the reservation/ticket.

[0716] 1.4.3.2 Use Case Cancellation

[0717] The USER should be capable of leaving the use case at any time.

1.5 Post-Conditions

[0718] If successful, the message/note text will be updated in the ARMS Web database. MESSAGES requested to be sent to the rental branch location are sent to ARMS.

[0719] If unsuccessful, the system state remains unchanged.

1.6 Special Requirements

[0720] 1.6.1 Submit Message Responsibilities

[0721] The parent use case that accessed this function will have the responsibility of submitting the text message to the ARMS Web database. Based on USER input, the parent use case must complete the following action:

[0722] If the USER chose to have the text sent to the rental branch location as a MESSAGE, the text will be written to the ARMS Web database and the MESSAGE will be sent to ARMS. ARMS will forward the text to ECARS for distribution to the appropriate rental branch.

[0723] If the USER chose to save the text as a DIARY NOTE, the text will be written to the ARMS Web database as a DIARY NOTE only.

1.7 Extension Points

[0724] None.

2. Screen Design

[0725] As noted in the Send Message Use Case, the Send Message function will be available on multiple screens throughout the system (e.g., Create Reservation, Extend Rental, Change Authorization). This section provides functional description of the screen container that is used on the multiple screens to support the Send Message use case.

2.1 Message Screen Container

[0726] 2.1.1 Screen Layout—see FIG. **112**. (This is the screen layout for the Create Reservation screen. The Message screen container is part of this screen, and is shown here for illustrative purposes only.)

[0727] The area of the screen under consideration is the container beginning with the Notebook heading. This is an example of how the message container might look on any given screen.

[0728] 2.1.2 Message Screen Container

Screen Label	Type	Length	Screen Field Name	Data Field	Screen Specific Rule
Note to Enterprise	Input Text	200	Message Text	message text	Text entered into this field will be sent to the Enterprise rental branch location.
Note to Self Only	Input Text	200	Message Text	Diary text	Text entered into this field will be stored in the ARMS Web database but will not be sent to the Enterprise rental branch location.

[0729] 2.1.3 Screen Function Definition

[0730] The Message screen container will use the functions of the parent screen to have the message sent.

3. Questions and Answers

[0731] Issue Number: 341

[0732] Question: Current state ARMS400 allows user to enter maximum of four lines of fifty characters. Current state ARMS has program limitation of ten lines of fifty characters. ARMS Web will be limited by current state ARMS. Should that be the planned maximum for ARMS Web or??? One idea would be to have the number of lines/characters profiled. Then the size of the message box that is displayed to the user would be limited by this profiled amount.

[0733] Status: Closed—Resolved

[0734] Resolution: 3-30-00, Kim De Valiance—I think ten lines of fifty characters to be entered by any user at a time is more than enough. I don't really for see the need to profile this by company.

[0735] Issue Number: 342

[0736] Question: Current state allows message to be sent on unauthorized requests only if they have not been assigned to an adjuster. How should future state work? If we allow messages on assigned unauthorized requests, we must keep in mind that we are defaulting the Direct-Bill To percent at 100% on all auth. screens. When the adjuster submits the message, they MAY be unintentionally authorizing the request.

[0737] Status: Closed—Resolved

[0738] Resolution: 3-30-00, Kim De Valiance—Kim: we should never send an authorization to the branch if all the adjuster did was key in a message. The message will either appear in ECARS under res notes or callback notes, but should never appear to the branch as an authorization. We not only need to give the adjuster the ability to send a message, but they should be able to change info (such as claim number, claim type, etc.) before assigning the request to the adjuster, thereby enabling the adjuster to see the correct info when authorizing or denying a DB. We hear this request a lot from our customers.

Functional Design Specification

Additional Charges

Version 1.2

Additional Charges

1. Additional Charges Use Case

1.1 Brief Description

[0739] The Additional Charges use case will allow the USER to view, add, or modify/remove any additional charges that may be associated with a rental authorization. Additional Charges such as Collision/Damage Waiver (CDW), Mileage Charge, or any other rental related charge could be authorized by a USER through this function.

1.2 Use Case Actors

[0740] The following actors will interact with this use case:

[0741] ADJUSTER—The ADJUSTER will use this use case to view, add, or modify any additional charges that are associated with a rental authorization.

1.3 Pre-Conditions

[0742] The USER must be signed-on to the ARMS Web system.

[0743] The USER must have a reservation or open ticket selected (active).

1.4 Flow of Events

[0744] The Flow of Events will include the necessary steps to view, add and modify additional charges associated with a rental authorization.

[0745] 1.4.1 Activity Diagram—see FIG. **113**.

[0746] 1.4.2 Basic Flow

[0747] The Basic Flow of the Additional Charges use case includes all of the required steps to view, add, or modify Additional Charges as part of an authorization.

[0748] 1. The USER will select Additional Charges for the active reservation or open ticket.

[0749] 2. The system will prompt the USER to add, modify or remove Additional Charges.

[0750] 3. The USER will view, add, or modify Additional Charges that will be authorized.

[0751] 4. The USER will submit the Additional Charges to the system.

[0752] 5. The system will validate the Additional Charges entered by the USER.

[0753] 6. The system will return the USER to the active reservation or open ticket and populate Additional Charges. (The Additional Charges should not be submitted to the ARMS Web database until the USER submits the changes on the active reservation or open ticket.)

[0754] 7. This ends this use case.

[0755] 1.4.3 Alternative Flows

[0756] 1.4.3.1 Additional Charges Invalid

[0757] If the Additional Charges entered by the USER are invalid, the system should present an error message to the USER and force the USER back into Step 2 of the Basic Flow. The system will declare additional charges invalid in the following circumstances:

[0758] 1.4.3.1.1 It will be considered invalid if the additional charge type is 'Dollars per Day' or 'Dollars per Rental' and the additional charge value entered is greater than $999.99.

[0759] 1.4.3.1.2 It will be considered invalid if the additional charge type is 'Dollars per Day' or 'Dollars per Rental' and the additional charge value entered is less than $0.

[0760] 1.4.3.1.3 It will be considered invalid if the additional charge type is 'Percentage of Rental' and the additional charge value entered is greater than 100%.

[0761] 1.4.3.1.4 It will be considered invalid if the additional charge type is 'Percentage of Rental' and the additional charge value entered is less than 0%.

1.5 Post-Conditions

[0762] If successful, the Additional Charges that were added or modified will be returned to the active reservation or open ticket.

[0763] If unsuccessful, no Additional Charge will be added to the active reservation or open ticket.

1.6 Special Requirements

[0764] The additional requirements of the business use case are included here. These are requirements not covered by the flow as they have been described in the sections above.

[0765] 1.6.1 Submit Additional Charges Responsibilities

[0766] The parent use case that accessed this function will have the responsibility of submitting the additional charges to the ARMS Web database. Any additional charges returned to a parent use case should be reflected on the screen within that use case. For example, if additional charges were being added as part of the Create Reservation process, the Create Reservation screens should have some indication that additional charges have been added.

[0767] 1.6.2 Additional Charges Descriptions

[0768] Below are the current additional charge descriptions used in the ARMS/400 system in the current state:

DAMAGE WAIVER	SPECIAL
PAI	DROP CHARGE
MILEAGE CHARGE	MISC CHARGES
HOURLY	SLP
DAILY	UNDERAGE DRIVER
WEEKLY	BABY CAR SEAT
MONTHLY	SKI RACK

1.7 Extension Points

[0769] None.

2. Screen Design

[0770] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Additional Charges

[0771] This screen will allow the user to view, add, modify or remove additional charges associated with a reservation/authorization.

[0772] 2.1.1 Screen Layout—see FIG. **114**.

[0773] 2.1.2 Screen Field Definition

Screen Label	Type	Length	Screen Field Name	Data Field	Screen Specific Rule
CDW (Collision Damage Waiver)	Check Box	1	CDW (Collision Damage Waiver)		
PAI (Personal Accident Insurance)	Check Box	1	PAI (Personal Accident Insurance)		
Underage Driver	Check Box	1	Underage Driver		
Drop Charge	Check Box	1	Drop Charge		
Mileage Charge	Check Box	1	Mileage Charge		
Misc. Charge	Check Box	1	Misc. Charge Check Box		
Create Charge Type	Text Box	15	Additional Charge Description		A description of the additional surcharge to be authorized.
Amount	Text Box	6	Additional Charge Value		An Amount text box should be included for every check box on the screen.
Type	Combo Box	20	Additional Charge Type		A Type combo box should be included for every check box on the screen. Values include: Dollars per Day (DEFAULT); Dollars per Rental; Percentage of Rental

[0774] 2.1.3 Screen Function Definition

[0775] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0776] 2.1.3.1 Create More Surcharges

[0777] The Create More Surcharges screen function will allow the USER to select the hyperlink and have an additional Misc. Charge line added to the screen. For example, the Screen Layout above shows only one Misc. Charge box. If a USER were to click on the Create More Surcharges hyperlink, the screen would refresh and provide the user with two Misc. Charges boxes. The USER is not limited to the number of Misc. Charge boxes that can be added.

[0778] 2.1.3.1.1 The Create More Surcharges screen function is invoked through clicking a hyperlink.

[0779] 2.1.3.2 Process

[0780] The Process screen function allows the USER to save the additional charges that are being authorized and return to the active reservation or open ticket. The active reservation or open ticket will reflect that additional charges have been added.

[0781] 2.1.3.2.1 The Process screen function is invoked through a button click or through an Enter keystroke.

[0782] 2.1.3.3 Previous

[0783] The Previous screen function will allow the USER to return to the active reservation or open ticket without saving the updates to additional charges.

[0784] 2.1.3.3.1 The Previous screen function is invoked through a button click.

3. Questions and Answers

[0785] None.

Functional Design Specification

View Car Class

Version 1.2

View Car Class

1. View Car Class Use Case

1.1 Brief Description

[0786] This use case will allow the USER to view examples of automobiles that are part of each Enterprise Car Class. The USER will have the ability to select a car class and have the rate for the car class apply to the reservation/authorization.

1.2 Use Case Actors

[0787] The following actors will interact with this use case:

[0788] ADJUSTER—The ADJUSTER will use the case to view and/or select the car class that will apply to a reservation.

1.3 Pre-Conditions

[0789] The USER must be signed-on to the ARMS Web system.

[0790] The USER must have a reservation or open ticket selected.

1.4 Flow of Events

[0791] The Flow of Events will include the necessary steps to view and/or select the car class to apply to a rental reservation.

[0792] 1.4.1 Activity Diagram—see FIG. **98**.

[0793] 1.4.2 Basic Flow

[0794] The Basic Flow of the View Car Class use case includes all of the required steps to view and/or select a car for a rental reservation. If a car class is selected, it will be used to populate rate information on a rental authorization.

[0795] 1. The USER will select View Car Class from the active reservation or open ticket.

[0796] 2. The system will display a car class detail screen. If the USER had previously selected a car class (for example, on the Create Reservation screen), the car class selected will be displayed. If no car has been selected, the system will display the Standard car class.

[0797] 3. The USER will select the car class to apply to the reservation or open ticket.

[0798] 4. The system will return the USER to the active reservation or open ticket and populate car class information based on the car class selected.

[0799] 5. This ends this use case.

[0800] 1.4.3 Alternative Flows

[0801] 1.4.3.1 Select Alternate Car Class

[0802] From Step 2 of the Basic Flow, the USER will have the ability to view an alternate car class. The car classes that will be available to view include:

[0803] Economy

[0804] Compact

[0805] Intermediate

[0806] Standard

[0807] Full Size

[0808] Premium

[0809] If the USER selects an alternate car class, the system will refresh and present the details of the new car class.

[0810] 1.4.3.2 Populate Car Class Rates

[0811] If a rental branch location has already been selected prior to entering this use case, the selection of a car class will populate the rates that apply to the selected car class on the active reservation or open ticket. This alternate flow returns the USER to Step 4 of the Basic Flow.

1.5 Post-Conditions

[0812] If successful, the selected Car Class will be returned to the active reservation or open ticket.

[0813] If unsuccessful, the system state is unchanged.

1.6 Special Requirements

[0814] The additional requirements of the business use case are included here. These are requirements not covered by the flow as they have been described in the sections above.

[0815] 1.6.1 Modify Car Class Selection Results

[0816] The USER may change the results of this use case as part of the active reservation or open ticket.

1.7 Extension Points

[0817] None.

2. Screen Design

[0818] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Car Class Detail Screen

[0819] This screen (see FIG. **99**(*a*)) will allow the USER to view detailed information about Enterprise car classes. The USER will also have the ability to select a car class to apply to a rental reservation/authorization.

[0820] 2.1.1 Screen Layout—see FIG. **99**(*a*)

[0821] 2.1.2 Car Class Details

[0822] 2.1.3 Screen Function Definition

[0823] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0824] 2.1.3.1 Select This Car Class

[0825] The Continue screen function will allow the USER to select the car class to apply to a reservation.

[0826] 2.1.3.1.1 The Continue screen function is invoked through either a button click or through an Enter keystroke.

[0827] 2.1.3.2 Previous

[0828] The Previous screen function allows the USER to return to the previous screen.

[0829] 2.1.3.2.1 The Previous screen function is invoked through a button click.

3. Questions and Answers

[0830] None.

Functional Design Specification

Assign a Request

Version 1.1

Screen Label	Type	Length	Screen Field Name	Data Field	Screen Specific Rule
	Output	20	Car Class Name		This should be the name of the currently selected car class.
(Person Image)	Output	2	Car Class Person Capacity		This should provide the average person capacity of the selected car class.
(Luggage Image)	Output	2	Car Class Luggage Capacity		This should provide the average luggage capacity of the selected car class.
	Hidden	255	Car Class Image Source		This should provide a picture of an example car within the selected car class.
	Output	120	Car Class Detail Description		This should provide a description of the selected car class.
Economy	Output		Economy Car Class		This should be a hyperlink to the Economy car class detail.
Compact	Output		Compact Car Class		This should be a hyperlink to the Compact car class detail.
Intermediate	Output		Intermediate Car Class		This should be a hyperlink to the Intermediate car class detail.
Standard	Output		Standard Car Class		This should be a hyperlink to the Standard car class detail.
Full Size	Output		Full Size Car Class		This should be a hyperlink to the Full Size car class detail.
Premium	Output		Premium Car Class		This should be a hyperlink to the Premium car class detail.

Assign a Request

1. Assign a Request Use Case

1.1 Brief Description

[0831] This use case describes the process of how a USER will review unassigned authorization request and assign them to an adjuster for further handling.

1.2 Use Case Actors

[0832] The following actors will interact with this use case:

[0833] CLAIMS PROCESSOR—The CLAIMS PROCESSOR is a USER who can perform this use case to assign a request for further handling.

[0834] ADJUSTER—The ADJUSTER is a USER who can receive the assigned request for further handling.

1.3 Pre-Conditions

[0835] The USER must be signed-on to the ARMS Web system.

[0836] The USER should be authorized to assign a request.

[0837] If there are unassigned requests present, the USER has selected the link from the Review List Action Items Use Case to enter this use case.

1.4 Flow of Events

[0838] The Flow of Events will include the necessary steps to make changes and updates to "Assign an Action Item".

[0839] 1.4.1 Activity Diagram—see FIG. **115**.

[0840] 1.4.2 Basic Flow

[0841] 1. The USER selects the unassigned authorizations link.

[0842] 2. The system retrieves all unassigned request summaries.

[0843] 3. The system retrieves all OFFICE IDs within ARMS Web.

[0844] 4. The system retrieves all USER IDs within the OFFICE.

[0845] 5. The system displays the unassigned authorization summaries with the offices and adjusters.

[0846] 6. The USER selects an adjuster to assign to the request.

[0847] 7. The system will update the ARMS Web database.

[0848] 8. This ends the use case.

[0849] 1.4.3 Alternative Flows

[0850] 1.4.3.1 Cancel Use Case

[0851] The USER should be capable of leaving the use case at any point prior to assigning the reservation information to an ADJUSTER.

[0852] 1.4.3.2 Modify a Request

[0853] Before step 6 of the basic flow, the USER should be able to make changes to the authorization.

[0854] 1.4.3.3 Select a different office

[0855] Before step 6 of the basic flow, the USER should be able to select a different office for this authorization request. If a different office has been selected, the user cannot assign the file to a new adjuster. The new office must now assign the file.

1.5 Post-Conditions

[0856] If the use case is successful, the system will change the request type from an unassigned authorization request to direct bill. If the user has authority to authorize this request, the system will change the request to Authorized status and assign the adjuster picked in Step 5 of the basic flow.

[0857] If the use case is unsuccessful, the system state will remain unchanged.

1.6 Special Requirements

[0858] None.

1.7 Extension Points

[0859] 1.7.1 MA-04 Send Message

[0860] The Send Message function will be used to allow the user to capture messages and diary notes associated with a rental reservation/authorization. The USER can elect to have the message sent to the Enterprise rental branch location responsible for the reservation/authorization. The USER may also send a message without assigning the file to an adjuster/office. All MESSAGES and DIARY NOTES captured must be related to a specific reservation/authorization.

[0861] 1.7.2 MA-10 Authorize a Request

[0862] The ADJUSTER may decide to enter into the full detail screen of the unassigned request, which would invoke the Authorize a Request case.

[0863] 1.7.3 MA-17 Cancel Authorization

[0864] At any point prior to assigning the file to an ADJUSTER, the USER should have the ability to cancel the authorization. If the authorization is canceled, the ADJUSTER will be prompted to select a cancellation reason code from a drop down list along with having the option to enter additional comments.

2. Screen Design

[0865] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Action Items—Unassigned

[0866] This screen will allow the USER to assign action items to a claims office or an adjuster or the USER may cancel an item. The USER may also change specified information in the Customer File through this screen.

[0867] 2.1.1 Screen Layout—Action Items—Unassigned—see FIG. **116**.

[0868] 2.1.2 Action Items—Unassigned

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Claims Office	Output	3	Office Id	external organization abbreviated name	N/A.
Handling For:	Output	30	Handling for Adjuster's Name	First Name + Last Name	N/A.
	Output	30	Renter's Name	First Name + Last Name	This should be a link. The USER should be able to get to the authorize page from this screen field.
	Output	30	Renter's Address	Address Line	
	Output	10	Renter's City	City	
	Output	3	Renter's State	State	
	Output	10	Renter's Zip Code	Zip Code	
	Output	16	Renter's Home Phone	Renters Night Phone + Renters Night Phone Extension	If these fields are populated, add a label to the screen to differentiate between Home Phone and Work Phone.
	Output	16	Renter's Work Phone	Day Phone + Renters Day Phone Extension	If these fields are populated, add a label to the screen to differentiate between Home Phone and Work Phone.
Claim Number	Input	30	Claim Number	Insurance Claim Number	N/A.
Vehicle Condition	List Box	15	Loss Type	loss type description	
Claim Type	List Box	15	Claim Type	claim type description	N/A.
Date of Loss:	Input	10	Date of Loss	Date of Loss	N/A.
Note to Enterprise	Input	30	Message Text	NOTE	N/A.
Assign to office:	List Box	5	Office Id	external organization abbreviated name	
Assign adjuster:	List Box	30	Adjuster Name	First Name + Last Name	Lists only those adjusters the USER has authority to assign.

[0869] 2.1.3 Screen Function Definition

[0870] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0871] 2.1.3.1<<Previous

[0872] When clicked, the USER will be taken back to the previous screen.

[0873] 2.1.3.2 Process

[0874] When clicked, the USER will be taken to the next item in the action item list or a detail of the completed action items. This button ends the use case.

[0875] 2.1.3.3 Cancel

[0876] When clicked, the USER will be allowed to cancel the authorization. If this occurs, the rental becomes unauthorized and the rental is no longer the responsibility of the insurance company.

[0877] 2.1.3.4 Last Action Message

[0878] After each action item in the USER's list has been completed, upon arriving at the next item there will be a confirmation message at the top of the screen. This message will be a hyperlink describing the last completed action. If the USER clicks on this link, the system will open the customer file, which will reflect all of the current information for the rental. The USER is then free to make additional changes or to simply view the file.

3. Application Operations

4. Data Fields

4.1 Data Field Definition

[0879] This section includes a definition of all data fields included in the functional specification.

[0880] 4.1.1 Address Line

Entity	ARM: Renter Detail
Column Name	RKADL1
Label Name	Address Line
System Name	
Data Type	CHAR(30)
Attribute Definition	

[0881] 4.1.2 City

Entity	ARM: Renter Detail
Column Name	RKCYNM
Label Name	City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[0882] 4.1.3 claim type code

Entity	AUTHORIZATION EXTENSION
Column Name	Clm_typ_cde
Label Name	claim type code:
System Name	CLMTYPCDE
Data Type	DEC(3,0)
Attribute Definition	The claim type code defines the different Authorization claim types. For example: Insured, Claimant, Uninsured Motorist, etc.

[0883] 4.1.4 claim type description

Entity	CLAIM TYPE
Column Name	clm_typ_dsc
Label Name	claim type description:
System Name	CLMTYPDSC
Data Type	CHAR(40)
Attribute Definition	The claim type description is a lexical definition of the claim type code which defines the different Authorization claim types. For example: Insured, Claimant, Uninsured Motorist, etc.

[0884] 4.1.5 company identifier

Entity	EXTERNAL ORGANIZATION
Column Name	cmpy_id
Label Name	company identifier:
System Name	CMPYID
Data Type	DEC(11,0)
Attribute Definition	Business Party Identifier is a surrogate key assigned to each unique occurrence of an Individual, External Organization, and Internal Organization (Business Party).

[0885] 4.1.6 DATE OF LOSS

Entity	A4 Cross Reference
Column Name	X4LSDT
Label Name	DATE OF LOSS
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[0886] 4.1.7 Day Phone

Entity	ARM: Renter Detail
Column Name	RKDYPH
Label Name	Day Phone
System Name	

-continued

Data Type	NUMERIC(10)
Attribute Definition	

[0887] 4.1.8 external organization abbreviated name

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_abbr_nam
Label Name	external organization abbreviated name:
System Name	EOABBRNAM
Data Type	CHAR(10)
Attribute Definition	External Organization Abbreviated Name is a shortened text based label associated with an organization outside of Enterprise. This name is sometimes used for accounting purposes.

[0888] 4.1.9 external organization identifier

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_id
Label Name	external organization identifier:
System Name	EOID
Data Type	DEC(11,0)
Attribute Definition	The external organization identifier is a surrogate key assigned to each unique occurrence of an External Organization. Examples: body shops, vehicle manufacturers, insurance companies, leasing accounts, credit unions, dealerships, or government agencies.

[0889] 4.1.10 First Name

Entity	ARM: Adjustor Master
Column Name	ALFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[0890] 4.1.11 First Name

Entity	ARM: Renter Detail
Column Name	RKFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[0891] 4.1.12 handled by adjustor code

Entity	ACTION ITEM
Column Name	handl_by_adjr_cde
Label Name	Adjustor Code
System Name	HNDADJRCDE
Data Type	CHAR(10)
Attribute Definition	The handled by adjustor code is the adjustor code of the administrator or adjustor's who is handling the action item.

[0892] 4.1.13 handled by company identifier

Entity	ACTION ITEM
Column Name	handl_by_cmpy_id
Label Name	ARMS Profile ID
System Name	HNDCMPYID
Data Type	CHAR(5)
Attribute Definition	The handled by company identifier is the company identifier of the administrator or adjustor's who is handling the action item.

[0893] 4.1.14 handling for adjustor code

Entity	AUTHORIZATION ACTIVITY LOG
Column Name	handl_for_adjr_cde
Label Name	handling for adjustor code:
System Name	HNDADJRCDE
Data Type	CHAR(10)
Attribute Definition	The handled by adjustor code is the adjustor code of an adjustor/user who is handling authorization activities for another adjustor/user in the ARMS Web application.

[0894] 4.1.15 handling for company identifier

Entity	AUTHORIZATION ACTIVITY LOG
Column Name	handl_for_cmpy_id
Label Name	handling for company identifier:
System Name	HNDCMPYID
Data Type	CHAR(5)
Attribute Definition	The handling for company identifier is the company identifier used to uniquely identify an adjustor/user who is handling authorization activities for another adjustor/user in the ARMS Web application.

[0895] 4.1.16 Insurance Claim Number

Entity	ARM: Authorization(Claim Info)
Column Name	AZCLNO
Label Name	Insurance Claim Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[0896] 4.1.17 Last Name

Entity	ARM: Adjustor Master
Column Name	ALLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[0897] 4.1.18 Last Name

Entity	ARM: Renter Detail
Column Name	RKLSNM
Label Name	Last Name
System Name	

-continued

Data Type	CHAR(20)
Attribute Definition	

[0898] 4.1.19 loss type description

Entity	LOSS TYPE
Column Name	loss_typ_dsc
Label Name	loss type description:
System Name	LOSSTYPDSC
Data Type	CHAR(40)
Attribute Definition	The loss type description is a lexical definition of the loss type code which defines the different loss categories when an Insurance Company authorizes a Rental. For example: Theft, Drivable, Repairable, Non-drivable, Non-repairable, Totaled.

[0899] 4.1.20 NOTE

Entity	ARM: ARMS/400 Diary Notes File
Column Name	NENOTE
Label Name	NOTE
System Name	
Data Type	CHAR(50)
Attribute Definition	

[0900] 4.1.21 Renters Day Phone Extension

Entity	ARM: Renter Detail
Column Name	RKDYEX
Label Name	Renters Day Phone Extension
System Name	
Data Type	NUMERIC(4)
Attribute Definition	

[0901] 4.1.22 Renters Night Phone

Entity	ARM: Renter Detail
Column Name	RKNTPH
Label Name	Renters Night Phone
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[0902] 4.1.23 Renters Night Phone Extension

Entity	ARM: Renter Detail
Column Name	RKNTEX
Label Name	Renters Night Phone Extension
System Name	
Data Type	NUMERIC(4)
Attribute Definition	

[0903] 4.1.23 State

Entity	ARM: Renter Detail
Column Name	RKSACD

-continued

Label Name	State
System Name	
Data Type	CHAR(2)
Attribute Definition	

[0904] 4.1.24 Zip Code

Entity	ARM: Renter Detail
Column Name	RKZPCD
Label Name	Zip Code
System Name	
Data Type	CHAR(9)
Attribute Definition	

5. Questions and Answers

[0905] Issue Number: 345

[0906] Question: Do we force the user to view the Rental Detail in order to change the unassigned adjuster to an adjuster who is authorized to handle?

[0907] Status: Closed—Resolved

[0908] Resolution: 4-12-00, Randy Haselhorst, we don't want to force them to look at the detail to assign a rental request to another user. They primarily look for claim number, claim type, renter name and possibly date of loss. If you can make the option you've described intuitive, that may work, but it doesn't sound that way to me.

[0909] 4-12-00, Kim De Valiance, NO—This is a great feature, but I don't know if it is necessary. Some companies use this feature, while others wait for the phone call to authorize.

[0910] Issue Number: 346

[0911] Question: Should you be allowed to decline, authorize or extend an unassigned rental.

[0912] Status: Closed—Resolved

[0913] Resolution: 4-12-00, Randy Haselhorst—you can't "extend" until you've authorized. Decline could be an option, but we should probably think about that more to determine if we should. Current state does not have this but I have heard people ask for it. As far as authorizing, that again may be a good idea. I'd like to see Kim and Dave's ideas.

[0914] 4-12-00, Kim De Valiance—Yes, we have heard this many, many times that will assigning a rental, the user should have the ability to do all these things (as long as the user has the proper authority).

[0915] Issue Number: 361

[0916] Question: Can we pass along an unassigned to another office?

[0917] Status: Pending

[0918] Resolution: Yes, if the request is an unassigned status, the USER can transfer it to another office.

[0919] Issue Number: 378

[0920] Question: Can we Exit the use case after Sending a Message and leave the request unassigned? Iteration 2 question.

[0921] Status: Closed—Resolved

[0922] Resolution: 6-23-00 Per Brian Weingart,—yes, after sending a message on an unassigned request, if we didn't assign an adjuster, it is still unassigned.

[0923] Issue Number: 413

[0924] Question: 6-23-00, Only one person can handle un-assigns—which is set up in the profile? Or can a multiple # of people handle the un-assigns? Does the Handling for drop down box allow for the selection of unassigned? How do we handle record locking? Per Jennifer, Sean is working on this issue.

[0925] Status: Pending

[0926] Resolution:

[0927] Issue Number: 414

[0928] Question: 6-23-00, If I select Unassigned from the action item list and only one exists do I go straight to the detail? Per Jennifer—Sean is working on this issue.

[0929] Status: Pending

[0930] Resolution:

[0931] Issue Number: 415

[0932] Question: 6-23-00, If I select Unassigned from the action item list and multiple exists I go straight to the detail. I go to a screen, which looks like action items, but list all of the unassigned. Per Jennifer—Sean is working on this issue.

[0933] Status: Pending

[0934] Resolution:

Functional Design Specification

Authorize a Request

Version 1.1

Authorize a Request

1. Authorize Request Use Case

1.1 Brief Description

[0935] This use case describes how a USER authorizes a direct bill request.

1.2 Use Case Actors

[0936] The following actors will interact with this use case:

[0937] ADJUSTER—The USER will use this system to authorize a direct bill request.

1.3 Pre-Conditions

[0938] The USER must be logged into the ARMS Web system.

[0939] The USER must have the authority to authorize a request.

[0940] At least one outstanding unauthorized direct bill request must be assigned that the USER may handle.

[0941] The USER must have selected an Unauthorized Direct Bill Request from the Review Action Items Screen or from the Search Results page.

1.4 Flow of Events

[0942] The Flow of Events will include the necessary steps to make changes and updates to "Authorize Request".

[0943] 1.4.1 Activity Diagram—see FIG. **117**.

[0944] 1.4.2 Basic Flow

[0945] 1. The USER selects an outstanding direct bill to authorize.

[0946] 2. The system displays the Customer file.

[0947] 3. The USER reviews the renter's information.

[0948] 4. The USER inputs a number of Authorized Amounts, days and required fields.

[0949] 5. The USER submits the Authorization.

[0950] 6. The system validates information in the Customer File.

[0951] 7. If the adjuster assigned to the Customer File is 'UNKNOWN' or 'UNASSIGNED', the System will assign the Customer File to the current USER.

[0952] 8. The system will update the ARMS/Web database with the Authorization.

[0953] 9. The System reads the user profile to see if the confirmation page should display.

[0954] 10. If the profile indicates 'Show Confirmation Page', the System will display the confirmation page.

[0955] 11. This ends the use case.

[0956] 1.4.3 Alternative Flows

[0957] 1.4.3.1 View Notebook

[0958] At step 3 of the Basic Flow, the USER can select to view the transaction history (Notebook) by selecting the Go To Notebook link.

[0959] 1.4.3.2 Add Notes to Customer File

[0960] At step 3 of the Basic Flow, the USER can add notes to the Customer File by typing in the appropriate notes field on the Customer File page.

[0961] 1.4.3.3 Skip Customer File

[0962] At step 3 of the Basic Flow, the USER should have the ability to skip to the next action item by clicking the Skip button. After clicking the Skip button, the USER should be taken to the next action item on their current list without any changes to the file being skipped.

[0963] 1.4.3.4 Change Customer File

[0964] At step 3 of the Basic Flow, the adjuster can make changes to the additional details of the Customer File. This is done by selecting the Add/Change link which will invoke an editable page with all *appropriate information editable.

1.5 Post-Conditions

[0965] If the use case was successful then the changes should go into effect immediately and the screen should revert back to the original screen of entry.

[0966] If the use case was successful, then the ARMS system will be notified of authorization changes.

[0967] If the use case was unsuccessful then the system state will be unchanged.

1.6 Special Requirements

[0968] 1.6.1 Requirements for Claim Type Authorizations

[0969] The following are a set of requirements surrounding the type of authorized amounts that are allowable based on the Claim Type associated with a rental. These restrictions DO NOT APPLY to reservations that are submitted with a Direct Billing Percentage of zero (0).

[0970] 1.6.1.1 When the Claim Type selected is 'Insured, 'Theft', or 'Uninsured Motorist'

[0971] 1.6.1.1.1 The reservation/rental must always include an Authorized Rate or both Policy Daily and Maximum Limits as defined by the renter's insurance policy. Zero (0) is an acceptable Policy Daily Limit.

[0972] 1.6.1.1.2 The reservation/rental must include an Authorized Rate or Policy Daily Limit if a Policy Maximum Limit is included. Zero (0) is an acceptable Policy Daily Limit.

[0973] 1.6.1.2 When the Claim Type selected is 'Claimant'

[0974] 1.6.1.2.1 The reservation/rental must always include an Authorized Rate.

[0975] 1.6.1.2.2 The reservation/rental may not include a Policy Daily/Maximum Limits selection.

[0976] 1.6.1.3 Requirements for editable fields based on reservation/ticket status

[0977] 1.6.1.3.1 Depending on the status of the Customer File the adjuster may change the following fields:

Field Name	Unassigned/ Unauthorized Reservation/ Ticket	Assigned but Unauthorized Reservation or Ticket	Authorized Ticket
CLAIM NUMBER	X	X	X
CLAIM TYPE	X	X	X
LOSS TYPE	X	X	X
DATE OF LOSS	X	X	X
INSURED INFORMATION	X	X	X
RENTER INFORMATION	X		
DATE RENTAL IS NEEDED	X		
ADDITIONAL CHARGES	X	X	X
NUMBER OF AUTHORIZED DAYS	X	X	
BILL-TO PERCENT	X	X	X
POLICY LIMITS	X	X	X
AUTHORIZED RATE	X	X	X

[0978] If the Customer File is an Unauthorized Reservation, the adjuster can Reject the Authorization Request, Send a Message, and/or Transfer (Assign) the file to an adjuster.

[0979] 1.6.1.3.2 If the status of the Customer File is an open ticket the following rules apply:

Actions	Authorized Reservation	Unauthorized Reservation/ Ticket	Authorized Open Ticket
Send Message	X	X	X
Extension			X
Terminate Rental			X
Cancel Authorization	X	X	
Transfer/Assign Adjuster	X	X	X
View Car Class	X	X	X

1.7 Extension Points

[0980] An extension point indicates a link between this use case and another use case. Extension points associated with the use case are indicated below. Clicking on the extension point will open the related use case.

[0981] 1.7.1 MA-04 Send Message

[0982] The Send Message will be used to allow the USER to capture messages and diary notes associated with a rental reservation/authorization. The USER can elect to either have the message sent to the Enterprise rental branch location responsible for the reservation/authorization, or to store the note in the ARMS Web system without sending the message to Enterprise. All MESSAGES and DIARY NOTES captured must be related to a specific reservation/authorization.

[0983] 1.7.2 MA-16 Transfer Work

[0984] (The Change Adjuster button invokes this use case).

[0985] The ADJUSTER may choose to transfer an authorization to a different adjuster in his/her office or transfer the authorization to another adjuster in a different office.

[0986] 1.7.3 MA-08 View Car Class

[0987] The ADJUSTER may choose to view the car class. This button invokes the View Car Class use case.

[0988] 1.7.4 MA-17 Cancel Authorization

[0989] The ADJUSTER may choose to deny the authorization. When the ADJUSTER selects the CANCEL button, it will invoke the Cancel Authorization use case to reject the authorization.

2. Screen Design

[0990] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Authorize Rental Detail

[0991] This screen will allow the user to work the currently selected authorization request. The user may set the authorization amounts and policy coverage limits or may assign the request to another adjuster.

[0992] 2.1.1 Screen Layout—Authorize Rental Detail—see FIG. **118**.

[0993] 2.1.2 Authorize Rental Detail

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Handling For:	List Box	30	Handling for Adjuster's Name	First Name + Last Name	N/A.
Note to Enterprise:	Input	0	Message	NOTE	
Notebook	Output	50	Message	NOTE	
Note to Self Only	Input	0	Message	NOTE	
	Output	8	Message Creation Date	Add Date	N/A.
Message	Output	50	Message Text	NOTE	N/A.
	Output	10	Notebook creation date	Add Date	
Claim no.	Output	30	Claim Number	Insurance Claim Number	
Claim Number:	Input	11	Claim Number	Insurance Claim Number	N/A.
___ days @	Input	4	Number of Days Authorized	Number Of Days Authorized	N/A.
Direct Bill %:	Input	6	Percent Covered	Bill To %	N/A.
Policy: Daily rate/Maximum dollars:	List Box	5	Policy Maximum and Daily Rates	Dollars Per Day Covered	N/A.
Policy: Daily rate/Maximum dollars:	List Box	5	Policy Maximum and Daily Rates	Max $ Covered	N/A.
	Output	30	Rental Location Branch Name	Rental Location	N/A.
Date Rental Needed:	List Box	10	Rental Start Date	Start Date	N/A.
days @ ___	List Box	6	Vehicle Rate	Vehicle Rate	N/A.
Insured Name:	Input	30	Insured's Name	First Name + Last Name	N/A.
Insured Name:	Output	20	Insured's Name	First Name + Last Name	
	Output	30	Rental Location Address	Address Line + Address Line2	N/A.
	Output	25	Rental Location City Name	City	N/A.
	Output	10	Rental Location Postal/Zip Code	Zip Code	N/A.
	Output	3	Rental Location State/ Province Code	State	N/A.
	Output	13	Rental Location Telephone Number	Telephone Number	N/A.

