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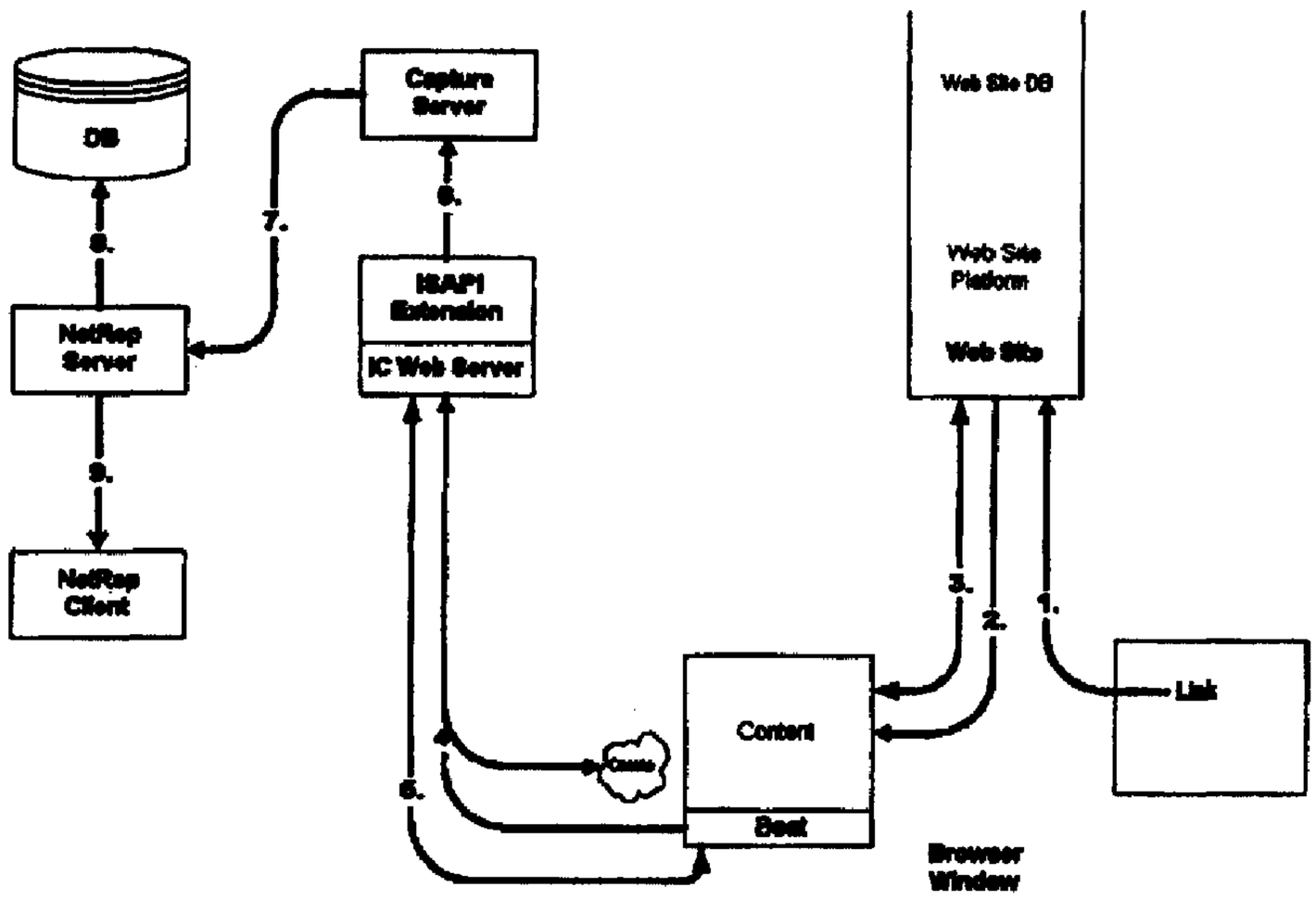
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(54) **PROCEDE ET SYSTEME DE LECTURE DU CONTENU D'UN PANIER D'ACHAT ELECTRONIQUE**

(54) **PROCESS AND SYSTEM FOR READING CONTENTS OF AN ELECTRONIC SHOPPING CART**



(57) L'invention concerne un système et un procédé permettant à un service client représentant une société (NetRep)d'établir une communication via un réseau électronique avec un client explorant le site Web de commerce électronique de cette société. Une application NetRep-client indique la présence et le statut de chaque client explorant un site Web de commerce électronique, notamment les sites Web visités antérieurement par le client et l'état du panier. Des filtres peuvent être employés pour sélectionner certains clients en vue d'une

(57) A system and method whereby a customer service representative of a company can initiate communications over an electronic network with a customer browsing an e-commerce web site of that company. A NetRep client application indicates the presence and status of each customer browsing an e-commerce web site, including a history of visited web pages and a shopping cart. Filters may be employed which differentiate certain customers for customer support. The NetRep client includes a dynamic knowledge base of selected pre-set messages to

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assistance. L'application NetRep-client comprend une base de connaissance dynamique composée de messages préétablis sélectionnés à l'adresse du client en fonction de son statut ou de ses antécédents. Le représentant NetRep peut en outre initier une conversation ou charger une page Web sur l'explorateur du client et peut assister le client de manière interactive pour le remplissage d'un formulaire.

the customer depending on their status or history. Additionally, the NetRep can initiate a conversation or push a web page to the customer's browser and can interactively participate with the customer in the correct filling out of a form.

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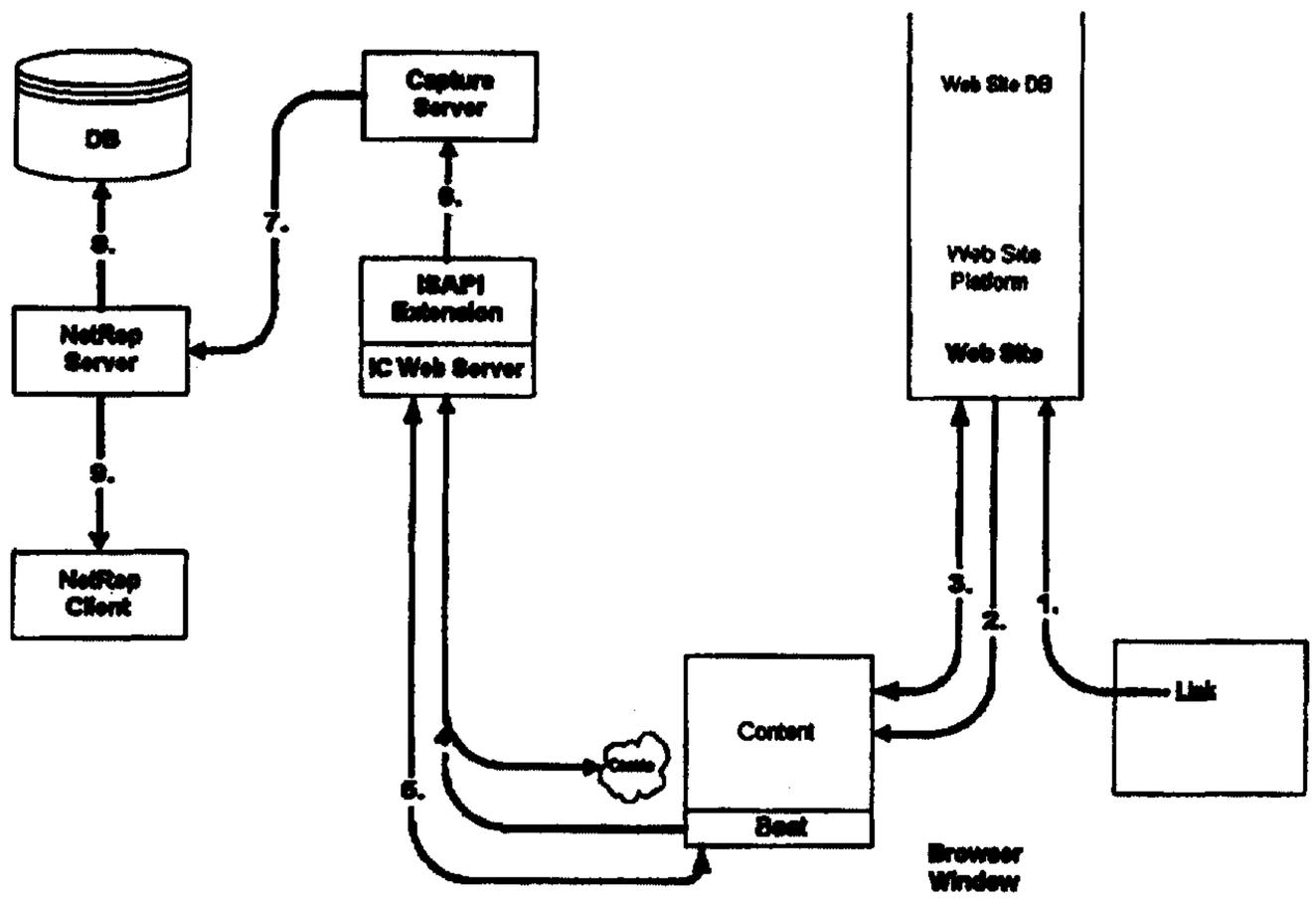
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(54) Title: PROCESS AND SYSTEM FOR READING CONTENTS OF AN ELECTRONIC SHOPPING CART



(57) Abstract

A system and method whereby a customer service representative of a company can initiate communications over an electronic network with a customer browsing an e–commerce web site of that company. A NetRep client application indicates the presence and status of each customer browsing an e–commerce web site, including a history of visited web pages and a shopping cart. Filters may be employed which differentiate certain customers for customer support. The NetRep client includes a dynamic knowledge base of selected pre–set messages to the customer depending on their status or history. Additionally, the NetRep can initiate a conversation or push a web page to the customer's browser and can interactively participate with the customer in the correct filling out of a form.

PROCESS AND SYSTEM FOR READING CONTENTS OF AN ELECTRONIC SHOPPING CART

CROSS REFERENCE TO RELATED APPLICATIONS

The present application claims the priority benefit of United States Provisional Application Serial No. 60/114,644, filed January 4, 1999; and is a C-I-P of United States Application Serial No. 09/167,054, filed October 6, 1998, which claims the priority benefit of United States Provisional Application Serial No. 60/061,166, filed October 6, 1997.

BACKGROUND OF THE INVENTION

The invention relates to processes and systems for interactively monitoring the presence of a customer on an e-commerce web site, communicating with the customer in real time, and cooperatively completing an e-commerce transaction with the customer.

The World Wide Web on the Internet has developed into a major channel of trade. Numerous businesses have established web sites through which they offer their goods and services. A customer viewing the Web pages of the business may select from among the goods or services offered by the merchant and arrange to pay for them, generally using a credit card or the like. The entire transaction may be completed electronically, without the need for the customer to physically visit the business. Furthermore, a direct telephone connection between the customer and the business is generally unnecessary and the only connections needed are the customer's and the businesses' connection to the Internet.

A major disadvantage of the Internet based transaction is the inability for the customers (who express an interest in the products of services of business simply by their presence at the Web site) to obtain answers to questions they may have. Another disadvantage is the inability of the business to monitor and track the progress of the customer through the various pages of the Web site. Another disadvantage is the inability for the business to initiate communication with the customer while the customer is at the Web site.

There thus continues to be a need for interactive communication with a customer at a business's Web site which allows a representative of the business to initiate communication with the customer and can be used to facilitate e-commerce.

SUMMARY OF THE INVENTION

A system and method whereby a customer service representative of a company (a "NetRep") can initiate communications over an electronic network with a customer browsing an e-commerce web site of that company is disclosed. A client application (the "NetRep Client") indicates the presence and status of each customer browsing an e-commerce web site of a company, including a history of visited web pages and a current shopping cart. Filters may be employed which differentiate certain customers as candidates for customer support from the NetRep. The NetRep Client includes a dynamic programmed response area (a knowledge base) of selected pre-set messages to the customer depending on the customer's current status or history. Additionally, the NetRep can initiate a conversation or push a web page to the customer's browser and can interactively participate with the customer in correctly filling out a form on the web site. A server application (the "NetRep Server") can access a database of previous visits of an identified customer to the web site and display such information on the NetRep Client.

Knowledge of the presence of the customer and the ability to track their web page history and shopping cart is provided by including an invisible (or virtually invisible) frame on each web page to be tracked in the web site. The frame executes a PUSH function from the customer's browser every so often which updates the NetRep Server with such information.

The invention, accordingly, comprises the several steps and the relation of one or more of such steps with respect to each of the others, and the system embodying features of construction, combinations of elements and arrangement of parts which are adapted to affect such steps, all as exemplified in the following detailed disclosure, and the scope of the invention will be indicated in the claims.

BRIEF DESCRIPTION OF THE DRAWINGS

For a full understanding of the invention, reference is had to the following description taken in connection with the accompanying drawings in which:

Figure 1. shows a screen image of one typical web site shopping cart in an embodiment of a method of the invention;

Figure 2. shows a screen image of the NetRep client application of one embodiment of the method of the invention used by the customer service or network representative (including the NetRep) of the sponsor of the web site initially while tracking the shopping process;

Figure 3. shows a screen image of one typical web site order form in an embodiment of a method of the invention;

Figure 4. shows a screen image of the client application of Figure 2. indicating that a transaction check-out is being initiated;

Figure 5. shows a screen image of the web site order form of Figure 3. partially filled out by the customer;

Figure 6. shows a screen image of the client application of Figure 2. indicating errors made in the submission or the check-out process by the customer;

Figure 7. shows a screen image of one typical web site confirmation form in an embodiment of a method of the invention;

Figure 8. shows a screen image of the client application of Figure 2. indicating a completed transaction;

Figure 9. shows a flowchart depicting the steps of processing a system initiation and a new page request with dynamic content, wherein the solid lines trace the system initiation and the dashed lines trace the new page request in an embodiment of a method of the invention;

Figure 10. shows a flowchart depicting the steps of processing a system initiation and a new page request with dynamic content wherein the solid lines trace the system initiation and the dashed lines trace the new page request in an embodiment of a method of the invention;

Figure 11. shows a NetRep client in accordance with another embodiment of the invention depicting several major components of the front-end;

Figure 12. shows a portion of the NetRep client of Figure 11. depicting the information fields for customers;

Figure 13. shows a flowchart depicting the steps of a system initiation in accordance with another embodiment of the invention;