-continued

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Date of Loss:	List Box	10	Date of Loss	Date of Loss	N/A.
Date of Loss	Output	10	Date of Loss	Date of Loss	
	Output	30	Renter's Address Line	Address Line	
Renter's Address	Output	20	Renter's City	City	
	Output	3	Renter's State/Province Code	State	
	Output	15	Renter's Zip/Postal Code	Zip Code	
Home Phone:	Output	16	Renter's Home Phone	Renters Night Phone + Renters Night Phone Extension	This field is input if the ticket is not opened. It will not be editable if the ticket is open.
Authorize Direct Bill: for	Output	30	Renter's Name	First Name + Last Name	N/A.
Renter:	Output	30	Renter's Name	First Name + Last Name	N/A.
	Output	16	Renter's Work Phone	Day Phone + Renters Day Phone Extension	
Owner's Vehicle	Output	20	Vehicle Year, Make and Model	Renter Vehicle Year + Renter Make/Model	
	Output	15	Repair Facility City	City	
Repair Facility	Output	20	Repair Facility Name	Repair Facility Name	
	Output	3	Repair Facility State	State	
	Output	10	Repair Facility Telephone Number	Telephone Number	
	Output	7	Repair Facility Zip Code	Zip Code	
Claim Type:	List Box	15	Claim Type	claim type description	N/A.
Claims Office:	Output	3	Office Id	external organization abbreviated name	N/A.
Vehicle Condition	List Box	20	Loss Type	loss type description	
Vehicle Condition	Output	20	Type of Loss	loss type description	
	Input	20	Renter's Email	renter email	

[0994] 2.1.3 Screen Function Definition

[0995] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[0996] 2.1.3.1 Skip

[0997] When clicked, the USER will be taken out of the use case without changing the current status of the request. Any changes made by clicking Change or Add and keying data in the bottom section will be saved.

[0998] 2.1.3.2 Process

[0999] When clicked, the system will validate the input and accept the changes made to the customer file. The arms database will be updated and the data will be sent to the arms system. The use case will then end and the USER will return to the process from which they came.

[1000] 2.1.3.3 Notebook

[1001] When clicked, the USER will be taken to the Note Book section at the bottom of the screen to view all messages for this rental.

[1002] 2.1.3.4 Transfer File

[1003] When clicked, the USER will be taken to the Transfer File screen. This screen allows the USER to change the office or adjuster currently assigned to the customer file. The required information in the Extend Rental/Customer File will be passed to the Transfer File screen. Upon completion of the transfer, the USER will then be returned to the next action item or the profiled start page, depending on the screen from which the USER began.

[1004] 2.1.3.5 Change or Add

[1005] When clicked, the system will refresh the current screen and make all editable fields in the bottom section (outside the gray box area) input capable. The changes on the top of the screen will not be lost.

[1006] 2.1.3.6 Top of page

[1007] When clicked, the USER will be taken to the top of the current page.

[1008] 2.1.3.7 View Car Class

[1009] When clicked, the USER will be taken to the View Car Class Use Case. No changes will be lost. Once the USER is finished with this use case, the USER will return to the Extend Rental Use Case.

3. Application Operations

4. Data Fields

4.1 Data Field Definition

[1010] This section includes a definition of all data fields included in the functional specification.

[1011] 4.1.1 Add Date

Entity	ARM: ARMS/400 Diary Notes File
Column Name	NEADDT
Label Name	Add Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1012] 4.1.2 Address Line

Entity	ARM: Renter Location Master
Column Name	LOADL1
Label Name	
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1013] 4.1.3 Address Line

Entity	ARM: Renter Detail
Column Name	RKADL1
Label Name	Address Line
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1014] 4.1.4 Address Line2

Entity	ARM: Renter Location Master
Column Name	LOADL2
Label Name	Address Line
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1015] 4.1.5 Bill To %

Entity	ARM: Authorization(Claim Info)
Column Name	AZBTPC
Label Name	Bill To %
System Name	
Data Type	DECIMAL(3)
Attribute Definition	

[1016] 4.1.6 Branch

Entity	A4 Cross Reference
Column Name	br_id
Label Name	Branch:
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1017] 4.1.7 City

Entity	ARM: Rental Location Master
Column Name	LOCYNM
Label Name	City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1018] 4.1.8 City

Entity	ARM: Renter Detail
Column Name	RKCYNM
Label Name	City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1019] 4.1.9 City

Entity	ARM: Repair Detail
Column Name	RUCYNM
Label Name	City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1020] 4.1.10 claim type code

Entity	AUTHORIZATION EXTENSION
Column Name	clm_typ_cde
Label Name	claim type code:
System Name	CLMTYPCDE
Data Type	DEC(3,0)
Attribute Definition	The claim type code defines the different Authorization claim types. For example: Insured, Claimant, Uninsured Motorist, etc.

[1021] 4.1.11 claim type description

Entity	CLAIM TYPE
Column Name	clm_typ_dsc
Label Name	claim type description:
System Name	CLMTYPDSC
Data Type	CHAR(40)
Attribute Definition	The claim type description is a lexical definition of the claim type codewhich defines the different Authorization claim types. For example: Insured, Claimant, Uninsured Motorist, etc.

[1022] 4.1.12 company identifier

Entity	EXTERNAL ORGANIZATION
Column Name	cmpy_id
Label Name	company identifier:
System Name	CMPYID
Data Type	DEC(11,0)
Attribute Definition	Business Party Identifier is a surrogate key assigned to each unique occurrence of an Individual, External Organization, and Internal Organization (Business Party).

[1023] 4.1.13 Date of Loss

Entity	ARM: Renter Detail
Column Name	RKLSDT
Label Name	Date Of Loss
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1024] 4.1.14 Day Phone

Entity	ARM: Renter Detail
Column Name	RKDYPH
Label Name	Day Phone
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1025] 4.1.15 Dollars Per Day Covered

Entity	ARM: Authorization(Claim Info)
Column Name	AZ$PDY
Label Name	Dollars Per Day Covered
System Name	
Data Type	DECIMAL(5,2)
Attribute Definition	

[1026] 4.1.16 external organization abbreviated name

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_abbr_nam
Label Name	external organization abbreviated name:
System Name	EOABBRNAM
Data Type	CHAR(10)
Attribute Definition	External Organization Abbreviated Name is a shortened text based label associated with an organization outside of Enterprise. This name is sometimes used for accounting purposes.

[1027] 4.1.17 external organization identifier

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_id
Label Name	external organization identifier:
System Name	EOID
Data Type	DEC(11,0)
Attribute Definition	The external organization identifier is a surrogate key assigned to each unique occurrence of an External Organization. Examples: body shops, vehicle manufacturers, insurance companies, leasing accounts, credit unions, dealerships, or government agencies.

[1028] 4.1.18 First Name

Entity	ARM: Adjustor Master
Column Name	ALFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1029] 4.1.19 First Name

Entity	ARM: Insured Detail
Column Name	IRFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1030] 4.1.20 First Name

Entity	ARM: Renter Detail
Column Name	RKFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1031] 4.1.21 Group

Entity	A4 Cross Reference
Column Name	grp_id
Label Name	Group Number
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1032] 4.1.22 Insurance Claim Number

Entity	ARM: Authorization(Claim Info)
Column Name	AZCLNO
Label Name	Insurance Claim Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1033] 4.1.23 Last Name

Entity	ARM: Adjustor Master
Column Name	ALLSNM
Label Name	Last Name
System Name	

-continued

Data Type	CHAR(20)
Attribute Definition	

[1034] 4.1.24 Last Name

Entity	ARM: Insured Detail
Column Name	IRLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1035] 4.1.25 Last Name

Entity	ARM: Renter Detail
Column Name	RKLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1036] 4.1.26 loss type code

Entity	AUTHORIZATION EXTENSION
Column Name	loss_typ_cde
Label Name	loss type code:
System Name	LOSSTYPCDE
Data Type	DEC(3,0)
Attribute Definition	The loss type code defines the different loss categories when an Insurance Company authorizes a Rental. For example: Theft, Drivable, Repairable, Non-drivable, Non-repairable, Totaled.

[1037] 4.1.27 loss type description

Entity	LOSS TYPE
Column Name	loss_typ_dsc
Label Name	loss type description:
System Name	LOSSTYPDSC
Data Type	CHAR(40)
Attribute Definition	The loss type description is a lexical definition of the loss type code which defines the different loss categories when an Insurance Company authorizes a Rental. For example: Theft, Drivable, Repairable, Non-drivable, Non-repairable, Totaled.

[1038] 4.1.28 Max $ Covered

Entity	ARM: Authorization(Claim Info)
Column Name	AZ$MAX
Label Name	Max $ Covered
System Name	
Data Type	DECIMAL(9,2)
Attribute Definition	

[1039] 4.1.29 NOTE

Entity	ARM: ARMS/400 Diary Notes File
Column Name	NENOTE
Label Name	NOTE
System Name	
Data Type	CHAR(50)
Attribute Definition	

[1040] 4.1.30 Number Of Days Authorized

Entity	ARM: Authorization(Claim Info)
Column Name	AZAUDY
Label Name	Number Of Days Authorized
System Name	
Data Type	DECIMAL(3)
Attribute Definition	

[1041] 4.1.31 Rental Location

Entity	ARM: Authorization(Claim Info)
Column Name	AZRNLC
Label Name	Rental Location
System Name	
Data Type	CHAR(10)
Attribute Definition	

[1042] 4.1.32 renter email

Entity	RENTER EXTENSION
Column Name	rentr_eml
Label Name	renter email:
System Name	RENTREML
Data Type	CHAR(70)
Attribute Definition	The email address of the renter.

[1043] 4.1.33 Renter Make/Model

Entity	ARM: Renter Detail
Column Name	RKVHMM
Label Name	Renter Make/Model
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1044] 4.1.34 Renter Vehicle Year

Entity	ARM: Renter Detail
Column Name	RKVHYR
Label Name	Renter Vehicle Year
System Name	
Data Type	NUMERIC(4)
Attribute Definition	

[1045] 4.1.35 Renters Day Phone Extension

Entity	ARM: Renter Detail
Column Name	RKDYEX
Label Name	Renters Day Phone Extension
System Name	
Data Type	NUMERIC(4)
Attribute Definition	

[1046] 4.1.36 Renters Night Phone

Entity	ARM: Renter Detail
Column Name	RKNTPH
Label Name	Renters Night Phone
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1047] 4.1.37 Renters Night Phone Extension

Entity	ARM: Renter Detail
Column Name	RKNTEX
Label Name	Renters Night Phone Extension
System Name	
Data Type	NUMERIC(4)
Attribute Definition	

[1048] 4.1.38 Repair Facility Name

Entity	ARM: Repair Detail
Column Name	RURFNM
Label Name	Repair Facility Name
System Name	
Data Type	CHAR(35)
Attribute Definition	

[1049] 4.1.39 Start Date

Entity	ARM: Authorization(Claim Info)
Column Name	AZSTDT
Label Name	Start Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1050] 4.1.40 State

Entity	ARM: Rental Location Master
Column Name	LOSACD
Label Name	State
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1051] 4.1.41 State

Entity	ARM: Renter Detail
Column Name	RKSACD
Label Name	State
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1052] 4.1.42 State

Entity	ARM: Repair Detail
Column Name	RUSACD
Label Name	State
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1053] 4.1.43 Status Description

Entity	ARM: ARMS/400 Cross Reference Status Table File
Column Name	XUSTDS
Label Name	Status Description
System Name	
Data Type	CHAR(6)
Attribute Definition	

[1054] 4.1.44 Telephone Number

Entity	ARM: Rental Location Master
Column Name	LOPHNO
Label Name	Telephone Number
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1055] 4.1.45 Telephone Number

Entity	ARM: Repair Detail
Column Name	RUPHNO
Label Name	Telephone Number
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1056] 4.1.46 Vehicle Class

Entity	ARM: Authorization(Claim Info)
Column Name	AZVHCS
Label Name	Vehicle Class
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1057] 4.1.47 Vehicle Rate

Entity	ARM: Authorization(Claim Info)
Column Name	AZVHRT
Label Name	Vehicle Rate
System Name	
Data Type	DECIMAL(5,2)
Attribute Definition	

[1058] 4.1.48 Zip Code

Entity	ARM: Rental Location Master
Column Name	LOZPCD
Label Name	Zip Code
System Name	
Data Type	CHAR(9)
Attribute Definition	

[1059] 4.1.49 Zip Code

Entity	ARM: Repair Detail
Column Name	RUZPCD
Label Name	Zip Code
System Name	
Data Type	CHAR(9)
Attribute Definition	

5. Questions and Answers

[1060] Issue Number: 419

[1061] Question: 6-23-00, When rejecting an authorization do we want a reason code? Per Jennifer—Mike, Brad and Craig is handling this.

[1062] Status: Pending

[1063] Resolution: 07-03-00—Brad Reel: In the ARMS Web V2.0 application reason codes will be collected for the following events: reject invoice, terminate authorization. Per a discussion with Randy Haselhorst, it would be worthwhile to collect a reason code for reject/cancel authorization. However, it is not critical for this release. If possible it should be incorporated.

[1064] 07-03-00—Brad Reel: I am reassigning to Mike Slater to work with Neil Fitzgerald and determine whether or not to incorporate in V2.0, or wait until a later release.

Functional Design Specification

Change Customer File

Version 1.1

Change Customer File

1. Change Customer File Use Case

1.1 Brief Description

[1065] The Change Authorization use case describes how the USER could change an authorization assigned to a reservation nor an open rental.

1.2 Use Case Actors

[1066] The following actors will interact with this use case:

[1067] ADJUSTER—The USER will use this case to add or change information related to an existing Customer File on a rental within ARMS Web.

1.3 Pre-Conditions

[1068] The USER must be logged into the ARMS Web system.

[1069] The USER must have selected to change an existing Customer File.

1.4 Flow of Events

[1070] The Flow of Events will include the necessary steps to make changes to a Customer File.

[1071] 1.4.1 Activity Diagram—see FIG. **119**.

[1072] 1.4.2 Basic Flow

[1073] 1. The USER will select a Customer File to change.

[1074] 2. The SYSTEM will display the associated Customer File detail of the selected item.

[1075] 3. The USER will add additional or modify existing information associated with the Customer File.

[1076] 4. The SYSTEM will validate added or modified data.

[1077] 5. The SYSTEM will update ARMS Web to reflect the changes.

[1078] 6. The SYSTEM notifies ARMS of the changes associated with the Customer File.

[1079] 7. The SYSTEM checks the profile for the confirmation screen setting.

[1080] 8. This ends the use case.

[1081] 1.4.3 Alternative Flows

[1082] 1.4.3.1 View Rental Notebook

[1083] At step 1, the USER may choose to view the history of a rental. The USER will be able to see the last five diary notes. The USER can also select to view the transaction history or add diary notes from the Extend Rental Detail.

[1084] 1.4.3.2 Validate Changes

[1085] If the USER changes or adds information, which does not pass validation, an error message will notify the USER and return them to step 1 of the Basic Flow.

[1086] If an error is discovered in the validation of the reservation/rental information submitted by the USER (Step 3 of the Basic Flow), the system would present the USER with an error message and return them to the Detailed Reservation/Rental Display. If the error is specific to a data field within the form, the field should be highlighted and the error described.

[1087] 1.4.3.3 Display Confirmation

[1088] After step 6, the USER may wish to have a confirmation page displayed, indicating that some type of change has taken place. The confirmation page is completely optional; therefore, at anytime the USER wants to set their profile to bypass this screen, he/she may do so.

[1089] 1.4.3.4 Update USER Profile

[1090] During the confirmation process, the USER has the option of changing their profile setting to display or hide the confirmation page. Each time the setting is changed, the USER profile must be updated to reflect the new requirements set by the USER.

1.5 Post-Conditions

[1091] If the use case was successful then the changes have been saved to the ARMS Web database and if appropriate, ARMS Web has generated notification transactions to ARMS.

[1092] If the use case was unsuccessful then the system has remained unchanged.

1.6 Special Requirements

[1093] It will be considered invalid if for a reservation, the Claim Number, Renter First Name, Renter Last Name, Claim Type, Vehicle Condition, Rental Location, Authorized Number of Days, Direct Bill Percent, and at least one Renter Telephone number have not been included.

[1094] It will be considered invalid if the customer has established Claim Number editing and the Claim Number format does not meet the requirements of the customer's Claim Number definition.

[1095] It will be considered invalid if any field identified as REQUIRED in the company/office profile is not included.

[1096] It will be considered invalid if any data entered violates the data type as specified by the ARMS Web database (i.e., alpha characters in a numeric field).

[1097] A warning will be presented to the USER if any defined limits identified in the company/office/user profile are exceeded (e.g., Maximum Number of Days Authorized). The system will allow the USER to submit the authorization from the warning.

[1098] It will be considered invalid if the selected Claim Type is 'Insured,' or 'Theft' and the reservation does not include an Authorized Rate or does not include both Policy Daily and Policy Maximum Limits (with the exception of reservations with a Direct Bill Percent of zero (0)). A Policy Daily Limit of zero (0) is an acceptable entry.

[1099] It will be considered invalid if the selected Claim Type is 'Insured,' or 'Theft' and the reservation includes a Policy Maximum Limit but does not include an Authorized Rate or Policy Daily Limit (with the exception of reservations with a Direct Bill Percent of zero (0)). A Policy Daily Limit of zero (0) is an acceptable entry.

[1100] It will be considered invalid if the selected Claim Type is 'Claimant' and Policy Limits (Daily or Maximum) have been included.

[1101] It will be considered invalid if the Authorized Number of Days is included and is less than zero (0).

[1102] It will be considered invalid if the Direct Bill Percent is greater than zero (0) and the Authorized Number of Days is zero.

[1103] It will be considered invalid if the Direct Bill Percent is less than zero (0).

[1104] It will be considered invalid if the Direct Bill Percent is greater than one hundred (100).

[1105] It will be considered invalid if the Labor Hours are less than zero (0).

[1106] It will be considered invalid if the Date of Loss is greater than the current date.

[1107] It will be considered invalid if the first three digits (i.e., area code) of any U.S. or Canadian telephone number meet the criteria below:

[1108] 0XX

[1109] 1XX

[1110] the second and third digits equal (e.g., 800, 877, 888, etc.)

[1111] Where X equals any digit 0 through 9.

[1112] It will be considered invalid if a U.S. or Canadian telephone number does not consist of 10 digits.

[1113] It will be considered invalid if a U.S. postal code that does not consist of 5 or 9 digits.

[1114] It will be considered invalid if the a Canadian postal code does not consist of 6 alphanumeric characters in the format AXAXAX where A is an alpha character and X is a digit between 0 and 9.

[1115] It will be considered invalid if an E-mail address is included that does not include an '@' character.

[1116] It will be considered invalid if the Send e-mail Confirmation to Renter flag is set to true and the Renter e-mail address is not included.

[1117] If the customer file is in reservation status, the screen will show a cancel button for the USER to cancel the authorization if desired.

[1118] If the customer file is in open ticket status, the screen will show the set last day button for the USER to terminate the rental if desired.

1.7 Extension Points

1.7.1 MA-04 Send a Message

[1119] The Send Message will be used to allow the USER to capture messages and diary notes associated with extending a rental. The USER can elect to either have the message sent to the Enterprise rental branch location responsible for the reservation/authorization, or to store the note in the ARMS Web system without sending the message to Enterprise. All MESSAGES and DIARY NOTES captured must be related to a specific reservation/authorization.

[1120] 1.7.2 MA-16 Reassign USER or Office (The Transfer File button invokes this use case)

[1121] After the extend rental detail is displayed, the USER may choose to change the current office/USER. First, the USER would select to change the current office/USER. Second, the system would display a list of authorized offices/USERs. Third, the USER would select a new office/USER.

[1122] 1.7.3 MA-15 Terminate a Rental (Set Last Day)

[1123] After the extend rental detail is displayed, the USER may choose to terminate the rental. If termination is selected, the USER must enter a reason for the termination of the rental. Termination means the insurance company is no longer willing to pay for the rental. This function (button) is only available for an open ticket. For reservation status, the USER should see the Cancel button.

[1124] 1.7.4 MA-17 Cancel Authorization

[1125] Before step 5 of the Basic Flow, the USER should have the capability to cancel the authorization.

Before the USER has made changes that have been updated in the database and sent to ARMS, the Cancel Authorization function (button) should be available for reservation status. However, the USER cannot perform the Cancel function on an open ticket. For an open ticket, the Termination (Set Last Day) function (button) is available.

[1126] 1.7.5 MA-08 View Car Class

[1127] The View Car Class use case will be used to allow the USER to view details about and select a car class to apply to a reservation. Details will include the average number of passengers and luggage items that can be served by a vehicle in the specific car class. The car class selected by the USER should be applied to the reservation.

2. Screen Design

[1128] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Change Rental Detail

[1129] This screen (see FIGS. **120**(*a*) and (*b*)) will allow the USER to work the currently selected authorization request. The USER may set the authorization amounts and policy coverage limits or may assign the request to another adjuster.

[1130] 2.1.1 Screen Layout—Change Rental Detail—see FIGS. **120**(*a*) and (*b*)

[1131] 2.1.2 Change Rental Detail

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Additional Charges	Output	15	Additional Charges		
Handling For:	Output	30	Handling for Adjuster's Name	First Name + Last Name	Last Name + First Name
Note to Self Only	Input	50	Message	NOTE	
Messages:	Output	8	Message Creation Date	Add Date	N/A.
Note to Enterprise:	Input	50	Message Text	NOTE	N/A.
	Output	50	Message Text	NOTE	N/A.
Claim Number:	Output	11	Claim Number	Insurance Claim Number	
Days Authorized to Date:	Output	2	Number of Days Authorized	Number Of Days Authorized	N/A.
_additional authorized days	Output	2	Number of Days to Extend	Number of Days to Extend	
Policy Limits	List Box	5	Policy Maximum and Dollars per day	Max $ Covered + Dollars Per Day Covered	
	Output	30	Rental Location Branch Name	Rental Location	
days @:	List Box	6	Rental Location Rate	Vehicle Rate	N/A.
Date of Rental	Output	10	Rental Start Date	Start Date	N/A.
Insured Name:	Output	30	Insured's Name	First Name + Last Name	
	Output	30	Rental Location Address	Address Line + Address Line2	N/A.
	Output	25	Rental Location City Name	City	N/A.
	Output	10	Rental Location Postal/Zip Code	Zip Code	N/A.
	Output	3	Rental Location State/ Province Code	State	N/A.
	Output	13	Rental Location Telephone Number	Telephone Number	N/A.
Date of Loss:	Output	10	Date of Loss	Date of Loss	
	Output	20	Renter City Name	City	
	Output	10	Rental Postal/Zip Code	Zip Code	
	Output	3	Renter State/ Province Code	State	
	Output	30	Renter Street Address	Address Line	
Home:	Output	16	Renter's Home Phone	Renters Night Phone + Renters Night Phone Extension	Not editable if ticket is Open.
	Output	30	Renter's Name	First Name + Last Name	Will not be editable if ticket is open. First Name + Last Name

-continued

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Renter Information:	Output	30	Renter's Name	First Name + Last Name	N/A.
Work Phone:	Output	16	Renter's Work Phone	Day Phone + Renters Day Phone Extension	Will not be able to edit if ticket is Open.
Owner's vehicle:	Output	4	Vehicle Year, Make and Model	Renter Make/Model + Renter Vehicle Year	
Repair Facility:	Output	20	Body Shop Name	Repair Facility Name	
	Input	16	Body Shop Phone Number	Telephone Number	
	Output	15	Repair Facility City	City	
	Output	3	Repair Facility State	State	
	Output	7	Repair Facility zip code	Zip Code	
Last Day authorized	Output	10	Date rental is authorized through	CALCULATED	Calculated field. Populated with an Open Ticket only.
Charges to Date:	Output	10	Total Charges	CALCULATED	
Renter Type	Output	10	Claim type	claim type description	
Claims Office:	Output	3	Office Id	external organization abbreviated name	N/A.
Vehicle Condition	Output	15	Type of Loss	loss type description	
Renter Email:	Output	20	Renter's Email	renter email	Will not be able to edit if ticket is Open.

[1132] 2.1.3 Screen Function Definition

[1133] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1134] 2.1.3.1 Skip

[1135] When clicked, the USER will be taken out of the use case without changing the current status of the request. Any changes made by clicking Change or Add and keying data in the bottom section will be saved.

[1136] 2.1.3.2 Process

[1137] When clicked, the system will validate the input and accept the changes made to the customer file. The arms web database will be updated and the data will be sent to the arms system. The use case will then end and the USER will return to the process from which they came.

[1138] 2.1.3.3 Notebook

[1139] When clicked, the USER will be taken to the Note Book section at the bottom of the screen to view all messages for this rental.

[1140] 2.1.3.4 Set Last Day

[1141] When clicked, the system will terminate the rental. The USER will be prompted to enter a termination date for this rental. This coincides with the use case MA-15—Terminate Rental.

[1142] 2.1.3.5 Transfer File

[1143] When clicked, the USER will be taken to the Transfer File screen. This screen allows the USER to change the office or adjuster currently assigned to the customer file. The required information in the Extend Rental/Customer File will be passed to the Transfer File screen. Upon completion of the transfer, the USER will then be returned to the next action item or the profiled start page, depending on the screen from which the USER began.

[1144] 2.1.3.6 Change or Add

[1145] When clicked, the system will refresh the current screen and make all editable fields in the bottom section (outside the gray box area) input capable. The changes on the top of the screen will not be lost.

[1146] 2.1.3.7 Top of page

[1147] When clicked, the USER will be taken to the top of the current page.

[1148] 2.1.3.8 View Car Class

[1149] When clicked, the USER will be taken to the View Car Class Use Case. No changes will be lost. Once the USER is finished with this use case, the USER will return to the Extend Rental Use Case.

[1150] 2.1.3.9 Extend Rental (checkbox)

[1151] When clicked and the process button is clicked, the system will validate the input and accept the extension AND any other changes made to the customer file. The arms web database will be updated and the data will be sent to the arms system. The use case will then end and the USER will proceed to the next action item. (If unchecked and the process button is clicked, only the changes to the screen will be saved. The extension will NOT be executed.)

[1152] 2.1.3.10 Last Action Message

[1153] After each action item in the USER's list has been completed, upon arriving at the next item there will be a confirmation message at the top of the screen. This message will be a hyperlink describing the last completed action. If the USER clicks on this link, the system will open the customer file, which will reflect all of the current infor-

mation for the rental. The USER is then free to make additional changes or to simply view the file.

3. Application Operations

4. Data Fields

4.1 Data Field Definition

[1154] This section includes a definition of all data fields included in the functional specification.

[1155] 4.1.1 Add Date

Entity	ARM: ARMS/400 Diary Notes File
Column Name	NEADDT
Label Name	Add Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1156] 4.1.2 Address Line

Entity	ARM: Renter Location Master
Column Name	LOADL1
Label Name	
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1157] 4.1.3 Address Line

Entity	ARM: Renter Detail
Column Name	RKADL1
Label Name	Address Line
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1158] 4.1.4 Address Line2

Entity	ARM: Rental Location Master
Column Name	LOADL2
Label Name	Address Line
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1159] 4.1.5 Branch

Entity	ARM: Rental Location Master
Column Name	Branch
Label Name	Branch:
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1160] 4.1.6 City

Entity	ARM: Rental Location Master
Column Name	LOCYNM
Label Name	City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1161] 4.1.7 City

Entity	ARM: Renter Detail
Column Name	RKCYNM
Label Name	City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1162] 4.1.8 City

Entity	ARM: Repair Detail
Column Name	RUCYNM
Label Name	City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1163] 4.1.9 claim type code

Entity	AUTHORIZATION EXTENSION
Column Name	clm_typ_cde
Label Name	claim type code:
System Name	CLMTYPCDE
Data Type	DEC(3,0)
Attribute Definition	The claim type code defines the different Authorization claim types. For example: Insured, Claimant, Uninsured Motorist, etc.

[1164] 4.1.10 claim type description

Entity	CLAIM TYPE
Column Name	clm_typ_dsc
Label Name	claim type description:
System Name	CLMTYPDSC
Data Type	CHAR(40)
Attribute Definition	The claim type description is a lexical definition of the claim type code which defines the different Authorization claim types. For example: Insured, Claimant, Uninsured Motorist, etc.

[1165] 4.1.11 company identifier

Entity	EXTERNAL ORGANIZATION
Column Name	cmpy_id
Label Name	company identifier:
System Name	CMPYID
Data Type	DEC(11,0)
Attribute Definition	Business Party Identifier is a surrogate key assigned to each unique occurrence of an Individual, External

-continued

	Organization, and Internal Organization (Business Party).

[1166] 4.1.12 Date of Loss

Entity	ARM: Renter Detail
Column Name	RKLSDT
Label Name	Date Of Loss
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1167] 4.1.13 Day Phone

Entity	ARM: Renter Detail
Column Name	RKDYPH
Label Name	Day Phone
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1168] 4.1.14 external organization abbreviated name

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_abbr_nam
Label Name	external organization abbreviated name:
System Name	EOABBRNAM
Data Type	CHAR(10)
Attribute Definition	External Organization Abbreviated Name is a shortened text based label associated with an organization outside of Enterprise. This name is sometimes used for accounting purposes.

[1169] 4.1.15 external organization identifier

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_id
Label Name	external organization identifier:
System Name	EOID
Data Type	DEC(11,0)
Attribute Definition	The external organization identifier is a surrogate key assigned to each unique occurrence of an External Organization. Examples: body shops, vehicle manufacturers, insurance companies, leasing accounts, credit unions, dealerships, or government agencies.

[1170] 4.1.16 First Name

Entity	ARM: Adjustor Master
Column Name	ALFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1171] 4.1.17 First Name

Entity	ARM: Insured Detail
Column Name	IRFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1172] 4.1.18 First Name

Entity	ARM: Renter Detail
Column Name	RKFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1173] 4.1.19 Group

Entity	ARM: Rental Location Master
Column Name	Group
Label Name	Group Number
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1174] 4.1.20 Insurance Claim Number

Entity	ARM: Authorization(Claim Info)
Column Name	AZCLNO
Label Name	Insurance Claim Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1175] 4.1.21 Last Name

Entity	ARM: Adjustor Master
Column Name	ALLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1176] 4.1.22 Last Name

Entity	ARM: Insured Detail
Column Name	IRLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1177] 4.1.23 Last Name

Entity	ARM: Renter Detail
Column Name	RKLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1178] 4.1.24 loss type code

Entity	AUTHORIZATION EXTENSION
Column Name	loss_typ_cde
Label Name	loss type code:
System Name	LOSSTYPCDE
Data Type	DEC(3,0)
Attribute Definition	The loss type code defines the different loss categories when an Insurance Company authorizes a Rental. For example: Theft, Drivable, Repairable, Non-drivable, Non-repairable, Totaled.

[1179] 4.1.25 loss type description

Entity	LOSS TYPE
Column Name	loss_typ_dsc
Label Name	loss type description:
System Name	LOSSTYPDSC
Data Type	CHAR(40)
Attribute Definition	The loss type description is a lexical definition of the loss type code which defines the different loss categories when an Insurance Company authorizes a Rental. For example: Theft, Drivable, Repairable, Non-drivable, Non-repairable, Totaled.

[1180] 4.1.26 message ecars indicator

Entity	AUTHORIZATION MESSAGE
Column Name	msg_ecars_ind
Label Name	message ecars indicator:
System Name	MSGECARIND
Data Type	CHAR(1)
Attribute Definition	The message ecars indicator indicates whether the message is sent/received from the ecars system.

[1181] 4.1.27 NOTE

Entity	ARM: ARMS/400 Diary Notes File
Column Name	NENOTE
Label Name	NOTE
System Name	
Data Type	CHAR(50)
Attribute Definition	

[1182] 4.1.28 Number Of Days Authorized

Entity	ARM: Authorization(Claim Info)
Column Name	AZAUDY

-continued

Label Name	Number Of Days Authorized
System Name	
Data Type	DECIMAL(3)
Attribute Definition	

[1183] 4.1.29 Rate Charged

Entity	ARM: Authorization(Claim Info)
Column Name	AZRTCH
Label Name	Rate Charged
System Name	
Data Type	DECIMAL(5,2)
Attribute Definition	

[1184] 4.1.30 Rental Location

Entity	ARM: Authorization(Claim Info)
Column Name	AZRNLC
Label Name	Rental Location
System Name	
Data Type	CHAR(10)
Attribute Definition	

[1185] 4.1.31 renter email

Entity	RENTER EXTENSION
Column Name	rentr_eml
Label Name	renter email:
System Name	RENTREML
Data Type	CHAR(70)
Attribute Definition	The email address of the renter.

[1186] 4.1.32 Renter Make/Model

Entity	ARM: Renter Detail
Column Name	RKVHMM
Label Name	Renter Make/Model
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1187] 4.1.33 Renter Vehicle Year

Entity	ARM: Renter Detail
Column Name	RKVHYR
Label Name	Renter Vehicle Year
System Name	
Data Type	NUMERIC(4)
Attribute Definition	

[1188] 4.1.34 Renters Day Phone Extension

Entity	ARM: Renter Detail
Column Name	RKDYEX

-continued

Label Name	Renters Day Phone Extension
System Name	
Data Type	NUMERIC(4)
Attribute Definition	

[1189] 4.1.35 Renters Night Phone

Entity	ARM: Renter Detail
Column Name	RKNTPH
Label Name	Renters Night Phone
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1190] 4.1.36 Renters Night Phone Extension

Entity	ARM: Renter Detail
Column Name	RKNTEX
Label Name	Renters Night Phone Extension
System Name	
Data Type	NUMERIC(4)
Attribute Definition	

[1191] 4.1.37 Repair Facility Name

Entity	ARM: Repair Detail
Column Name	RURFNM
Label Name	Repair Facility Name
System Name	
Data Type	CHAR(35)
Attribute Definition	

[1192] 4.1.38 standard message description

Entity	STANDARD MESSAGE
Column Name	std__msg__dsc
Label Name	standard message description:
System Name	STDMSGDSC
Data Type	CHAR(50)
Attribute Definition	The standard message description is a lexical definition for standard message code which defines a predefined message which is applicable to specific activity type codes. For example: "Authorization confirmed on &Date with Reservation Number &Resnumber"

[1193] 4.1.39 Start Date

Entity	ARM: Authorization(Claim Info)
Column Name	AZSTDT
Label Name	Start Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1194] 4.1.40 State

Entity	ARM: Rental Location Master
Column Name	LOSACD
Label Name	State
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1195] 4.1.41 State

Entity	ARM: Renter Detail
Column Name	RKSACD
Label Name	State
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1196] 4.1.42 State

Entity	ARM: Repair Detail
Column Name	RUSACD
Label Name	State
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1197] 4.1.43 Status Description

Entity	ARM: ARMS/400 Cross Reference Status Table File
Column Name	XUSTDS
Label Name	Status Description
System Name	
Data Type	CHAR(6)
Attribute Definition	

[1198] 4.1.44 Telephone Number

Entity	ARM: Rental Location Master
Column Name	LOPHNO
Label Name	Telephone Number
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1199] 4.1.45 Telephone Number

Entity	ARM: Repair Detail
Column Name	RUPHNO
Label Name	Telephone Number
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1200] 4.1.46 Vehicle Class

Entity	ARM: Authorization(Claim Info)
Column Name	AZVHCS
Label Name	Vehicle Class
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1201] 4.1.47 Vehicle Rate

Entity	ARM: Authorization(Claim Info)
Column Name	AZVHRT
Label Name	Vehicle Rate
System Name	
Data Type	DECIMAL(5,2)
Attribute Definition	

[1202] 4.1.48 Zip Code

Entity	ARM: Rental Location Master
Column Name	LOZPCD
Label Name	Zip Code
System Name	
Data Type	CHAR(9)
Attribute Definition	

[1203] 4.1.49 Zip Code

Entity	ARM: Repair Detail
Column Name	RUZPCD
Label Name	Zip Code
System Name	
Data Type	CHAR(9)
Attribute Definition	

[1204] 4.1.50 Zip Code

Entity	ARM: Repair Detail
Column Name	RUZPCD
Label Name	Zip Code
System Name	
Data Type	CHAR(9)
Attribute Definition	

5. Questions and Answers

[1205] Issue Number: 368

[1206] Question: Can the Adjuster shorten the number of days authorized without terminating the rental.

[1207] Status: Closed—Resolved

[1208] Resolution: 5-3-00, Brian Weingart, Kim De Valiance—No. After a ticket is open and has been authorized, the only modification allowed to the number of days authorized comes in the form of a termination. For example, if an adjuster sent us ten days and on the fifth day, decided to only give us a total of six (thereby removing the authorization for four days) the adjuster would have to terminate that rental as of the sixth day.

[1209] Issue Number: 386

[1210] Question: Should the Date of Loss be editable in Change Authorization or does it depend on the state of the reservation/ticket.

[1211] Status: Closed—Resolved

[1212] Resolution: 6-23-00, Brian Weingart,—Since Date of Loss is considered Insurance company information, the adjuster owns this information. The Adjuster can change this in either a reservation or open ticket status. This is editable until the rental is considered closed.

Functional Design Specification

Terminate Rental

Version 1.0

Terminate Rental

1. Terminate Rental Use Case

1.1 Brief Description

[1213] The Terminate Rental use case describes how the USER would terminate a rental. This use case will allow the USER to inform Enterprise of the last day that the ADJUSTER will pay for a rental. In most cases, by providing a date in the future, Enterprise will receive an extension through the last day.

1.2 Use Case Actors

[1214] The following actors will interact with this use case:

[1215] ADJUSTER—The USER will use this case to terminate a rental.

1.3 Pre-Conditions

[1216] The USER must be logged into the ARMS Web system.

[1217] The USER must have the authority to terminate an open rental.

[1218] The USER must have selected an authorized rental.

1.4 Flow of Events

[1219] The Flow of Events will include the necessary steps to terminate a rental.

[1220] 14.1 Activity Diagram—see FIG. **121**.

[1221] 14.2 Basic Flow

[1222] 1. The USER selects to terminate an authorization.

[1223] 2. The system prompts the USER for the termination information.

[1224] 3. The USER enters the termination date and reason/comments.

[1225] 4. The USER submits the termination information.

[1226] 5. The system will validate the termination information.

[1227] 6. The system updates the ARMS Web database.

[1228] 7. The system reads the USER profile for the confirmation settings.

[1229] 8. This ends the use case.

[1230] 1.4.3 Alternative Flows

[1231] 1.4.3.1 Previous

[1232] After step 3, the USER can abandon all changes, which result in the system state remaining unchanged. After clicking the "Previous" button, the USER will be returned to the screen from which they came.