Figure 14. shows a flowchart depicting the steps of continually monitoring a customer in accordance with the embodiment of Figure 13;

Figure 15. shows a flowchart depicting the steps of proactively engaging a customer in accordance with the embodiment of Figure 13;

Figure 16. shows a flowchart depicting the steps of a customer explicitly requesting assistance in accordance with the embodiment of Figure 13;

Figure 17. shows a flowchart depicting the steps of managing a conversation in accordance with the embodiment of Figure 13;

Figure 18. shows a flowchart depicting the steps of releasing an engaged customer in accordance with the embodiment of Figure 13;

Figure 19. shows a flowchart depicting the steps of displaying a customer shopping cart in accordance with the embodiment of Figure 13;

Figure 20. shows a flowchart depicting the steps of pushing a selected page in accordance with the embodiment of Figure 13;

Figure 21. shows a flowchart depicting the steps of updating a customer profile information in accordance with the embodiment of Figure 13;

Figures 22a through 22i show screen images of the NetRep browser window and the customer browser window from when the NetRep initiates a conversation with the customer to when the customer is released;

Figures 23a through 23l show screen images of the NetRep browser window and the customer browser window from when the NetRep interactively helps the customer fill out a purchase order form to when the customer submits an approved form; and

Figure 24 shows a screen shot of a browser window showing a summary of available reports.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Dynamic content on the businesses' web site and proactive involvement by Internet-based customer network representatives (NetReps) make it possible to assist a customer to a web site in carrying out a transaction. One or more displayable pages of information are generated in real time, on the fly, as the surfer or customer navigates, makes purchases or completes various required informational forms required to complete a transaction. A customer network representative (NetRep) may proactively engage the customer or respond to a request for help and review customer specific information to support and assist in the completion of the transaction.

The contents of the customer's shopping cart can then be displayed as a dynamically created real time image or page for viewing by a NetRep of the entity or corporation sponsoring the web site. This image enables the representative to in real time graphically view the contents of the surfer's or customer's shopping cart. This interaction is invisible to the customer during the time that the customer is perusing various pages of the web site.

When the customer clicks on the "check out" or submit button, the image tag can be generated again, and the NetRep views the final contents of the customer's electronic shopping cart. In the latter instance, the NetRep is able to proactively open a dialogue with the surfer or the customer for purposes of assisting in the check-out phase of the transaction.

Additionally, the process or the NetRep can then discriminate between customers based on current or previous contact with the web site. Web site algorithms are developed to 'filter' this data for the NetRep's use. Customers or surfers whose collection of goods or requests for services represent a higher level of content or more extensive transactions may therefore receive priority over those customers whose selections represent a relatively low or limited content transaction. These filter algorithms can include using current content information, previous purchasing history, customer information or any internal or external web site data that is useful in determining the potential value of a customer interaction.

As part of this interactive bi-directional communication, the representative can assist the customer in entering and obtaining authorization of a credit card to complete the purchase. Errors that have been made by the customer (and seen by the NetRep as well) can be corrected with the assistance of the NetRep and a message can be returned to the customer explaining various aspects of the assistance and the corrections that have been made, if any, for purposes of facilitating a conclusion of the transaction.

To implement the interactive process of initially viewing the contents of the user's shopping cart during the transaction, a template can be used. A displayable page can then be generated in real time in response to a request by the customer for an item to be placed in to the customer's acquisition list or shopping cart. As a result, the representative is able to view the contents of the customer's shopping cart while at the same time remaining invisible to the customer.

Once the surfer or customer has concluded the acquisition phase, that individual will then enter a check-out phase to conclude the transaction. If a "submit" icon or "check-out" icon have been clicked, the NetRep can then be brought into the process first to discriminate between those potential transactions that are appropriate for further follow-up. For example, small transactions may need little or no follow-up. Major transactions involving numerous items or various requests for services can then be facilitated by the NetRep.

The NetRep can, in turn, open a dialogue with the customer in a role of "virtual cashier" for purposes of assisting the customer in concluding the transaction. Assistance could include answering questions about products, answering questions about the financial aspects of the transaction including assisting the customer in obtaining authorization of credit card numbers, and the like. Once the transaction has been successfully concluded, the NetRep can send to the customer an appropriately worded sign-off or log-off message intended to have the customer exit the web site with a positive shopping experience and a positive view of the entity sponsoring this site.

Figures 1 through 8 represent screen images associated with one embodiment of a system and method of the invention involving a transaction of the type described above. Figures 1, 3, 5 and 7 illustrate pages or browser windows transmitted to the customer for purposes of carrying out a transaction involving two items. Figures 2, 4, 6 and 8 illustrate images as seen by the representative of the sponsor of the web site initially while tracking the shopping process, Figure 2, and in recognizing that a transaction check-out was being initiated, Figure 4. Figures 6 and 8 illustrate information provided to the representative pertaining to errors made in the submission or the check-out process by the customer. As described above, such errors can be dynamically responded to by opening a dialogue with the customer, proactively, without waiting for the customer to have to try to address the problem or error on their own.

With reference to Figure 9, the following steps show how a method of the invention processes a system initiation and a new page request with dynamic content. The solid lines trace the system initiation and the dashed lines trace the new page request.

<u>System initiation</u>

The customer clicks a link that requests a page from the web server that is serving up dynamic pages at a step 1.

The web server returns a cookie containing the customer's unique identifier and a frame set with at least a hidden frame and a content frame at a step 2.

The content frame requests a page from the web server which is returned to the content frame at a step 3.

The hidden frame performs a UPULL function call to the ISAPI server extension, getting the customer's ID from the cookie, notifying the web server system of the new customer. The hidden frame receives back a page that will perform the UPULL again after 'X' number of seconds at a step 4.

The server extension notifies the capture server that there is a new customer. It passes the customer's ID and current page at a step 5.

The capture server notifies the NetRep server that a new customer is on the site. The notification includes the customer's ID and current page at a step 6.

A new session is created in the database for the customer which includes the customer's current page, browser strings, and IP address at a step 7.

The NetRep client application is notified of the new customer at a step 8.

New page request

The customer clicks on a link that requests a new page from the web page server, and the web server returns the page to the content frame at a step 1.

The function NPNOTIFY is sent to the ISAPI server extension from the returned page at a step 2. It returns a one pixel graphic to the page.

The function NPUPDATE is sent to the ISAPI server extension from the returned page at a step 3. This updates the parameters in the UPULL function to include the new page. It returns a one pixel graphic to the page.

The server extension notifies the capture server that a customer has requested a new page at a step 4. The notification includes the requested URL and the customer's ID.

The capture server notifies the NetRep server that a customer has requested a new page at a step 5. The notification includes the customer's ID and current page.

The page history gets updated in the database for the customer at a step 6.

The NetRep client application is notified of the page change at a step 7.

With reference to Figure 10., the following steps show how the method of the invention tracks and registers items placed into a shopping cart.

Adding Items

The customer adds a new item to the shopping cart by clicking on the item's link at a step 1.

When the item is added to the shopping cart the NINOTIFY function is sent to the ISAPI server extension notifying the web site server that the customer has added an item to their shopping cart at a step 2. A one pixel graphic is returned to the page.

The ISAPI server extension notifies the Capture server that the customer has added an item to their shopping cart at a step 3.

The Capture server notifies the NetRep server that the customer has added a new item to their shopping cart at a step 4.

The NetRep server logs the information to the icontact database at a step 5.

The NetRep server notifies the NetRep client which updates the item in the customer's item list displayed in the NetRep client.

Another embodiment of the system of the invention will now be described in further detail.

I. System Overview

The web site server system of the business running the customer service representative application of the invention may be known as the "icontact Server system." The icontact Server System allows for proactive, real-time profiling, engagement, and communication with concurrent customers on a web site. Through the use of a collection of single-pixel image calls on the web site, a representative can profile all individual customers by viewing the consecutive series of pages the customer has perused, the items currently in the customer's online shopping cart, the values the customer has entered into various forms on the site, and any information in additional backend business systems that contain previously gathered information about the customer.

At any time the NetRep is able to proactively open a dialogue with the customer to aid the customer. The NetRep is able to offer assistance in finding a specific page and then direct the customer's browser to that page without any navigation from the customer. The NetRep is also able to assist the customer with completion of HTML forms throughout the web site. The NetRep is able to view the values entered by the customer, update or edit the values, and push the form back to the customer. The customer can then submit the form for processing.

I.a. NetRep Client Overview

Many tools and resources are embedded with in the NetRep client to assist the representative in profiling and conversing with customers visiting the web site.

The NetRep Client is divided into 5 different areas, see Figure 11.

Profiling Queue – The Profiling Queue is where all unengaged customers currently on the web site are listed. Clicking anywhere in the row containing the customer will highlight the row and make the customer selected the Active Customer. When highlighted, this reference row also activates the personalization information relevant to the customer, if there personalization data for the customer. This additional information aids the NetRep in further profiling data to aid in the prioritization of the customer. In addition, listed alongside each customer on the site are the following data points, see Figure 12.

Status – In a two letter code, the Status displays whether a customer is available (AV), has been previously engaged (PE), or is requesting a assistance. (HI).

Page – Page is the length of time the customer has been viewing the page. The time is formatted as 'hh:mm:ss' where 'hh' is the number of hours, 'mm' is the number of minutes, and 'ss' is the number of seconds the customer has been on the current page.

Site – Site is the length of time the customer has been perusing the site in the current browsing session. A browsing session ends when the customer does not view a page in the active web site for a 'x' number of seconds. The time format is the same as in Page.

Current Page – Page is a description of the page the customer is currently viewing. This may be the title of the page, error codes encountered by the customers, the name or SKU of a product the customer is viewing, any phrase outputted by the web site, or a combination of the above.

Current Cart Item – The Current Cart item column displays the most recent product with positive activity (addition of quantity) in the customer's shopping cart.

Cart Total – The total price of all items in the customer's shopping cart multiplied by the individual quantities of each product appears in the Cart Total column.

ID – ID is the unique identifier given to the listed customer. This ID is used to track the customer as they progress through the site. This ID can be explicitly defined by the web site. This is possible when the sponsoring web site platform maintains a unique identifier. This explicitly defined identifier then allows the icontact server to utilize information stored in the sponsoring web site's platform and database when profiling a user.

IP – The IP column displays the IP (Internet Protocol) address of the listed customer. This is useful when determining the origin of this customer. A reverse-lookup of the customer's IP address may offer insight into their connectivity or the corporation's network they are using to access the internet.

Engaged Queue – The Engaged Queue displays all customers that are currently engaged by the representative (the NetRep) using this NetRep client. It contains the same data points as the Staging Queue. Selecting a customer in this queue will highlight the row of data for the customer and make them the Active Customer. Only one customer can be the Active Customer at a time. This allows the NetRep to switch between several engaged

and unengaged customers and view profiling information specific to each individual customer.

Personalization Area – The Personalization Area contains data specific to the Active Surfer to profile the current Active Customer. When selected, each of the tabs will display personal information specific to that customer. In addition, this information displays status messages that the Surfer sees that enables the NetRep to support and aid in the successful completion of a transaction. These tabs are fully functional whether the Active Customer is engaged or not engaged. The list of available Personalization tabs are as follows:

Notes – The Notes tab allows retrieval and creation of distinguishing data about this user. The representative can enter personal information such as name, address, and various notes about the customer which can be referenced, changed, and searched by representatives that encounter this customer in the future. In addition, this tab allows for entering lead generation information which is then referenced in database reports.

History – The History tab lists all past session visits from this customer, the number of purchases the surfer has made, the average dollars spent on each purchase, the pages the customer viewed and the amount of time spent on these pages for the currently selected session and the pages viewed during the current session. In addition, since all conversations are recorded for each individual session and stored within the icontact data bases, any previous conversations with a NetRep the customer had through the icontact system may be viewed. This is especially useful when needing to reference previous pricing discussions that may have occurred not only at different times of the site visits, but with different NetReps. The default session selected is the current session. The NetRep may view past history information by selecting the session from the drop-down control.

Cart – The Cart Tab acts as a complement for the Cart Total column located in the Staging and Engaged Queues. The Cart Tab lists all products currently in the Active Customer's shopping cart and the progression of additions, removals, and quantity changes that brought the customer to arrive at the current state of contents. The NetRep may also be enabled to view an image of the product.

Forms – The Forms Tab lists the various forms found throughout the sponsoring web site. The representative is able to view the values entered by the customer. If the surfer makes errors in the submission, the NetRep can simultaneously see the error messages and support and aid in the successful entry of the information. The NetRep can

even make changes to these values him or herself and 'push' the form with the newly entered data to the customer while the customer is engaged.

Queries – The Queries Tab is an open definition tab that can be used to integrate the NetRep client into existing or custom created backend systems or databases. For example, if the ID of the customer is explicitly defined by the sponsoring web site, that ID allows unique reference to data stored on the backend systems of the sponsoring Web site. The representative then has available to them all data resources stored on the various systems in the sponsoring organization.

The Personalization areas are totally customizable to meet the individual web site needs. Data can be presented to the NetRep screens not only from the web site, but also can come from the customer data bases. As an example, if a customer would like to integrate a Tracking/Shipping data base for the NetRep's use, a tab can be created to interface with the Tracking/Shipping data in this Personalization area.

Programmed Response – The Programmed Response area conveys the knowledge designed to assist the representative in answering questions posed by the customers in conversation and direct the customers to information resources on the sponsoring web site. The Programmed Response area consists of two portions:

Preset Messages Tab – The Preset Messages tab is a collection of available responses stored in an hierarchical structure for easy retrieval. The Preset Messages can be imported from other available customer service prompting systems. This area may also be interfaced to a natural language parsing system to provide a limited listing of responses based on the current conversation.

Tour Guide Tab – The Tour Guide tab is a collection of destinations that an engaged customer may be proactively directed or displayed a link in a conversation. The destinations are stored in an hierarchical system. The destinations may be imported from product listings or other database defined dynamic pages. This area may also be interfaced to a natural language parsing system to provide a limited listing of destinations based on the content within the current conversation. This capability also extends to the sending of presentation files, such as Microsoft's PowerPoint, Acrobat's PDF files, multimedia files, as well as other medium used to tell a story, or document a product or process.