[1233] 1.4.3.2 Additional Comments

[1234] When terminating a rental, the USER must select a reason from the drop-down box to explain why the termination is taking place. As well, if further explanation is desired there is a comment box in which the USER may enter additional comments for more clarification. This section is optional, unless the USER selects "Other" from the reason code drop-down box. In this case, the comment box must be used.

[1235] 1.4.3.3 Display Confirmation

[1236] After step 7, the USER may wish to have a confirmation page displayed, indicating that some type of change has taken place. The confirmation page is completely optional; therefore, at anytime the USER wants to set their profile to bypass this screen, he/she may do so.

[1237] 1.4.3.4 Update USER Profile

[1238] During the confirmation process, the USER has the option of changing their profile setting to display or hide the confirmation page. Each time the setting is changed, the USER profile must be updated to reflect the new requirements set by the USER.

1.5 Post-Conditions

[1239] If the use case was successful then the changes will go into effect immediately and write a transaction record to pass to ARMS indicating that there was a change on the rental. If the renter's email address was entered, a system-generated message will notify the renter.

[1240] If the use case was unsuccessful then the system will remain unchanged.

1.6 Special Requirements

[1241] 1.6.1 The termination date must be greater than or equal to the current date or the last day authorized. There is a business rule that ensures that an adjuster cannot take away already used rental days.

Current Date	Authorization Date	Termination Date
6/20	6/25	>=6/20
6/20	6/10	>=6/10

[1242] 1.6.2 If the USER extends an authorization that has been terminated, the termination information is considered invalid.

[1243] 1.6.3 It is mandatory that a USER select a termination reason from the drop-down list. If the USER selects "Other" from the drop-down list, a comment about the termination must be supplied.

1.7 Extension Points

[1244] None.

2. Screen Design

[1245] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Terminate Rental

[1246] This screen (see FIG. **122**) will allow the user enter the information about terminating a rental.

[1247] 2.1.1 Screen Layout—Terminate Rental—see FIG. **122**

[1248] 2.1.2 Terminate Rental

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Comment:	Input	50	Message Text	NOTE	Required field if Reason selected is "other"
Reason:	List Box	30	Reason	NOTE	Required Field
Termination Date	List Box	10	Termination Date	Termination Date	The date entered must be the current date or later. This is the date that the insurance company will no longer pay for the rental. /This field should have a calendar control associated with it to allow the user to select the date of loss from a calend.
Renter:	Output	30	Renter's Name	First Name + Last Name	Renter's Last Name + Renter's First Name

[1249] 2.1.3 Screen Function Definition

[1250] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1251] 2.1.3.1 Previous

[1252] Will return the user to the detail screen from which they came. The system and the information on the detail screen will remain unchanged.

[1253] 2.1.3.2 Process

[1254] When clicked, the system will complete the termination of the rental and notify the required parties.

[1255] 2.1.3.2.1 The user must have selected a valid termination date that is greater than the current date.

3. Application Operations

4. Data Fields

4.1 Data Field Definition

[1256] This section includes a definition of all data fields included in the functional specification.

[1257] 4.1.1 Company Id

Entity	ARM: ARMS/400 Internal Error Log File
Column Name	E4CUID
Label Name	Company Id
System Name	
Data Type	CHAR(5)
Attribute Definition	

[1258] 4.1.2 external organization abbreviated name

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_abbr_nam
Label Name	external organization abbreviated name:
System Name	EOABBRNAM
Data Type	CHAR(10)
Attribute Definition	External Organization Abbreviated Name is a shortened text based label associated with an organization outside of Enterprise. This name is sometimes used for accounting purposes.

[1259] 4.1.3 external organization identifier

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_id
Label Name	external organization identifier:
System Name	EOID
Data Type	DEC(11,0)
Attribute Definition	The external organization identifier is a surrogate key assigned to each unique occurrence of an External Organization. Examples: body shops, vehicle manufacturers, insurance companies, leasing accounts, credit unions, dealerships, or government agencies.

[1260] 4.1.4 First Name

Entity	ARM: Adjustor Master
Column Name	ALFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1261] 4.1.5 First Name

Entity	ARM: Renter Detail
Column Name	RKFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1262] 4.1.6 Insurance Claim Number

Entity	ARM: Authorization(Claim Info)
Column Name	AZCLNO
Label Name	Insurance Claim Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1263] 4.1.7 Last Name

Entity	ARM: Adjustor Master
Column Name	ALLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1264] 4.1.8 Last Name

Entity	ARM: Renter Detail
Column Name	RKLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1265] 4.1.9 NOTE

Entity	ARM: ARMS/400 Diary Notes File
Column Name	NENOTE
Label Name	NOTE
System Name	
Data Type	CHAR(50)
Attribute Definition	

[1266] 4.1.10 renter email

Entity	RENTER EXTENSION
Column Name	rentr_eml
Label Name	renter email:
System Name	RENTREML
Data Type	CHAR(70)
Attribute Definition	The email address of the renter.

[1267] 4.1.11 Termination Date

Entity	ARM: Authorization(Claim Info)
Column Name	AZTMDT
Label Name	Termination Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

5. Questions and Answers

[1268] Issue Number: 373

[1269] Question: How is the renter currently notified of a termination of the rental? Are they usually notified by the time the rental is terminated? How should this be represented on the screen? Should the checkbox say to notify the renter or that the renter has already been notified?

[1270] Status: Pending

[1271] Resolution:

Functional Design Specification

Transfer File

Version 0.6

Transfer File

1. Transfer File Use Case

1.1 Brief Description

[1272] The Transfer File use case describes how the user would assign one of their action items to another user/office.

1.2 Use Case Actors

[1273] The following actors will interact with this use case. Each of the actors can be defined generically as USER. The USER will use this use case to reassign action items to other USERS and/or offices.

[1274] ADJUSTER

[1275] PROCESSOR

1.3 Pre-Conditions

[1276] The USER must be logged into the ARMS Web system.

[1277] The USER must have the ability to reassign action items.

[1278] The USER must have access to a customer file to reassign.

[1279] The customer file must be in an open, reservation, or unauthorized state.

1.4 Flow of Events

[1280] The Flow of Events will include the necessary steps for a USER to reassign action items.

[1281] 1.4.1 Activity Diagram—see FIG. **123**.

[1282] 1.4.2 Basic Flow

[1283] 1. The USER selects to reassign a customer file.

[1284] 2. The system retrieves the list of valid offices to display.

[1285] 3. The system retrieves the list of valid USERs to display based on reservation/ticket status.

[1286] 4. The system displays the list of adjusters for the current office and the list of other valid offices.

[1287] 5. The USER selects the user that will be the new owner of the selected action item.

[1288] 6. The system will update the ARMS Web database to reflect the recent ownership change and changes, if any, from the prior screen.

[1289] 7. The system generates a message indicating that a transfer and any other changes have been completed.

[1290] 8. The system updates the ARMS Web database and notifies ARMS with an Authorization Change transaction.

[1291] 9. This ends the use case.

[1292] 1.4.3 Alternative Flows

[1293] 1.4.3.1 Change Office

[1294] After step 3 of the basic flow, the USER may choose to assign the action item to a new office. If the USER chooses a new office, the flow would return to step 2 of the basic flow. This should reflect possible recipients of the action item from that office.

[1295] 1.4.3.2 Cancel Use Case

[1296] The USER may cancel the use case at any point prior to updating the ARMS Web Database. If the USER elects to cancel the use case, the customer file will not be transferred, however, any other changes that were made to the file will remain.

[1297] 1.4.3.3 Display Confirmation

[1298] After step 7, the USER may wish to have a confirmation page displayed, indicating that some type of change has taken place. The confirmation page is completely optional, therefore, at anytime the USER wants to set their profile to bypass this screen, he/she may do so.

[1299] 1.4.3.4 Update USER Profile

[1300] During the confirmation process, the USER has the option of changing their profile setting to display or hide the confirmation page. Each time the setting is changed, the USER profile must be updated to reflect the new requirements set by the USER.

1.5 Post-Conditions

[1301] If the use case was successful then the changes should go in to effect immediately and the new owner should be able to view the newly assigned action item.

[1302] If the use case was unsuccessful then the system will remain unchanged.

1.6 Special Requirements

[1303] When building the list of valid USERS, the system will determine the status of the reservation/ticket and retrieve all users in the current office with authority to process that status of a reservation/ticket.

[1304] When building the list of valid Offices, the system will retrieve all other offices defined within ARMS Web as valid offices for the specified company.

[1305] When selecting an office for the reassign operation, the system must rebuild the user list so the USER will only see valid users that are able to complete the action item to be transferred.

[1306] After the changes have been submitted, the next Action Item will populate indicating that a transfer has been completed, if the USER started from the Action Item List.

[1307] After the changes have been submitted, the USER will return to the profiled start page with a message indicating that a transfer has been completed, if the USER arrived at the customer file via the search option.

1.7 Extension Points

[1308] None.

2. Screen Design

[1309] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Transfer File

[1310] This screen (see FIG. **124**) will allow the USER to pick which functions that they may want to change.

[1311] 2.1.1 Screen Layout—Transfer File—see FIG. **124**

[1312] 2.1.2 Transfer File

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Adjuster's Name	ListBox	30	Change to Adjuster's Name	First Name + Last Name	List of adjuster's within the currently selected Assign to Claim Office that are authorized to handle the current request type. The adjuster that the request is currently assigned to will be selected upon entry into the screen.
Adjuster's Name:	Output	30	Current Adjuster's Name	First Name + Last Name	N/A.
Claims Office	ListBox	3	Change to Office Id	external organization identifier	List of office within the current Company Structure that are authorized to handle the current request type. The office that the request is currently assigned to will be selected in the drop down box upon entry into the screen.
Claims Office:	Output	3	Current Office Id	external organization abbreviated name	N/A

[1313] 2.1.3 Screen Function Definition

[1314] 2.1.3.1 Cancel

[1315] When clicked, the USER will be returned to the screen/use case where they were prior to selecting Change Office/Adjuster (Transfer). Any changes made will be lost and the system will remain unchanged.

[1316] 2.1.3.2 Process

[1317] When clicked, the system will be validated. If the validation passes, the update will be sent to the ARMS system and the USER will be returned to the screen/use case from which they came. If the validation fails, the USER will be returned to the current screen with error message(s) and the field in error highlighted.

3. Application Operations

4. Data Fields

4.1 Data Field Definition

[1318] This section includes a definition of all data fields included in the functional specification.

[1319] 4.1.1 external organization abbreviated name

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_abbr_nam
Label Name	external organization abbreviated name:
System Name	EOABBRNAM
Data Type	CHAR(10)
Attribute Definition	External Organization Abbreviated Name is a shortened text based label associated with an organization outside of Enterprise. This name is sometimes used for accounting purposes.

[1320] 4.1.2 external organization identifier

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_id
Label Name	external organization identifier:
System Name	EOID
Data Type	DEC(11, 0)
Attribute Definition	The external organization identifier is a surrogate key assigned to each unique occurrence of an External Organization. Examples: body shops, vehicle manufacturers, insurance companies, leasing accounts, credit unions, dealerships, or government agencies.

[1321] 4.1.3 First Name

Entity	ARM: Adjustor Master
Column Name	ALFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1322] 4.1.4 Last Name

Entity	ARM: Adjustor Master
Column Name	ALLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

Functional Design Specification

Cancel Authorization

Version 1.0

Cancel Authorization

1. Cancel Authorization Use Case

1.1 Brief Description

[1323] This use case will describe how a USER would cancel an authorized reservation.

1.2 Use Case Actors

[1324] The following actors will interact with this use case:

[1325] ADJUSTER—The USER will be able to perform the duties of canceling an authorized reservation.

1.3 Pre-Conditions

[1326] The USER must be logged into the ARMS Web system.

[1327] The USER must have the ability to cancel an authorization.

[1328] The USER has selected an authorized reservation and wants to cancel the authorization within ARMS Web.

1.4 Flow of Events

[1329] The Flow of Events will include the necessary steps to "Cancel Authorization".

[1330] 1.4.1 Activity Diagram—see FIG. **125**.

[1331] 1.4.2 Basic Flow

[1332] 1. The USER selects to cancel the authorization.

[1333] 2. The system will prompt the user for a reason for cancellation.

[1334] 3. The USER will select a reason.

[1335] 4. The USER will submit the cancellation.

[1336] 5. The system will update the ARMS Web database to reflect that the USER cancelled the Authorization.

[1337] 6. The system will read the USER profile for the confirmation settings.

[1338] 7. This ends the use case.

[1339] 1.4.3 Alternative Flows

[1340] 1.4.3.1 Previous

[1341] After step 3, the USER can abandon all changes, which result in the system state remaining unchanged. After clicking the "Previous" button, the USER will be returned to the screen from which they came.

[1342] 1.4.3.2 Additional Comments

[1343] When canceling a rental, the USER must select a reason from the drop-down box to explain why the cancellation is taking place. As well, if further explanation is desired, there is a comment box in which the USER may enter additional comments for more clarification. This section is optional, unless the USER selects "Other" from the reason code drop-down box. In this case, the comment box must be used.

[1344] 1.4.3.3 Display Confirmation

[1345] After step 6, the USER may wish to have a confirmation page displayed, indicating that some type of change has taken place. The confirmation

page is completely optional, therefore, at anytime the USER wants to set their profile to bypass this screen, he/she may do so.

[1346] 1.4.3.4 Update USER Profile

[1347] During the confirmation process, the USER has the option of changing their profile setting to display or hide the confirmation page. Each time the setting is changed, the USER profile must be updated to reflect the new requirements set by the USER.

1.5 Post-Conditions

[1348] If the use case was successful then the changes should go in to effect immediately and generate a transaction record to pass to ARMS indicating that the authorized reservation was cancelled.

[1349] If the use case was unsuccessful then the system will remain unchanged.

1.6 Special Requirements

[1350] When canceling an authorization, the USER must select a reason from the drop-down list. If the USER chooses "Other" from the pre-defined list, a comment about why the authorization was cancelled must be supplied.

1.7 Extension Points

[1351] None.

2. Screen Design

[1352] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Cancel Direct Bill Authorization

[1353] This screen (see FIG. **126**) will allow the USER to pick which functions that he/she may want to change.

[1354] 2.1.1 Screen Layout—Cancel Direct Bill Authorization—see FIG. **126**

[1355] 2.1.2 Cancel Direct Bill Authorization

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Reason	List Box	50	Cancellation Reason	NOTE	N/A
Comment:	Input	50	Message Text	NOTE	Required if cancellation reason is "Other"
Claim #	Output	30	Claim Number	Insurance Claim Number	
Renter's Name	Output	30	Renter's Name	First Name + Last Name	N/A

[1356] 2.1.3 Screen Function Definition

[1357] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1358] 2.1.3.1 Previous

[1359] When clicked, the user will be returned to the screen/use case where they were prior to selecting Cancel Reservation. Any changes made will be lost and the system will remain unchanged.

[1360] 2.1.3.2 Process

[1361] When clicked, the system will update the message file with the comment record if entered and mark the current reservation authorization as cancel. The cancellation and the new message, if entered, will be forwarded to the ARMS system. The system returns the USER to the appropriate Action Items List screen.

3. Application Operations

4. Data Fields

4.1 Data Field Definition

[1362] This section includes a definition of all data fields included in the functional specification.

[1363] 4.1.1 Cancel Date

Entity	ARM: Authorization(Claim Info)
Column Name	AZCNDT
Label Name	Cancel Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1364] 4.1.2 Cancellation Code

Entity	ARM: Authorization(Claim Info)
Column Name	AZCNCD
Label Name	Cancellation Code
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1365] 4.1.3 external organization abbreviated name

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_abbr_nam
Label Name	external organization abbreviated name:
System Name	EOABBRNAM
Data Type	CHAR(10)

-continued

Attribute Definition	External Organization Abbreviated Name is a shortened text based label associated with an organization outside of Enterprise. This name is sometimes used for accounting purposes.

[1366] 4.1.4 First Name

Entity	ARM: Renter Detail
Column Name	RKFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1367] 4.1.5 Insurance Claim Number

Entity	ARM: Authorization(Claim Info)
Column Name	AZCLNO
Label Name	Insurance Claim Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1368] 4.1.6 Last Name

Entity	ARM: Renter Detail
Column Name	RKLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1369] 4.1.7 NOTE

Entity	ARM: ARMS/400 Diary Notes File
Column Name	NENOTE
Label Name	NOTE
System Name	
Data Type	CHAR(50)
Attribute Definition	

[1370] 4.1.8 Rental Location

Entity	ARM: Authorization(Claim Info)
Column Name	AZRNLC
Label Name	Rental Location
System Name	
Data Type	CHAR(10)
Attribute Definition	

5. Questions and Answers

[1371] Issue Number: 418

[1372] Question: Do we need a reason to cancel—have cancel page.

[1373] Status: Closed—Resolved

[1374] Resolution: 6-23-00, Per Neil, kill this page, it's not necessary.

Functional Design Specification

View Customer File

Version 1.0

View Customer File

1. Search and View Customer File

1.1 Brief Description

[1375] This use case describes the process that a USER would use to find and view information regarding a rental. In order to view the rental detail, one of two general conditions must be satisfied:

[1376] 1) The rental is open and the USER does not have any authority to make changes.

[1377] 2) The rental is in a state that no longer allows changes to be made.

[1378] If these conditions are not met, the USER will be taken to the appropriate use case.

1.2 Use Case Actors

[1379] All actors will use the use case to View Rental Detail in the ARMS Web system. All of the following actors can be defined generically as a USER:

[1380] ADJUSTER

[1381] PROCESSOR

[1382] COMPANY MANAGER

[1383] ENTERPRISE ADMINISTRATOR

[1384] COMPANY ADMINISTRATOR

1.3 Pre-Conditions

[1385] The USER must be signed-on to the system

[1386] (AND)

[1387] The USER does not have the authority to make changes and the ticket is open,

[1388] (OR)

[1389] The ticket is in a state that doesn't allow changes to be made.

1.4 Flow of Events

[1390] The Flow of Events includes all the steps necessary to View Rental Detail in the ARMS Web system.

[1391] 1.4.1 Activity Diagram—see FIG. **127**.

[1392] 1.4.2 Basic Flow

[1393] The Basic Flow of the View Rental Detail use case includes all of the required activities for the USER to successfully find and view information regarding an open rental.

[1394] 1. The USER initiates a search for a Customer File.

[1395] 2. The system, based on criteria entered by the USER, retrieves the matches for that search.

[1396] 3. The system displays the search results.

[1397] 4. The USER selects one of the matches.

[1398] 5. The system displays the detail of the Customer File.

[1399] 6. This ends this use case.

[1400] 1.4.3 Alternative Flows

[1401] 1.4.3.1 Search Again

[1402] After step 3 of the basic flow, the USER may decide that they would like to conduct another search. By entering new search criteria, they would return to step 2 with new criteria and the use case could continue.

[1403] 1.4.3.2 Only One Match Found

[1404] At step 2 of the basic flow, if the system only finds one match, the system will advance to step 5 of the basic flow invoking the appropriate use case for modifications.

[1405] 1.4.3.3 View Only

[1406] If the Customer File selected was in a state not allowing changes, the system would display the Customer File, however, not allowing the USER to modify any information within ARMS Web.

1.5 Post-Conditions

[1407] If the use case is successful, the system will return to its previous state.

[1408] If the use case is unsuccessful, the use case the system will remain unchanged.

1.6 Special Requirements

[1409] To successfully locate a customer file, the following criteria must be satisfied:

[1410] 1. The following fields will limit the search results: Adjuster Name, Last Authorized Day, Date of Loss, and/or a status of the Customer File.

[1411] a. If a Renter Last Name has been supplied, an exact match on last name is considered valid.

[1412] b. If a Renter Last Name and Renter First Name has been supplied and there is no exact match on Renter Last Name, there is no match.

[1413] c. If a Renter Last Name and Renter First Name has been supplied and there is an exact match on Renter Last Name and not an exact match on Renter First Name, the Renter Last Name with the closest Renter First Name is considered a match.

[1414] d. If a Renter Last Name and Claim Number has been supplied and there is an exact match on Renter Last Name and not on Claim Number, the closest match on Renter Last Name and the closest match on Claim Number greater than the Claim Number provided is considered a match.

[1415] 2. If the USER supplies one or more of the following fields, the above result set will position to closest match of Customer Files based on: Renter Last Name, Renter First Name, and/or Claim Number.

[1416] 3. This search capability will include all available Open and Closed Rentals for searching.

[1417] 4. Any empty fields signify the search should not limit the result set by that field.

[1418] 5. Any Customer File present in the result set will contain a link to the appropriate use case based on the current status of the reservation or rental.

1.7 Extension Points

[1419] 1.7.1.1 MA-10 Authorized a Request

[1420] If the customer file were an unauthorized reservation or ticket, the system would enter the Authorization use case to allow the USER to authorize this Customer File.

[1421] 1.7.1.2 MA-12 Extend Rental

[1422] If the customer file were an authorized ticket or an action item of extension status, the system would enter the Extend Rental use case to allow the USER to extend this Customer File.

[1423] 1.7.1.3 MA-13 Change Authorization

[1424] If the customer file were an authorized reservation or ticket not requiring any immediate action, the system would enter the Change Authorization use case to allow the USER to authorize this Customer File.

[1425] 1.7.1.4 MA-07 Additional Charges

[1426] The Additional Charges use case will be used to add special charges to the reservation being created by the USER (e.g., CDW). Any Additional Charges captured should be returned and applied to the reservation. The existence of Additional Charges should be reflected on the reservation screen.

[1427] 1.7.1.5 MA-08 View Car Class

[1428] The View Car Class use case will be used to allow the USER to view details about and select a car class to apply to a reservation. Details will include the average number of passengers and luggage items that can be served by a vehicle in the specific car class. The car class selected by the USER should be applied to the reservation.

[1429] 1.7.1.6 Invoicing—81-01-Handle Unapproved Invoices & BI-02 Pay Approved Invoices & BI-03 Reject an Invoice

[1430] At step 5, the USER may elect to view approved invoices, unapproved invoices, or rejected invoices. Upon completion of this process, the USER should be returned back to step 5 of the Basic Flow.

2. Screen Design

[1431] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Find a Customer (tab)

[1432] This screen will allow the USER to view the rental.

[1433] 2.1.1 Find a Customer (tab)—see FIG. **128**

[1434] 2.1.2 Customer (tab)

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
last name	Input	20	Renter last name	Last name	
first name	Input	20	Renter's first name	First name	
claim number	Input	30	Insurance claim number	Ins. Claim number	N/A.
adj. last name	Input	20	Adjuster's last name	Last name	N/A.
last date authorized:	Input	20	Last date authorized	LAST AUTH DAY	N/A.
status:	List Box	20	Contract Status	Status Code	N/A.

[1435] 2.1.3 Screen Function Definition

[1436] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1437] 2.1.3.1 Search

[1438] When clicked, the will search for any records that match the criteria listed.

2.2 Customer File—Closed Items

[1439] This screen will allow the USER to view the rental when closed.

[1440] 2.2.1 Screen Layout—Customer File—Closed Items—see FIG. **129**

[1441] 2.2.2 Customer File—Closed Items

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Actual Days:	Output	3	actual days rented	Item Quantity	Invoicing Section Only
@	Output	3	Actual Rate Rented	Item Rate	Invoicing Section-Actual Rental only
=	Output	8	Amount charged	Item Amount	Invoicing sections, Actual Rental only
Billed Period: _____ to _____ (____ days)	Output	30	Billing start date, end date and number of days	Item Quantity	Invoicing section only
	Output	3	Number of days authorized	Item Quantity	Invoicing, Actual Rental Section only
Sales Tax (____%)	Output	3	Sales Tax	Item Description	Invoicing, Actual Rental section only
Billed Period: _____ to _____ (____ days)	Output	30	Billing start date, end date and number of days	Bill to End Date	Invoicing section only
Billed Period: _____ to _____ (____ days)	Output	30	Billing start date, end date and number of days	Bill to Start Date	Invoicing section only
Federal ID:	Output	12	Federal ID Number	Federal ID Number	Only shown in Invoicing sections
Invoice Date:	Output	10	Invoice Date	Record Add Date	Only used in the invoice sections
Reference:	Output	32	Reference Number	Invoice Number	Only in the invoice sections
Amount Received	Output	8	Amount Received	Total Amount Received	Invoicing, Actual Rental sections only
Total Charges:	Output	8	Total Charges	Total Ticket Charges	Invoicing, Actual Rental Section only
Total Due:	Output	8	Total Due	Total Amount Due	Invoicing, Actual Rental sections only
Handling For:	Output	30	Handling for Adjuster's Name	First Name + Last Name	
Authorized Period: _____ to _____ (____ days)	Output	30	Authorized Start Date	Start Date + End Date + Days authorized-detail	Only in invoicing sections
Date	Output	8	Message Creation Date	Add Date	N/A.
Message to Branch Location:	Output	50	Message Text	NOTE	
Notebook	Output	50	Message Text	NOTE	N/A.
Authorized Class:	Output	20	Car Class Name	Vehicle Class	
Current Class:	Output	20	Car Class Name	Vehicle Class	N/A.
Claim Number:	Output	11	Claim Number	Insurance Claim Number	
Claim No.	Output	30	Claim Number	Insurance Claim Number	

-continued

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Daily Rate/Max. Dollars	Output	10	Daily Policy Rate and Maximum Policy Rate	Dollars Per Day Covered + Max $ Covered	Invoicing section only
Direct Bill Percent	Output	4	Direct Bill Percent	Bill To %	Invoicing sections only
Direct Bill Percent	Output	8	Direct Bill Percent	Bill To %	Invoicing sections Actual Rental only
	Output	30	Rental Location Branch Name	Rental Location	
Days/Rate	Output	6	Rental Location Rate and number of days	Number Of Days Authorized	N/A.
Days/Rate	Output	6	Rental Location Rate and number of days	Vehicle Rate	N/A.
@	Output	7	Rental Rate per day	Rate Charged	Invoicing section only
Rental Period: _____ to _____ (____ days)	Output	30	Rental Start	Start Date + End Date + CALCULATED	Invoicing sections only
Rental Date	Output	10	Rental Start Date	Start Date	
Start Date	Output	10	Start Date of rental	Start Date	
Insured Name:	Output	30	Insured's Name	First Name + Last Name	
	Output	30	Rental Location Address	Address Line + Address Line2	N/A.
	Output	25	Rental Location City Name	City	N/A.
	Output	10	Rental Location Postal/ Zip Code	Zip Code	N/A.
	Output	3	Rental Location State/ Province Code	State	N/A.
	Output	13	Rental Location Telephone Number	Telephone Number	N/A.
Date of Loss:	Output	10	Date of Loss	Date Of Loss	
	Output	20	Renter City Name	City	
	Output	10	Renter Postal/ Zip Code	Zip Code	
	Output	3	Renter State/ Province Code	State	
	Output	30	Renter Street Address	Address Line	
Renter Email:	Output	20	Renter's Email	Day Phone	
Home Phone:	Output	16	Renter's Home Phone	Renters Night Phone + Renters Night Phone Extension	
Renter Information:	Output	30	Renter's Name	First Name + Last Name	N/A.
Renter Name:	Output	30	Renter's Name	First Name + Last Name	
Owner's Vehicle	Output	4	Renter's Vehicle Year, Make and Model	Renter Vehicle Year + Renter Make/Model	
Work Phone:	Output	16	Renter's Work Phone	Day Phone + Renters Day Phone Extension	
Repair Facility:	Output	20	Body Shop Name	Repair Facility Name	
Phone Number:	Output	16	Body Shop Phone Number	Telephone Number	
	Output	20	Repair Facility City	City	
	Output	3	Repair Facility State	State	
	Output	7	Repair Facility Zip Code	Zip Code	
=	Output	10	Amount charged	CALCULATED	Invoicing sections only
Total authorized Includes Tax & Surcharge	Output	8	Total authorized amount	CALCULATED	Invoicing sections only
Renter Type	Output	15	Claim Type	claim type description	

-continued

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Claims Office:	Output	3	Office Id	external organization abbreviated name	
Vehicle Condition	Output	15	Loss Type	loss type description	
Renter Email:	Output	20	Renter's Email	renter email	

[1442] 2.2.3 Screen Function Definition

[1443] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1444] 2.2.3.1 Previous

[1445] When clicked, the USER will be taken back to the use case from where they came.

[1446] 2.2.3.2 Printer Friendly Version

[1447] When clicked, the system will bring up a screen that only shows the particular invoice for which you clicked this button. The USER may print from this screen.

[1448] 2.2.3.3 Top of page

[1449] When clicked, the USER will be taken to the top of the current page.

2.3 Search Results

[1450] This screen will allow the USER To view the rental when closed.

[1451] 2.3.1 Screen Layout—Search Results—see FIG. **130**

[1452] 2.3.2 Search Results

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Last Date	Output	10	Authorization Date		
Status	List Box	10	Contract Status	Status Code	
last date authorized	Input	5	Last Day Authorized	LAST AUT DAY	
adj. last name	Input	15	Adjuster Last Name	Last Name	
Adjuster Name:	Output	20	Adjuster Name	First Name + Last Name	
Handling for:	List Box	15	Handling for Adjuster Name	First Name + Last Name	
File Type	Output	15	Status	Status Description	
confirmation number	Input	52	Confirmation Number	Transmission Code	
Claim Number	Output	30	Claim Number	Insurance Claim Number	Populated by the data matching the search criteria
claim number	Input	30	claim number	Insurance Claim Number	
Loss Date	Output	10	Date of Loss	Date Of Loss	
first name	Input	15	Renter's First Name	First Name	
last name	Input	15	Renter's Last Name	Last Name	
Renter's Name	Output	30	Renter's Name	First Name + Last Name	Returned data from the search criteria
Claims Office:	List Box	5	Office ID	external organization abbreviated name	
You requested a search for:	Output	30	Search Criteria	NOT STORED	This field will be populated by the criteria used to search for a particular record. This field may be at Last Name, First Name, Claim Number, Confirmation Number, Adjuster Last Name or Status. The data in this field

[1453] 2.3.3 Screen Function Definition

[1454] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1455] 2.3.3.1 Search Again

[1456] When clicked, the system will re-search the database after the USER has entered new or additional criteria.

[1457] 2.3.3.2 Top of page

[1458] When clicked, the USER will be taken to the top of the current page.

[1459] 2.3.3.3 View Next 10>>>

[1460] When clicked, the system will display the next 10 items that match the search criteria.

3. Application Operations

4. Data Fields

4.1 Data Field Definition

[1461] This section includes a definition of all data fields included in the functional specification.

[1462] 4.1.1 Add Date

Entity	ARM: ARMS/ 400 Diary Notes File
Column Name	NEADDT
Label Name	Add Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1463] 4.1.2 Address Line

Entity	ARM: Renter Location Master
Column Name	LOADL1
Label Name	
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1464] 4.1.3 Address Line

Entity	ARM: Renter Detail
Column Name	RKADL1
Label Name	Address Line
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1465] 4.1.4 Address Line2

Entity	ARM: Renter Location Master
Column Name	LOADL2
Label Name	Address Line
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1466] 4.1.5 Bill To %

Entity	ARM: Authorization(Claim Info)
Column Name	AZBTPC
Label Name	Bill To %
System Name	
Data Type	DECIMAL(3)
Attribute Definition	

[1467] 4.1.6 Bill to End Date

Entity	A4 Invoice Header
Column Name	IIBTDT
Label Name	Bill to End Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1468] 4.1.7 Bill to Start Date

Entity	A4 Invoice Header
Column Name	IISRDT
Label Name	Bill to Start Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1469] 4.1.8 Branch

Entity	ARM: Rental Location Master
Column Name	Branch
Label Name	Branch:
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1470] 4.1.9 City

Entity	ARM: Rental Location Master
Column Name	LOCYNM
Label Name	City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1471] 4.1.10 City

Entity	ARM: Renter Detail
Column Name	RKCYNM
Label Name	City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1472] 4.1.11 City

Entity	ARM: Repair Detail
Column Name	RUCYNM
Label Name	City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1473] 4.1.12 claim type code

Entity	AUTHORIZATION EXTENSION
Column Name	clm_typ_cde
Label Name	claim type code:
System Name	CLMTYPCDE
Data Type	DEC(3, 0)
Attribute Definition	The claim type code defines the different Authorization claim types. For example: Insured, Claimant, Uninsured Motorist, etc.

[1474] 4.1.13 claim type description

Entity	CLAIM TYPE
Column Name	clm_typ_dsc
Label Name	claim type description:
System Name	CLMTYPDSC
Data Type	CHAR(40)
Attribute Definition	The claim type description is a lexical definition of the claim type code which defines the different Authorization claim types. For example: Insured, Claimant, Uninsured Motorist, etc.

[1475] 4.1.14 company identifier

Entity	EXTERNAL ORGANIZATION
Column Name	cmpy_id
Label Name	company identifier:
System Name	CMPYID
Data Type	DEC(11, 0)
Attribute Definition	Business Party Identifier is a surrogate key assigned to each unique occurrence of an Individual, External Organization, and Internal Organization (Business Party).

[1476] 4.1.15 Date of Loss

Entity	ARM: Renter Detail
Column Name	RKLSDT
Label Name	Date Of Loss
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1477] 4.1.16 Day Phone

Entity	ARM: Renter Detail
Column Name	RKDYPH

-continued

Label Name	Day Phone
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1478] 4.1.17 Days authorized-detail

Entity	ARM: ARMS/400 Diary Notes File
Column Name	NEAUDY
Label Name	Days authorized-detail
System Name	
Data Type	DECIMAL(3)
Attribute Definition	

[1479] 4.1.18 Dollars Per Day Covered

Entity	ARM: Authorization(Claim Info)
Column Name	AZ$PDY
Label Name	Dollars Per Day Covered
System Name	
Data Type	DECIMAL(5, 2)
Attribute Definition	

[1480] 4.1.19 End Date

Entity	ARM: Authorization(Claim Info)
Column Name	AZENDT
Label Name	End Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1481] 4.1.20 external organization identifier

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_id
Label Name	external organization identifier:
System Name	EOID
Data Type	DEC(11, 0)
Attribute Definition	The external organization identifier is a surrogate key assigned to each unique occurrence of an External Organization. Examples: body shops, vehicle manufacturers, insurance companies, leasing accounts, credit unions, dealerships, or government agencies.

[1482] 4.1.21 Federal ID Number

Entity	A4 Invoice Header
Column Name	IIFETX
Label Name	Federal ID Number
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1483] 4.1.22 First Name

Entity	ARM: Adjustor Master
Column Name	ALFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1484] 4.1.23 First Name

Entity	ARM: Insured Detail
Column Name	IRFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1485] 4.1.24 First Name

Entity	ARM: Renter Detail
Column Name	RKFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1486] 4.1.25 Group

Entity	ARM: Rental Location Master
Column Name	Group
Label Name	Group Number
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1487] 4.1.26 Insurance Claim Number

Entity	ARM: Authorization(Claim Info)
Column Name	AZCLNO
Label Name	Insurance Claim Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1488] 4.1.27 Invoice Number

Entity	A4 Invoice Header
Column Name	I1INNO
Label Name	Invoice Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1489] 4.1.28 LAST AUT DAY

Entity	A4 Cross Reference
Column Name	X4LADT
Label Name	LAST AUT DAY
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1490] 4.29 Last Name

Entity	ARM: Adjustor Master
Column Name	ALLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1491] 4.1.30 Last Name

Entity	ARM: Insured Detail
Column Name	IRLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1492] 4.1.31 Last Name

Entity	ARM: Renter Detail
Column Name	RKLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1493] 4.1.32 loss type code

Entity	AUTHORIZATION EXTENSION
Column Name	loss_typ_cde
Label Name	loss type code:
System Name	LOSSTYPCDE
Data Type	DEC(3, 0)
Attribute Definition	The loss type code defines the different loss categories when an Insurance Company authorizes a Rental. For example: Theft, Drivable, Repairable, Non-drivable, Non-repairable, Totaled.

[1494] 4.1.33 loss type description

Entity	LOSS TYPE
Column Name	loss_typ_dsc
Label Name	loss type description:
System Name	LOSSTYPDSC
Data Type	CHAR(40)
Attribute Definition	The loss type description is a lexical definition of the loss type code which defines the different loss categories when an Insurance Company authorizes

-continued

	a Rental. For example: Theft, Drivable, Repairable, Non-drivable, Non-repairable, Totaled.

[1495] 4.1.34 Max $ Covered

Entity	ARM: Authorization (Claim Info)
Column Name	AZ$MAX
Label Name	MAX $ Covered
System Name	
Data Type	DECIMAL(9, 2)
Attribute Definition	

[1496] 4.1.35 message ecars indicator

Entity	AUTHORIZATION MESSAGE
Column Name	msg_ecars_ind
Label Name	message ecars indicator:
System Name	MSGECARIND
Data Type	CHAR(1)
Attribute Definition	The message ecars indicator indicates whether the message is sent/received from the ecars system.

[1497] 4.1.36 NOTE

Entity	ARM: ARMS/400 Diary Notes File
Column Name	NENOTE
Label Name	NOTE
System Name	
Data Type	CHAR(50)
Attribute Definition	

[1498] 4.1.37 Number Of Days Authorized

Entity	ARM: Authorization(Claim Info)
Column Name	AZAUDY
Label Name	Number Of Days Authorized
System Name	
Data Type	DECIMAL(3)
Attribute Definition	

[1499] 4.1.38 Rate Charged

Entity	ARM: Authorization(Claim Info)
Column Name	AZRTCH
Label Name	Rate Charged
System Name	
Data Type	DECIMAL(5, 2)
Attribute Definition	

[1500] 4.1.39 Record Add Date

Entity	A4 Invoice Header
Column Name	I1ADDT
Label Name	Record Add Date
System Name	

-continued

Data Type	NUMBER(8)
Attribute Definition	

[1501] 4.1.40 Rental Location

Entity	ARM: Authorization(Claim Info)
Column Name	AZRNLC
Label Name	Rental Location
System Name	
Data Type	CHAR(10)
Attribute Definition	

[1502] 4.1.41 renter email

Entity	RENTER EXTENSION
Column Name	rentr_eml
Label Name	renter email:
System Name	RENTREML
Data Type	CHAR(70)
Attribute Definition	The email address of the renter.

[1503] 4.1.42 Renter Make/Model

Entity	ARM: Renter Detail
Column Name	RKVHMM
Label Name	Renter Make/Model
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1504] 4.1.43 Renter Vehicle Year

Entity	ARM: Renter Detail
Column Name	RKVHYR
Label Name	Renter Vehicle Year
System Name	
Data Type	NUMERIC(4)
Attribute Definition	

[1505] 4.1.44 Renters Day Phone Extension

Entity	ARM: Renter Detail
Column Name	RKDYEX
Label Name	Renters Day Phone Extension
System Name	
Data Type	NUMERIC(4)
Attribute Definition	

[1506] 4.1.45 Renters Night Phone

Entity	ARM: Renter Detail
Column Name	RKNTPH
Label Name	Renters Night Phone
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1507] 4.1.46 Renters Night Phone Extension

Entity	ARM: Renter Detail
Column Name	RKNTEX
Label Name	Renters night Phone Extension
System Name	
Data Type	NUMERIC(4)
Attribute Definition	

[1508] 4.1.47 Repair Facility Name

Entity	ARM: Repair Detail
Column Name	RURFNM
Label Name	Repair Facility Name
System Name	
Data Type	CHAR(35)
Attribute Definition	

[1509] 4.1.48 standard message description

Entity	STANDARD MESSAGE
Column Name	std_msg_dsc
Label Name	standard message description:
System Name	STDMSGDSC
Data Type	CHAR(50)
Attribute Definition	The standard message description if a lexical definition for standard message code which defines a predefined message which is applicable to specific activity type code. For example: "Authorization confirmed on & Date with Reservation Number & Resnumber"

[1510] 4.1.49 Start Date

Entity	ARM: Authorization(Claim Info)
Column Name	AZSTDT
Label Name	Start Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1511] 4.1.50 State

Entity	ARM: Rental Location Master
Column Name	LOSACD
Label Name	State
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1512] 4.1.51 State

Entity	ARM: Renter Detail
Column Name	RKSACD
Label Name	State
System Name	

-continued

Data Type	CHAR(2)
Attribute Definition	

[1513] 4.1.52 State

Entity	ARM: Repair Detail
Column Name	RUSACD
Label Name	State
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1514] 4.1.53 Status Description

Entity	ARM: ARMS/400 Cross Reference Status Table File
Column Name	XUSTDS
Label Name	Status Description
System Name	
Data Type	CHAR(6)
Attribute Definition	

[1515] 4.1.54 Telephone Number

Entity	ARM: Rental Location Master
Column Name	LOPHNO
Label Name	Telephone Number
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1516] 4.1.55 Telephone Number

Entity	ARM: Repair Detail
Column Name	RUPHNO
Label Name	Telephone Number
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1517] 4.1.56 Total Amount Due

Entity	A4 Invoice Trailer
Column Name	13BL$$
Label Name	Total Amount Due
System Name	
Data Type	DECIMAL(9, 2)
Attribute Definition	

[1518] 4.1.57 Total Amount Received

Entity	A4 Invoice Trailer
Column Name	13RC$$
Label Name	Total Amount Received
System Name	
Data Type	DECIMAL(9,2)
Attribute Definition	

[1519] 4.1.58 Total Ticket Charges

Entity	A4 Invoice Trailer
Column Name	13TO$$
Label Name	Total Ticket Charges
System Name	
Data Type	DECIMAL(9,2)
Attribute Definition	

[1520] 4.1.59 Transmission Code

Entity	ARM: ARMS/400 Diary Notes File
Column Name	NETRCD
Label Name	Transmission Code
System Name	
Data Type	Char(1)
Attribute Definition	

[1521] 4.1.60 Vehicle Class

Entity	ARM: Authorization(Claim Info)
Column Name	AZVHCS
Label Name	Vehicle Class
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1522] 4.1.61 Vehicle Rate

Entity	ARM: Authorization(Claim Info)
Column Name	AZVHRT
Label Name	Vehicle Rate
System Name	
Data Type	DECIMAL(5,2)
Attribute Definition	

[1523] 4.1.62 Zip Code

Entity	ARM: Rental Location Master
Column Name	LOZPCD
Label Name	Zip Code
System Name	
Data Type	CHAR(9)
Attribute Definition	

[1524] 4.1.63 Zip Code

Entity	ARM: Rental Detail
Column Name	RKZPCD
Label Name	Zip Code
System Name	
Data Type	CHAR(9)
Attribute Definition	

[1525] 4.1.64 Zip Code

Entity	ARM: Repair Detail
Column Name	RUZPCD
Label Name	Zip Code
System Name	
Data Type	CHAR(9)
Attribute Definition	

Functional Design Specification

Handle Unapproved Invoices

Version 1.1

1. Handle Unapproved Invoices Use Case

1.1 Brief Description

[1526] The Handle Unapproved Invoices use case describes how the Adjuster would review invoices and approve them for payment. The use case will then describe the processes the Adjuster will follow in the case where the Adjuster is the one that is actually paying the invoice.

1.2 Use Case Actors

[1527] The following actors will interact with this use case:

[1528] ADJUSTER—The ADJUSTER will use this case to approve and either pay unapproved invoices or send them on to a PROCESSOR for payment.

1.3 Pre-Conditions

[1529] The ADJUSTER must be logged into the ARMS Web system.

[1530] The ADJUSTER'S office must be set up for individual approval of invoices.

[1531] The ADJUSTER must be able to handle invoices.

1.4 Flow of Events

[1532] The Flow of Events will include the necessary steps for an ADJUSTER to approve and pay invoices.

[1533] 1.4.1 Activity Diagram—see FIG. **131**.

[1534] 1.4.2 Basic Flow

[1535] 1. The ADJUSTER will view the detail of the invoice.

[1536] 2. If the ADJUSTER chooses to pay the invoice immediately, execute subflow 1.4.2.3—Pay a Single Invoice. Otherwise continue the Basic Flow.

[1537] 3. The ADJUSTER will approve the invoice.

[1538] 4. The system will mark the invoice approved.

[1539] 5. If the ADJUSTER pays their invoices, then the invoice will be added to their payment list. If a PROCESSOR pays their invoices, then the invoice will be added to the PROCESSOR'S payment list.

[1540] 6. The system will update the ARMS Web database.

[1541] 7. If this is the last or only invoice in the action items list, then continue to step eight of the Basic Flow. Otherwise, the use case ends.

[1542] 8. The system will check to see if the ADJUSTER'S office is set up for individual payment or bulk payment.

[1543] If the ADJUSTER'S office is set up for individual payment execute subflow 1.4.2.1, Individual Pay.

[1544] If the ADJUSTER'S office is set up for bulk payment execute subflow 1.4.2.2, Bulk Pay.

[1545] 1.4.2.1 Individual Payment List

[1546] 1. The system will display instructions for paying the invoices individually and a summary list of all the invoices just approved by the ADJUSTER.

[1547] 2. For each invoice on the payment list, the ADJUSTER may enter the associated check number.

[1548] 3. The ADJUSTER will submit the payment list to the system.

[1549] 4. The system will mark the invoice paid.

[1550] 5. The system will update the ARMS Web database.

[1551] 6. This ends the use case.

[1552] 1.4.2.2 Bulk Payment List

[1553] 1. The system will display instructions for paying the invoices in bulk and a summary list of all the invoices just approved by the ADJUSTER.

[1554] 2. The ADJUSTER may enter the check number of the check that is paying all the invoices on the payment list.

[1555] 3. The ADJUSTER will submit the payment list to the system.

[1556] 4. The system will mark the invoice paid.

[1557] 5. The system will update the ARMS Web database.

[1558] 6. This ends the use case.

[1559] 1.4.2.3 Pay A single Invoice

[1560] 1. The ADJUSTER may enter the check number for the invoice being paid.

[1561] 2. The system will mark the invoice paid.

[1562] 3. The system will update the ARMS Web database.

[1563] 4. This ends the use case.

[1564] 1.4.3 Alternative Flows

[1565] 1.4.3.1 Selected Action Item is Payment List

[1566] At step one of the Basic Flow, if the action item being worked is the "Payment List" action item, then the ADJUSTER will be taken immediately to step one of section 1.4.2.1 if they are set up for individual pay, or step one of section 1.4.2.2 if they are set up for bulk pay.

[1567] 1.4.3.2 Reject an Invoice

[1568] At step one in the Basic Flow, the ADJUSTER may choose to reject the invoice. The rejection process is executed using extension point BI-03—Reject an Invoice.

[1569] 1.4.3.3 View Customer File

[1570] At Individual Payment List or Bulk Payment List, the ADJUSTER may choose to view detail information about the rental. The view rental detail process is executed using extension point MA-19—View Customer File.

[1571] 1.4.3.4 Print a Single Invoice

[1572] At step one in the Basic Flow, the ADJUSTER may choose to print the invoice. If they so choose, they may also print the rental history. The system will display a printer friendly screen and the ADJUSTER will choose to print via their browser window. Upon printing, the ADJUSTER will choose to return to the step one of the Basic Flow by hitting the "back" button on the web browser.

[1573] 1.4.3.5 Print an Invoice List

[1574] At step one in section 1.4.2.1, Individual Pay, or section 1.4.2.2, Bulk Pay, the ADJUSTER may choose to print the invoice list of all invoices on the Payment List. If they so choose, they may also print the rental history for all invoices. The system will display a printer friendly screen and the ADJUSTER will choose to print via their browser window. Upon printing, the ADJUSTER will choose to return to the step one of section 1.4.2.1 if the ADJUSTER is set up for Individual Pay, or section 1.4.2.2 if the ADJUSTER is set up for Bulk Pay.

[1575] 1.4.3.6 Skip Invoice

[1576] At step three in the Basic Flow, the ADJUSTER may choose to skip the invoice in question and handle it at a later time. The ADJUSTER will be taken to the next action item on their action item list. The status of the invoice should not be changed by the ARMS Web system.

[1577] 1.4.3.7 Payment by PROCESSOR

[1578] If the ADJUSTER is only responsible for approving the invoice, then, after step four in the Basic Flow, the system will make the approved invoice an action item for the PROCESSOR(S) responsible for paying the ADJUSTER'S invoices. This ends the use case. Payment by PROCESSOR is handled via Functional Specification BI-02—Pay Approved Invoices.

[1579] 1.4.3.8 Amount Being Approved Exceeds USER'S Authorization Limits

[1580] When a USER attempts to approve an invoice for payment, the system will check to see if the amount due on the invoice is greater than the USER's authorization amount. If the amount due is greater than the USER'S limit, the system will not allow the approval and will request that the USER transfer the invoice to another user with authorization limits that are great enough to approve the invoice.

[1581] 1.4.3.9 Change Claim Number

[1582] At step one in the Basic Flow, if the status is "rejected" and if the profile allows, the ADJUSTER may choose to change the claim number associated with an invoice. Once a claim number has been updated, the ADJUSTER will continue with step four of the basic.

1.5 Post-Conditions

[1583] If the use case was successful and the ADJUSTER is responsible for paying invoices, the approved invoices should be marked as paid in the ARMS Web system.

[1584] If the use case was successful and the ADJUSTER is only responsible for approving invoices, then the approved invoices should be marked as adjuster approved in the ARMS Web system.

1.6 Special Requirements

[1585] The additional requirements of the business use case are included here. These are requirements not covered by the flow as they have been described in the sections above.

[1586] 1.6.1 ARMS Web Routes Invoices

[1587] Before an ADJUSTER receives an invoice to be approved, the ARMS Web system will look at the invoicing criteria for the owning office and owning adjuster and make a determination as to whether the invoice is auto approved or adjuster approved. If an invoice is auto approved, the invoice will always be assigned to a processor for payment without it ever being sent to an adjuster for approval. The payment method may be either bulk or individual payment.

[1588] 1.6.2 Includes Tax and Surcharge Data Field

[1589] On the invoice next to the authorized amount, the field "Includes Tax and Surcharge" will be displayed next to the Authorized total if that total should include taxes and surcharges. This will occur in two events. For an insured, if the authorized amount is less than the policy daily amount, the authorized total will include taxes and surcharges up to the policy daily amount. For a claimant, the authorized amount will always include taxes and surcharges, without limit, until the rental is terminated by the ADJUSTER.

[1590] 1.6.3 Data Fields to Assist with Future Releases or Customer Integration

[1591] It must be possible to capture the following information at some point in the future because of either planned future releases or customer integration.

[1592] Amount Being Paid on Each Invoice

1.7 Extension Points

[1593] An extension point indicates a link between this use case and another use case. Extension points associated with the use case are indicated below. Clicking on the extension point will open the related use case.

[1594] 1.7.1 BI-03 Reject an Invoice

[1595] The Reject an Invoice Functional Specification is used to reject a specific invoice to Enterprise due to missing required information or an incorrect amount on the bill. Upon completion of the Reject an Invoice Functional Specification, the ADJUSTER should be returned to step six of the Basic Flow in the Handle Unapproved Invoices Functional Specification. Any previously approved invoices should still be approved in the system. The rejected invoice should be marked as rejected by the system. The Handle Unapproved Invoices Functional Specification will only allow for one invoice to be rejected at a time.

[1596] 1.7.2 MA-19—View Rental Detail

[1597] The View Rental Detail Functional Specification is used to review the rental history in regards to a specific rental. Upon completion of the View Rental Detail Functional Specification, the ADJUSTER should be returned to step four of the Basic Flow in the Handle Unapproved Invoices Functional Specification. Any previously approved invoices should still be approved in the system.

2. Screen Design

[1598] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Invoicing—Individual Payment

[1599] This screen will allow the user to choose to view the invoice selected in the action items list. They will choose to either pay this invoice immediately (pay now), or choose to add it to a payment list for payment later in conjunction with all their other invoices. They may also choose to print the invoice from this page. They may also optionally choose to print the rental history. The user may choose to change the claim number. Finally the user may choose to skip this invoice and leave it until later for review.

[1600] 2.11 Invoicing—Individual Payment—see FIG. **132**

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
	Output	30	Rental Location's Mailing Street Address	Address Line + Address Line2	
	Output	15	Line Item Charge Description	Item Description	This line may repeat multiple times depending on the number of taxes and surcharges that apply.
	Output	15.2	Line Item Charge Description	Item Amount	Line Item Charge Qty * Line Item Charge Amount. This line may repeat multiple times depending on the number of taxes and surcharges that apply.
Claim No:	Input	15	Claim Number	Insurance Claim Number	
Invoice Date:	Output	10	Invoice Date (Ecar's Ticket Date)	Record Add Date	

-continued

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Reference:	Output	20	Invoice ID	Invoice Number	Rental Group ID + Rental Branch ID + ECARS Ticket Number
Please include this reference number on your check	Output	20	Invoice Id	Invoice Number	Rental Group Id + Rental Branch Id + ECARS Ticket Number
Federal ID:	Output	30	Location's Federal Id.	Federal ID Number	
Federal ID:	Output	30	Location's Federal ID	Federal ID Number	
Amount Received	Output	15.2	Amount of rental Charges received	Total Amount Received	
Total Due:	Input	15.2	Total Amount Due from Ins. Company	Total Amount Due	
Total Charges:	Output	15.2	Total Rental Ticket Charges	Total Ticket Charges	
Handling For:	Output	30	Handling for Adjuster's Name	First Name + Last Name	Adjuster's First name + Adjuster's last name. The name of the adjuster to which the invoice is currently assigned.
	Output	150	Messages	NOTE	This field will repeat multiple lines for all diary notes (messages) for this reservation.
to	Output	10	Authorization Termination Date	End Date	
to	Output	10	Authorization Termination Date	End Date	
Direct Bill Percent	Output	15.0	Authorized Bill percentage	Bill to %	
Direct Bill Percent	Output	15.0	Authorized Bill percentage	Bill to %	
Authorized Period:	Output	10	Authorized Start Date	Start Date	
Billed Period:	Output	10	Authorized Start Date	Start Date	
Claim Number	Input	15	Claim Number	Insurance Claim Number	Will be pre-filled with the claim number currently on the authorization.
to	Output	10	Close date of Rental Ticket	End Date	
Policy: Daily Rate-Max Dollars:	Output	15.2	Policy Daily Maximum Amount + Policy Maximum	Dollars Per Day Covered	
Policy: Daily Rate/Max Dollars:	Output	15.2	Policy Daily Maximum Amount + Policy Maximum	Max $ Covered	
Rental Period:	Output	10	Start date of Rental Ticket	Start Date	
Insured Name	Output	30	Insured's Name	First Name + Last Name	
For	Output	30	Insured's name	First Name + Last Name	
	Output	30	Rental Location's Mailing City, State and Zip Code	City + State + Zip Code	
	Output	30	Rental Location's Mailing Street Stress	Address Line + Address Line2	
	Output	15	Rental Location's Phone Number	Telephone Number	
	Output	30	Rental Location's mailing City, State, and Zip	City	
	Output	30	Rental Location's Mailing City, State, and Zip	State	
	Output	30	Rental Location's mailing City, State, and Zip	Zip Code	

-continued

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
	Output	30	Rental Location's Mailing Street Address	Address Line + Address Line2	
	Output	15	Rental Location's Phone Number	Telephone Number	This field is repeated for each invoice in the payment list.
Renter	Output	30	Renter's Name	First Name + Last Name	
(	Output	5	Number of Authorized Days	CALCULATED	
(	Output	5	Number of authorized days	CALCULATED	
(	Output	5	Number of Rental Days	CALCULATED	
Total Due	Output	15.2	Total Amount Due from Ins. Company	CALCULATED	Total Charges – Amount Received
Number of Authorized Dates + "@" + authorized Daily Rate + "/day="	Output	15.2	Total Authorized Amount before tax and surcharge	CALCULATED	Number of Authorized Days * Authorized Daily Rate
Total authorized includes Tax & Surcharge	Output	15.2	Total authorized amount with Tax and surcharge	CALCULATED	(Number of authorized Days * Authorized Daily Rate) + Calculated Tax and surcharge
Number of Rental Days + "@" + ECAR's Ticket Daily Rate + "/day="	Output	15.2	Total Ticket Rental Amount before tax and surcharge	CALCULATED	Number of Rental Days * ECARS Ticket Daily Rate.
Claim Type:	Output	10	Claim Type	claim type description	
Claims Office:	Output	3	Office Id	external organization abbreviated name	The claims office id which the user is currently process work for.
Vehicle Condition	Output	20	Loss Type	loss type description	
Rental	Output	30	Rental Location's Accounting Name	accounting name	
Send Payment To:	Output	30	Rental Location's Accounting Name	accounting name	
Check Number for your payment	Input	20	Check Number	check number	

[1601] 2.1.3 Screen Function Definition

[1602] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1603] 2.1.3.1 PRINTER FRIENDLY PAGE

[1604] When clicked, the user will be taken to the "Printer Friendly View" of the current invoice.

[1605] 2.1.3.2 REJECT

[1606] When clicked, the user will be taken to the Reject Invoice process.

[1607] 2.1.3.3 PAY NOW

[1608] When clicked, the system will edit the current information. If the edit passes, the invoice will be marked as paid and the data files updated. If the validation fails, the user will be returned to the current screen with the errors highlighted.

[1609] 2.1.3.3.1 The system will validate that the user has an authorization limit high enough to approve the invoice. If not, the system will generate an error and ask the USER to transfer the invoice.

[1610] 2.1.3.4 ADD TO PAYMENT LIST

[1611] When clicked, the system will edit the current information for check number and claim number. If the edit passes, the invoice will be marked as approved and will be added to the ADJUSTER'S payment list and the user will be returned to the Review List process.

[1612] 2.1.3.5 SKIP>>

[1613] When clicked, the user will be advanced to the next action item to be processed and the current invoice will remain unchanged (un-approved).

[1614] 2.1.3.6 Top of Page

[1615] When clicked, the user will be taken to the top of the current invoice page.

[1616] 2.1.3.7 Transfer File

[1617] When clicked, the system will present a list of users that have authorization limits greater than

the amount due on the invoice. The USER may then choose one user from this list to which they may transfer the file.

[1618] 2.1.3.8 Policy Information

[1619] Policy Information will only be shown under the Authorized Section if the claim type is NOT claimant.

2.2 Invoicing—Approval

[1620] This screen will allow the user to choose to view the invoice selected in the action items list. They may choose to approve the invoice payment. This will add the invoice to the PROCESSOR(S) that are responsible for paying the ADJUSTER'S invoices. The user may also choose to skip this invoice and leave it until later for review. They may choose to print the invoice from this page. They may also optionally choose to print the rental history. Finally, the user may choose to change the claim number.

[1621] 2.2.1 Screen Layout—invoicing Approval.shtml—see FIG. **133**

[1622] 2.2.2 Invoice Approval

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
	Output	152	Line item Charge Amount	Item Amount	Line Item Charge Qty * Line Item Charge Amount. This line may repeat multiple times depending on the number of taxes and surcharges that apply.
	Output	15	Line Item Charge Description	Item Description	This line may repeat multiple times depending on the number of taxes and surcharges that apply.
Claim No:	Output	15	Claim Number	Insurance Claim Number	
Claim Number		15	Claim Number	Insurance Claim Number	Will be pre-filled with claim number currently on authorization.
To	Output	10	Close Date of billing of Rental Ticket	Bill to End Date	
Invoice Date:	Output	10	Invoice Date (ECARs Ticket Date)	Record Add Date	
Reference	Output	20	Invoice Id	Invoice Number	Rental Group Id + Rental Branch Id + ECARS Ticket Number
Federal ID:	Output	30	Location's Federal Id.	Federal ID Number	
Billed Period	Output	10	Start date of billing of Rental Ticket	Bill to Start Date	
Amount Received:	Output	15.2	Amount of Rental received.	Total Amount Received	
Total Due	Output	15.2	Total amount due from Ins. Company	Total Amount Due	
Total Charges:	Output	15.2	Total Rental Ticket Charges	Total Ticket Charges	
Handling For:	Output	30	Handling for Adjuster's Name	First Name + Last Name	Adjuster's First name + Adjuster's last name. The name of the adjuster to which the invoice is currently assigned.
	Output	50	Messages	NOTE	This field will repeat multiple lines for all diary notes (messages) for a reservation
To	Output	10	Authorization Termination Date	End Date	
Direct Bill Percent:	Output	15.0	Authorized Bill percentage	Bill To %	
Direct Bill Percent	Output	15.0	Authorized Bill percentage	Bill To %	
Authorized Period:	Output	10	Authorized Start Date	Start Date	
To	Output	10	Close Date of Rental Ticket	End Date	

-continued

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Policy: Daily Rate/Max Dollars	Output	15.2	Policy Daily Maximum Amount + Policy Maximum	Dollars Per Day Covered	
Policy: Daily Rate/Max Dollars	Output	15.2	Policy Daily Maximum Amount + Policy Maximum	Max $ Covered	
Rental Period:	Output	10	Start date of Rental Ticket	Start Date	
Insured Name:	Output	30	Insured's name	First Name + Last Name	
For:	Output	30	Insured's Name	First Name + Last Name	Renter's Last Name + Renter's First Name
	Output	30	Rental Location's Mailing City, State and Zip Code	City + State + Zip Code	Mailing City + Mailing State + Mailing Zip
	Output	30	Rental Location's Mailing Street Address	Address Line + Address Line2	
	Output	15	Rental Location's Phone Number	Telephone Number	
Date of loss:	Output	20	Date of loss	Date Of Loss	
Renter	Output	30	Renter's name	First Name + Last Name	Renter's Last Name + Renter's First Name
(	Output	5	Number of Authorized Days	CALCULATED	Total number of authorized rental days
(	Output	5	Number of Billed Days	CALCULATED	
(	Output	5	Number of Rental Days	CALCULATED	Total number of authorized Rental Days
Total Due:	Output	15.2	Total Amount Due from Ins. Company	CALCULATED	Total Charges – Amount Received
Number of Authorized Days + "@" + Authorized Daily Rate + "/day="	Output	15.2	Total authorized amount before tax and surcharge	CALCULATED	Number of Authorized Days * Authorized Daily Rate
Total authorized includes Tax & Surcharge	Output	15.2	Total Authorized Amount with tax and surcharge	CALCULATED	(Number of authorized Days * Authorized Daily Rate) + (Calculated Tax and surcharge)
Number of Rental Days + "@" + ECAR's Ticket Daily Rate + "/day="	Output	15.2	Total Ticket Rental Amount before tax and surcharge	CALCULATED	Number of Rental Days * ECARS Ticket Daily Rate
Claim Type:	Output	10	Claim Type	claim type description	Claimant, Insured, etc.
Claims Office:	Output	3	Office Id	external organization abbreviated name	The claims office id which the user is currently process work for.
Rental	Output	30	Rental Location's Accounting Name	accounting name	

[1623] 2.2.3 Screen Function Definition

[1624] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1625] 2.2.3.1 PRINTER FRIENDLY PAGE

[1626] When clicked, the user will be taken to the "Printer Friendly View" of the current invoice.

[1627] 2.2.3.2 REJECT

[1628] When clicked, the user will be taken to the Reject Invoice process.

[1629] 2.2.3.3 APPROVE FOR PAYMENT

[1630] When clicked, the currently displayed invoice status will be marked as approved and the user will be taken to the next Action Items.

[1631] The system will validate that the user has an authorization limit high enough to approve the invoice. If not, the system will generate an error and ask the USER to transfer the invoice.

[1632] Another adjuster has not already approved the invoice.

[1633] 2.2.3.4 SKIP>>

[1634] When clicked, the user will be advanced to the next selected action item to be processed and the current invoice will remain unchanged (un-approved).

[1635] 2.2.3.5 Top of Page

[1636] When clicked, the user will be taken to the top of the current invoice page.

[1637] 2.2.3.6 Transfer File

[1638] When clicked, the system will present a list of users that have authorization limits greater than the amount due on the invoice. The USER may then choose one user from this list to which they may transfer the file.

[1639] 2.2.3.7 Policy Information

[1640] Policy Information will only be shown under the Authorized Section if the claim type is NOT claimant.

2.3 Individual Payment List

[1641] This screen provides the user with information on what the system expects them to do, and requests a check number that will be used to pay each invoice. The user may also choose to print the invoices, and optionally print the rental history in addition to the invoices. The user may choose not to process the payment list at this time, in which case the payment list will be added to the user's action items list.

[1642] 2.3.1 Screen Layout—invoicingPymtList.shtml—see FIG. **134**

[1643] 2.3.2 Individual Payment List

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Claim Number	Input	15	Claim Number	Insurance Claim Number	Will be pre-filled with claim number currently on authorization. This field is repeated for each invoice in the payment list. This field is repeated for each invoice in the payment list.
Invoice Date	Output	10	Invoice Date (ECARS Ticket Date)	Record Add Date	This field is repeated for each invoice in the payment list.
Invoice:	Output	20	Invoice Id	Invoice Number	Rental Group Id + Rental Branch Id + ECARS Ticket Number This field is repeated for each invoice in the payment list.
Please include this reference number on your check:	Output	20	Invoice ID	Invoice Number	Rental Group ID + Rental Branch ID + ECARS Ticket number. This field is repeated for each invoice in the payment list.
Federal ID	Output	30	Location's Federal ID	Federal ID Number	This field is repeated for each invoice in the payment list.
Total Amount:	Output	15.2	Total amount due from Ins. Company	Total Amount Due	Total Charges – Amount Received This field is repeated for each invoice in the payment list.
Handling For:	Output	30	Handling for Adjuster's Name	First Name + Last Name	Adjuster's First name + Adjuster's last name. The name of the adjuster to which the invoice is currently assigned.
	Output	30	Insured's Name	First Name + Last Name	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing Street Address	Address Line + Address Line2	This field is repeated for each invoice in the payment list.
	Output	12	Rental Location Telephone Number	Telephone Number	This field is repeated for each invoice in the payment list.

-continued

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
	Output	30	Rental Location's Mailing City, State and Zip Code	City + State + Zip Code	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing City State and Zip	City + State + Zip Code	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing Street Address	Address Line + Address Line2	This field is repeated for each invoice in the payment list.
Date of loss	Output	10	Date of loss	Date Of Loss	This field is repeated for each invoice in the payment list.
Invoice	Output	5	Invoice List Number	CALCULATED	This field is repeated for each invoice in the payment list.
Claim type	Output	10	Claim Type	claim type description	This field is repeated for each invoice in the payment list.
Claims Office:	Output	3	Office Id	external organization abbreviated name	This claims office id which the user is currently process work for list.
Vehicle Condition	Output	10	Loss Type	loss type description	This field is repeated for each invoice in the payment list.
Remit to:	Output	30	Rental Location's Accounting Name	accounting name	This field is repeated for each invoice in the payment list.
Rental:	Output	30	Rental Location's Accounting Name	accounting name	This field is repeated for each invoice in the payment list.
Send Payment to:	Output	30	Rental Location's Accounting Name	accounting name	This field is repeated for each invoice in the payment list.
Enter the check number of your payment here:	Input	20	Check Number	check number	This field is repeated for each invoice in the payment list.

[1644] 2.3.3 Screen Function Definition

[1645] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1646] 2.3.3.1 PRINTER FRIENDLY PAGE

[1647] When clicked, the user will be taken to the "Printer Friendly View" of the current invoice.

[1648] 2.3.3.2 CONFIRM PAYMENT

[1649] When clicked, system will mark the reservation as paid and update the database. The update will be passed to the Arms system.

[1650] 2.3.3.3 PAY LATER

[1651] When clicked, the user will be returned to view list and the requests will remain unchanged.

[1652] 2.2.3.4 Top of Page

[1653] When clicked, the user will be taken to the top of the current invoice page.

2.4 Bulk Payment List

[1654] This screen provides the user with information on what the system expects them to do, and requests a check number that will be used to pay each invoice. The user may also choose to print the invoices, and optionally print the rental history in addition to the invoices. The user may choose not to process the payment list at this time, in which case the payment list will be added to the user's action items list.

[1655] 2.4.1 Screen Layout—Bulk Payment List—see FIG. **135**

[1656] 2.4.2 Bulk Payment List

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Claim Number	Input	15	Claim Number	Insurance Claim Number	Will be pre-filled with claim number currently on authorization. This field is repeated for each invoice in the payment list.

-continued

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Invoice Date	Output	10	Invoice Date (ECARS Ticket Date)	Record Add Date	This field is repeated for each invoice in the payment list.
Please include this reference number on your check:	Output	20	Invoice ID	Invoice Number	Rental Group Id + Rental Branch Id + ECARS Ticket Number. This field is repeated for each invoice in the payment list.
Invoice:	Output	20	Invoice Id	Invoice Number	Rental Group ID + Rental Branch ID + ECARS Ticket number. This field is repeated for each invoice in the payment list.
Federal ID	Output	30	Location's Federal ID	Federal ID Number	This field is repeated for each invoice in the payment list.
Total Amount:	Output	15.2	Total amount due from Ins. Company	Total Amount Due	Total Charges – Amount Received. This field is repeated for each invoice in the payment list.
Handling For:	Output	30	Handling for Adjuster's Name	First Name + Last Name	Adjuster's First name + Adjuster's last name. The name of the adjuster to which the invoice is currently assigned.
	Output	30	Insured's Name	First Name + Last Name	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing Street Address	Address Line + Address Line2	This field is repeated for each invoice in the payment list.
	Output	12	Rental Location Telephone Number	Telephone Number	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing City, State and Zip Code	City + State + Zip Code	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing City State and Zip	City + State + Zip Code	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing Street Address	Address Line + Address Line2	This field is repeated for each invoice in the payment list.
Date of loss	Output	10	Date of loss	Date Of Loss	This field is repeated for each invoice in the payment list.
Invoice	Output	5	Invoice List Number	CALCULATED	This field is repeated for each invoice in the payment list. Count
Claim type	Output	10	Claim Type	claim type description	This field is repeated for each invoice in the payment list.
Claims Office:	Output	3	Office Id	external organization abbreviated name	The claims office id which the user is currently process work for.
Vehicle Condition	Output	10	Loss Type	loss type description	This field is repeated for each invoice in the payment list.
Remit to:	Output	30	Rental Location's Accounting Name	accounting name	This field is repeated for each invoice in the payment list.

-continued

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Send Payment to:	Output	30	Rental Location's Accounting Name	accounting name	This field is repeated for each invoice in the payment list.
Rental:	Output	30	Rental Location's Accounting Name	accounting name	This field is repeated for each invoice in the payment list.

[1657] 2.4.3 Screen Function Definition

[1658] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other activity.

[1659] 2.4.3.1 PRINTER FRIENDLY PAGE

[1660] When clicked, the user will be taken to the "Printer Friendly View" of the current invoices.

[1661] 2.4.3.2 CONFIRM PAYMENT

[1662] When clicked, the system will mark the reservation as paid and update the database. The update will be passed to the Arms system. The user will then be returned to the next action item or the Action Item screen if no more action items exist.

[1663] 2.4.3.3 PAY LATER

[1664] When clicked, the user will be returned to Action Items and the request will remain unchanged.

[1665] 2.4.3.4 Top of Page

[1666] When clicked, the user will be taken to the top of the payment list.

3. Application Operations

[1667] This section will detail all the application operations that are part of this Functional Specification Document.

3.1 Get Unapproved Invoices (Adjuster Id)

[1668] The build unapproved invoice list operation finds all the invoices, that need approval, for the specified adjuster.

3.2 Approve Invoice (Invoice Number)

[1669] The approve invoice operation marks the specified invoice as approved. This invoice is now ready to be paid.

3.3 Get Approved Invoices (Adjuster Id)

[1670] The build approved invoice list operation finds all the approved invoices for the specified adjuster.

3.4 Get Invoice Detail (Invoice Number)

[1671] The build invoice detail operation gets the relevant invoice information for the specified invoice number.

3.5 Pay Invoice (Invoice Number, Check Number)

[1672] The pay invoice operation records the check number specified by the adjuster against the specified invoice and marks the invoice as paid.

4. Data Fields

4.1 Data Field Definition

[1673] This section includes a definition of all data fields included in the functional specification.

[1674] 4.1.1 accounting name

Entity	OFFDRB OFFICE DIRECTORY BRANCH MASTER
Column Name	acctg_nam
Label Name	Accounting Name
System Name	
Data Type	VARCHAR(8)
Attribute Definition	

[1675] 4.1.2 action item assigned date

Entity	ACTION ITEM
Column Name	actn_item_assn_dte
Label Name	action item assigned date:
System Name	AITMASGNDT
Data Type	DATE
Attribute Definition	The action item assigned date is the date the action item was established and assigned to an administrator or adjustor.

[1676] 4.1.3 action item complete date

Entity	ACTION ITEM
Column Name	actn_item_cmpl_dte
Label Name	action item complete date:
System Name	AITMCMPLDT
Data Type	DATE
Attribute Definition	The action item complete date is the date the action item was completed by an administrator or adjustor.

[1677] 4.1.4 action item effective date

Entity	ACTION ITEM
Column Name	actn_item_eff_dte
Label Name	action item effective date:

-continued

System Name	AITMEFFDT
Data Type	DATE
Attribute Definition	The action item effective date is the date the action item will become effective.

[1678] 4.1.5 action item status code

Entity	ACTION ITEM
Column Name	actn_item_stat_cde
Label Name	action item status code:
System Name	
Data Type	CHAR(6)
Attribute Definition	The action item status code defines the status of this action item. For example:

[1679] 4.1.6 action item type code

Entity	ACTION ITEM
Column Name	actn_item_typ_cde
Label Name	action item type code:
System Name	
Data Type	DEC(3,0)

-continued

Attribute Definition	The action item type code defines specific tasks/action items associated with the Rental Authorization/Reservation activities accomplished by adjustors and administrators when contracting an insured with a replacement vehicle. For example: Closing an Of

[1680] 4.1.7 action item type description

Entity	ACTION ITEM TYPE
Column Name	actn_item_typ_dsc
Label Name	action item type description:
System Name	
Data Type	CHAR(40)
Attribute Definition	The action item type description is a lexical definition of an action item type code which defines specific tasks/action items associated with the Rental Authorization/Reservation activities accomplished by adjustors and administrators when contracting an

[1681] 4.1.8 action related adjustor code

Entity	ACTION ITEM
Column Name	actn_rel_adjr_cde
Label Name	Adjustor Code
System Name	ARADJRCDE
Data Type	CHAR(10)
Attribute Definition	The action related adjustor code is the adjustor code of the adjustor/user which requires completion of some action item work activity such as an office closing and adjustors/users who need to be moved to another office.

[1682] 4.1.9 action related company identifier

Entity	ACTION ITEM
Column Name	actn_rel_cmpy_id
Label Name	ARMS Profile ID
System Name	ARCMPYID
Data Type	CHAR(5)
Attribute Definition	The action related company identifier is the company identifier of the adjustor/user which requires completion of some action item work

-continued

	activity such as an office closing and adjustors/users who need to be moved to another office.

[1683] 4.1.10 Address Line

Entity	ARM: Rental Location Master
Column Name	LOADL1
Label Name	
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1684] 4.1.11 Address Line2

Entity	ARM: Rental Location Master
Column Name	LOADL2
Label Name	Address Line
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1685] 4.1.12 Adjustor Code

Entity	ARM: Adjustor Master
Column Name	ALAACD
Label Name	Adjustor Code
System Name	
Data Type	CHAR(10)
Attribute Definition	

[1686] 4.1.13 ARMS Profile ID

Entity	ACTION ITEM
Column Name	ALCUID
Label Name	ARMS Profile ID
System Name	
Data Type	CHAR(5)
Attribute Definition	The ARMS Profile ID is the company identifier used to uniquely define an authorization.

[1687] 4.1.14 ARMS Profile ID

Entity	ARM: Adjustor Master
Column Name	ALCUID
Label Name	ARMS Profile ID
System Name	
Data Type	CHAR(5)
Attribute Definition	

[1688] 4.1.15 assigned to adjustor code

Entity	ACTION ITEM
Column Name	assgn_to_adjr_cde
Label Name	Adjustor Code
System Name	AADJRCDE

-continued

Data Type	CHAR(10)
Attribute Definition	The assigned to adjustor code is the adjustor code of the administrator or adjustor's who is assigned the action item.