Current Conversation – The Current Conversation area contains the interface for sending messages to the currently engaged Active Customer. Upon pressing enter or clicking Send, the contents of the Outgoing Message box will be sent to the engaged Active

Customer. The ongoing conversation with the Active Customer appears above. The conversation is color coded and labeled with the originator of the message. Using the color red, for example, denotes an intuitive message to the NetRep that attention is needed in the conversation. Selecting a different customer in the Engaged Queue will switch the Current Conversation area to the conversation involving the selected customer.

II. Core Functionality

Through the use of several core functionalities that utilize the NetRep Client, NetRep Server, Capture Server, icontact Database, ISAPI Server Extension, and HTML embedded in the treated pages, the icontact system has several core functionalities. The combination of these functionalities allow for an overall system of profiling, proactive engagement, and assistance for customers perusing the sponsoring web site.

II.a. Core Functionality – System Initiation

Before engagement or profiling is possible, the user must be initialized as customer perusing a treated Web site. This process is minimally invasive and should be oblivious to the customer. With reference to Figure 13:

The customer clicks a link or enters a URL from the Web Server that is serving up dynamic content at a step 1.

The web server returns a frameset page with frames named Content and Beat at a step 2.

The Content frame requests a page from the web server which is returned to the Content frame at a step 3.

The hidden beat frame includes an image call that calls the INITCOOKIE function on the ISAPI server extension. The ISAPI extension returns a cookie containing the customer's unique identifier at a step 4.

The hidden frame performs a UPULL function call to the ISAPI server extension, getting the customer's ID from the cookie, notifying the icontact system of the new customer at a step 5. The hidden frame receives back a page that will perform the UPULL again after 'X' number of seconds.

The ISAPI server extension notifies the capture server that there is a new customer at a step 6. The ISAPI server extension passes the customer's ID and current page.

The capture server notifies the NetRep server that a new customer is on the site at a step 7. The notification includes the customer's ID and current page.

A new series of session information is created in the database for the customer at a step 8. This information includes the customer's current page, browser strings, and IP address.

The NetRep client application is notified of the new customer at a step 9.

II.b. Core Functionality – Continuing Customer Tracking

Once the customer is viewing pages inside the icontact frameset, the system is able to continue tracking the customer as they progress through the Web Site. With reference to Figure 14:

The customer clicks on a link that requests a new page from the web server at a step 1. The web server returns the page to the content frame at a step 2.

The returned page determines whether it is inside the icontact frameset through JavaScript code in the HTML HEAD. If it is not, then a request is made to the web server to load the icontact frameset with the current page as the main content at a step 2a.

The function PNOTIFY is sent to the ISAPI server extension passing a text description of the page the customer is currently viewing at a step 2b. It returns a one pixel graphic to the page.

The function UPPAGE is sent to the ISAPI server extension passing the URL of the page in the content frame at a step 2c. UPPAGE updates the parameters in the UPULL function to include the new page. The function call returns a one pixel graphic to the page.

The ISAPI server extension notifies the capture server that a customer has requested a new page at a step 3. The notification includes the customer's ID, the URL of the page, and the page description.

The Capture server notifies the NetRep server that a customer has requested a new page at a step 4. The notification includes the customer's ID, the URL of the page, and the page description.

The page history gets updated in the database for the customer at a step 5.

The NetRep client application is notified of the page change at a step 6 and the NetRep views the history at a step 7.

II.c. Core Functionality – Proactive Engagement

The NetRep client contains all available customers in the Staging Queue. The NetRep is able to selectively engage individual customers. With reference to Figure 15:

The NetRep selects the customer from their Staging Queue and clicks Engage at a step 1.

The NetRep Client notifies the NetRep Server of the conversation request passing the customer's ID at a step 2.

The NetRep server notifies the conversation request to the Capture server passing the customer's ID at a step 3.

The customer's browser calls the UPPAGE function on the ISAPI server extension as part of the beat process at a step 4, which occurs every 'X' seconds.

The ISAPI server extension requests the state change from the Capture server where the ISAPI server extension is notified of the conversation request at a step 5.

The ISAPI server extension returns the JavaScript code to generate the conversation frameset on the customer's browser at a step 6.

The content frame is determined from the most recent UPPAGE function call at a step 6a.

The NetRep's initial message is retrieved from the ISAPI server at a step 6b.

II.d. Core Functionality – Reactive Engagement

In addition to proactive engagement, the customer can explicitly request help from all available NetRep's. With reference to Figure 16:

The customer initiates a request by clicking on a link that calls the REQUEST_NETREP function on the ISAPI server extension and passes the URL of the current page in the content frame at a step 1.

The ISAPI server extension returns a frameset to the browser containing a Beat, Content, and Waiting frame. The content frame is set to the URL passed in the REQUEST_NETREP function.

The ISAPI server extension notifies the Capture server of the request and passes the customer's ID at a step 2.

The Capture Server notifies the NetRep Server of the request and passes the customer's IP at a step 3.

The NetRep server saves the request to the database at a step 4.

The NetRep server notifies the NetRep Client of the request at a step 5.

The NetRep Client changes the status of the customer in the Customer Queue to notify the NetRep of the customer's request for a NetRep at a step 6. At this point, the engagement is treated as a proactive engagement and is the NetRep's responsibility to react to the request.

II.e. Core Functionality – Managing Conversations From the NetRep

Once engaged, the NetRep is able to freely send messages that will be displayed on the customer's browser. With reference to Figure 17:

The NetRep enters a message into the Current Conversation Area of the NetRep client while the engaged customer is selected in the NetRep Client's Engaged Queue at a step 1.

The message request is sent to the NetRep server along with the customer's ID at a step 2.

The NetRep Server saves the message into the database along with the customer's ID at a step 3.

The NetRep Server passes the message and the customer's ID to the Capture server at a step 4.

The beat frame makes a scheduled call to the UPPAGE function on the ISAPI server extension at a step 5.

The server extension notes the existence of a new message in the customer's outgoing message queue at a step 6.

The ISAPI server extension sends code to the customer's browser requesting that it updates the NetRep portion of the visible conversation at a step 7. The conversation requests the most recent conversation page from the ISAPI server extension.

The ISAPI server extension returns the most recent conversation including the message entered by the NetRep at a step 9.

II.e. Core Functionality – Managing Conversations From Customer

An engaged customer is able to freely send messages to the NetRep who has the customer engaged. This NetRep is notified of the message and can the contents of the conversation.

The customer enters a message into the edit box in the conversation frame. This message is sent via the SMESS function call to the ISAPI server extension.

The ISAPI server extension notifies the capture server of the message and passes the customer's ID and message.

The Capture server passes the message and customer ID to the NetRep server.

The NetRep server saves the message and customer ID to the database.

The appropriate NetRep client is notified of the message and customer ID.

The customer's line in the Engaged Queue is updated and displays a flashing icon. The message list for this customer is updated and displayed when the customer is selected in the Engaged Queue.

II.f. Core Functionality – Releasing a Customer

The NetRep is able to return the customer to a standard browsing section, removing the visible conversation frame, while maintaining the icontact frameset to allow continued tracking the customer's actions. With reference to Figure 18:

The NetRep selects the customer in their Engaged Queue and clicks Release at a step 1.

The NetRep Client notifies the NetRep server of the request and passes the customer's ID at a step 2.

The NetRep Server updates the database with the Customer's ID at a step 3.

The NetRep Server notifies the Capture server of the request, passing the customer's ID at a step 4.

The schedule UPPAGE request is made to the ISAPI server extension from the browser at a step 5.