[1689] 4.1.16 assigned to company identifier

Entity	ACTION ITEM
Column Name	assgn_to_cmpy_id
Label Name	ARMS Profile ID
System Name	ACMPYID
Data Type	CHAR(5)
Attribute Definition	The assigned to company identifier is the company identifier of the administrator or adjustor's who is assigned the action item.

[1690] 4.1.17 Bill To %

Entity	ARM: Authorization(Claim Info)
Column Name	AZBTPC
Label Name	Bill To %
System Name	
Data Type	DECIMAL(3)
Attribute Definition	

[1691] 4.1.18 Bill to End Date

Entity	A4 Invoice Header
Column Name	IIBTDT
Label Name	Bill to End Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1692] 4.1.19 Bill to Start Date

Entity	A4 Invoice Header
Column Name	IISRDT
Label Name	Bill to Start Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1693] 4.1.20 check number

Entity	RENTAL INVOICE PAYMENT
Column Name	chk_nbr
Label Name	check number:
System Name	CHKNBR
Data Type	DEC(11.0)
Attribute Definition	

[1694] 4.1.21 City

Entity	ARM: Rental Location Master
Column Name	LOCYNM
Label Name	City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1695] 4.1.22 claim type description

Entity	CLAIM TYPE
Column Name	clm_typ_dsc
Label Name	claim type description:
System Name	CLMTYPDSC
Data Type	CHAR(40)
Attribute Definition	The claim type description is a lexical definition of the claim type code which defines the different Authorization claim types. For example: Insured, Claimant, Uninsured Motorist, etc.

[1696] 4.1.23 company identifier

Entity	EXTERNAL ORGANIZATION
Column Name	cmpy_id
Label Name	company identifier:
System Name	CMPYID
Data Type	DEC(11.0)
Attribute Definition	Business Party Identifier is a surrogate key assigned to each unique occurrence of an Individual, External Organization, and Internal Organization (Business Party)

[1697] 4.1.24 company structure level code

Entity	ACTION ITEM
Column Name	cmpy_strct_lvl_cde
Label Name	company structure level code:
System Name	CMPYSLVLCD
Data Type	DEC(3.0)
Attribute Definition	The external organization structure level code identifies the kind or type of internal organizations of the external organizations which Enterprise Rent-A-Car does business with. Such as: Corporation, Branch Claims Office, Region, Area, Subregion, etc.

[1698] 4.1.25 Customer Transaction ID

Entity	ACTION ITEM
Column Name	AZCUTI
Label Name	Customer Transaction ID
System Name	
Data Type	CHAR(20)
Attribute Definition	The Customer Transaction ID is the authorization transaction identifier which along with a company identifier uniquely define an authorization.

[1699] 4.1.26 Date Of Loss

Entity	ARM: Renter Detail
Column Name	RKLSDT
Label Name	Date of Loss
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1700] 4.1.27 Dollars Per Day Covered

Entity	ARM: Authorization(Claim Info)
Column Name	AZ$PDY
Label Name	Dollars Per Day Covered
System Name	
Data Type	DECIMAL(5.2)
Attribute Definition	

[1701] 4.1.28 End Date

Entity	ARM: Authorization(Claim Info)
Column Name	AZENDT
Label Name	End Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1702] 4.1.29 external organization abbreviated name

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_abbr_nam
Label Name	external organization abbreviated name:
System Name	EOABBRNAM
Data Type	CHAR(10)
Attribute Definition	External Organization Abbreviated Name is a shortened text based label associated with an organization outside of Enterprise. This name is sometimes used for accounting purposes.

[1703] 4.1.30 external organization identifier

Entity	ALTERNATE ORGANIZATION
Column Name	e_o_id
Label Name	external organization identifier:
System Name	EOID
Data Type	DEC(11.0)
Attribute Definition	Business Party Identifier is a surrogate key assigned to each unique occurrence of an Individual, External Organization, and Internal Organization (Business Party).

[1704] 4.1.31 Federal ID Number

Entity	A4 Invoice Header
Column Name	IIFETX
Label Name	Federal ID Number
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1705] 4.1.32 First Name

Entity	ARM: Adjustor Master
Column Name	ALFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1706] 4.1.33 First Name

Entity	ARM: Insured Detail
Column Name	IRFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1707] 4.1.34 First Name

Entity	ARM: Renter Detail
Column Name	RKFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1708] 4.1.35 handled by adjustor code

Entity	ACTION ITEM
Column Name	handl_by_adjr_cde
Label Name	Adjustor Code
System Name	HNDADJRCDE
Data Type	CHAR(10)
Attribute Definition	The handled by adjustor code is the adjustor code of the administrator or adjustor's who is handling the action item.

[1709] 4.1.36 handled by company identifier

Entity	ACTION ITEM
Column Name	handl_by_cmpy_id
Label Name	ARMS Profile ID
System Name	HNDCMPYID
Data Type	CHAR(5)
Attribute Definition	The handled by company identifier is the company identifier of the administrator or adjustor's who is handling the action item.

[1710] 4.1.37 handling for adjustor code

Entity	AUTHORIZATION ACTIVITY LOG
Column Name	handl_for_adtr_cde
Label Name	handling for adjustor code:
System Name	HNDADJRCDE
Data Type	CHAR(10)
Attribute Definition	The handling for adjustor coder is the adjustor code of an adjustor/user who is handling authorization activities for another adjustor/user in the ARMS Web application.

-continued

[1711] 4.1.38 handling for company identifier

Entity	AUTHORIZATION ACTIVITY LOG
Column Name	handl_for_cmpy_id
Label Name	handling for company identifier:
System Name	HNDCMPYID
Data Type	CHAR(5)
Attribute Definition	The handling for company identifier is the company identifier used to uniquely identify an adjustor/user who is handling authorization activities for another adjustor/user in the ARMS Web application.

[1712] 4.1.39 Insurance Claim Number

Entity	A4 Invoice Header
Column Name	IICLNO
Label Name	Insurance Claim Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1713] 4.1.40 Insurance Claim Number

Entity	ARM: Authorization(Claim Info)
Column Name	AZCLNO
Label Name	Insurance Claim Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1714] 4.1.41 Invoice Number

Entity	A4 Invoice Header
Column Name	IIINNO
Label Name	Invoice Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1715] 4.1.42 Item Amount

Entity	A4 Invoice Detail
Column Name	12IT$$
Label Name	Item Amount
System Name	
Data Type	DECIMAL(7.2)
Attribute Definition	

[1716] 4.1.43 Item Description

Entity	A4 Invoice Detail
Column Name	I2ITDS

-continued

Label Name	Item Description
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1717] 4.1.44 Item Quantity

Entity	A4 Invoice Detail
Column Name	I2ITQY
Label Name	Item Quantity
System Name	
Data Type	DECIMAL(5)
Attribute Definition	

[1718] 4.1.45 Item Rate

Entity	A4 Invoice Detail
Column Name	I2ITRT
Label Name	Item Rate
System Name	
Data Type	DECIMAL(7.2)
Attribute Definition	

[1719] 4.1.46 Last Name

Entity	ARM: Adjustor Master
Column Name	ALLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1720] 4.1.47 Last Name

Entity	ARM: Insured Detail
Column Name	IRLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1721] 4.1.48 Last Name

Entity	ARM: Renter Detail
Column Name	RKLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1722] 4.1.49 loss type description

Entity	LOSS TYPE
Column Name	loss_typ_dsc
Label Name	loss type description:
System Name	LOSSTYPDSC

-continued

Data Type	CHAR(40)
Attribute Definition	The loss type description is a lexical definition of the loss type code which defines the different loss categories when an Insurance Company authorizes a Rental. For example: Theft, Drivable, Repairable, Non-drivable, Non-repairable, Totaled.

[1723] 4.1.50 Max $ Covered

Entity	ARM: Authorization(Claim Info)
Column Name	AZ$MAX
Label Name	Max $ Covered
System Name	
Data Type	DECIMAL(9, 2)
Attribute Definition	

[1724] 4.1.51 NOTE

Entity	ARM: ARMS/400 Diary Notes File
Column Name	NENOTE
Label Name	NOTE
System Name	
Data Type	CHAR(50)
Attribute Definition	

[1725] 4.1.52 Number Of Days Authorized

Entity	ARM: Authorization(Claim Info)
Column Name	AZAUDY
Label Name	Number Of Days Authorized
System Name	
Data Type	DECIMAL(3)
Attribute Definition	

[1726] 4.1.53 Record Add Date

Entity	A4 Invoice Header
Column Name	IIADDT
Label Name	Record Add Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1727] 4.1.54 related office identifier

Entity	ACTION ITEM
Column Name	rel_ofc_id
Label Name	related office identifier:
System Name	RELOFCID
Data Type	DEC(11, 0)
Attribute Definition	The related office identifier is the identifier of the office responsible for the action item.

[1728] 4.1.55 Remittance Reference #

Entity	A4 Remit Reference No.
Column Name	Q5RMNO
Label Name	Remittance Reference #
System Name	
Data Type	NUMERIC(6)
Attribute Definition	

[1729] 4.1.56 Request Type

Entity	ACTION ITEM TYPE
Column Name	XURSTP
Label Name	Request Type
System Name	XURSTP
Data Type	CHAR(1)
Attribute Definition	The request type is a code from the ARMS system which identifies whether adjustor action is necessary for an authorization and what type of action.

[1730] 4.1.57 Start Date

Entity	ARM: Authorization(Claim Info)
Column Name	AZSTDT
Label Name	Start Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1731] 4.1.58 State

Entity	ARM: Rental Location Master
Column Name	LOSACD
Label Name	State
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1732] 4.1.59 Status Code

Entity	ACTION ITEM TYPE
Column Name	XUSTCD
Label Name	Status Code
System Name	XUSTCD
Data Type	CHAR(1)
Attribute Definition	The status code is a code from the ARMS system which identifies whether an authorization is a reservation, a ticket, unauthorized, invoiced, paid, etc.

[1733] 4.1.60 Telephone Number

Entity	ARM: Rental Location Master
Column Name	LOPHNO
Label Name	Telephone Number
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1734] 4.1.61 Total Amount Due

Entity	A4 Invoice Trailer
Column Name	13BL$$
Label Name	Total Amount Due
System Name	
Data Type	DECIMAL(9, 2)
Attribute Definition	

[1735] 4.1.62 Total Amount Received

Entity	A4 Invoice Trailer
Column Name	13RC$$
Label Name	Total Amount Received
System Name	
Data Type	DECIMAL(9, 2)
Attribute Definition	

[1736] 4.1.63 Total Billed to Others

Entity	A4 Invoice Trailer
Column Name	13OT$$
Label Name	Total Billed to Others
System Name	
Data Type	DECIMAL(9, 2)
Attribute Definition	

[1737] 4.1.64 Total Ticket Charges

Entity	A4 Invoice Trailer
Column Name	13TO$$
Label Name	Total Ticket Charges
System Name	
Data Type	DECIMAL(9, 2)
Attribute Definition	

[1738] 4.1.65 Vehicle Rate

Entity	ARM: Authorization(Claim Info)
Column Name	AZVHRT
Label Name	Vehicle Rate
System Name	
Data Type	DECIMAL(5, 2)
Attribute Definition	

[1739] 4.1.66 Zip Code

Entity	ARM: Rental Location Master
Column Name	LOZPCD
Label Name	Zip Code
System Name	
Data Type	CHAR(9)
Attribute Definition	

5. Questions and Answers

[1740] Issue Number: 256

[1741] Question: The calculation for authorized limit when displaying the invoice detail does not take bill to percent into account when all the following conditions are true:

[1742] Policy Maximum=0

[1743] Policy Daily>0

[1744] Vehicle Rate>0

[1745] Vehicle Rate<Policy Daily

[1746] or all the following conditions are true:

[1747] Policy Maximum>0

[1748] Policy Daily=0

[1749] Vehicle Rate>0

[1750] In all other cases, the amount is multiplied by the bill to percent to get the authorized limit. Is this calculation correct?

[1751] Status: Pending

[1752] Resolution: 3-14-00, D S E—Need to follow up with author to get a further understanding of question.

[1753] 3-23-00, Issue Mtg., Will get addressed in current state and fix.

[1754] Issue Number: 257

[1755] Question: This is a presentation issue. The adjuster name on the invoice detail screen will not show up in certain cases. This code is in the *INZSR sub routine and needs some investigation of scenarios to determine the exact flaw.

[1756] Status: Closed—Resolved

[1757] Resolution: 3-14-00, D S E—Need to follow up with author to get a further understanding of question.

Functional Design Specification

Pay Approved Invoices

(Processor Pay)

Version 1.0

1. Pay Approved Invoices Use Case

1.1 Brief Description

[1758] The Pay Approved Invoices use case describes how the PROCESSOR would review and pay invoices in the ARMS Web system.

1.2 Use Case Actors

[1759] The following actors will interact with this use case:

[1760] PROCESSOR—The PROCESSOR will use this use case to pay approved invoices.

1.3 Pre-Conditions

[1761] The PROCESSOR must be logged into the ARMS Web system.

[1762] The PROCESSOR'S office must be set up to handle processor payment of invoices.

[1763] The PROCESSOR must be authorized to handle invoices.

1.4 Flow of Events

[1764] The Flow of Events will include the necessary steps for a PROCESSOR to review and pay invoices.

[1765] 1.4.1 Activity Diagram—see FIG. **136**

[1766] 1.4.2 Basic Flow

[1767] 1. The PROCESSOR will view their payment list.

[1768] 2. The system will check to see if the PROCESSOR'S office is set up for individual payment or bulk payment.

[1769] If the PROCESSOR'S office is set up for individual payment execute subflow 1.4.2.1, Individual Pay.

[1770] If the PROCESSOR'S office is set up for bulk payment execute subflow 1.4.2.2, Bulk Pay.

[1771] 1.4.2.1 Individual Pay

[1772] 1. The system will display instructions for paying the invoices individually and a summary list of all the invoices on the PROCESSOR'S payment list.

[1773] 2. For each invoice on the payment list, the PROCESSOR may enter the associated check number.

[1774] 3. The PROCESSOR will submit the invoices to the system.

[1775] 4. The system will mark the invoices paid.

[1776] 5. The system will update the ARMS Web database.

[1777] 6. This ends the use case.

[1778] 1.4.2.2 Bulk Pay

[1779] 1. The system will display instructions for paying the invoices in bulk and a summary list of all the invoices on the PROCESSOR'S payment list.

[1780] 2. The ADJUSTER may enter the check number of the check that is paying all the invoices on the payment list.

[1781] 3. The PROCESSOR will submit the invoices to the system.

[1782] 4. The system will mark the invoices paid.

5. The system will update the ARMS Web database.

6. This ends the use case.

[1783] 1.4.3 Alternative Flows

[1784] 1.4.3.1 View Customer File

[1785] At step one of Section 1.4.2.1, Individual Pay, or Section 1.4.2.2, Bulk Pay, the PROCESSOR may choose to view detail information about the rental. The view rental detail process is executed using extension point MA-19—View Customer File.

[1786] 1.4.3.2 Return an Invoice

[1787] At step one of Section 1.4.2.1, Individual Pay or Section 1.4.2.2, Bulk Pay the PROCESSOR may choose to return any invoice to the ADJUSTER. The PROCESSOR may enter a message to explain why they returned the invoice. The returned invoice should be given a status of returned invoice. The invoice will then become an action item for the owning ADJUSTER to review and correct.

[1788] 1.4.3.3 Print an Invoice List

[1789] At step one in section 1.4.2.1, Individual Pay, or section 1.4.2.2, Bulk Pay, the PROCESSOR may choose to print the invoice list of all invoices on the Payment List. If they so choose, they may also print the rental history for all invoices. The system will display a printer

friendly screen and the PROCESSOR will choose to print via their browser window. Upon printing, the PROCESSOR will return to the step one of section 1.4.2.1 if the PROCESSOR is set up for Individual Pay, or section 1.4.2.2 if the PROCESSOR is set up for Bulk Pay.

1.5 Post-Conditions

[1790] If the use case was successful the accepted invoices should be marked as paid in the ARMS Web system.

[1791] If the use case was unsuccessful, the system state is unchanged.

1.6 Special Requirements

[1792] The additional requirements of the business use case are included here. These are requirements not covered by the flow as they have been described in the sections above.

[1793] 1.6.1 ARMS Web Routes Invoices

[1794] Before an ADJUSTER receives an invoice to be approved, the ARMS Web system will look at the invoicing criteria for the owning office and owning adjuster and make a determination as to whether the invoice is auto approved or adjuster approved. If an invoice is auto approved, the invoice will always be assigned to a processor for payment without it ever being sent to an adjuster for approval.

[1795] 1.6.2 Data Fields to Assist with Future Releases or Customer Integration

[1796] It must be possible to capture the following information at some point in the future because of either planned future releases or customer integration.

[1797] Amount Being Paid on Each Invoice

[1798] 1.6.3 Claim Number is Editable on the Invoice

[1799] If a company is set up for EDI transmission of invoices to the company's claim system, that company must have the ability to change the claim number on the invoice.

1.7 Extension Points

[1800] 1.7.1 MA-19—View Customer File

[1801] The View Customer File Functional Specification is used to review the rental history in regards to a specific rental. Upon completion of the View Customer File Functional Specification, the ADJUSTER should be returned to step one of Section 1.4.2.1, Individual Pay, or Section 1.4.2.2, Bulk Pay in the Handle Unapproved Invoices Functional Specification. Any previously approved invoices should still be approved in the system.

2. Screen Design

[1802] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Invoicing—Individual Payment List

[1803] This screen will allow the user to enter a check number for each invoice and notify Enterprise that they have processed the payment.

[1804] 2.1.1 Individual Payment List—see FIG. **137**

[1805] 2.1.2 Individual Payment List

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Claim Number	Input	15	Claim Number	Insurance Claim Number	Will be pre-filled with claim number currently on authorization. This field is repeated for each invoice in the payment list. This field is repeated for each invoice in the payment list.
Invoice Date	Output	10	Invoice Date (ECARS Ticket Date)	Record Add Date	This field is repeated for each invoice in the payment list.
Please include this reference number on your check:	Output	20	Invoice ID	Invoice Number	Rental Group ID + Rental Branch ID + ECARS Ticket number. This field is repeated for each invoice in the payment list.
Invoice:	Output	20	Invoice Id	Invoice Number	Rental Group Id + Rental Branch Id + ECARS Ticket Number This field is repeated for each invoice in the payment list.
Federal ID	Output	30	Location's Federal ID	Federal ID Number	This field is repeated for each invoice in the payment list.

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Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Total Amount:	Output	15,2	Total amount due from Ins. Company	Total Amount Due	Total Charges – Amount Received This field is repeated for each invoice in the payment list.
Handling For:	Output	30	Handling for Adjuster's Name	First Name + Last Name	Adjuster's First name + Adjuster's last name. The name of the adjuster to which the invoice is currently assigned.
	Output	30	Insured's Name	First Name + Last Name	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing Street Address	Address Line + Address Line2	This field is repeated for each invoice in the payment list.
	Output	12	Rental Location Telephone Number	Telephone Number	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing City, State and Zip Code	City + State + Zip Code	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing City State and Zip	City + State + Zip Code	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing Street Address	Address Line + Address Line2	This field is repeated for each invoice in the payment list.
Date of loss	Output	10	Date of loss	Date Of Loss	This field is repeated for each invoice in the payment list.
Invoice	Output	5	Invoice List Number	CALCULATED	This field is repeated for each invoice in the payment list. Count
Claim type	Output	10	Claim Type	claim type description	This field is repeated for each invoice in the payment list.
Claims Office:	Output	3	Office Id	external organization abbreviated name	This claims office id which the user is currently process work for.
Vehicle Condition	Output	10	Loss Type	loss type description	This field is repeated for each invoice in the payment list.
Remit to:	Output	30	Rental Location's Accounting Name	accounting name	This field is repeated for each invoice in the payment list.
Send Payment to:	Output	30	Rental Location's Accounting Name	accounting name	This field is repeated for each invoice in the payment list.
Rental:	Output	30	Rental Location's Accounting Name	accounting name	This field is repeated for each invoice in the payment list.
Enter the check number of your payment here:	Input	20	Check Number	check number	This field is repeated for each invoice in the payment list.

[1806] 2.1.3 Screen Function Definition

[1807] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1808] 2.1.3.1 PRINTER FRIENDLY PAGE

[1809] When clicked, the user will be taken to the "Printer Friendly View" of the current invoice.

[1810] 2.1.3.2 CONFIRM PAYMENT

[1811] When clicked, system will mark the reservation as paid and update the database. The update will be passed to the Arms system.

[1812] 2.1.3.3 PAY LATER

[1813] When clicked, the user will be returned to their action item list and the payment list will remain unprocessed.

[1814] 2.1.3.4 RETURN TO ADJUSTER

[1815] When clicked, the invoice will be returned to the last adjuster associated with the rental before it closed. The invoice will be removed from the list displayed.

[1816] 2.1.3.5 Top of Page

[1817] When clicked, the user will be taken to the top of the current invoice page.

2.2 Bulk Payment List

[1818] This screen will allow the user to pick which functions that he/she may want to change.

[1819] 2.2.1 Screen Layout—Bulk Payment List—see FIG. **138**

[1820] 2.2.2 Invoicing—Bulk Payment List

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Claim Number	Input	15	Claim Number	Insurance Claim Number	Will be pre-filled with claim number currently on authorization. This field is repeated for each invoice in the payment list.
Invoice Date	Output	10	Invoice Date (ECARS Ticket Date)	Record Add Date	This field is repeated for each invoice in the payment list.
Please include this reference number on your check:	Output	20	Invoice ID	Invoice Number	Rental Group ID + Rental Branch ID + ECARS Ticket number. This field is repeated for each invoice in the payment list.
Invoice:	Output	20	Invoice Id	Invoice Number	Rental Group Id + Rental Branch Id + ECARS Ticket Number. This field is repeated for each invoice in the payment list.
Federal ID	Output	30	Location's Federal ID	Federal ID Number	This field is repeated for each invoice in the payment list.
Total Amount:	Output	152	Total amount due from Ins. Company	Total Amount Due	Total Charges – Amount Received. This field is repeated for each invoice in the payment list.
Handling For:	Output	30	Handling for Adjuster's Name	First Name + Last Name	Adjuster's First name + Adjuster's last name. The name of the adjuster to which the invoice is currently assigned.
	Output	30	Insured's Name	Last Name	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing Street Address	Address Line + Address Line2	This field is repeated for each invoice in the payment list.
	Output	12	Rental Location Telephone Number	Telephone Number	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing City, State and Zip Code	City + State + Zip Code	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing City State and Zip	City + State + Zip Code	This field is repeated for each invoice in the payment list.
	Output	30	Rental Location's Mailing Street Address	Address Line + Address Line2	This field is repeated for each invoice in the payment list.
Date of loss	Output	10	Date of loss	Date Of Loss	This field is repeated for each invoice in the payment list.
Invoice	Output	5	Invoice List Number	CALCULATED	This field is repeated for each invoice in the payment list.
Claim type	Output	10	Claim Type	claim type description	This field is repeated for each invoice in the payment list.
Claims Office:	Output	3	Office Id	external organization abbreviated name	This claims office id which the user is currently process work for.
Vehicle Condition	Output	10	Loss Type	loss type description	This field is repeated for each invoice in the payment list.
Remit to:	Output	30	Rental Location's Accounting Name	accounting name	This field is repeated for each invoice in the payment list.

-continued

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Send Payment to:	Output	30	Rental Location's Accounting Name	accounting name	This field is repeated for each invoice in the payment list.
Rental:	Output	30	Rental Location's Accounting Name	accounting name	This field is repeated for each invoice in the payment list.

[1821] 2.2.3 Screen Function Definition

[1822] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1823] 2.2.3.1 PRINTER FRIENDLY PAGE

[1824] When clicked, the user will be taken to the "Printer Friendly View" of the current invoice.

[1825] 2.2.3.2 CONFIRM PAYMENT

[1826] When clicked, system will mark the reservation as paid and update the database. The update will be passed to the Arms system.

[1827] 2.2.3.3 PAY LATER

[1828] When clicked, the user will be returned to their action item list and the payment list will remain unprocessed.

[1829] 2.2.3.4 RETURN TO ADJUSTER

[1830] When clicked, the invoice will be returned to the last adjuster associated with the rental before it closed. The invoice will be removed from the list displayed.

[1831] 2.2.3.5 Top of Page

[1832] When clicked, the user will be taken to the top of the current invoice page.

2.3 Return Invoice to Adjuster

[1833] 2.3.1 Screen Layout—returnBilling.shtml—see FIG. **139**

[1834] 2.3.2 Return Billing

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Claim Number	Input	15	Claim Number	Insurance Claim Number	
Amount	Output	15,2	Total Amount Due from Ins. Company	Total Amount Due	
Adjuster's Name	Output	30	Adjuster's Name	First Name + Last Name	Adjuster's last name + adjuster's first name
Comments	Input	50	Reason Comments	NOTE	
Renter Name	Output	30	Renter's name	First Name + Last Name	Renter's Last Name + Renter's First Name
Reason For Return	ComboBox	50	Reason For Return	standard message description	

[1835] 2.3.3 Screen Function Definition

[1836] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1837] 2.3.3.1 CANCEL

[1838] When clicked, the user will be returned to the Invoicing Approval or Invoicing Individual Payment screen from which they came. The invoice will still be displayed with the status of the invoice unchanged.

[1839] 2.3.3.2 Return to Adjuster

[1840] When clicked, the user will return the invoice to the Adjuster for further instructions and the status will show returned invoice.

3. Application Operations

[1841] This section will detail all the application operations that are part of this Functional Specification Document.

3.1 Get Approved Invoices (Office Id)

[1842] The get approved invoices operation finds all the approved invoices for the specified office.

3.2 Get Invoice Detail (Invoice Number)

[1843] The get invoice detail operation gets the relevant invoice information for the specified invoice number.

3.3 Return Invoice to Approving Adjuster (Invoice Number, Reason Code)

[1844] The return invoice to approving adjuster operation marks the specified invoice so that the approving adjuster can review the invoice and re-approve it.

3.4 Pay Invoice (Invoice Number, Check Number)

[1845] The pay invoice operation records the check number specified by the adjuster against the specified invoice and marks the invoice as paid.

4. Data Fields

4.1 Data Field Definition

[1846] This section includes a definition of all data fields included in the functional specification.

[1847] 4.1.1 accounting name

Entity	OFFDRB OFFICE DIRECTORY BRANCH MASTER
Column Name	acctg_nam
Label Name	Accounting Name
System Name	
Data Type	VARCHAR(8)
Attribute Definition	

[1848] 4.1.2 action item complete date

Entity	ACTION ITEM
Column Name	actn_item_cmpl_dte
Label Name	action item complete date:
System Name	AITMCMPLDT
Data Type	DATE
Attribute Definition	The action item complete date is the date the action item was completed by an administrator or adjustor.

[1849] 4.1.3 action item effective date

Entity	ACTION ITEM
Column Name	actn_item_eff_dte
Label Name	action item effective date:
System Name	AITMEFFDT
Data Type	DATE
Attribute Definition	The action item effective date is the date the action item will become effective.

[1850] 4.1.4 action item status code

Entity	ACTION ITEM
Column Name	actn_item_stat_cde
Label Name	action item status code:
System Name	
Data Type	CHAR(6)
Attribute Definition	The action item status code defines the status of this action item. For example:

[1851] 4.1.5 action item type code

Entity	ACTION ITEM
Column Name	actn_item_typ_cde
Label Name	action item type code:
System Name	
Data Type	DEC(3, 0)
Attribute Definition	The action item type code defines specific tasks/action items associated with the Rental Authorization/Reservation activities accomplished by adjustors and administrators when contracting an insured with a replacement vehicle. For example: Closing an Of

[1852] 4.1.6 action item type description

Entity	ACTION ITEM TYPE
Column Name	actn_item_typ_dsc
Label Name	action item type description:
System Name	
Data Type	CHAR(40)
Attribute Definition	The action item type description is a lexical definition of an action item type code which defines specific tasks/action items associated with the Rental Authorization/Reservation activities accomplished by adjustors and administrators when contracting an

[1853] 4.1.7 Address Line

Entity	ARM: Rental Location Master
Column Name	LOADL1
Label Name	
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1854] 4.1.8 Address Line2

Entity	ARM: Rental Location Master
Column Name	LOADL2
Label Name	Address Line
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1855] 4.1.9 ARMS Profile ID

Entity	ACTION ITEM
Column Name	ALCUID
Label Name	ARMS Profile ID
System Name	
Data Type	CHAR(5)
Attribute Definition	The ARMS Profile ID is the company identifier used to uniquely define an authorization.

[1856] 4.1.10 assigned to adjustor code

Entity	ACTION ITEM
Column Name	assgn_to_adjr_cde
Label Name	Adjustor Code
System Name	AADJRCDE
Data Type	CHAR(10)
Attribute Definition	The assigned to adjustor code is the adjustor code of the administrator or adjustor's who is assigned the action item.

[1857] 4.1.11 assigned to company identifier

Entity	ACTION ITEM
Column Name	assgn_to_cmpy_id
Label Name	ARMS Profile ID

-continued

System Name	ACMPYID
Data Type	CHAR(5)
Attribute Definition	The assigned to company identifier is the company identifier of the administrator or adjustor's who is assigned the action item.

[1858] 4.1.12 Bill To %

Entity	ARM: Authorization(Claim Info)
Column Name	AZBTPC
Label Name	Bill To %
System Name	
Data Type	DECIMAL(3)
Attribute Definition	

[1859] 4.1.13 Branch

Entity	A4 Cross Reference
Column Name	br_id
Label Name	Branch:
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1860] 4.1.14 check number

Entity	RENTAL INVOICE PAYMENT
Column Name	chk_nbr
Label Name	check number:
System Name	CHKNBR
Data Type	DEC(11, 0)
Attribute Definition	

[1861] 4.1.15 City

Entity	ARM: Rental Location Master
Column Name	LOCYNM
Label	Name City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1862] 4.1.16 claim type description

Entity	CLAIM TYPE
Column Name	clm_typ_dsc
Label Name	claim type description:
System Name	CLMTYPDSC
Data Type	CHAR(40)
Attribute Definition	The claim type description is a lexical definition of the claim type code which defines the different Authorization claim types. For example: Insured, Claimant, Uninsured Motorist, etc.

[1863] 4.1.17 company identifier

Entity	EXTERNAL ORGANIZATION
Column Name	cmpy_id
Label Name	company identifier:
System Name	CMPYID
Data Type	DEC(11, 0)
Attribute Definition	Business Party Identifier is a surrogate key assigned to each unique occurrence of an Individual, External Organization, and Internal Organization (Business Party).

[1864] 4.1.18 company structure level code

Entity	ACTION ITEM
Column Name	cmpy_strct_lvl_cde
Label Name	company structure level code:
System Name	CMPYSLVLCD
Data Type	DEC(3, 0)
Attribute Definition	The external organization structure level code identifies the kind or type of internal organizations of the external organizations which Enterprise Rent-A-Car does business with. Such as: Corporation, Branch Claims Office, Region, Area, Subregion, etc.

[1865] 4.1.19 Customer Transaction ID

Entity	ACTION ITEM
Column Name	AZCUTI
Label Name	Customer Transaction ID
System Name	
Data Type	CHAR(20)
Attribute Definition	The Customer Transaction ID is the authorization transaction identifier which along with a company identifier uniquely define an authorization.

[1866] 4.1.20 Date Of Loss

Entity	ARM: Renter Detail
Column Name	RKLSDT
Label Name	Date of Loss
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1867] 4.1.21 Dollars Per Day Covered

Entity	ARM: Authorization(Claim Info)
Column Name	AZ$PDY
Label Name	Dollars Per Day Covered
System Name	
Data Type	DECIMAL(5, 2)
Attribute Definition	

[1868] 4.1.22 End Date

Entity	ARM: Authorization(Claim Info)
Column Name	AZENDT

-continued

Label Name	End Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1869] 4.1.23 external organization abbreviated name

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_abbr_nam
Label Name	external organization abbreviated name:
System Name	EOABBRNAM
Data Type	CHAR(10)
Attribute Definition	External Organization Abbreviated Name is a shortened text based label associated with an organization outside of Enterprise. This name is sometimes used for accounting purposes.

[1870] 4.1.24 external organization identifier

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_id
Label Name	external organization identifier:
System Name	EOID
Data Type	DEC(11, 0)
Attribute Definition	The external organization identifier is a surrogate key assigned to each unique occurrence of an External Organization. Examples: body shops, vehicle manufacturers, insurance companies, leasing accounts, credit unions, dealerships, or governing agencies.

[1871] 4.1.25 Federal ID Number

Entity	A4 Invoice Header
Column Name	I1FETX
Label Name	Federal ID Number
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1872] 4.1.26 First Name

Entity	ARM: Adjustor Master
Column Name	ALFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1873] 4.1.27 First Name

Entity	ARM: Renter Detail
Column Name	RKFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1874] 4.1.28 Group

Entity	A4 Cross Reference
Column Name	grp_id
Label Name	Group Number
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1875] 4.1.29 handled by adjustor code

Entity	ACTION ITEM
Column Name	handl_by_adjr_cde
Label Name	Adjustor Code
System Name	HNDADJRCDE
Data Type	CHAR(10)
Attribute Definition	The handled by adjustor code is the adjustor code of the administrator or adjustor's who is handling the action item.

[1876] 4.1.30 handled by company identifier

Entity	ACTION ITEM
Column Name	handl_by_cmpy_id
Label Name	ARMS Profile ID
System Name	HNDCMPYID
Data Type	CHAR(5)
Attribute Definition	The handled by company identifier is the company identifier of the administrator or adjustor's who is handling the action item.

[1877] 4.1.31 handling for adjustor code

Entity	AUTHORIZATION ACTIVITY LOG
Column Name	handl_for_adtr_cde
Label Name	handling for adjustor code:
System Name	HNDADJRCDE
Data Type	CHAR(10)
Attribute Definition	The handling for adjustor coder is the adjustor code of an adjustor/user who is handling authorization activities for another adjustor/user in the ARMS Web application.

[1878] 4.1.32 handling for company identifier

Entity	AUTHORIZATION ACTIVITY LOG
Column Name	handl_for_cmpy_id
Label Name	handling for company identifier:
System Name	HNDCMPYID
Data Type	CHAR(5)
Attribute Definition	The handling for company identifier is the company identifier used to uniquely identify an adjustor/user who is handling authorization activities for another adjustor/user in the ARMS Web application.

[1879] 4.1.33 Insurance Claim Number

Entity	A4 Invoice Header
Column Name	I1CLNO
Label Name	Insurance Claim Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1880] 4.1.34 Insurance Claim Number

Entity	ARM: Authorization(Claim Info)
Column Name	AZCLNO
Label Name	Insurance Claim Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1881] 4.1.35 Invoice Number

Entity	A4 Invoice Header
Column Name	I1INNO
Label Name	Invoice Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1882] 4.1.36 Item Amount

Entity	A4 Invoice Detail
Column Name	I2IT$$
Label Name	Item Amount
System Name	
Data Type	DECIMAL(7.2)
Attribute Definition	

[1883] 4.1.37 Item Description

Entity	A4 Invoice Detail
Column Name	I2ITDS
Label Name	Item Description
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1884] 4.1.38 Item Quantity

Entity	A4 Invoice Detail
Column Name	I2ITQY
Label Name	Item Quantity
System Name	
Data Type	DECIMAL(5)
Attribute Definition	

[1885] 4.1.39 Item Rate

Entity	A4 Invoice Detail
Column Name	I2ITRT
Label Name	Item Rate
System Name	
Data Type	DECIMAL(7.2)
Attribute Definition	

[1886] 4.1.40 Last Name

Entity	ARM: Adjustor Master
Column Name	ALLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1887] 4.1.41 Last Name

Entity	ARM: Renter Detail
Column Name	RKLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1888] 4.1.42 loss type description

Entity	LOSS TYPE
Column Name	loss_typ_dsc
Label Name	loss type description:
System Name	LOSSTYPDSC
Data Type	CHAR(40)
Attribute Definition	The loss type description is a lexical definition of the loss type code which defines the different loss categories when an Insurance Company authorizes a Rental. For example: Theft, Drivable, Repairable, Non-drivable, Non-repairable, Totaled.

[1889] 4.1.43 Max $ Covered

Entity	ARM: Authorization(Claim Info)
Column Name	AZ$MAX
Label Name	Max $ Covered
System Name	
Data Type	DECIMAL(9, 2)
Attribute Definition	

[1890] 4.1.44 NOTE

Entity	ARM: ARMS/400 Diary Notes File
Column Name	NENOTE
Label Name	NOTE
System Name	
Data Type	CHAR(50)
Attribute Definition	

[1891] 4.1.45 Record Add Date

Entity	A4 Invoice Header
Column Name	I1ADDT
Label Name	Record Add Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1892] 4.1.46 related office identifier

Entity	ACTION ITEM
Column Name	rel_ofc_id
Label Name	related office identifier:
System Name	RELOFCID
Data Type	DEC(11, 0)
Attribute Definition	The related office identifier is the identifier of the office responsible for the action item.

[1893] 4.1.47 Request Type

Entity	ACTION ITEM TYPE
Column Name	X4RSFG
Label Name	Request Type
System Name	
Data Type	CHAR(1)
Attribute Definition	

[1894] 4.1.48 standard message description

Entity	STANDARD MESSAGE
Column Name	std_msg_dsc
Label Name	standard message description:
System Name	STDMSGDSC
Data Type	CHAR(50)
Attribute Definition	The standard message description is a lexical definition for standard message code which defines a predefined message which is applicable to specific activity type codes. For example: "Authorization confirmed on &Date with Reservation Number &Resnumber"

[1895] 4.1.49 Start Date

Entity	ARM: Authorization(Claim Info)
Column Name	AZSTDT
Label Name	Start Date
System Name	
Data Type	NUMERIC(8)
Attribute Definition	

[1896] 4.1.50 State

Entity	ARM: Rental Location Master
Column Name	LOSACD
Label Name	State
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1897] 4.1.51 Status Code

Entity	ACTION ITEM TYPE
Column Name	XUSTCD
Label Name	Status Code
System Name	XUSTCD
Data Type	CHAR(1)
Attribute Definition	The status code is a code from the ARMS system which identifies whether an authorization is a reservation, a ticket, unauthorized, invoiced, paid, etc.

[1898] 4.1.52 Telephone Number

Entity	ARM: Rental Location Master
Column Name	LOPHNO
Label Name	Telephone Number
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1899] 4.1.53 Ticket Number

Entity	A4 Cross Reference
Column Name	X4TKNO
Label Name	Ticket Number
System Name	
Data Type	CHAR(6)
Attribute Definition	

[1900] 4.1.54 Total Amount Due

Entity	A4 Invoice Trailer
Column Name	I3BL$$
Label Name	Total Amount Due
System Name	
Data Type	DECIMAL(9, 2)
Attribute Definition	

[1901] 4.1.55 Total Amount Received

Entity	A4 Invoice Trailer
Column Name	I3RC$$
Label Name	Total Amount Received
System Name	
Data Type	DECIMAL(9.2)
Attribute Definition	

[1902] 4.1.56 Total Billed to Others

Entity	A4 Invoice Trailer
Column Name	I3OT$$
Label Name	Total Billed to Others
System Name	
Data Type	DECIMAL(9.2)
Attribute Definition	

[1903] 4.1.57 Total Ticket Charges

Entity	A4 Invoice Trailer
Column Name	I3TO$$
Label Name	Total Ticket Charges
System Name	
Data Type	DECIMAL(9.2)
Attribute Definition	

[1904] 4.1.58 Zip Code

Entity	ARM: Rental Location Master
Column Name	LOZPCD
Label Name	Zip Code
System Name	
Data Type	CHAR(9)
Attribute Definition	

5. Questions and Answers

[1905] None.

Functional Design Specification

Reject an Invoice

Version 1.0

1. Reject An Invoice Use Case

1.1 Brief Description

[1906] The Reject an Invoice use case describes how the ADJUSTER would reject an invoice to Enterprise in the ARMS Web system.

1.2 Use Case Actors

[1907] The following actors will interact with this use case:

[1908] ADJUSTER—The ADJUSTER will use this use case to reject an invoice.

1.3 Pre-Conditions

[1909] The ADJUSTER'S office must be set up for individual approval of invoices.

[1910] The ADJUSTER must be set up to approve invoices.

1.4 Flow of Events

[1911] The Flow of Events will include the necessary steps for an ADJUSTER to reject invoices.

[1912] 1.4.1 Activity Diagram—see FIG. **140**

[1913] 1.4.2 Basic Flow

[1914] 1. The ADJUSTER will reject an invoice.

[1915] 2. The system will prompt for reject confirmation.

[1916] 3. The ADJUSTER will enter a reject reason for rejecting the invoice.

[1917] 4. The ADJUSTER may enter comments to be added to the diary notes.

[1918] 5. The ADJUSTER will submit the rejection to the system.

[1919] 6. The system will display instructions for achieving resolution on the rejected invoice.

[1920] 7. The ADJUSTER will acknowledge that they understand the instructions.

[1921] 8. The system will update the ARMS Web database to reflect that the ADJUSTER rejected the invoice.

[1922] 9. This ends the use case.

[1923] 1.4.3 Alternative Flows

[1924] 1.4.3.1 Cancel Rejection

[1925] At steps two through seven of the Basic Flow, the ADJUSTER must have the ability to cancel the invoice rejection process. Canceling the rejection should return the ADJUSTER to the Invoicing Approval Screen or the Invoicing Individual Payment screen. The invoice that was to be rejected should be displayed. The status of the invoice should be unapproved.

[1926] 1.4.3.2 No Reject Reason Given

[1927] At step three in the Basic Flow; if the ADJUSTER attempts to bypass entering a reject reason, they will be prompted to enter one. The ADJUSTER will not be allowed to complete the rejection process without providing a reject reason.

[1928] 1.4.3.3 Short Pay

[1929] If the reject reason given in step three of the Basic Flow is a reason that requires a short pay, at step five of the Basic Flow the system will display a field for entry of the short pay amount. The ADJUSTER will not be allowed to complete the rejection process without providing an amount that will be paid.

1.7 Extension Points

[1935] None.

2. Screen Design

[1936] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Reject Billing Reason

[1937] This screen will allow the user to begin the rejection process.

[1938] 2.1.1 Screen Layout—Reject Billing Reason—see FIG. **141**

[1939] 2.1.2 Reject Billing—Reject Billing Reason

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Amount	Output	10	Total Amount Due	CALCULATED	
Claim Number	Output	15	Claim Number	Insurance Claim Number	
Adjuster's Name	Output	30	Adjuster's Name	First Name + Last Name	Name of adjuster's to which the invoice is assigned
Comments	Input	50	Message Text	NOTE	
Renter's Name	Output	30	Renter's name	First Name + Last Name	Renter's Last Name + Renter's First Name
Reason for Rejection	List Box	20	Rejection Reasons	standard message description	

1.5 Post-Conditions

[1930] If the use case was successful the invoice will be marked rejected in the ARMS Web system.

[1931] If the use case was unsuccessful, the status remains unchanged.

1.6 Special Requirements

[1932] The additional requirements of the business use case are included here. These are requirements not covered by the flow as they have been described in the sections above.

[1933] 1.6.1 Invoices are Initially Auto Approved

[1934] If an ADJUSTER'S invoices are normally auto approved, functionality needs to exist to route invoices to them when they are returned to ADJUSTER from the PROCESSOR. This functionality will need to override the normal routing processes that exist at the office.

[1940] 2.1.3 Screen Function Definition

[1941] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1942] 2.1.3.1 CONTINUE

[1943] The system will validate the input from the screen according to the listed business rules. If the validation passes, the rejection process will continue.

[1944] The following business rules that must be passed before the USER may continue to the next step in the rejection process are the following:

[1945] A valid rejection reason must be selected from the drop down box

[1946] If the rejection reason selected is "Other" a comment must be entered

[1947] 2.1.3.2 CANCEL

[1948] When clicked, the user will be returned to the Invoicing Approval or Invoicing Individual Payment screen. The invoice will still be displayed with the status of the invoice unchanged.

2.2 Reject Billing Amount

[1949] 2.2.1 Screen layout—Reject Billing Amount—see FIG. **142**

[1950] 2.2.2 Reject Billing—Reject Billing Amount

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Claim Number	Output	15	Claim Number	Insurance Claim Number	
Amount	Output	15.2	Invoice Amount	Total Amount Due	
Adjuster's Name	Output	30	Adjuster's Name	First Name + Last Name	Name of adjuster's to which the invoice is assigned.
Handling For:	Output	30	Handling for Adjuster's Name	First Name + Last Name	Adjuster's First name + Adjuster's last name. The name of the adjuster to which the invoice is currently assigned.
	Output	30	User's Name	First Name + Last Name	Adjuster's last name + Adjuster's first name. The name of the adjuster to which the invoice is currently assigned.
	Output	30	Rental Location Address	Address Line + Address Line2	
	Output	30	Rental Location City, State and Zip	City + State + Zip Code	
	Output	15	Rental Location Telephone Number	Telephone Number	
Renter's Name	Output	30	Renter's name	First Name + Last Name	Renter's Last Name + Renter's First Name
To complete this process, please contact the Enterprise Branch listed below:	Output	50	Rental Location Accounting Name	accounting name	

[1951] 2.2.3 Screen Function Definition

[1952] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[1953] 2.2.3.1 REJECT INVOICE

[1954] The system will validate the input from the screen. If the validation passes, the invoice will be marked as rejected and the Arms Web database will be updated. If an amount was entered in the "Amount you are paying" field, then the invoice should be marked short paid.

[1955] 2.2.3.2 CANCEL

[1956] When clicked, the user will be returned to the Invoicing Approval or Invoicing Individual Payment screen. The invoice will still be displayed with the status of the invoice unchanged.

3. Application Operations

[1957] This section will detail all the application operations that are part of this Functional Specification Document.

3.1 Get Invoice Rejection Reasons (Company Id)

[1958] The get invoice rejection reasons gets the predefined rejection reasons for the company.

3.2 Reject Invoice (Invoice Number)

[1959] The reject invoice operation marks the specified invoice as rejected. The rejected invoice becomes an action item for the adjuster to handle.

4. Data Fields

4.1 Data Field Definition

[1960] This section includes a definition of all data fields included in the functional specification.

[1961] 4.1.1 accounting name

Entity	OFFDRB OFFICE DIRECTORY BRANCH MASTER
Column Name	acctg_nam
Label Name	Accounting Name
System Name	
Data Type	VARCHAR(8)
Attribute Definition	

[1962] 4.1.2 Address Line

Entity	ARM: Rental Location Master
Column Name	LOADL1
Label Name	
System Name	

-continued

Data Type	CHAR(30)
Attribute Definition	

[1963] 4.1.3 Address Line2

Entity	ARM: Rental Location Master
Column Name	LOADL2
Label Name	Address Line
System Name	
Data Type	CHAR(30)
Attribute Definition	

[1964] 4.1.4 City

Entity	ARM: Rental Location Master
Column Name	LOCYNM
Label Name	City
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1965] 4.1.5 external organization abbreviated name

Entity	EXTERNAL ORGANIZATION
Column Name	e_o_abbr_nam
Label Name	external organization abbreviated name:
System Name	EOABBRNAM
Data Type	CHAR(10)
Attribute Definition	External Organization Abbreviated Name is a shortened text based label associated with an organization outside of Enterprise. This name is sometimes used for accounting purposes.

[1966] 4.1.6 First Name

Entity	ARM: Adjustor Master
Column Name	ALFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1967] 4.1.7 First Name

Entity	ARM: Renter Detail
Column Name	RKFSNM
Label Name	First Name
System Name	
Data Type	CHAR(15)
Attribute Definition	

[1968] 4.1.8 Insurance Claim Number

Entity	A4 Invoice Header
Column Name	I1CLNO

-continued

Label Name	Insurance Claim Number
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1969] 4.1.9 Last Name

Entity	ARM: Adjustor Master
Column Name	ALLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1970] 4.1.10 Last Name

Entity	ARM: Renter Detail
Column Name	RKLSNM
Label Name	Last Name
System Name	
Data Type	CHAR(20)
Attribute Definition	

[1971] 4.1.11 standard message description

Entity	STANDARD MESSAGE
Column Name	std_msg_dsc
Label Name	standard message description:
System Name	STDMSGDSC
Data Type	CHAR(50)
Attribute Definition	The standard message description is a lexical definition for standard message code which defines a predefined message which is applicable to specific activity type codes. For example: "Authorization confirmed on &Date with Reservation Number &Resnumber"

[1972] 4.1.12 State

Entity	ARM: Rental Location Master
Column Name	LOSACD
Label Name	State
System Name	
Data Type	CHAR(2)
Attribute Definition	

[1973] 4.1.13 Telephone Number

Entity	ARM: Rental Location Master
Column Name	LOPHNO
Label Name	Telephone Number
System Name	
Data Type	NUMERIC(10)
Attribute Definition	

[1974] 4.1.14 Total Amount Due

Entity	A4 Invoice Trailer
Column Name	I3BL$$
Label Name	Total Amount Due
System Name	
Data Type	DECIMAL(9,2)
Attribute Definition	

[1975] 4.1.15 Zip Code

Entity	ARM: Rental Location Master
Column Name	LOZPCD
Label Name	Zip Code
System Name	
Data Type	CHAR(9)
Attribute Definition	

Functional Design Specification

Callbacks

Version 1.1

Callbacks

1. Callbacks

1.1 Brief Description

[1976] This use case describes the process that will perform repair facility callbacks in the ARMS Web system. USERs perform repair facility callbacks on each of the rental contracts that are set to expire in the near future (or have already expired), to proactively determine if rentals must be extended due to slippage in repair facility time estimates. The callback process in the ARMS Web system will retrieve each of the rental contracts that will expire in the user-defined period of time, and organize them by repair facility to allow the USER to make one phone call to inquire about the potentially multiple vehicles that the repair facility is responsible for.

1.2 Use Case Actors

[1977] All actors will use the use case to retrieve callback lists in the ARMS Web system. All of the following actors can be defined generically as a USER:

[1978] PROCESSOR

[1979] ADJUSTER

[1980] COMPANY MANAGER

[1981] For the balance of this use case, all of the above actors will be referred to as USER.

1.3 Pre-Conditions

[1982] The USER must be signed-on to the system.

1.4 Flow of Events

[1983] The Flow of Events includes all the steps necessary to retrieve and manage callbacks in the ARMS Web system.

[1984] 1.4.1 Activity Diagram—see FIG. **143**

[1985] 1.4.2 Basic Flow

[1986] The Basic Flow of the Callbacks use case includes all of the required activities for the USER to successfully generate and perform repair facility callbacks in the ARMS Web system.

[1987] 1. The USER selects to perform callbacks from the reporting menu of top navigation.

[1988] 2. The system generates a report of all open authorizations for the selected office that will expire the next day (have a last authorized day of tomorrow). This list will include any authorizations that have already expired, or will expire by the end of business on the following day.

[1989] 3. The system displays a summary of repair facilities that have rentals expiring in the specified timeframe. The repair facility callback summary must consist of:

[1990] Repair Facility Name

[1991] Repair Facility Telephone Number

[1992] Number of Rental callbacks due to the Repair Facility

[1993] 4. The USER selects one or more repair facilities from the repair facility callback summary.

[1994] 5. The system displays a summary of the open authorizations that are set to expire for all selected repair facilities. The open authorization callback summary will consist of:

[1995] Renter Name

[1996] Year/Make/Model of the Renter's Vehicle

[1997] Driveable Flag (y/n)

[1998] Number of Days Behind

[1999] Authorized Days

[2000] Last Authorized Day

[2001] 6. The USER will select a customer file from the list.

[2002] 7. The USER will extend into use case MA-12 Extend Authorization. The USER will have the ability to extend, add notes, terminate or modify an authorization as proscribed in the MA-12 Extend Authorization use case. If callbacks still exist, the USER will be returned to Step 5 of the Basic Flow on completion of the MA-12 Extend Authorization use case. If all callbacks have been completed, the Basic Flow continues.

[2003] 8. The system will display a screen to indicate that all repair facility callbacks for the office have been completed.

[2004] 9. This ends this use case.

[2005] 1.4.3 Alternative Flows

[2006] The Alternative Flows of this use case can occur when certain conditions exist or when specific USER feedback is provided.

[2007] 1.4.3.1 Change Last Authorized Date

[2008] At Step 3 or Step 5 of the Basic Flow, the USER has the ability to change the last authorized day to any day in the future. The system will regenerate the callbacks list and the USER will be returned to Step 2 of the Basic Flow on submission of the new last authorized day.

[2009] 1.4.3.2 Last Authorized Date Entered Invalid

[2010] In the Change Last Authorized Date Alternative Flow, if the last authorized date entered by the USER is invalid, the system will return to the

beginning of the Change Last Authorized Date Alternative Flow and provide the USER with an error message.

[2011] 1.4.3.2.1 It will be considered invalid if the last authorized date entered is less than the current date.

1.5 Post-Conditions

[2012] If successful, a callback list is created for the USER.

[2013] If unsuccessful, the system state remains unchanged.

1.6 Special Requirements

[2014] None.

1.7 Extension Points

[2015] 1.7.1 MA-12 Extend Authorization

[2016] At Step 7 of the Basic Flow, the USER will extend from the use case to the MA-12 Extend Authorization use case. This will allow the USER to update the open authorization with the results of the repair facility callback (e.g., extend, add notes, or terminate the rental authorization). On completion of the MA-12 Extend Authorization use case, the rules specified within the Basic Flow should be followed as to the next step in the process.

2. Screen Design

[2017] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Repair Facility Callback Summary

[2018] This screen provides the USER with a repair facility callback summary, and supports Step 3 of the Basic Flow.

[2019] 2.1.1 Screen Layout—see FIG. **144**

Functional Design Specification

Generate Personal Report

Version 1.11

Generate Personal Report

1. Generate Personal Report

1.1 Brief Description

[2020] This use case describes how a USER would generate a report on their personal rental management activity. Personal reports allow the USER access to reporting on only their own rental management activity, which allows the USER to review their own performance and secures access to the rental management reports of others.

1.2 Use Case Actors

[2021] All actors will use the use case to generate personal reports in the ARMS Web system. All of the following actors can be defined generically as a USER:

[2022] ADJUSTER

[2023] PROCESSOR

[2024] COMPANY MANAGER

[2025] For the balance of this use case, all of the above actors will be referred to as USER.

1.3 Pre-Conditions

[2026] The USER must be signed-on to the system.

1.4 Flow of Events

[2027] The Flow of Events includes all the steps necessary to generate personal reports in the ARMS Web system.

[2028] 1.4.1 Activity Diagram—see FIG. **145**

[2029] 1.4.2 Basic Flow

[2030] The Basic Flow of the Generate Personal Report use case includes all of the required activities for the USER to successfully generate and view a standard personal report in ARMS Web.

[2031] 1. The USER selects to generate a personal report from the top navigation bar.

[2032] 2. The system generates the report for the specific USER. The report should provide rental management reports for the signed-in USER. The default report view to display to the USER will be the Open Ticket Detail view (see section 1.6.1 of the Special Requirements section on page 5 for further definition).

[2033] 3. The system displays the report to the USER.

[2034] 4. This ends this use case.

[2035] 1.4.3 Alternative Flows

[2036] The Alternative Flows of this use case can occur when certain conditions exist or when specific USER feedback is provided. The Alternative Flows are optional and only occur if the conditions specified are met.

[2037] 1.4.3.1 Change Report View

[2038] At Step 3 of the Basic Flow, the USER will have the ability to change the report 'view'. (Report views are covered in more detail in Section 1.6 Special Requirements.) Report 'views' change the type of information that is presented to the USER, but maintains the same or similar scope. For example, the USER can select to change to a closed ticket detail view from the open ticket detail view, but the information presented is limited (scoped) to the rental management activity of the USER.

[2039] If the USER selects to change the report view, the system will return to Step 2 of the Basic Flow and re-generate the report to build the requested view.

[2040] 1.4.3.2 Change Closed Ticket Date Range

[2041] At Step 3 of the Basic Flow, if the current report view is a closed ticket report, the USER will have the ability to change the date range of the report. The available date range for closed ticket reporting will be a rolling 13-month period (to be expanded to 24-months in future releases) with the current month inclusive. The default date range that

will be presented to the USER will be the current and previous two (2) months. The USER will have the ability to select Month/Year to begin and end the date range for the closed ticket report. The USER will not have the ability to select specific days within a month as part of the date range.

[2042] If the USER selects a new date range for the closed ticket report view, the system will return to Step 2 of the Basic Flow and re-generate the report to build the USERs closed ticket report for the selected date range.

[2043] 1.4.3.3 Select Open Ticket from Open Ticket Detail Report

[2044] At Step 3 of the Basic Flow, if the current report view is an open ticket detail report, the USER will have the ability to select a report line item to view the details of the open ticket customer file. When selected, the system will present the USER with the customer file that corresponds to the selected open ticket. The USER will be allowed to modify and submit changes to the customer file (as proscribed in use case MA-13 Change Authorization). Once activity on the customer file is complete, the USER should be returned to the open ticket detail report (Step 3 of the Basic Flow).

[2045] 1.4.3.4 Select Closed Ticket from Closed Ticket Detail Report

[2046] At Step 3 of the Basic Flow, if the current report view is a closed ticket detail report, the USER will have the ability to select a report line item to view the details of the closed ticket customer file. When selected, the system will present the USER with the closed customer file that corresponds to the selected closed ticket. The USER will be allowed to view/print the details of the closed ticket, but will not have the ability to modify or change the ticket information. From the closed customer file, the USER will be returned to the closed ticket detail report (Step 3 of the Basic Flow).

[2047] 1.4.3.5 Sort Report

[2048] At Step 3 of the Basic Flow, the USER will have the ability to select any report column heading to have the report sorted by the selected column. If the USER selects a column heading, the system must sort the report by the selected column heading in ascending order. The USER will have the ability to toggle between ascending and descending sort order by re-selecting the currently sorted column. For example, if the USER wanted their report view to be sorted by Renter Name, clicking on the column would cause the report view to be sorted ascending by renter last name. If the USER would like to reverse the sort order to descending, selecting the column heading again would allow the report to be resorted descending by renter last name.

[2049] The system will return the USER to Step 3 of the Basic Flow on completion of this Alternative Flow, with the report view resorted according to the USER request.

[2050] 1.4.3.6 Add/Edit Custom View

[2051] At Step 3 of the Basic Flow, the USER will have the ability to add or edit a custom report view. If the USER selects to add a report view, the system will extend to the RP-03 Add/Edit Custom View use case to define a new custom report layout.

[2052] If the USER is viewing a custom report, they will have the ability to edit the custom view by selecting an 'edit' option. When a user requests to edit a custom report layout, the system will extend to the RP-03 Add/Edit Custom View use case and pre-fill all corresponding fields with the currently selected parameters for the custom layout.

[2053] On completion of the use case extension, the USER will be returned to Step 2 of Basic Flow in this use case and be presented with the custom report layout that was defined/modified.

[2054] 1.4.3.7 Select Download Report

[2055] At Step 3 of the Basic Flow, the USER will have the ability to download the current report view to a comma-delimited file. If the USER selects to download a comma-delimited version of the report, the system must publish a comma-delimited file that includes all of the data within the columns of the current report view. The comma-delimited file should include column headings for each of the columns of data provided to the USER. The comma-delimited file must also include report header information that includes:

[2056] Report View (open ticket detail/closed ticket detail)

[2057] Name of the Adjuster

[2058] Date and time the report was generated

[2059] The system should return the USER to the report view (Step 3 of the Basic Flow) once a report has been successfully downloaded.

1.5 Post-Conditions

[2060] If successful, a standard report is created for the USER.

[2061] If unsuccessful, the system state remains unchanged.

1.6 Special Requirements

[2062] The special requirements for this use case define all of the personal report 'views' that are available to the USER. This list of personal report views may be expanded at a later date to include additional information from the ARMS/400 reporting detail files, but only these views are anticipated for the initial release.

[2063] 1.6.1 Open Ticket Detail View

[2064] The Open Ticket Detail View provides the USER with columns of data on all currently open tickets under their management. The Open Ticket Detail report will display the following information to the user:

[2065] 1. Renter Name

[2066] 2. Claim Number

[2067] 3. Claim Type

[2068] 4. Authorized Rate*

[2069] 5. Authorized Days*

[2070] 6. Rental Days*

[2071] 7. Number of Days Behind*

[2072] 8. Number of Extensions*

[2073] 9. Surcharges (Y/N)

[2074] 10. Authorized Amount*

[2075] Specific rules that must apply to the Open Ticket Detail report view are outlined in the sections below;

[2076] 1.6.1.1 Data Columns in the Open Ticket Detail View should be presented in the order defined above. For example, renter name belongs in column 1 of the Open Ticket Detail report.

[2077] 1.6.1.2 All numeric fields should have averages provided at the foot of each corresponding column. Numeric fields are indicated with an asterisk (*) in the list above.

[2078] 1.6.1.3 The default sort for the Open Ticket Detail view must be by the Number of Days Behind field, with open tickets that are the farthest behind presented at the top of the list.

[2079] 1.6.1.4 Any open tickets that have a value greater than zero (0) in the Number of Days Behind field should be highlighted to the USER.

[2080] 1.6.1.5 The report must include a count of the total number of contracts in the list.

[2081] 1.6.1.6 The report view must include report header information (in both screen and downloaded versions) that includes:

[2082] the type/view of report (open ticket detail)

[2083] the name of the USER for whom the report was generated

[2084] the date/time the open ticket report was generated

[2085] 1.6.2 Closed Ticket Detail View

[2086] The Closed Ticket Detail View provides the USER with columns of data on closed ticket activity for the currently selected date range (the default date range is the current plus previous two (2) months). The Closed Ticket Detail report will display the following information to the user:

[2087] 1. Renter Name

[2088] 2. Claim Number

[2089] 3. Claim Type

[2090] 4. Authorized Rate*

[2091] 5. Authorized Days*

[2092] 6. Billed Days*

[2093] 7. Number of Extensions*

[2094] 8. Total Charges*

[2095] 9. Amount Received*

[2096] 10. Billed Amount*

[2097] Specific rules that must apply to the Closed Ticket Detail report view are outlined in the sections below;

[2098] 1.6.2.1 Data Columns in the Closed Ticket Detail View should be presented in the order defined above. For example, renter name belongs in column 1 of the Closed Ticket Detail report.

[2099] 1.6.2.2 All numeric fields should have averages provided at the foot of each corresponding column. Numeric fields are indicated with an asterisk (*) in the list above.

[2100] 1.6.2.3 The default sort for the Closed Ticket Detail view must be by the Claim Number field.

[2101] 1.6.2.4 The report must include a count of the total number of contracts in the list.

[2102] 1.6.2.5 The report view must include report header information (in both screen and downloaded versions) that includes:

[2103] the type/view of report view (closed ticket detail)

[2104] the name of the USER for whom the report was generated

[2105] the date/time the open ticket was generated

[2106] 1.6.3 Custom Report Views

[2107] The USER will have the ability to define their own custom report views through the RP-03 Add/Edit Custom View use case. These custom views are accessible from the Personal Reporting module of ARMS Web.

[2108] 1.6.4 Report View Management

[2109] The system will present all of the records in a report result set on a single page, and the USER will scroll through the results to find specific records. Report views will not be presented in paging format (e.g., forcing the USER to review the Next 25 of 427 records).

1.7 Extension Points

[2110] This section describes the extension points of this use case.

[2111] 1.7.1 MA-13 Change Authorization

[2112] If the USER selects a line item from the Open Ticket Detail report view, the USER will extend into the MA-13 Change Authorization use case (see the Select Open Ticket from Open Ticket Detail Report Alternative Flow on page 3 for additional detail). The USER will have the ability to make any changes or updates that their security level allows, and have the opportunity to return to this use case without making any changes to the open ticket. On completion of activity in the MA-13 Change Authorization use case, the USER will be returned to Step 3 of the Basic Flow within this use case (be presented with the Open Ticket Detail report).

[2113] 1.7.2 RP-03 Add/Edit Custom View

[2114] If the USER selects to add or edit a custom view, the USER will extend into the RP-03 Add/Edit Custom View use case (see the Add/Edit Custom View Alternative Flow on page 4 for additional detail). The USER will define or modify their custom report layout and be returned to Step 2 of the Basic Flow within this use case.

2. Screen Design

[2115] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Personal Report Template Screen

[2116] This screen provides the template to build personal report 'views', and supports Step 3 of the Basic Flow.

[2117] 2.1.1 Screen Layout—see FIG. **146**

[2118] 2.1.2 Screen Field Definition

Screen Label	Type	Length	Data Field	Screen Specific Rule
Office	Combo Box		Branch claims office	This combo list should include all of the offices for the currently active company that the USER is assigned to. If the value of this field is changed, the system should automatically refresh the screen with the current report view for the newly selected office.
Handling for	Output Text		Handling for	For personal reports, this value should always be 'Yourself'.
	Output Text		<Report By>	The <report by> field is a place holder in the header of the report view. For personal reports, this placeholder should be populated with the name of the user that is being reported on (i.e., the name of the user that requested the report).
	Output Text		<Time/Date Stamp>	The <time/date stamp> field is a placeholder in the header of the report view. For personal reports, this placeholder should be populated with the date and time that the report was generated.
	Output Text		<Report Type>	The <report type> field is a placeholder in the header of the report view. For personal reports, this placeholder should be populated with the name of the current report view (e.g., Open Ticket Detail, Custom View 1)
<Column Heading I through X>	Output Text		<Data Columns I through X>	The data columns of the report should correspond to the data columns defined for the selected report view (either static or custom report view). The data columns should be presented in the sequence that they are defined.
Total	Output Text		Number of Customer Files	The total field should include the total number of contracts/customer files that are represented in the report.
Select a view	Combo Box		Report view selection	The 'select a view' combo box should include the names of all report views that are available to the user. This includes all pre-defined (e.g., Open Ticket Detail) and user-defined custom views. There should be an additional option to 'Add a custom view . . . '. If selected, the system should redirect the user to the Add/Edit Custom View screen in the RP-03 Add/Edit Custom View specification.
Show Only	Combo Box		Claim Type Filter	The 'show only' combo box should include the following values: II Claim Types (default) nsured Claim Types laimant Claim Types ninsured Claim Types heft Claim Types When selected, the report should filter the records to display in the requested report view according to the selection in this combo box. For example, if the selection in the 'show only' field were 'Insured Claim Types', the report view would only include records that have a Claim Type of 'Insured.

-continued

Screen Label	Type	Length	Data Field	Screen Specific Rule
From	Combo box		Closed ticket report from date	The 'From' combo box should include all months and years for the last 13 months (rolling 13 month period, current month inclusive). For example a value in this field might include 'January 2000'. The default value should be 2 months prior to the current month.
To	Combo box		Closed ticket report to date	The 'From' combo box should include all months and years for the last 13 months (rolling 13 month period, current month inclusive). For example a value in this field might include 'July 2000'. The default value should be the current month.

[2119] 2.1.3 Screen Function Definition

[2120] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[2121] 2.1.3.1 Choose a different report

[2122] The 'Choose a different report' screen function provides the USER with a hyperlink to the View a Different Report section of the Personal Report Template screen. The 'Choose a different report' screen function must be at or near the header of the report.

[2123] 2.1.3.2 Go to Report Averages

[2124] The 'Go to Report Averages' screen function provides the USER with a hyperlink to the bottom of the report to review the averages for each of the numeric columns in the report view. The 'Go to Report Averages' hyperlink must be at or near the header of the report.

[2125] 2.1.3.3 Column Heading Sort

[2126] The 'Column Heading Sort' screen function allows the USER to click on any column heading and have the current report view sorted by the selected column. On initial selection of a column heading, the system will resort the report view by the column selected in ascending order. If the sorted column is selected by the USER, the system will resort the report in descending order.

[2127] 2.1.3.4 Download this report

[2128] The 'Download this Report' screen function allows the USER to click on a hyperlink and download a comma-delimited copy of the current report view. The downloaded copy must include:

[2129] Report Header Information

Name of the Report View

Name of the Person

Date and Time that the Report Was generated

[2130] Report View Column Headings

[2131] Report View Records

[2132] 2.1.3.5 View Report

[2133] The 'View Report' screen function allows the USER to submit a request for a different type and/or date range of the report view. The system will refresh the screen with updated report view information when this screen function is invoked.

[2134] 2.1.3.6 Edit Custom View

[2135] The Edit Custom View screen function is available only in cases that the USER has a custom defined view active. If the USER selects the Edit Custom View hyperlink, the system will present the USER with the Add/Edit Custom View screen and pre-populate the screen with the custom view definition. This will allow the USER to edit the custom views that they have previously defined.

[2136] See FIGS. **147**(*a*)-(*c*).

Functional Design Specification

Generate Management Report

Version 1.11

Generate Management Report

1. Generate Management Report

1.1 Brief Description

[2137] This use case describes how a USER would request and generate management reports using the on-line reporting functionality of ARMS Web. On-line management reports provide real-time access to open and closed ticket information, which provides the management team of our customers with a tool to effectively monitor rental management statistics. Using the on-line reporting functionality, USERs can request and receive summarized and detailed rental management reports on their Office, on Adjusters within an office, or on the Repair Facilities that are trading partners of a particular office.

[2138] NOTE: The on-line reporting functionality of ARMS Web provides ARMS ticket data only. ARMS and Non-ARMS reporting is available through the monthly L480 report.

1.2 Use Case Actors

[2139] All actors will use the use case to generate management reports in the ARMS Web system. All of the following actors can be defined generically as a USER:

[2140] ADJUSTER—Adjusters may be granted the authority to access management reports in their user profile. (Users may be granted access to management reporting capabilities through their user profile, even if they are not considered 'managers' in the ARMS Web system.)

[2141] COMPANY MANAGER—All users that are identified to the system as managers will have access rights to the management reporting functionality.

[2142] For the balance of this use case, all of the above actors will be referred to as USER.

1.3 Pre-Conditions

[2143] The USER must be signed-on to the system.

[2144] The USER must have the authority to access management reports.

1.4 Flow of Events

[2145] The Flow of Events includes all the steps necessary to generate management reports in the ARMS Web system.

[2146] 1.4.1 Activity Diagram—see FIG. **148**

[2147] 1.4.2 Basic Flow

[2148] The Basic Flow of the Generate Management Report use case includes all of the required activities for the USER to successfully generate and view a management report using the on-line reporting functionality in ARMS Web.

[2149] 1. The USER selects to generate a management report from top navigation.

[2150] 2. The system generates a Closed Ticket Summary report by Adjuster for the USER. Management reporting USERs will have the ability to request additional summary or detail reports for:

[2151] a. The office as a whole (by Office)

[2152] b. The adjusters within an office (by Adjuster)

[2153] c. The repair facilities doing business with a claims office (by Repair Facility)

[2154] 3. The system displays the report to the USER.

[2155] 4. This ends this use case.

[2156] 1.4.3 Alternative Flows

[2157] The Alternative Flows of this use case can occur when certain conditions exist or when specific USER feedback is provided.

[2158] 1.4.3.1 Change Report View

[2159] At Step 6 of the Basic Flow, the USER will have the ability to change the report 'view'. (Report views are covered in more detail in Section 1.6 Special Requirements.) Report 'views' change the type of information that is presented to the USER, but maintains the same or similar scope.

[2160] If the USER selects to change the report view, the system will return to Step 5 of the Basic Flow and re-generate the report to build the requested view. NOTE: The USER may also change the Report By criteria to request a new report view (e.g., request a report by Adjuster, Office, or Repair Facility).

[2161] 1.4.3.2 Change Closed Ticket Date Range

[2162] At Step 6 of the Basic Flow, if the current report view is a closed ticket report, the USER will have the ability to change the date range of the report. The available date range for closed ticket reporting will be a rolling 13-month period (to be expanded to 24-months in future releases) with the current month inclusive. The default date range that will be presented to the USER will be the current and previous two (2) months. The USER will have the ability to select Month/Year to begin and end the date range for the closed ticket report. The USER will not have the ability to select specific days within a month as part of the date range.

[2163] If the USER selects a new date range for the closed ticket report view, the system will return to Step 5 of the Basic Flow and re-generate the report to build the USERs closed ticket report for the selected date range.

[2164] This applies to both summary and detail views of closed ticket reports.

[2165] 1.4.3.3 Select Summary Line Item from Open Ticket Summary Report

[2166] At Step 6 of the Basic Flow, if the current report view is an open ticket summary report, the USER will have the ability to select a report line item, which will trigger a request for a more detailed report for the selected item. For example, if the current view were an Open Ticket Summary for Adjusters within an office (Open Summary by Adjuster), the USER would have the ability to select an adjuster from the summarized report and review the Open Ticket Detail report for that adjuster. This 'drill-down' capability must be available for all report types (by Office, by Adjuster, by Repair Facility).

[2167] If the USER selects a line item from a summary report view, the system will return to Step 5 of the Basic Flow and generate the Open Ticket Detail report view for the selected item. From the Open Ticket Detail, the USER will have the ability to return to the Open Ticket Summary or to continue reviewing the Open Ticket Detail report views for each adjuster/repair facility within the office.

[2168] 1.4.3.4 Select Open Ticket from Open Ticket Detail Report

[2169] At Step 6 of the Basic Flow, if the current report view is an open ticket detail report, the USER will have the ability to select a report line item to view the details of the open ticket customer file. When selected, the system will present the USER with the customer file that corresponds to the selected open ticket. The USER will be allowed to modify and submit changes to the customer file (as proscribed in use case MA-13 Change Authorization). Once activity on the customer file is complete, the USER should be returned to the open ticket detail report (Step 6 of the Basic Flow).

[2170] 1.4.3.5 Select Summary Line Item from Closed Ticket Summary Report

[2171] At Step 6 of the Basic Flow, if the current report view is a closed ticket summary report, the USER will have the ability to select a report line item, which will trigger a request for a more detailed report for the selected item. For example, if the current view were a Closed Ticket Summary for Repair Facilities within an office (Closed Summary by Repair Facility), the USER would have the abil-

ity to select a repair facility name from the summarized report and review the Closed Ticket Detail report for that repair facility. This 'drill-down' capability must be available for all report types (by Office, by Adjuster, by Repair Facility).

[2172] If the USER selects a line item from a summary report view, the system will return to Step 5 of the Basic Flow and generate the Closed Ticket Detail report view for the selected item. From the Closed Ticket Detail, the USER will have the ability to return to the Closed Ticket Summary or to continue reviewing the Closed Ticket Detail report views for each adjuster/repair facility within the office.

[2173] 1.4.3.6 Select Closed Ticket from Closed Ticket Detail Report

[2174] At Step 6 of the Basic Flow, if the current report view is a closed ticket detail report, the USER will have the ability to select a report line item to view the details of the closed ticket customer file. When selected, the system will present the USER with the closed customer file that corresponds to the selected closed ticket. The USER will be allowed to view/print the details of the closed ticket, but will not have the ability to modify or change the ticket information. From the closed customer file, the USER will be returned to the closed ticket detail report (Step 6 of the Basic Flow).

[2175] 1.4.3.7 Sort Report

[2176] At Step 6 of the Basic Flow, the USER will have the ability to select any report column heading to have the report sorted by the selected column. If the USER selects a column heading, the system must sort the report by the selected column heading in ascending order. The USER will have the ability to toggle between ascending and descending sort order by re-selecting the currently sorted column. For example, if the USER wanted their report view to be sorted by Renter Name, clicking on the column would cause the report view to be sorted ascending by renter last name. If the USER would like to reverse the sort order to descending, selecting the column heading again would allow the report to be resorted descending by renter last name.

[2177] The system will return the USER to Step 6 of the Basic Flow on completion of this Alternative Flow, with the report view resorted according to the USER request.