The ISAPI server extension discovers the release request for the customer at a step 6.

The ISAPI server extension returns code that will create an un-engaged frameset on the browser at a step 7. The frameset returned uses the last UPPAGE function parameter as the source for the content frame at a step 8.

II.g. Core Functionality – Storing Shopping Cart Information

The contents of a customer's shopping cart can be stored in the icontact system to allow for personalizing and profiling the customer. With reference to Figure 19:

In the process of conducting an online sale, a customer requests a particular item be added to their shopping cart, at a step 1, or other action be taken that affects the customer's shopping cart. This may include changes of quantity, removal of an item or items, or final purchase of the item or items.

The Web Site returns the current contents of the shopping cart as defined by the Web Site Platform and Database at a step 2. This step is oblivious to the icontact system.

A single graphic image calls the REFRESHCART function on the ISAPI server extension, at a step 3, passing the price, SKU, name, and qty for each product in the shopping cart.

The ISAPI server extension notifies the Capture Server of the request and passes the customer's ID and all the data points passed to the ISAPI server extension at a step 4.

The Capture Server notifies the NetRep server of the request and passes the customer's ID and all the data points passed to the ISAPI server extension at a step 5.

The NetRep server passes the customer's ID and the contents of the cart to the Database where it is stored at a step 6.

The NetRep server computes the total value of the customer's cart and notifies the NetRep Client of the change by passing the customer's ID, the total value, and the last product in the shopping cart list of products at a step 7.

II.h. Core Functionality – Pushing a Page

The NetRep is able to select a single engaged customer and direct the customer's browser to show a specific page in the Content frame as defined by the URL in the Tour Guide Tab of the Knowledge Base Area. With reference to Figure 20:

The NetRep selects a customer in the Engaged Queue of the NetRep Client, selects a page from the Tour Tab in the Knowledge Base area, and clicks Push at a step 1.

The NetRep Client notifies the NetRep Server of the request, passing the URL of the page to push and the customer's ID at a step 2.

The NetRep Server passes the URL and customer's ID to the Capture Server at a step 3.

The browser makes a scheduled call to the UPPAGE function on the ISAPI Server Extension at a step 4.

The ISAPI server extension discovers the waiting push page request at a step 5.

The ISAPI server extension sends the code to the browser that will change the content frame to the desired URL at a step 6.

The content frame requests the URL that was passed by the ISAPI server extension at a step 7. This URL can reference any web site including the sponsoring web site, the icontact web site, or a 3rd party.

III. Profiling and Prioritization Tools

The objective of the representative is to determine which customers to engage based upon predefined business rules. These rules may be designed to effectively target customers who are preparing to make large purchases, customers who appear to be lost, high profile surfers from history or customers who are interested in specific products. When determining which customer to engage, the NetRep has several tools available in the NetRep Client. The Personalization Area and various prioritization functionality exist within the NetRep Client.

III.A. Personalization Area

The Personalization Area in the upper-right hand section of the NetRep client breaks down information into different areas and is indexed to a specific customer. The data here may either be the icontact third parties data systems. The systems open architecture allows for any or all of the combinations to co-exist in this space. The display area itself is an embedded web browser. The specific URL requested for each tab is defined in the Administrative Client for the icontact system. The following describes how the content is retrieved. With reference to Figure 21:

Whenever the NetRep has a customer selected in either the Engaged Queue or the Profiling Queue, a request is made at regular intervals to the web URL specified by the tab currently selected. The NetRep client passes the selected customer's ID, IP address, misc. unique identifier, and current session information to the web server at a step 1.

The web server uses CGI to access the database to return information specific to the selected customer at a step 2.

The web server returns the HTML page to the NetRep Client at a step 3.

The NetRep client displays the information to the NetRep at a step 4.

III.B. Prioritization

The NetRep client offers both filtering and sorting as methods for prioritizing customer activity. All individual data points in the Profiling Queue can be sorted to allow the NetRep to quickly rank customer activity.

Filters can be developed so that a 'threshold' must be met before a surfer is seen in the Profiling queue. Filters can be based on time on site, on a page, dollars in their shopping basket, error conditions or other data points either within the web site or the customers enterprise data bases. The individual NetRep client also allows the NetRep to filter on these data points to target particular customers. Each NetRep involved in representing a web site is able to utilize different types of filters and is able to readily switch between these filters. The following is a list of the different filters available to the NetRep:

Status – The NetRep can request that the staging queue only display Customers with a specific type of status. This becomes helpful when the NetRep is looking to act within a reactive model as the NetRep can select that only Customers requesting assistance will appear in the Staging area.

Time On Page/Time On Site – The NetRep is able to view customers in the Staging Queue only after they have been on the site or page for a particular amount of time. This is helpful when looking for customers that have been on a help screen or are viewing the checkout form.

Specific Page – The NetRep is able to choose whether this type of filter is persistent or non-persistent. If a customer views a page that is listed in the predefined list of filter pages, they will appear in the Staging Queue. If the filter is persistent, the customer will then remain in the Staging Queue irregardless of their current page.

Shopping Cart – The NetRep is able to define a threshold value for the dollar amount of a customers Shopping Cart. If the total value of the Customer's shopping cart is greater then this value, the customer appears in the Staging Queue.

An engaged customer will always appear in the Engaged Queue of the NetRep client that has them currently engaged. At that point the customer is not listed in any Profiling Queue. Filters only affect the Profiling Queue. Therefore, engaged customers are not affected by filters until they are released.

IV.A Shopping Cart/Product Push

An exemplary embodiment of the invention allows the NetRep to assist selected customers. For example, the following example shows how profiling a customer may assist in helping customers complete more sales.

While helping a customer, the NetRep notices that another customer has been on the site for a long time (Time On Site in the Staging Queue) and that the customer already has a large dollar amount in the Cart Total, Figure 22a.

The NetRep further investigates the customer by selecting the Shop Cart Tab in the profiling area after clicking on the customer, Figure 22b. The customer has several items in the cart and, in this example, this satisfies the specific business rules of the sponsoring company to proactively engage a customer.

The NetRep engages the customer by clicking Engage on the NetRep client. The customer's browser opens up the conversation window, Figure 22c, and the NetRep's default greeting is displayed.

The NetRep now has two customers engaged and can switch between the conversations be selecting the customer in the Engaged Queue, Figure 22d.

The Customer now composes a reply message to the NetRep in the conversation window. For example, here the customer is looking for a particular type of product, Figure 22e.

The NetRep composes a response after finding the product in the Programmed Response Area. The NetRep sends the response, selects the product from the tour tab, and clicks Push, Figure 22f.

The customer receives the message from the NetRep and the screen is refreshed to the page containing the requested product, Figure 22g.

The customer composes a message to the NetRep asking to be released. The NetRep releases the customer by clicking on the Release button, Figure 22h.

The original customer remains engaged, Figure 22i.

The limitation on the number of customers a single NetRep can engage is based on the connectivity and computer and the average length and depth of conversations with customers the NetRep can handle. There is no physical limitation to the number of surfer sessions. It is more a quality of the conversation as more customers are engaged that creates the limitation. The icontact server system itself places no limitation on the number of engaged customers by a single NetRep.

IV.B. Forms Assistant

The following example of another embodiment of the invention monitors the customer shopping cart and forms profiling systems of an e-commerce web site.

The NetRep is able to view the current page a customer is on through the Staging Queue on the NetRep Client, Figure 23a, and that the customer has yet to complete the ordering form for the site, Figure 23b.

The customer begins completion of the form leaving several fields blank or in error, Figure 23c. The customer then submits the form.

Upon customer submission, the NetRep is able to view the values entered by the customer through the Forms Tab in the Profiling Area, Figure 23d.

The NetRep engages the customer. The NetRep composes a message based on the error information provided in the Forms Tab, Figure 23e.

The customer receives the message from the NetRep, Figure 23f.

The customer composes a message containing the missing information, Figure 23g.

The NetRep receives this message from the customer, Figure 23h, and the NetRep uses the Forms Tab to store this information, Figure 23i.

The NetRep then selects the Order Form from the Tour Tab in the Programmed Response Area and clicks the Push button, Figure 23j.

The customer receives the Push page and verifies that everything is correct, Figure 23k.

The customer submits the order form. If the values were correct, the customer receives a confirmation, Figure 23l. If there were errors remaining in the form, the NetRep is able to continue helping the customer fill out the form and/or push the form an additional number of times.

At this point the NetRep releases the customer and the customer continues perusing the web site.

V. Further Integration

The core system allows for much flexibility in including additional technologies in a new and unique format. The data collected from customer activity is analyzed to provide reports not only on page demographics, but on the effective use of customer support to increase sales and customer loyalty. Voice and multimedia can be

integrated into the platform. The Programmed Response area can be dynamic through database access and natural language parsing.

V.a. Reporting

The icontact Database stores every page customers view, the contents of all shopping carts, all conversations, all engagements, and all sales. This data is analyzed through statistical reports that help determine NetRep efficiency, online sales efficiency, traffic patterns, and quantitative analysis of customer support.

On a nightly basis, the database is analyzed and statistical information for the last day and last week are stored in Database tables that are referenced in a series of reports that are accessible via a web browser, see Figure 24.

The reports and data can also be exported for further analysis.

V.b. Click to talk

Connecting the icontact system to a telephony system provides a NetRep with the means of talking directly to a customer via a telephone. The following is an example:

The NetRep engages a customer through the online icontact system.

In the course of discussion, it is determined that assistance would be best offered via telephone.

The NetRep pushes a form out to the customer. The form prompts for the customer's telephone number. The form has already been tagged with the NetRep's telephone number.

The customer completes the form and presses submit.

The submission executes on a server that in turn initiates a phone call to the NetRep.

When the NetRep answers the phone the system then dials the customer.

When the customer picks up, the conversation can continue through the telephone.

While the above process describes the use of a terrestrial based land line system, the same technologies can also be applied using what is commonly called Voice over IP (VoIP). The technology uses internet protocol for voice communication allowing the voice to occur over the same data facilities that the computer on the internet utilizes. This sharing the data line can substantially reduced communication costs utilizing VoIP.

It will thus be seen that the objects set forth above, among those made apparent from the preceding description, are efficiently attained and, since certain changes may be made in carrying out the above method and in the constructions set forth without departing from this a scope of the invention. It is intended that all matter contained in the above description and shown in the accompanied drawings shall be interpreted in an illustrative sense and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described and all statements of this scope of the invention which, as a matter of language, might be said to fall there between.

CLAIMS

We claim:

1. A method of using an electronic network to facilitate communication between a NetRep and a customer, comprising:

detecting the presence of a particular customer at a particular page of a web site;

transmitting an indicator to a selected NetRep display whereupon transmission of a return message to be presented to that customer can be initiated;

transmitting the return message to that customer for viewing; and

detecting at least one of identification information relevant to that customer, historical information about a customer's prior web site visits, internal data or data maintained outside of the web site in an enterprise-wide data system relevant to that customer and information about that customer's previous e-commerce transactions with the web site.

2. The method of claim 1, further comprising tracking the progress of the customer through the web site and building a list of visited web pages thereof.

3. The method of claim 2, further comprising transferring a response from the customer to the NetRep display.

4. The method of claim 3, further comprising transferring a responsive reply back to the customer substantially on a real-time basis.

5. The method of claim 4, further comprising enabling the customer to carry out a commercial transaction.

6. The method of claim 4, further comprising facilitating the carrying out of an interactive conversation.

7. The method of claim 2, further comprising displaying a list of web pages presented to a customer over a period of time.

8. The method of claim 7 wherein the list of web pages is displayed at a remote site.

9. The method of claim 8, further comprising presenting to the customer an indicator whereby the customer, when viewing a selected page, can initiate a bi-directional conversation with the remote site.

10. A method of communicating with a customer who has logged onto a communication network comprising:

presenting at least a part of an information sequence, displayable in part, and including one or more pages that may be displayed at various times in response to commands entered by the individual;

detecting when the customer is viewing a page;

tracking the progress of the customer through a plurality of pages which are in part presentable graphically;

storing the tracking information;

transmitting, from another site, a selected communication to be presented to the individual to facilitate interaction with the page being displayed for the customer;

enabling the customer to form a responsive message; and

transmitting the responsive message to the another site for reviewing and in real-time, and carrying out an interactive information interchange between the customer and the another site.

11. A method of facilitating interactive communications between a customer and a NetRep using an electronic network comprising:

selecting at least one page containing displayable information and commands for implementing a display;

incorporating additional commands, which when the page is to be displayed at a requesting site, provide information to another site;

displaying the selected page in response to a customer's request; and

initiating a bi-directional information interchange, on the page being displayed, using the provided information.

12. The method of claim 11, further comprising opening a dialog box on the page being displayed.

13. The method of claim 12 wherein a message can be entered into the dialog box.

14. The method of claim 13 wherein the message can be transmitted to and displayed at another site.

15. The method of claim 14 which includes building a list at the another site indicative of the pages displayed at the requesting site.

16. An information sequence, in part displayable for a viewer, comprising:

a text sequence to be displayed;

a sequence of display controlling commands combined with the displayable text; and

a sequence of tracking commands, combined with the displayable text whereby information pertaining to text being presented to a viewer can be presented, substantially in real-time, at a displaced location for tracking the text being presented to the viewer.

17. The sequence of claim 16 wherein the text sequence is organized as a plurality of linked pages and wherein at least some of the pages include frame based commands for tracking.

18. The sequence of claim 16 which includes, as commands, hypertext mark-up tags.

19. The sequence of claim 18 which includes as tracking commands, hypertext framing tags.

20. The sequence of claim 17 wherein the pages include, as commands, hypertext mark up tags and wherein at least some of the pages comprise hypertext frame tags.

21. A multi-processor communication system comprising:

a customer client;

a customer server, coupled at least intermittently to the customer client for transferring information therebetween whereby a customer using the customer client and the customer server can request a selected file, specified by the customer;

a monitoring client;

a monitoring server, coupled at least intermittently to the monitoring client, for transferring information therebetween wherein the servers can communicate via a common network, whereby a NetRep using the monitoring client and the monitoring server can initiate an interactive real-time information interchange with the customer and wherein the customer can reply thereto on a one-on-one basis.

22. The system of claim 21 wherein the customer client includes, at least in part, a browser to facilitate a display of the selected file.

23. The system of claim 22 wherein the browser is capable of interpreting HTML-type tags in the file to facilitate display thereof.