[2178] 1.4.3.8 Add/Edit Custom View

[2179] At Step 6 of the Basic Flow, the USER will have the ability to add or edit a custom report view. If the USER selects to add a report view, the system will extend to the RP-03 Add/Edit Custom View use case to define a new custom report layout.

[2180] If the USER is viewing a custom report, they will have the ability to edit the custom view by selecting an 'edit' option. When a user requests to edit a custom report layout, the system will extend to the RP-03 Add/Edit Custom View use case and pre-fill all corresponding fields with the currently selected parameters for the custom layout.

[2181] On completion of the use case extension, the USER will be returned to Step 5 of Basic Flow in this use case and be presented with the custom report layout that was defined/modified.

[2182] 1.4.3.9 Select Download Report

[2183] At Step 6 of the Basic Flow, the USER will have the ability to download the current report view to a comma-delimited file. If the USER selects to download a comma-delimited version of the report, the system must publish a comma-delimited file that includes all of the data within the columns of the current report view. The comma-delimited file should include column headings for each of the columns of data provided to the USER. The comma-delimited file must also include report header information that includes:

[2184] Report View (open ticket detail/closed ticket detail)

[2185] Name of the Adjuster

[2186] Date and time the report was generated

[2187] The system should return the USER to the report view (Step 6 of the Basic Flow) once a report has been successfully downloaded.

1.5 Post-Conditions

[2188] If successful, a standard report is created for the USER.

[2189] If unsuccessful, the system state remains unchanged.

1.6 Special Requirements

[2190] The special requirements for this use case define all of the management report 'views' that are available to the USER. Management reports will be provided two USERs in two ways:

[2191] 'Standard' reporting views that have been defined by Enterprise at the request of customers

[2192] 'Custom' reporting detail views that allow the USER to define the columns of data that they would like to be present in a report

[2193] 1.6.1 Standard Management Reporting Views

[2194] Standard management reporting views are views that have been defined by Enterprise based on the requests of customers. These views will be carried forward in to ARMS Web and are defined in this section.

[2195] The table below (see FIG. **149**) includes the detailed data fields that are available on each of the 'standard' management reports. The columns available in each report have been expanded somewhat over the current state, as the web environment offers more flexibility to provide additional information than the current state green screen application. The sequence of columns that must be presented in each report are indicated using the number 1-10, with fields that are on the screen but not in the primary data table indicated with an 'X'. For example, the first column in the 'Adjuster—Open Detail' report is the renter name, the second column is the claim number, etc.

[2196] 1.6.1.1 All numeric fields should have averages provided at the foot of each corresponding column. Numeric fields are indicated with an asterisk (*) in the list above.

[2197] 1.6.1.2 The default sort for the Open Ticket Detail views must be by the Number of Days Behind

field, with open tickets that are the farthest behind presented at the top of the list.

[2198] 1.6.1.3 The default sort for the Closed Ticket Detail views must be by Claim Number.

[2199] 1.6.1.4 The default sort for the Open Ticket Summary views must be by Adjuster Name (if by Adjuster), Repair Facility Name (if by Repair Facility), or Office Name (if by Office)

[2200] 1.6.1.5 The default sort for the Closed Ticket Summary views must be by Adjuster Name (if by Adjuster), Repair Facility Name (if by Repair Facility), or Month/Year (if by Office)

[2201] 1.6.1.6 Any items in an Open Ticket Detail view that have a value greater than zero (0) in the Number of Days Behind field should be highlighted to the USER.

[2202] 1.6.1.7 All report views must include a count of the total number of contracts listed.

[2203] 1.6.1.8 The report view must include report header information (in both screen and downloaded versions) that includes:

[2204] the type/name of the report view (e.g., open ticket detail, open ticket summary)

[2205] the name of the entity that is being reported on. For summary views, this should always be the office name. For detail views, the entity name must be:

[2206] the adjuster name (for reports by Adjuster)

[2207] the office name (for reports by Office)

[2208] the repair facility name (for reports by Repair Facility)

[2209] the date/time the report was generated

[2210] 1.6.2 Custom Management Reporting Views

[2211] Custom management reporting views allow the USER to define the fields that they would like to use to build their own report. The fields selected by the USER become the columns of the report, and the system will not limit the number of columns that a USER can request as part of the report. Custom reporting views are discussed at length in use case RP-03 Add/Edit Custom View.

[2212] 1.6.3 Report View Management

[2213] The system will present all of the records in a report result set on a single page, and the USER will scroll through the results to find specific records. Report views will not be presented in paging format (e.g., forcing the USER to review the Next 25 of 427 records).

1.7 Extension Points

[2214] This section describes the extension points of this use case.

[2215] 1.7.1 MA-13 Change Authorization

[2216] If the USER selects a line item from the Open Ticket Detail report view, the USER will extend into the MA-13 Change Authorization use case (see the Select Open Ticket from Open Ticket Detail Report Alternative Flow on page 4 for additional detail). The USER will have the ability to make any changes or updates that their security level allows, and have the opportunity to return to this use case without making any changes to the open ticket. On completion of activity in the MA-13 Change Authorization use case, the USER will be returned to Step 6 of the Basic Flow within this use case.

[2217] 1.7.2 RP-03 Add/Edit Custom View

[2218] If the USER selects to add or edit a custom view, the USER will extend into the RP-03 Add/Edit Custom View use case (see the Add/Edit Custom View Alternative Flow on page 5 for additional detail). The USER will define or modify their custom report layout and be returned to Step 6 of the Basic Flow within this use case.

2. Screen Design

[2219] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Management Report View Template

[2220] This screen provides the USER with a management report view template, and supports Step 6 of the Basic Flow.

[2221] 2.1.1 Screen Layout—see FIG. **150**

[2222] 2.1.2 Screen Field Definition

Screen Label	Type	Length	Data Field	Screen Specific Rule
Office	Combo Box		Branch claims office	This combo list should include all of the offices for the currently active company that the USER is assigned to. If the value of this field is changed, the system should automatically refresh the screen with the current report view for the newly selected office.
Handling for	Output Text		Handling for	For management reports, this value should always be 'Yourself'.
	Output Text		<Report By>	The <report by> field is a placeholder in the header of the report view. For management reports, this placeholder should be populated with the name of the entity that is being reported on (i.e., Adjuster Name,

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Screen Label	Type	Length	Data Field	Screen Specific Rule
				Office Name, or Repair Facility Name).
	Output Text		<Time/Date Stamp>	The <time/date stamp> field is a placeholder in the header of the report view. For management reports, this placeholder should be populated with the date and time that the report was generated.
	Output Text		<Report Type>	The <report type> field is a placeholder in the header of the report view. For management reports, this placeholder should be populated with the name of the current report view (e.g., Open Ticket Detail, Custom View 1)
<Column Heading I through X>	Output Text		<Data Columns I through X>	The data columns of the report should correspond to the data columns defined for the selected report view (either static or custom report view). The data columns should be presented in the sequence that they are defined.
Total	Output Text		Number of Customer Files	The total field should include the total number of contracts/customer files that are represented in the report.
Go to	Combo Box		Report sorted by navigation	The 'Go to' combo box should include all of the entities available in the current report. For example, if the report were an Open Ticket Detail view Reported By Adjuster, this list would include all of the Adjusters that would PAGE in the list. The 'Go to' combo box should only be available in detail views.
Report by	Combo box		Report sorted by	The 'Report by' combo box should include all of the currently available report by options in the ARMS Web system. The report by options for the initial release of ARMS Web 2.0 should be: 'Office', 'Adjuster', and 'Repair Facility'
Select a view	Combo box		Report view selection	The 'select a view' combo box should include the names of all report views that are available to the user. This includes all pre-defined (e.g., Open Ticket Detail) and user-defined custom views. There should be an additional option to 'Add a custom view . . . '. If selected, the system should redirect the user to the Add/Edit Custom View screen in the RP-03 Add/Edit Custom View specification.
Show Only	Combo box		Claim Type Filter	The 'show only' combo box should include the following values: II Claim Types (default) nsured Claim Types laimant Claim Types ninsured Claim Types heft Claim Types When selected, the report should filter the records to display in the requested report view according to the selection in this combo box. For example, if the selection in the 'show only' field were 'Insured Claim Types', the report view would only include records that have a Claim Type of 'Insured.
From	Combo box		Closed ticket report from date	The 'From' combo box should include all months and years for the last 13 months (rolling 13 month period, current month inclusive). For

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Screen Label	Type	Length	Data Field	Screen Specific Rule
				example a value in this field might include 'January 2000'. The default value should be 2 months prior to the current month.
To	Combo box		Closed ticket report to date	The 'From' combo box should include all months and years for the last 13 months (rolling 13 month period, current month inclusive). For example a value in this field might include 'July 2000'. The default value should be the current month.

[2223] 2.1.3 Screen Function Definition

[2224] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[2225] 2.1.3.1 Choose a different report

[2226] The 'Choose a different report' screen function provides the USER with a hyperlink to the View a Different Report section of the Personal Report Template screen. The 'Choose a different report' screen function must be at or near the header of the report.

[2227] 2.1.3.2 Go to Report Averages

[2228] The 'Go to Report Averages' screen function provides the USER with a hyperlink to the bottom of the report to review the averages for each of the numeric columns in the report view. The 'Go to Report Averages' hyperlink must be at or near the header of the report.

[2229] 2.1.3.3 Column Heading Sort

[2230] The 'Column Heading Sort' screen function allows the USER to click on any column heading and have the current report view sorted by the selected column. On initial selection of a column heading, the system will resort the report view by the column selected in ascending order. If the sorted column is selected by the USER, the system will resort the report in descending order.

[2231] 2.1.3.4 Previous <Report By>

[2232] The 'Previous <Report By>' screen function allows the USER to navigate to the previous detail record in a particular detail report. For example, if the report view were an Open Ticket Detail report by Repair Facility, the 'Previous <Report By> screen function would allow the USER to move to the previous Repair Facility detail record in a report. This screen function should only be available on open or closed ticket detail views (including custom views), and should only be available if a previous report by item exists (i.e., we wouldn't have a previous item if we were on the first item in the list).

[2233] 2.1.3.5 Next <Report By>

[2234] The 'Next <Report By>' screen function allows the USER to navigate to the next detail record in a particular detail report. For example, if the report view were an Open Ticket Detail report by Adjuster, the 'Next <Report By> screen function would allow the USER to move forward to the next Adjuster's detail report view within the office. This screen function should only be available on open or closed ticket detail views (including custom views), and should only be available if a next report by item exists (i.e., we wouldn't have a next item if we were on the last item in the list).

[2235] 2.1.3.6 Download this report

[2236] The 'Download this Report' screen function allows the USER to click on a hyperlink and download a comma-delimited copy of the current report view. The downloaded copy must include:

[2237] Report Header Information
Name of the Report View
Name of the Person
Date and Time that the Report Was generated

[2238] Report View Column Headings

[2239] Report View Records

[2240] 2.1.3.7 View Report

[2241] The 'View Report' screen function allows the USER to submit a request for a different type and/or date range of the report view. The system will refresh the screen with updated report view information when this screen function is invoked.

[2242] 2.1.3.8 Edit Custom View

[2243] The Edit Custom View screen function is available only in cases that the USER has a custom defined view active. If the USER selects the Edit Custom View hyperlink, the system will present the USER with the Add/Edit Custom View screen and pre-populate the screen with the custom view definition. This will allow the USER to edit the custom views that they have previously defined.

Functional Design Specification

Add/Edit Custom View

Version 1.1

Add/Edit Custom View

1. Generate Management Report

1.1 Brief Description

[2244] The Add/Edit Custom View use case describes the process to add or edit a custom report view in the ARMS Web system. Custom views allow the USER to

select the data columns that they would like to view in a report (from a pre-defined list of available fields). USERs will have the ability to access their custom views just as they would any other 'standard' report view.

1.2 Use Case Actors

[2245] All actors will use the use case to add or edit a custom report view(s) in the ARMS Web system. All of the following actors can be defined generically as a USER:

[2246] ADJUSTER

[2247] COMPANY MANAGER

[2248] For the balance of this use case, all of the above actors will be referred to as USER.

1.3 Pre-Conditions

[2249] The USER must be signed-on to the system.

[2250] The USER must have the on-line reporting functionality active (i.e., must be on an on-line reporting screen).

1.4 Flow of Events

[2251] The Flow of Events includes all the steps necessary to add or edit a custom report view in the ARMS Web system.

[2252] 1.4.1 Activity Diagram—see FIG. **151**

[2253] 1.4.2 Basic Flow

[2254] The Basic Flow of the Add/Edit Custom View use case includes all of the required activities for the USER to successfully add or edit a custom report view for use in the on-line reporting functionality of ARMS Web.

[2255] 1 The USER selects to add or edit a custom report view from the on-line reporting screen(s).

[2256] 2. The system displays a screen that allows the USER to define or build a custom report view.

[2257] 3. The USER defines the custom report view. The USER will have the ability to indicate a Name for the view, and define the data columns that they would like to have reported. The comprehensive list of data columns that will be available to the USER can be found in Section 1.6 Special Requirements (on page 4).

[2258] 4. The USER will submit the custom view to the system.

[2259] 5. The system will update the ARMS Web database.

[2260] 6. This ends this use case.

[2261] 1.4.3 Alternative Flows

[2262] The Alternative Flows of this use case can occur when certain conditions exist or when specific USER feedback is provided.

[2263] 1.4.3.1 Edit Custom Report View

[2264] At Step 1 of the Basic Flow, if the USER selected to edit a current custom report view, the system will present the screen to define/build a custom report and pre-fill all fields with the current report definition. For example, if the USER were editing their 'Massive' custom report view, 'Massive' would appear in the report name field and all of the data columns that were previously defined as the massive report would appear in the 'selected columns' portion of the screen.

1.5 Post-Conditions

[2265] If successful, a custom report view is created for the USER.

[2266] If unsuccessful, the system state remains unchanged.

1.6 Special Requirements

[2267] The special requirements for this use case define all of the management report 'views' that are available to the USER. Management reports will be provided two USERs in two ways:

[2268] 1.6.1 Custom Report Definition

[2269] This section provides the system framework for custom report view definition in the ARMS Web system. These are additional requirements around functionality to allow USERs to define/build custom report views, and apply to the use case as a whole.

[2270] 1.6.1.1 USERs will have the ability to create one or more custom views.

[2271] 1.6.1.2 USERs will be able to define custom report views for DETAIL views only (USERs will not have the ability to define custom summary views). (Most of the numeric fields that can be summarized for USERs are already provided in the standard management report views.)

[2272] 1.6.1.3 USERs will have the ability to select custom report views by Office, by Adjuster, or by Repair Facility (similar to the standard management reports).

[2273] 1.6.1.4 Custom report views will be limited to the data columns in the Custom Report View Data Domain (see 1.6.2 Custom Report View Data Domain)

[2274] 1.6.1.5 Custom report views must define if the report view retrieves Open, Closed, or All Ticket statuses.

[2275] 1.6.1.6 All custom report views defined as 'closed ticket only' must allow the user to indicate a date range. The default date range for custom views will be the same as the default range for standard closed ticket reports (the current month plus two (2) prior months).

[2276] 1.6.1.7 When a custom report view has been defined, the name of the custom report view will become a selection from the USERs view list. For example, 'MyCustomView' would be seen in the list with 'Open Ticket Detail', 'Closed Ticket Detail', etc.

[2277] 1.6.2 Custom Report View Data Domain

[2278] The following is a list of all available data columns that a USER may select as part of a custom report view. The number of columns that a USER selects to make part of the custom report view is not limited, which allows the USER to select a subset or all of these data fields to be published in their report.

Adjuster	Claim Number	Claim Type
Office Name	Renter Name	State of Rental Location
Authorized Days	Authorized Rate	Policy Daily Rate
Days Behind	Number of Extensions	Policy Maximum Rate

-continued

Rental Days	Billed Days	Billed to %
Repair Facility Name	Insured Name	Rental Status
Total Charges	Billed Amount	Amount Received
Other Charges	Vehicle Condition (Driveable Flag/Repairable Flag)	Authorized Total Amount
Surcharges Flag	Rental Start Date	Rental Close Date
Termination Date	Invoice Date	Invoice Approve Date
Remittance Date	Repair Facility Phone Number	

1.7 Extension Points

[2279] None.

2. Screen Design

[2280] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Add/Edit Custom View

[2281] This screen provides the USER with the ability to add or edit a custom view, and supports Step 2 of the Basic Flow.

[2282] 2.1.1 Screen Layout—see FIG. **152**

[2283] 2.1.2 Screen Field Definition

Screen Label	Type	Length	Data Field	Screen Specific Rule
Name this report	Text		Custom Report Name	The name a USER provides to refer to the custom report view definition. The name of the report must be unique to other custom reports defined by the user (e.g., a single user can not have two reports with the same name). This uniqueness must only be enforced at the user level (e.g., two different users CAN use the same name for a report). The name of the report will appear in the USERs 'Select a view' combo box when the report view is saved.
Start from a View	Combo box		Custom view start point	The 'Start from a View' combo list allows a USER to select a default or 'standard' view as a starting point in report view definition. The values within the combo box should be 'Open Ticket Detail' and 'Closed Ticket Detail'. If selected, the system should use the values of the Report by 'Adjuster' standard report to pre-populate the 'New Report Fields' list box. The default value of this field should be '-Select a Starting View-'
Ticket Status	Combo box		Custom view ticket status	The 'Ticket Status' combo box indicates the scope of the report in terms of ticket status. The list should include 'Open Tickets', 'Closed Tickets', and 'All Tickets'. The system will use this as part of the overall custom report definition.
Available Fields	List Box		Custom view available fields	The 'Available Fields' list box includes all of the fields that are available to be included in a custom view, but have not yet been selected to be included in the report. When an available field is selected from the list to be included in the report, the field should be removed from this list box (and populate the 'New Report Fields' list box). For a list of all available fields see Section 1.6.2 Custom Report View Data Domain above.
New Report Fields	List Box		Custom view selected fields	The 'New Report Fields' list box includes all of the fields that have been selected by the USER. These fields define the columns of the report. The sequence that the fields appear in the report is defined from top to bottom of this list box (e.g., the first field in the list = the first column in the report). This sequence can be modified using the Sequence Up and Sequence Down

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Screen Label	Type	Length	Data Field	Screen Specific Rule
				screen functions (see 0 Screen Function Definition below). If the USER selects a starting view (from the Start from a View field), the list box will populate with all of the fields that make up the standard view selected (e.g., if the USER selects 'Closed Ticket Detail' from the Start from a View field, all of the fields that make up a Closed Ticket Detail report would populate in this field.

[2284] 2.1.3 Screen Function Definition

[2285] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[2286] 2.1.3.1 Remove

[2287] The 'Remove' screen function allows a USER to remove selected fields from the 'New Report Fields' list box (and re-add them to the 'Available Fields' list box).

[2288] 2.1.3.2 Insert

[2289] The 'Insert' screen function allows a USER to add selected fields to the 'New Report Fields' list box (and remove them from the 'Available Fields' list box).

[2290] 2.1.3.3 Dictionary

[2291] The 'Dictionary' screen function allows a USER to open a dictionary that defines all of the fields that can be added to a report view. The dictionary will be included as part of the help functionality of the system.

[2292] 2.1.3.4 Sequence Up

[2293] The 'Sequence Up' screen function (presented with an 'up' arrow in the screen shot) allows a USER to move a selected field in the 'New Report Fields' list box up in the sequence of the report.

[2294] 2.1.3.5 Sequence Down

[2295] The 'Sequence Down' screen function (presented with a 'down' arrow in the screen shot) allows a USER to move a selected field in the 'New Report Fields' list box down in the sequence of the report.

[2296] 2.1.3.6 Save Report View

[2297] The 'Save Report View' screen function allows the USER to save the custom report definition and return to the reporting use case(s). The system will return the USER to the report use case from which they entered this use case (either RP-01 or RP-02) and be presented with the newly defined report view.

[2298] 2.1.3.7 Close without Saving

[2299] The 'Close without Saving' screen function allows the USER to exist the screen with saving any changes made. The system will return the USER to the report use case from which they entered this use case (either RP-01 or RP-02).

[2300] 2.1.3.8 Delete

[2301] The 'Delete' screen function allows the USER to delete a custom report view from their profile. When a custom report view is deleted it should no longer be available in the USERs view selection combo box. The system will return the USER to the report use case from which they entered this use case (either RP-01 or RP-02).

Functional Design Specification

Maintain User

Version 1.3

Maintain User

1. Maintain User Use Case

1.1 Brief Description

[2302] The Maintain User use case describes how a USER would set up or maintain a user in the ARMS Web system.

1.2 Use Case Actors

[2303] The following actors will interact with this use case:

[2304] ENTERPRISE ADMINISTRATOR—The ENTERPRISE ADMINISTRATOR is a person who can perform this use case to set up any user in a company.

[2305] COMPANY ADMINISTRATOR—The COMPANY ADMINISTRATOR is a person who can perform this use case for the company. They may add users and assign them to office(s) that they are the administrator of within the company.

[2306] OFFICE ADMINISTRATOR—The OFFICE ADMINISTRATOR is a person who can perform this use case for the company. The OFFICE ADMINISTRATOR may maintain any user in their company structure to which they have been assigned ownership.

1.3 Pre-Conditions

[2307] The USER must be logged into the system.

[2308] If maintaining a user, the USER should have the ability to maintain that user. In order to maintain a user at a specific office, the ADMINISTRATOR must have access to that specific office.

[2309] If adding a user, the USER should have the ability to add a user.

1.4 Flow of Events

[2310] The Flow of Events will include all the steps necessary to add or maintain a company user in the ARMS Web system.

[2311] 1.4.1 Activity Diagram—see FIG. **153**

[2312] 1.4.2 Basic Flow

[2313] The Basic Flow will describe how a USER will maintain a user in the ARMS Web system.

[2314] 1. The USER will choose to maintain user(s).

[2315] 2. The system will present a list of all users that are in all the offices the USER has access to maintain.

[2316] 3. The USER will choose a user to maintain.

[2317] 4. The system will display the user's information for the USER to edit.

[2318] 5. The USER will update the user's information and submit the information to the system.

[2319] 6. The system will validate the information entered.

[2320] 7. The system will update the ARMS Web database.

[2321] 8. This ends the use case.

[2322] 1.4.3 Alternative Flows

[2323] 1.4.3.1 Add User

[2324] At step three in the Basic Flow, the USER may choose to add a user, if they have the authority level to do so. The USER will enter a primary office, UserID, First Name and Last Name for the new user. The system will then validate that the office was entered and the UserID does not exist. If a UserID match is found, or the office was not entered, the system will display an error and request the USER enter a new UserID. Otherwise, the system will display the default settings for a new user; the USER will update the default settings and submit the information to the system. The system will validate the information entered, and update the ARMS Web database. The use case is then complete.

[2325] 1.4.3.2 Show All Users for the Company

[2326] At step three in the Basic Flow, the USER may choose to display all users within the company. This would allow for adding users to offices the USER controls. The USER will choose the user they wish to work with and the system will then display the user's information; the USER will add the user to any offices the USER controls and submit the information to the system. The system will validate the information entered, and update the ARMS Web database. The use case is then complete.

[2327] 1.4.3.2.1 If a user's primary office is not an office controlled by the USER, the USER may only add the user to offices the USER controls. The USER should not be able to change any of the user's settings. A USER that has control of a user's primary office can only change user settings.

[2328] 1.4.3.3 User Information Validation Fails

[2329] In step six of the Basic Flow, the system may find that user information entered by the USER does not meet the validation criteria. The system should return the USER to step four of the Basic Flow, show the USER the invalid data, and prompt the USER to reenter the data.

[2330] This rule also applies for new user creation. Whenever a new user is submitted to the system for creation, the system must validate that the criteria entered is valid. If any information is invalid, the system should present the invalid date to the USER, and prompt the user to correct it.

[2331] 1.4.3.3.1 The following fields must be populated to complete a user update or new user creation.

[2332] Last Name

[2333] First Name

[2334] UserID (Must be validated to ensure it is not a duplicate ID)

[2335] Home Office (Must be a valid office and not null)

[2336] 1.4.3.4 Cancel Add/Maintain User

[2337] Until step five in the Basic Flow, the USER may choose to cancel the use case. The system should not store any changes made by the USER within the use case.

1.5 Post-Conditions

[2338] If the use case was successful and the USER was maintaining a user, the user criteria being changed will have been changed and updated in the ARMS Web system.

[2339] If the use case was successful and the USER was adding a user, the user will have been added in the ARMS Web system.

[2340] If the use case was unsuccessful, the system state will be unchanged.

1.6 Special Requirements

[2341] 1.6.1 User Inactivation

[2342] In order to inactivate a user, the following set of criteria must be validated. If any of the criteria are found to be true, then the system will not allow the USER to inactivate the user.

[2343] If A4XREFL1/X4STCD is equal to 'C' (closed rental) and any tickets were closed in the past seven days

[2344] If A4XREFL1/X4STCD is equal to 'A' (audited invoice)

[2345] If A4XREFL1/X4STCD is equal to 'R' (reservation)

[2346] If A4XREFL1/X4STCD is equal to 'O' (open contract)

[2347] If A4XREFL1/X4STCD is equal to 'U' (unconfirmed) and A4XREFL1/X4RSFG is equal to 'D' (Direct Bill request)

[2348] If A4XREFL1/X4STCD is equal to 'Z' (sent) and A4XREFL1/X4RSFG is equal to 'C' (extension request & message sent)

[2349] If A4XREFL1/X4STCD is equal to 'Z' (sent) and A4XREFL1/X4RSFG is equal to 'M' (authorization message sent)

[2350] If A4XREFL1/X4STCD is equal to 'Z' (sent) and A4XREFL1/X4RSFG is equal to 'X' (extension request sent)

[2351] If A4XREFL1/X4STCD is equal to 'B' (authorized invoice) and A4XREFL1/X4RSFG is equal to 'B' (invoice sent from ARMS)

[2352] If A4XREFL1/X4STCD is equal to 'B' (authorized invoice) and A4XREFL1/X4RSFG is equal to 'R' (invoice returned to adjuster)

[2353] If A4XREFL1/X4STCD is equal to 'B' (authorized invoice) and A4XREFL1/X4RSFG is equal to 'E' (rejected system error)

[2354] If A4XREFL1/X4STCD is equal to 'B' (authorized invoice) and A4XREFL1/X4RSFG is equal to 'Q' (rejected invoice ARMS researching)

[2355] 1.6.2 User Default Settings

[2356] Whenever a new user is created, the settings for that user should be defaulted based on the user's primary office profile settings. For example, if the office is a reservation only office, the user should default to reservation only. This does not imply that the administrator cannot change the settings. This should also apply to whether can receive work setting should be on or off for the user/team. If all other users/teams in the office have the setting either on or off, then the new user should mimic this setting. Once again, this does not imply that the administrator cannot change this setting.

1.7 Extension Points

[2357] None.

2. Screen Design

[2358] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 Create or Modify User

[2359] This screen will allow the USER to search for and select a user to modify or select to add a new user.

[2360] 2.1.1 Screen Layout—see FIG. **154**

[2361] 2.1.2 Create or Modify User

[2362] 2.1.3 Screen Function Definition

[2363] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[2364] 2.1.3.1 A-Z Anchor Links

[2365] When any of the letters are clicked, the list of users should position itself with that letter presented at the top of the user view area on the page.

[2366] 2.3.3.2 Teams Link

[2367] When the team link is clicked, the list of teams should position itself at the top of the view area on the page. The list of teams should be placed last in the list of all users/teams.

[2368] 2.1.3.3 Process

[2369] When the Process button is clicked, the system should check to see that the appropriate information was entered in order to create a new user (Office, Last Name, First Name UserID). If the information is entered, the system will create a new user with those attributes and the other user attributes defaulted. The system should then display the new user's profile.

2.2 Create or Modify Team

[2370] This screen will allow the USER to input and change information about a user (i.e. name, E-mail address, etc.)

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
New Team	Radio Button	1	Create a New Team		
New User	Radio Button	1	Create a New User Indicator		
User ID:	Input	10	User Id	ARMS Profile ID	
First Name:	Input	15	First Name of New User	First Name	
Handling For	Output	30	Handling For	First Name + Last Name	
Last Name:	Text Box	20	Last Name of New User	Last Name	
User ID	Output	10	List of User Ids within the company	Adjustor Code	
Name	Output	30	List of Users within a Company	First Name + Last Name	
User ID:	Input	10	User Id	Adjustor Code	
Primary office	List Box	25	Primary office	external organization name	
Primary office	Output	10	List of Primary offices	external organization abbreviated name	
Office Description	Output	20	List of Office Descriptions within Company	external organization name	
Office:	Output	4	Office Id	external organization abbreviated name	

[2371] 2.2.1 Screen Layout—see FIG. **155**
[2372] 2.2.2 Create or Modify Team

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
New Team	Radio Button	1	Create a New Team		
New User	Radio Button	1	Create a New User Indicator		
Name	Output	20	Adjusters Associated with the Company	First Name + Last Name	
Handling For	Output	20	Handling For	First Name + Last Name	
User ID	Output	7	List of User Ids Associated with a Company	Adjustor Code	
Primary office	List Box	20	Primary office associated with Team	external organization abbreviated name	
Primary office	Output	10	List of Primary offices Associated with a Company	external organization abbreviated name	
Office Description	Output	20	List of Office Descriptions associated with a comp	external organization name	
Office:	Output	10	Office	external organization abbreviated name	
Team Name	Input	15	Team Name	external organization name	

[2373] 2.2.3 Screen Function Definition

[2374] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[2375] 2.2.3.1 A-Z Anchor Links

[2376] When any of the letters are clicked, the list of users should position itself with that letter presented at the top of the user view area on the page.

[2377] 2.2.3.2 Teams Link

[2378] When the team link is clicked, the list of teams should position itself at the top of the view area on the page. The list of teams should be placed last in the list of all users/teams.

[2379] 2.2.3.3 Process

[2380] When the Process button is clicked, the system should check to see that the appropriate information was entered in order to create a new team (Office, Team Name). If the information is entered, the system will create a new team with those attributes and the other user attributes defaulted. The system should then display the new team's profile.

2.3 User Profile

[2381] This screen will allow the USER to input and change information about a user (i.e. name, E-mail address, etc.)

[2382] 2.3.1 Screen Layout—see FIG. **156**

[2383] 2.3.2 User Profile

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Reset Password	Check Box	1	Reset Password Indicator		
Email Address:	Text Box	15	Adjuster's Email Address	e-Mail address	
First Name	Text Box	15	First Name	First Name	
Handling For	Output	10	Handling For	First Name + Last Name	
Last Name	Text Box	10	Last Name	Last Name	
User ID:	Output	0	User Id	Adjustor Code	
Active	Check Box	1	User is Active	Status: Active/Inactive	
Address	Output	25	Home Office Address	Customer Address Line 1 + Customer Address Line 2	
Phone:	Output	10	Home Office Phone Number	Customer Phone Number + Customer Phone Extension	

-continued

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Postal	Output	10	Home Office Postal Code	Zip Code	
City	Output	15	Home Office City	customer city text	
ST/PROV	Output	5	Home Office State	customer state code	
Office	Output	10	Office	external organization abbreviated name	
Home Office	List Box	20	Office Name	external organization name	
Other authorized Offices	List Box	20	Other authorized Offices for The User	external organization name	
Allow files and action items to be assigned to this user	Check Box	1	Allow files & action items to be assigned to user	profile type value code	If Allow Files and Action Items have been selected, this user or team will appear in the Handle For list.
Authorize/ Extend Rental	Check Box	1	Allow user to Authorize/Extend Rental	profile type value code	
User Maintenance	Check Box	1	Allow user to conduct user maintenance	profile type value code	
Create Reservation	Check Box	1	Allow user to create reservation	profile type value code	
Reporting (Management)	Check Box	1	Allow user to do reporting	profile type value code	
Pay Invoice	Check Box	1	Allow user to Pay Invoices	profile type value code	
Days/Rental	Text Box	10	Authorization Limit on Days per Rental	profile type value quantity	
$_max/ rental	Text Box	10	Authorization Limit on Maximum Dollars per Rental	profile type value amount	

[2384] 2.3.3 Screen Function Definition

[2385] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[2386] 2.3.3.1 Process

[2387] When clicked, the system will ensure that all rules on the page are enforced. Upon completion, the system will return the USER to the Create a New User/Team page.

[2388] 2.3.3.1.1 The user must have a First Name, Last Name and Home Office entered. The Home Office must be a valid office for that company.

[2389] 2.3.3.1.2 Work Authority for each user will default to all enabled.

[2390] 2.3.3.1.3 If the Active switch has been set to inactive, the system will check to see if the user owns any open work. If the user owns work, the system will not allow the user to be set to inactive. The system will notify the USER that the user has open work assigned to them and request that they transfer the work before attempting to inactivate the user.

[2391] 2.3.3.1.4 If the reset password option is set, the system will reset the user's password. This will reset the user's password to the password used for new users. Need to verify what that password is.

[2392] 2.3.3.1.5 If the File Ownership flag is turned off, the system will check to see if the user owns any open work. If the user owns work, the system will not allow the file ownership flag to be turned off. The system will notify the USER that the user has open work assigned to them and request that they transfer the work before attempting to turn off file ownership.

2.4 Team Profile

[2393] This screen will allow the USER to input and change information about a user (i.e. name, E-mail address, etc.)

[2394] 2.4.1 Screen Layout—see FIG. **157**

[2395] 2.4.2 Create or Modify Team

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Allow files and action items to be assigned to this team	Check Box	1	Allow action items to be assigned to team		

-continued

Screen Label	Type	Size	Screen Field Name	Data Field Name	Screen Specific Rule
Available	List Box	30	Available Members for Team	First Name + Last Name	
E-mail Address	Text Box	20	Email Address	e-Mail address	
Handling For:	Output	20	Handling For:	First Name + Last Name	
Active	Check Box	1	Team Active Indicator	Status: Active/Inactive	
Team Members	List Box	30	Team Members	First Name + Last Name	
Phone Number	Output	10	Branch Office Phone Number	Customer Phone Number + Customer Phone Extension	
Postal	Output	10	Branch Office Postal Code	Zip Code	
Address	Output	25	Home Office Address	Customer Address Line 1 + Customer Address Line 2	
ST/PROV	Output	3	Branch Office State or Province	customer state code	
City	Output	15	Home Office City	customer city text	
Home Office	Output	20	Home Office Name	external organization name	
Office	Output	5	Office	external organization abbreviated name	
Team Name	Text Box	20	Team Name	external organization name	

[2396] 2.4.3 Screen Function Definition

[2397] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[2398] 2.4.3.1 Process

[2399] When clicked, the system will ensure that all rules on the page are enforced. Upon completion, the system will return the USER to the Create a New User/Team page.

[2400] 2.4.3.1.1 The team must have a Team Name and Home Office entered. The Home Office must be a valid office for that company.

[2401] 2.4.3.1.2 If the Active switch has been set to inactive, the system will check to see if the team owns any open work. If the team owns work, the system will not allow the team to be set to inactive. The system will notify the USER that the team has open work assigned to them and request that they transfer the work before attempting to inactivate the team.

[2402] 2.4.3.1.3 If the File Ownership flag is turned off, the system will check to see if the team owns any open work. If the team owns work, the system will not allow the file ownership flag to be turned off. The system will notify the USER that the team has open work assigned to them and request that they transfer the work before attempting to turn off file ownership. If the user or team does not receive File Ownership, that user or team will not display in the Handle For list.

3. Application Operations

[2403] This section will detail all the application operations that are part of this Functional Specification Document.

3.1 Build list of Users

[2404] (Office Id, First Name, Last Name, User ID)

[2405] Build a list of User first and last names NOT limited to a given office in order to search for a user. Limited by the first or last name passed.

3.2 Find User Information

[2406] (User Id)

[2407] Retrieve the current values for a user's profile.

3.3 Update User Information

[2408] (User Id, Name, e-mail Address, Out of Office, Handler for out of office user, Initial Page, Is user Multi-company, Is User Active, Current Password, New Password, Receive Authorization Assignment)

[2409] Update the given data values for the user profile.

3.4 Build list of User offices

[2410] (User Id)

[2411] Build a list of office names for the offices the user is assigned to.

3.5 Find User Office Information

[2412] (User Id, Office Id)

[2413] Retrieve the current values assigned for the user at a given office.

3.6 Update User Office Information

[2414] (User Id, Office Id, and data values)

[2415] Update the given data values for the user profile.

3.7 Add User Office Information

[2416] (User Id, Office Id)

[2417] Assign user access to another office. Default values are set for the users access.

3.8 Remove User Office Information

[2418] (User Id, Office Id)

[2419] Revoke assignment of the user to an office. The user cannot be revoked from their primary office.

3.9 Build a list of users to which the administrator has access

[2420] (Company ID, Administrator ID, User ID)

[2421] Build a list of User first and last names limited to a given office in order to maintain a user. Limited by the first or last name passed.

[2422] 3.10 Validate that User ID does not exist

[2423] (User ID)

[2424] Verify that the administrator must add a new user.

4. Data Fields

4.1 Data Field Definition

[2425] This section includes a definition of all data fields included in the functional specification.

[2426] 4.1.1 User Language Preference

[2427] This is the user's language preference while working with the ARMS Web System.

[2428] Data Field Type: Alpha-Numeric

[2429] Data Field Length: 10

[2430] Data Source: <Data Source>

[2431] 4.1.2 Phone Number

[2432] This is the user's phone number.

[2433] Data Field Type: Alpha-Numeric

[2434] Data Field Length: 10

[2435] Data Source: <Data Source>

[2436] 4.1.3 Profile Attribute Id

[2437] I.S. assigned identifier for a profile attribute. Must be unique and non-blank. Each profilable item will have a profile attribute.

[2438] Data Field Type: Alpha-Numeric

[2439] Data Field Length: 20

[2440] Data Source: <Data Source>

[2441] 4.1.4 Last Name

[2442] This is the last name of the user.

[2443] Data Field Type: Alpha-Numeric

[2444] Data Field Length: 20

[2445] Data Source: <Data Source>

[2446] 4.1.5 Handler for out of office user

[2447] This is the user who will handle work for the user who is out of office.

[2448] Data Field Type: Alpha-Numeric

[2449] Data Field Length: 0

[2450] Data Source: <Data Source>

[2451] 4.1.6 Start Page

[2452] This is the initial page that the user will see when he logs on to the system.

[2453] Data Field Type: URL

[2454] Data Field Length: 256

[2455] Data Source: <Data Source>

[2456] 4.1.7 Is user out of office?

[2457] This flag indicates that the user is out of office and no work should be assigned to them. Instead another user can be set up to handle for the user who is out of office.

[2458] Data Field Type: Boolean

[2459] Data Field Length: 1

[2460] Data Source: <Data Source>

[2461] 4.1.8 Is the user multicompany?

[2462] This flag indicates that this user can do work for multiple insurance companies. These are typically Enterprise Rent-A-Car employees working on site at an insurance company office or Rental Management Services employees who are also Enterprise employees who manage rentals for the insurance company but are not on site.

[2463] Data Field Type: Boolean

[2464] Data Field Length: 1

[2465] Data Source: <Data Source>

[2466] 4.1.9 Can user receive work?

[2467] This flag indicates that user can receive work (e.g. requests for authorization, requests for extension etc.). Typically, a manager would set this flag to "No" so that work would not be assigned to him or her although he or she could be notified in certain situations like authority limit exceeded etc.

[2468] Data Field Type: Boolean

[2469] Data Field Length: 1

[2470] Data Source: <Data Source>

[2471] 4.1.10 Is User Active?

[2472] This flag indicates the user is currently active and may log on to the system to do work.

[2473] Data Field Type: Boolean

[2474] Data Field Length: 1

[2475] Data Source: <Data Source>

[2476] 4.1.11 Email Address

[2477] This is the email address of the user.

[2478] Data Field Type: Alpha-Numeric

[2479] Data Field Length: 30

[2480] Data Source: <Data Source>

[2481] 4.1.12 First Name

[2482] This is the first name of the user.

[2483] Data Field Type: Alpha-Numeric

[2484] Data Field Length: 15

[2485] Data Source: <Data Source>

[2486] 4.1.13 Password

[2487] This is the user specified password that the user will use along with the user id to log on to the ARMS Web System.

[2488] Data Field Type: Password

[2489] Data Field Length: 10

[2490] Data Source: <Data Source>

[2491] 4.1.14 User Id

[2492] This is the user id that the user will use to sign on to the ARMS Web System. This id must be unique across the whole system.

[2493] Data Field Type: Alpha-Numeric

[2494] Data Field Length: 10

[2495] Data Source: <Data Source>

5. Questions and Answers

[2496] Issue Number: 321

[2497] Question: When do we "Kill" profiles that have been created but not used? Question 2—Do we allow for deleting users, and if so, who would handle this function? Question 3—Do we allow for deleting inactive user, and if so, who would handle this function?

[2498] Status: Closed—Resolved

[2499] Resolution: 3-21-00, Dave Smith—The other questions would seem to have procedures in place today.

Unless there is a compelling reason, I don't think we should reinvent the wheel. Could you check with the ARMS team to find out?

[2500] 08-07-00—Brad Reel: UserIDs that were created, but never accessed will be made inactive after six months. UserIDs that have not been accessed for two years will also be made inactive. After being made inactive, they will be purged after three additional months.

[2501] Issue Number: 322

[2502] Question: Do we allow for deleting users, and if so who would it be that does so?

[2503] Status: Closed—Merged

[2504] Resolution: 3-21-00, Dave Smith—The other questions would seem to have procedures in place today. Unless there is a compelling reason, I don't think we should reinvent the wheel. Could you check with the ARMS team to find out? 3-27-00, merged with Issue 321

[2505] Issue Number: 323

[2506] Question: When do we delete an inactive user? And who would handle?

[2507] Status: Closed—Merged

[2508] Resolution: 3-21-00, Dave Smith—The other questions would seem to have procedures in place today. Unless there is a compelling reason, I don't think we should reinvent the wheel. Could you check with the ARMS team to find out? 3-27-00, merged with issue 321

[2509] Issue Number: 324

[2510] Question: User ID: Do we have current Enterprise Business rules that we need to enforce, and if so, what are they? The assumption we made when discussing this was that the admin could give them whatever ID the user desired. If user wanted the ID Beavis, the admin could create it. The question is, are there some rules we want to enforce (i.e. User ID's start w/first three characters of insurance company's name, GEI for GEICO) and some defaults for both UserID & Password? Maybe for GEICO, the first user is GEI0001 and the default password is GEICO. Just something we need to address.

[2511] Status: Closed—Resolved

[2512] Resolution: 3-22-00, Dave Smith—I think we should give them whatever user ID they want.

[2513] 3-30-00. Kim DeVallance—user ID is a company specific item. For example, GEICO's is their associate ID (similar to our employee number). Progressive uses their PACMAN ID, Nationwide uses their RACF ID . . . all a similar concept. It is an ID that the adjuster is familiar with and I think we should allow the customer to use an employee number already familiar to the adjuster.

[2514] 4-7-00, Issue Mtg, the field is 10 characters, First three will be company driven, the next 7 can be alpha/num and the users choice.

[2515] 4-11-00, Brad Reel—Current State, ID's are first three characters of the company's name, and up to seven numeric characters. Could possibly expand to seven alpha-numeric instead of just numeric. Barring any disagreement, we will suggest the following in the ARMS Web system: first three characters of the company's name are the first three characters of the ID. Then the ID must include at least 4 alpha-numeric characters with at least one number in it. The minimum ID length would be 7 characters, the maximum 10. Suggest we try to force companies to use their employee IDs as the seven digits. ARMS Web system can generate a number if necessary.

[2516] Need to confirm with our security people that this is acceptable security on an Enterprise-owned application. Also, should consider whether or not we think first three characters of a company's name will allow us to always uniquely identify companies.

[2517] Issue Number: 325

[2518] Question: Current State we capture the primary address for the user, (the address the user (adjuster) is located at) do we want to do the same in future state? In the screen prototype should the primary user (adjuster) address be capture in the user profile screens, given that we currently have an office address in the office profile?

[2519] Status: Closed—Resolved

[2520] Resolution: 3-30-00, Kim DeVallance—Kim—I do not think it is necessary for the ARMS/Web application, but it may be a mandatory field for the ARMS system when it processes info. I would recommend checking with the analysts from ARMS. We pull the address from ECARS when we send a paper bill, and if the bill is electronic, the address does not matter.

[2521] 4-7-00, Issue Mtg, Default to office address, allow at the user level to be changed, if it is changed it will only update the database not the 400.

[2522] 4-11-00, Brad Reel—When creating a user, we need to capture a user-specific address. It should default to the primary office they are assigned to when they are first created, but be changeable. This means we have to change the process for adding a user so we identify their primary office before we enter address information.

[2523] Issue Number: 326

[2524] Question: Can a user be maintained at more than one office? Do we still have a default/primary office when the user is created?

[2525] Example: You have been created at the St. Louis Office and you need to travel to California to help with a disaster, does California have the rights to maintain you.

[2526] Status: Closed—Resolved

[2527] Resolution: 3-22-00, Dave Smith—For tracking purposes, I think we need to maintain one profile only. If someone moves to another location because of a disaster, we should move the profile to that office. Perhaps to make it easy on the transition, we could transfer their base profile and let the new office modify accordingly.

[2528] 3-27-00, Ask Brad to follow-up with Dave Smith.

[2529] 3-30-00, Kim DeVallance—Current state, yes a user can be maintained at more than one office, but a user should have a primary office.

[2530] Issue Number: 327

[2531] Question: Do we need a primary office at which you see all work below you? This would apply only to people who were in offices that were not claims offices. Example: I am a regional VP (wouldn't that be cool) and I want to use the system. I define "Default One" as my region, so when I look at stuff in the system an I see all the offices under my office as my default.

[2532] Status: Closed—Resolved

[2533] Resolution: 3-22-00, Dave Smith—Yes, I think this a good enhancement.

[2534] 3-30-00, Kim DeVallance—This would be great!!!

[2535] Issue Number: 328

[2536] Question: Do we need a primary office that you can create work at? This would apply to everyone and defines the primary office I can create work in. For an

Adjuster, this would be their primary office. For someone at a higher level, it would be the office they assign work to if they create it. Following the example above, if that VP creates a res (unlikely, but work with me), this default would be the claims office it would be sent to for completion.

[2537] Status: Closed—Resolved

[2538] Resolution: 3-22-00, Dave Smith—Yes, I think this a good enhancement as well.

[2539] 3-30-00, Kim DeVallance—Yes, but keep in mind during the life of a rental we can transfer the rental to different offices within the same company profile.

[2540] Issue Number: 329

[2541] Question: Where does the manager get assigned to a user? At the Office Level, the User Level or the Team level? Can a user have more than one manager?

[2542] Status: Closed—Resolved

[2543] Resolution: 08-08-00—Brad Reel: Upon further discussion with the business, the process for selecting a person to handle an authorization limit is as follows: When a user hits an authorization limit, the system will request that the user select another user to approve the request and handle the rental. The system will only present users that have limits higher than the requested amount/number of days. Once the user has been selected, the rental will then be permanently transferred to the chosen user.

[2544] Issue Number: 331

[2545] Question: Under Report Layout section, is this for the office to give the user what fields that they want them to see? Then the user can set how he views these fields in MY PROFILE?

[2546] Status: Closed—Resolved

[2547] Resolution: 3-21-00, Anita Klopfenstein—It allows the user to create a default report layout as well as establish groupings. For example: I may want a team group which allows me to select adjusters to view. However, this would be a function which had to be approved in the profile of the user. Otherwise they can only see their work.

[2548] Issue Number: 332

[2549] Question: Are the authorization limits for the life of the rental or the transaction, (as applied to use by an adjuster)

[2550] Status: Closed—Resolved

[2551] Resolution: 3-21-00, Anita Klopfenstein—Both—There is a daily limit and a rental max. For the life of the rental.

[2552] Issue Number: 350

[2553] Question: Do we want to force a search before and admin can add a user?

[2554] Status: Closed—Resolved

[2555] Resolution: 08-07-00—Brad Reel: When adding a user, the system will search for the UserID and ensure it does not exist. No other searches will be performed.

[2556] Issue Number: 352

[2557] Question: Where does the ability to change the language the user can view the screens in reside? With the Admin or the user?

[2558] Status: Deferred

[2559] Resolution:

[2560] Issue Number: 356

[2561] Question: When setting up a user, should the office profile restrict the user's profile? Or are the office and user profiles independent of each other?

[2562] Status: Closed—Resolved

[2563] Resolution: 08-07-00—Brad Reel: Office profile overrides user profile. A user can have more rights than the office, but will still be restricted to only activities that can be performed in that office based on the office profile while they are working in that office.

[2564] Issue Number: 360

[2565] Question: Brad Decoder, Password/do we send e-mail to the admin to let them know how many times login failed?

[2566] Status: I2 User Review

[2567] Resolution:

[2568] Issue Number: 365

[2569] Question: Do we need a batch process for adding users?

[2570] Status: Closed—Resolved

[2571] Resolution: 07-03-00—Brad Reel: This question has also been asked in the more general setting of "Should a process exist for walking a user through setting up an entire company (much like a wizard tool)." For this release of ARMS Web (V2.0) a batch process for creating users will not be created. There will also not be a wizard for creating a company. However, for future releases, this wizard will be a very worthwhile tool to create and should be incorporated into future releases.

Functional Design Specification

User Profile

Version 1.0

1. User Profile Use Case

1.1 Brief Description

[2572] The User Profile use case describes how the USER would customize their working environment. User Profile will allow the USER to change their password, set his or her out of office, and modify their Favorite Locations list.

1.2 Use Case Actors

[2573] Actors will use this use case to update their user profile. The following actors will interact with this use case:

[2574] ENTERPRISE ADMINISTRATOR

[2575] COMPANY ADMINISTRATOR

[2576] OFFICE ADMINISTRATOR

[2577] CLAIMS MANAGER

[2578] ADJUSTER

[2579] FIRST NOTICE OF LOSS ADJUSTER

[2580] PROCESSOR

1.3 Pre-Conditions

[2581] The company must be enrolled in ARMS Web.

[2582] The USER must be enrolled and have an active User ID and password.

[2583] The USER must be logged into the ARMS Web system.

1.4 Flow of Events

[2584] The Flow of Events will include the necessary steps to make changes and updates to "My Profile".

[2585] 1.4.1 Activity Diagram—see FIG. **158**

[2586] 1.4.2 Basic Flow

[2587] 1. The USER will choose to edit their User Profile

[2588] 2. The system will display the USER'S User Profile.

[2589] 3. The USER will specify the action they would like to perform (user settings, set out of office, add a Favorite Location, remove a Favorite Location, edit a Favorite Location).

[2590] 4. The USER will select one of the options.

[2591] 5. Based on the USER'S response, one or more of the following subflows is executed:

[2592] If the USER chooses to edit a Favorite Location, the Edit Favorite Location Subflow is executed.

[2593] If the USER chooses to add a Favorite Location, the Add Favorite Location Subflow is executed.

[2594] If the USER chooses to remove a Favorite Location, the Remove Favorite Location Subflow is executed.

[2595] If the USER chooses to set the Out of Office Function, the Out of Office Subflow is executed.

[2596] If the USER chooses to Change Password, the Change Password Subflow is executed.

[2597] If the USER chooses Confirmation Page, the Confirmation Page Subflow is executed.

[2598] 1.4.2.1 Edit Favorite Location Subflow

[2599] This subflow allows the USER to edit a location on their Favorite Locations List.

[2600] 1. The USER selects the location they wish to edit from their Favorite Locations List.

[2601] 2. The USER changes the name they wish to use to identify the location. This is the name that will be displayed to them in their Favorite Locations List.

[2602] 3. The USER submits the information to the system.

[2603] 4. The system updates ARMSWeb to reflect the new Favorite Location.

[2604] 5. The use case ends.

[2605] 1.4.2.2 Add Favorite Location Subflow

[2606] This subflow allows the USER to add a location to the Favorite Locations List.

[2607] 1. The USER will execute Functional Specification MA-02: Find a Rental Location to search for the location they would like to add to their Favorite Locations List.

[2608] 2. The USER selects the location they wish to add to their Favorite Locations List.

[2609] 3. The USER enters the name they wish to use to identify the location. This is the name that will be displayed to them in their Favorite Locations List.

[2610] 4. The USER submits the information to the system.

[2611] 5. The system updates ARMSWeb to reflect the new Favorite Location.

[2612] 6. The use case ends.

[2613] 1.4.2.3 Remove Favorite Location Subflow

[2614] This subflow allows the USER to remove a location to the Favorite Locations List.

[2615] 1. The USER selects the location they wish to remove from their Favorite Locations List.

[2616] 2. The USER submits the information to the system.

[2617] 3. The system updates ARMSWeb to reflect the removal of the Favorite Location.

[2618] 4. The use case ends.

[2619] 1.4.2.4 Out of Office Subflow

[2620] This subflow allows the USER to select when they are out of office and assigns their workload to another USER.

[2621] 1. The USER will set choose to be Out of Office.

[2622] 2. The USER will enter the beginning date of when they will be Out of Office.

[2623] 3. The USER will choose an alternate USER to handle their work for each office the USER is assigned to.

[2624] 4. The USER submits the information to the system.

[2625] 5. The system validates the changes.

[2626] 6. The system updates ARMSWeb database to reflect the out of office status. At this time, the system will assign any work that exists for the USER to the chosen user(s). Any new work that is assigned to the USER will automatically be reassigned by the system to the chosen user(s).

[2627] 7. The use case ends.

[2628] 1.4.2.5 Change Password Subflow

[2629] This subflow allows the USER to change their current password.

[2630] 1. The USER enters the old password.

[2631] 2. The USER enters the new password of their choice.

[2632] 3. The USER re-enters new password for verification

[2633] 4. The USER submits the passwords to the system.

[2634] 5. The system validates the password changes.

[2635] 6. The system updates ARMSWeb to reflect the new password changes.

[2636] 7. The use case ends.

[2637] 1.4.2.6 Confirmation Page

[2638] This subflow allows the USER to turn on or off confirmation pages in the ARMS Web system.

[2639] 1. If Confirmation pages have been turned off, the user will turn them on.

[2640] 2. If Confirmation pages have been turned on, the user will turn them off.

[2641] 3. The USER submits the change to the system.

[2642] 4. The system updates ARMSWeb to reflect the change.

[2643] 5. The use case ends.

[2644] 1.4.3 Alternative Flows

[2645] 1.4.3.1 Invalid Password

[2646] At step five in the Change Password Subflow, if the current password is incorrect or if the confirmed password does not match the new pass-

word, the system will prompt the USER to re-enter the old, the new and the confirmation password.

[2647] 1.4.3.1.1 It will be considered invalid if the new password entered was one of the USER'S last five ARMS Web passwords.

[2648] 1.4.3.1.2 It will be considered invalid if the new password is not at between six and 10 characters and alphanumeric in type.—Validate 1.4.3.1.1 & 1.4.3.1.2 in Sign-on.

[2649] 1.4.3.2 Alternate Users not Chosen in Each Office USER is Assigned

[2650] At step five in the Out of Office Subflow, the system will validate that a user was selected to handle the USER'S work in each office the USER is assigned to. If a user was not chosen for each office, the system will notify the USER that they must select a user to handle their work in each office they are assigned to. The system will then return the USER to step two of the Out of Office Subflow.

[2651] 1.4.3.3 Out of Office Start Date is in the Past

[2652] At step five in the Out of Office Subflow, the system will validate that a user selected an out of office date that is present (today) or in the future. If the date is in the past, the system will generate an error and ask the USER to enter a date that is either today or in the future. The system will then return the USER to step two of the Out of Office Subflow.

[2653] 1.4.3.4 Favorite Location Name Entered is the same as an Existing Location

[2654] When the USER submits the name for a new location, or changes the name of an existing location, the system will validate that the name entered is not an exact duplicate of any other name in the USER'S list of Favorite Locations. If the name is a duplicate, the system will prompt the USER to enter a different name for the location in question. The system will then return the USER to step one of the Edit Favorite Location Subflow.

[2655] 1.4.3.5 Cancel User Profile

[2656] At any point during the use case up until a change has been submitted to the system, the USER may decide to not update their profile.

1.5 Post-Conditions

[2657] If the use case was successful then either a new password has been assigned, the out of office function will be turned on, or the USER'S Favorite Locations will be edited.

[2658] If the use case was unsuccessful then the system will remain unchanged.

1.6 Special Requirements

[2659] None.

1.7 Extension Points

[2660] None.

2. Screen Design

[2661] A definition of the screen layout(s), screen data fields, and screen functions that are used to implement the flows identified above. More than one screen may be used to implement support for the use case flow.

2.1 My Profile

[2662] This screen will allow the USER to pick which functions that they wish to change.

[2663] 2.1.1 Screen Layout—My Profile—see FIG. **159**

[2664] 2.1.2 My Profile

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Remove This Branch	Check Box	1	Delete branch from preferred locations indicator		
First Day Out:	List Box	10	Out of office start date		Three drop downs: month, day, year
Off	Radio Button	1	Select feature setting		
On	Radio Button	1	Select feature setting		
Off	Radio Button	1	Show confirmation page		
On	Radio Button	1	Show confirmation page?		
Confirm Password:	Text Box	0	Password	change password	N/A.
New Password:	Text Box	0	Password	change password	N/A.
Adjuster:	List Box	30	Handler for out of office user	First Name + Last Name	
Handling For	Output	15	Handling For Adjuster	First Name + Last Name	
Old Password:	Text Box	0	Password	User Paswd	N/A.
Address	Output	30	Preferred Location Address	Address Line + Address Line2	
Office	Output	10	Claims Office	external organization abbreviated name	
Office:	Output	10	Handler for out of office adjuster's office	external organization abbreviated name	

-continued

Screen Label	Type	Size	Screen Field Name	Data Field	Screen Specific Rule
Name	Input	30	Preferred Location Name	location name	Defaults to address name

[2665] 2.1.3 Screen Function Definition

[2666] This section includes the definitions for all functions that can be performed within the screen. This includes operations invoked by button clicks, specific shortcut keystrokes, or other actor activity.

[2667] 2.1.3.1 Process

[2668] When clicked, the system will validate the information on the screen is correct and complete. If an error is found the screen will be redisplayed with a message indicating the error condition and highlighting the field in error. If no errors are found, the database will be updated with the new information.

[2669] 2.1.3.2 Add A Different Office

[2670] When clicked, the system will take the USER to MA-02-Find Rental Location Use Case. Here, the USER will select a new location to add to the preferred location list, and then return to the PR-07-User Profile Use Case. The new information will be validated and the database will be updated.

3. Application Operations

[2671] This section will detail all the application operations that are part of this Functional Specification Document.

3.1 Retrieve User Profile

[2672] (User Id)

[2673] Retrieve user's current profile settings.

3.2 Update User Profile

[2674] (User Id, Out of Office, Assigned Adjuster, Start Page)

[2675] Update user's Out of Office status, Adjuster to handle work during out of office period, and the user's initial page.

3.3 Change Password

[2676] (Current Password, New Password, New Password Confirmation)

[2677] Change the user's password from the current password to the new password. Validate that the current password is correct.

4. Data Fields

4.1 Data Field Definition

[2678] This section includes a definition of all data fields included in the functional specification.

[2679] 4.1.1 Handler for out of office user

[2680] This is the user who will handle work for the user who is out of office.

[2681] Data Field Type: Alpha-Numeric

[2682] Data Field Length: 0

[2683] Data Source: <Data Source>

[2684] 4.1.2 Start Page

[2685] This is the initial page that the user will see when he logs on to the system.

[2686] Data Field Type: URL

[2687] Data Field Length: 256

[2688] Data Source: <Data Source>

[2689] 4.1.3 Is user out of office?

[2690] This flag indicates that the user is out of office and no work should be assigned to them. Instead another user can be set up to handle for the user who is out of office.

[2691] Data Field Type: Boolean

[2692] Data Field Length: 1

[2693] Data Source: <Data Source>

[2694] 4.1.4 Password

[2695] This is the user specified password that the user will use along with the user id to log on to the ARMS Web System.

[2696] Data Field Type: Password

[2697] Data Field Length: 10

[2698] Data Source: <Data Source>

5. Questions and Answers

[2699] Issue Number: 334

[2700] Question: Is out of office assigned at the user level or at the office level? (Could you set this for each office you work out of?) Example: You have been created at the St. Louis Office and you need to travel to California to help with a disaster, does California have the rights to maintain you.

[2701] Status: Closed—Resolved

[2702] Resolution: 4-7-00, Issue Mtd., Defer to user review I2

[2703] 08-07-00—Brad Reel: A user will be required to set their out of office function for all offices they are assigned to in order to activate the function. The function is set up using the assumption that a user would only be out of office if they were unreachable at all offices (vacation, training, etc.). Since the system can be accessed from any web connection, it is possible for a user to do work for any and all offices they are assigned to from anywhere. Therefore, it seems logical that a user would only set their out of office function if they were not available in any capacity.

[2704] Issue Number: 335

[2705] Question: Does a user have the field level control of the fields he can see?

[2706] Status: Closed—Resolved

[2707] Resolution: 4-7-00, Issue Mtg., Should be set at the Office level, the user should not be able to set the field that they want to see.

[2708] 4-11-00, Brad Reel—User does not need to have control over the fields they see. Control at the office (or team level, where applicable) is sufficient.

[2709] Issue Number: 336

[2710] Question: Are we still using the "Requests to be Processed" page (the Command Center) as an option for a start up page?

[2711] Status: Future

[2712] Resolution: 4-7-00, Issue Mtg., Defer to future release, We are not sure that it will not be an option, right now it is not.

[2713] 4-11-00, Brad Reel—As of right now, the "Command Center" page (Requests to be Processed) should not be an option for the start page, and is not even planned for the ARMS Web system.

[2714] Issue Number: 434

[2715] Question: 07-06-00—Brad Reel: The ARMS Web redesign has a requirement that the system would allow the user to choose the page in the system they could use as their start-up page. Their options were: the Command Center Page, the Action Items Page, or the Create Reservation Page. Based on the way the system has been designed to process since that time, it does not seem to make sense to be able to choose anything other than the Action Items page as a user's start page. The profile build team suggests removing the option to allow a user to choose their start page from the user profile.

[2716] 07-07-00—Brad Reel: Feedback from the technical team and the business suggests that it may make more sense to have Create Reservation as an option, and have it process in a different manner than the normal create reservation process. The main advantage of this would be First Notice of Loss Adjusters. There was also consensus that if the ability to select your start page is removed in this release, it should be possible to easily add it back in the future.

[2717] 07-07-00—Brad Reel: Upon speaking to the database and build teams, it should not be difficult to add the functionality back to the system in a future release. A user's start page was set up as an attribute of a user, and since there will still be other attributes for a user, the start page will just be a new attribute when it is added back. Therefore adding the ability to choose a start page in a future release should not be difficult.

[2718] 07-07-00—Brad Reel: This issue is being assigned to Sean O'Donnell for review of the feasibility and impacts to the create reservation process if a user is allowed to enter the create res page without having entered the initial required fields (i.e. Claim #, Claim Type, Renter Last Name, etc.). This issue should be discussed for resolution at the 07-17 issues meeting and is being assigned to Craig Lalumandier as resolution contact until it is resolved. Upon resolution, this issue may need to be assigned back to Brad Reel so that the decision can be implemented into the user profile.

[2719] Status: Closed—Resolved

[2720] Resolution: Jul. 17, 2000 [Craig L.]—For the initial release, the start page will not be profiled. This feature would not be difficult to add in the future.

[2721] Sean O'Donnell 07-11-2000—I would NOT recommend allowing users to have the create reservation page selected as their 'Start Page' for the following reasons:

[2722] the reason(s) we split the reservation process into two pages to begin with still exist 1) to have the information to perform authorized and unauthorized matches to ensure that the reservation that is being created does not already exist, 2) to get the 'where needed' information to retrieve a location & rates, 3) to get the claim type information up front so that we can build the authorization section of the create reservation page appropriately.

[2723] if we change the process to support 'FNOL' adjusters differently than the 'normal' way of creating a reservation, use of the application will be inconsistent.

[2724] Please contact me if there are concerns with these statements.

What is claimed is:

1. A computer-implemented method for managing a rental vehicle reservation for a replacement vehicle corresponding to a disabled vehicle, the method comprising:

storing a transaction in memory, the transaction corresponding to the replacement rental vehicle reservation, the replacement rental vehicle reservation having a plurality of operational activity phases, the operational activity phases comprising a reservation phase, an open rental phase and a closed rental phase;

storing an administration schedule data structure in memory, the administration schedule data structure configured to empower a plurality of different parties to perform management actions on the transaction;

communicating data over the Internet to a remote computer operated by a party, the communicated data for populating a graphical user interface (GUI) screen for display on the remote computer, the communicated data comprising data about the transaction to facilitate performance of a management action on the transaction;

receiving an input over the Internet from the remote computer through the GUI screen, the received input comprising an instruction from the party operating the remote computer to perform the facilitated management action on the transaction;

automatically performing the management action corresponding to the instruction on the transaction;

conditioning performance of the communicating step, the input receiving step, and the automatically performing step on the party operating the remote computer being empowered by the administration schedule data structure to take the facilitated management action on the transaction; and

repeating the communicating step, the input receiving step, the automatically performing step, and the conditioning step for a plurality of different parties with respect to a plurality of different management actions over the course of all of the operational activity phases for the rental vehicle reservation; and

wherein the method steps are performed by a processor.

2. The method of claim **1** further comprising the processor defining the administration schedule data structure such that at least a plurality of the parties are empowered with differing authorities for performing management actions on the transaction.

3. The method of claim **1** wherein the parties comprise a plurality of users who are employed by the same business organization.

4. The method of claim **3** wherein the users comprise a plurality of insurance adjusters organized into a virtual workgroup through the administration schedule data structure.

5. The method of claim **1** wherein the parties correspond to a plurality of different business organizations.

6. The method of claim **5** wherein the parties comprise a first party corresponding to an insurance company and a second party corresponding to a repair facility at which the disabled vehicle is undergoing repair work.

7. The method of claim **6** wherein the administration schedule data structure is further configured to empower the repair facility to create the replacement rental vehicle reservation.

8. The method of claim **6** wherein the administration schedule data structure is further configured to empower the repair facility to extend an authorization period of the transaction.

9. The method of claim **8** wherein the administration schedule data structure is further configured to empower the repair facility to extend an authorization period of the transaction within a defined authority range.

10. The method of claim **6** wherein the administration schedule data structure is further configured to empower the repair facility to approve an invoice for the transaction within a defined authority range.

11. The method of claim **5** wherein the parties comprise a first party corresponding to an insurance company and at least one second party corresponding to at least one member of the group consisting of (1) an assist company, (2) a credit hire company, (3) a lawyer, and (4) a fleet management company.

12. The method of claim **1** wherein the transaction comprises a plurality of the transactions, the method further comprising the processor performing the method steps for the plurality of transactions, and wherein the parties comprise a plurality of different insurance companies and a plurality of different repair facilities.

13. The method of claim **12** further comprising the processor defining the administration schedule data structure such that (1) at least one of the insurance companies is associated with a plurality of different repair facilities, and (2) at least two of the repair facilities associated with the at least one insurance company are differently empowered with respect to the management actions they can perform on transactions for the at least one insurance company.

14. The method of claim **13** wherein the different management actions eligible to be performed on the transactions comprise (1) an authorization for a replacement rental vehicle reservation during the reservation phase, (2) an authorization change for a replacement rental vehicle reservation during the reservation phase, (3) an authorization change for a replacement rental vehicle reservation during the open rental phase, (4) an extension for a replacement rental vehicle reservation during the open rental phase, (5) a vehicle type change for a replacement rental vehicle reservation during the open rental phase, (6) an invoice approval or rejection for a replacement rental vehicle reservation during the closed rental phase, and (7) an invoice remittance for a replacement rental vehicle reservation during the closed rental phase.

15. The method of claim **12** wherein the different management actions eligible to be performed on the transactions comprise (1) an authorization for a replacement rental vehicle reservation during the reservation phase, (2) an authorization change for a replacement rental vehicle reservation during the reservation phase, (3) an authorization change for a replacement rental vehicle reservation during the open rental phase, (4) an extension for a replacement rental vehicle reservation during the open rental phase, (5) a vehicle type change for a replacement rental vehicle reservation during the open rental phase, (6) an invoice approval or rejection for a replacement rental vehicle reservation during the closed rental phase, and (7) an invoice remittance for a replacement rental vehicle reservation during the closed rental phase.

16. The method of claim **1** further comprising:

the processor storing the transaction in a master database of reservation data;

the processor providing a synching function so that a mobile computer may be selectively connected to the master database and, under operator command, a database in the mobile computer containing reservation data may be uploaded to the master database;

comparing the data from the two databases; and

choosing to store data from each according to a synch protocol at least partially specified by a user.

17. The method of claim **1** further comprising the processor permitting an entry of user satisfaction data and transmitting the user satisfaction data to an authority for response thereto.

18. The method of claim **1** further comprising the processor providing (1) a menu of action items with to a plurality of the transactions for selective entry and processing by a user thereof and (2) a command template through which a user may execute a plurality of entered action items all together without further user action.

19. The method of claim **1** further comprising the processor (1) performing the method steps with respect to a plurality of the transactions, the transactions corresponding to a plurality of replacement rental vehicle reservations with a plurality of different rental vehicle service providers, and (2) providing a plurality of graphical user interface (GUI) screens to a plurality of the remote computers over the Internet through a plurality of stateless connections, the GUI screens configured to solicit user input for creating and managing the transactions.

20. The method of claim **1** further comprising:

the processor receiving vehicle repair data for the disabled vehicle; and

the processor automatically extending an authorization period for the transaction based at least in part on the received vehicle repair data.

21. An apparatus for managing a rental vehicle reservation for a replacement vehicle corresponding to a disabled vehicle, the apparatus comprising:

a processor for communicating with a remote computer over the Internet; and

a memory, the memory configured to (1) store a transaction corresponding to the replacement rental vehicle reservation, the replacement rental vehicle reservation having a plurality of operational activity phases, the operational activity phases comprising a reservation phase, an open rental phase and a closed rental phase, and (2) store an administration schedule data structure, the administration schedule data structure configured to empower a plurality of different parties to perform management actions on the transaction;

wherein the processor and memory are configured to (1) communicate data over the Internet to the remote computer, the communicated data for populating a graphical user interface (GUI) screen for display on the remote computer, the remote computer being associated with a

party, the communicated data comprising data about the transaction to facilitate performance of a management action on the transaction, (2) receive an input over the Internet from the remote computer through the GUI screen, the received input comprising an instruction to perform the facilitated management action on the transaction, and (3) automatically perform the management action corresponding to the instruction on the transaction, wherein performance by the processor of the communication operation, the input receiving operation, and the automated management action performance operation is conditioned on the remote computer being associated with a party that is empowered by the administration schedule data structure to take the facilitated management action on the transaction; and

wherein the processor and memory are further configured to repeat the conditional communication, input receiving, and automated management action performance operations for a plurality of different parties with respect to a plurality of different management actions over the course of all of the operational activity phases for the rental vehicle reservation.

22. The apparatus of claim **21** wherein the processor and memory are further configured to define the administration schedule data structure such that at least a plurality of the parties are empowered with differing authorities for performing management actions on the transaction.

23. The apparatus of claim **21** wherein administration schedule data structure is further configured to define the parties such that the parties comprise a plurality of users who are employed by the same business organization.

24. The apparatus of claim **23** wherein administration schedule data structure is further configured to define the users as a plurality of insurance adjusters organized into a virtual workgroup.

25. The apparatus of claim **21** wherein administration schedule data structure is further configured to define the parties such that the parties correspond to a plurality of different business organizations.

26. The apparatus of claim **25** wherein administration schedule data structure is further configured to define the parties such that the parties comprise a first party corresponding to an insurance company and a second party corresponding to a repair facility at which the disabled vehicle is undergoing repair work.

27. The apparatus of claim **26** wherein the administration schedule data structure is further configured to empower the repair facility to create the replacement rental vehicle reservation.

28. The apparatus of claim **26** wherein the administration schedule data structure is further configured to empower the repair facility to extend an authorization period of the transaction.

29. The apparatus of claim **28** wherein the administration schedule data structure is further configured to empower the repair facility to extend an authorization period of the transaction within a defined authority range.

30. The apparatus of claim **26** wherein the administration schedule data structure is further configured to empower the repair facility to approve an invoice for the transaction within a defined authority range.

31. The apparatus of claim **25** wherein the parties comprise a first party corresponding to an insurance company and at least one second party corresponding to at least one member of the group consisting of (1) an assist company, (2) a credit hire company, (3) a lawyer, and (4) a fleet management company.

32. The apparatus of claim **21** wherein the transaction comprises a plurality of the transactions, and wherein the processor and memory are further configured to perform the repeated conditional communication, input receiving, and automated management action performance operations for the plurality of transactions, and wherein the parties comprise a plurality of different insurance companies and a plurality of different repair facilities.

33. The apparatus of claim **32** wherein the processor and memory are further configured to define the administration schedule data structure such that (1) at least one of the insurance companies is associated with a plurality of different repair facilities, and (2) at least two of the repair facilities associated with the at least one insurance company are differently empowered with respect to the management actions they can perform on transactions for the at least one insurance company.

34. The apparatus of claim **33** wherein the different management actions eligible to be performed on the transactions comprise (1) an authorization for a replacement rental vehicle reservation during the reservation phase, (2) an authorization change for a replacement rental vehicle reservation during the reservation phase, (3) an authorization change for a replacement rental vehicle reservation during the open rental phase, (4) an extension for a replacement rental vehicle reservation during the open rental phase, (5) a vehicle type change for a replacement rental vehicle reservation during the open rental phase, (6) an invoice approval or rejection for a replacement rental vehicle reservation during the closed rental phase, and (7) an invoice remittance for a replacement rental vehicle reservation during the closed rental phase.

35. The apparatus of claim **32** wherein the different management actions eligible to be performed on the transactions comprise (1) an authorization for a replacement rental vehicle reservation during the reservation phase, (2) an authorization change for a replacement rental vehicle reservation during the reservation phase, (3) an authorization change for a replacement rental vehicle reservation during the open rental phase, (4) an extension for a replacement rental vehicle reservation during the open rental phase, (5) a vehicle type change for a replacement rental vehicle reservation during the open rental phase, (6) an invoice approval or rejection for a replacement rental vehicle reservation during the closed rental phase, and (7) an invoice remittance for a replacement rental vehicle reservation during the closed rental phase.

36. A computer-implemented method for managing a replacement rental vehicle reservation, the replacement rental vehicle reservation corresponding to a disabled vehicle, the method comprising:

storing a transaction in memory, the transaction corresponding to the replacement rental vehicle reservation, the replacement rental vehicle reservation having a plurality of operational activity phases, the operational activity phases comprising a reservation phase, an open rental phase and a closed rental phase;

storing an administration schedule data structure in memory, the administration schedule data structure configured to empower a plurality of different parties to perform management of the transaction;

communicating data over the Internet to a remote computer, the communicated data for populating a graphical

user interface (GUI) screen for display on the remote computer, the communicated data comprising data about the transaction to facilitate performance of a management action on the transaction;

receiving an input over the Internet from the remote computer through the GUI screen, the received input comprising an instruction for performing the management action on the transaction;

automatically performing the management action corresponding to the instruction on the transaction on a condition that a party from which the instruction input was received is empowered by the administration schedule data structure to perform the management action corresponding to the instruction;

repeating the communicating step, the input receiving step, and the automatically performing step over the course of all of the operational activity phases for the replacement rental vehicle reservation; and

wherein the method steps are performed by a processor.

37. The method of claim **36** further comprising the processor performing the communicating step and the input receiving step on a condition that a party associated with the remote computer is empowered by the administration schedule data structure to perform the facilitated management action.

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