24. The system of claim 23 wherein the monitoring server receives information indicative of the progress of the customer in reviewing the displayed file.

25. The system of claim 24 wherein the monitoring server includes a control program for forwarding to the monitoring client the progress indicating received information.

26. A method for using a computer to enable a web site NetRep to observe in real-time a web site usage profile of any one of a plurality of web site customers and proactively to engage the customer in a one-to-one, real-time conversation, comprising:

recording individualized information about each customer's usage of the respective web site including a list of the web pages the customer has viewed and the amount of time spent on each, a unique customer's address, a status indicator showing whether the customer has been previously engaged by another NetRep, the total time the customer has spent on the web site, and a unique identifier for each customer;

displaying to a group of NetReps the above information for the customers to all or a selected portion of the web site in real-time;

enabling any one of a plurality of NetReps to select any one of a plurality of customers to engage in a private one-to-one conversation; and

proactively engaging the customer so chosen in a one-to-one conversation without any action on the customer's part.

27. The method of claim 26, further comprising:

enabling a customer to request a conversation with a NetRep;

enabling one NetRep to engage in one-to-one conversations with a number of customers simultaneously;

enabling the NetRep to send messages and other content to the customer;

enabling the customer to receive messages and other content from the NetRep;

enabling the customer to send messages and other content to the NetRep;

enabling the NetRep to receive messages and other content from the customer; and

enabling the NetRep to proactively terminate the conversation with any engaged customer.

28. The method of claim 26, further comprising enabling the customer to terminate the conversation with the NetRep.

29. The method of claim 26, further comprising recording all or part of the recorded information into a database for future use and analysis.

30. The method of claim 26, further comprising displaying for a customer a two-part graphical display with the NetRep's comments at one location and the customer's comments adjacent thereto.

31. An apparatus enabling a web site NetRep to observe a real-time web site personalized usage of any one of a plurality of web site customers, profiling them and proactively engage a selected customer in a one-to-one, real-time conversation, comprising:

a storage device; and

a processor connected to the storage device wherein the storage device includes a program for controlling the processor; and

wherein the processor interacts with the program to record information about each web site customer's usage of the web site including at least a list of the web pages the customer has viewed and the amount of time spent on each, a unique customer's address, a status indicator showing whether the customer has been previously engaged by another NetRep, the total time the customer has spent on the web site, and a unique identifier for each customer.

32. The apparatus of claim 31, further comprising displaying to a group of NetReps the information for the customers to all or a selected portion of the web site in real time including instructions to allow any one of an plurality of NetReps to select any one of a plurality of customers to engage in a private one-to-one conversation and to proactively engage the customer so chosen in a one-to-one conversation without any action by the customer.

33. The apparatus of claim 31, further comprising:

commands to enable a customer to request a conversation with a NetRep and to enable one NetRep to engage in one-to-one conversations with a number of customers simultaneously;

enable the NetRep to send messages and other content to the customer;

enable the customer to receive messages and other content from the NetRep;

enable the customer to send messages and other content to the NetRep;

enable the NetRep to receive messages and other content from the customer;

enable the NetRep to proactively terminate the conversation with any engaged customer;

optionally enable the customer to terminate the conversation with a NetRep; and

optionally record all or part of the above information into a database for future use and analysis.

34. The apparatus of claim 32, further comprising a display device displaying information in real time including, but not limited to, a list of the web pages the customer has viewed and the amount of time spent on each, a status indicator showing whether the customer has been previously engaged by another NetRep or not, the total time the customer has spent on the web site, and a unique identifier for each customer.

35. The apparatus of claim 31, wherein the storage device optionally store a record of all or part of the information regarding the user's web site usage program recorded by the apparatus.

36. A method for using a computer to observe a real-time web site usage profile of any one of a plurality of web site customers, to compare that profile with a number of predefined web usage profiles which are associated with lists of actions to be performed upon a pattern, to determine if the customer's usage profile matches any one of these predefined profiles, and to automatically perform the action associated with the matched usage profiles, comprising:

storing a number of predefined web site usage profiles;

storing and associating a list of actions with each predefined usage pattern;

recording information about each web site customer's usage of the web site including, but not limited to, a list of web pages the customer has viewed and the amount of time spent on each, the customer's address, a status indicator showing whether the customer has been previously engaged by another NetRep, the total time the customer has spent on the web site, and a unique identifier for each customer;

comparing the above information with each predefined usage profiles and their associated actions; and

executing the associated action list upon a successful match between the customer's usage pattern and the predefined usage pattern.

37. The method of claim 36, further comprising:

inputting into the computer a number of descriptions of a web site usage pattern;

inputting into the computer a number of lists of actions to be performed by the computer;

associating each usage pattern description with at least one list of actions to be performed by the computer; and

editing and deleting the descriptions of web site usage patterns, the lists of actions, and their associations.

38. An apparatus for observing a real-time web site usage profile of any one of a plurality of web site customers, to compare that profile with a number of predefined web usage profiles which are associated with lists of actions, to determine if the customer's usage profile matches any of these predefined profiles, and to automatically perform the action associated with the matched usage profiles; comprising:

a storage device; and

a processor connected to the storage device;

the storage device storing;

a number of predefined web site usage patterns;

a list of actions associated with each predefined usage pattern;

a program for controlling the processor; and

wherein the processor is operative with the program to record information about each web site customer's usage of the web site including, some or all of the web pages the customer has viewed and the amount of time spend on each, a status indicator showing whether the customer has been previously engaged by another NetRep or not, the total time the customer has spent on the web site, and a unique identifier for reach customer and wherein the program includes commands for comparing the above information with each predefined usage profile and executing the associated action list upon a successful match between the customer's usage pattern and the predefined usage patter.

39. The apparatus of claim 38, in which the processor is further operative with the program to:

input a number of descriptions of a web site usage pattern;

input a number of lists of actions to be performed by the computer;

associate each usage pattern description with at least one list of actions to be performed by the processor; and

editing and deleting the descriptions of web site usage patterns, the lists of actions, and their associations.

40. A method of analyzing customer movements through a plurality of related files comprising:

tracking viewing paths of a plurality of viewers of the files; analyzing the tracking information and identifying selected file sequences which exhibit a greater incidence of viewing paths than other sequences.

41. The method of claim 40 wherein the tracking step is carried out in real time.

42. The method of claim 41 wherein the tracking information is stored.

43. The method of claim 42 wherein the analyzing step is carried out relative to the stored tracking information.

44. A method of identifying a customer at a web site comprising:

detecting the presence of an individual customer at the site;

determining the customer's IP address; and

assigning a unique identifier to the customer in addition to the customer's IP address.

45. A computer implemented method for interacting with a customer browsing a web site, said computer implemented method comprising the steps of:

a) providing a computer-based client application accessible to a NetRep, said client application including means for determining the presence of a customer browsing a web site, means for transmitting a NetRep message from said NetRep to said customer, and a conversation display for displaying a conversation between said NetRep and said customer;

b) said web site including a coding means for transmitting a customer identity associated with said customer to a computer-based server application when said customer accesses said web site and means for retrieving said NetRep message from said server application;

c) accessing said customer identity of said customer accessing said web site from said server application by said means for determining;

d) displaying said customer identity to said NetRep by said client application;

e) composing said NetRep message by said NetRep;

f) transmitting said NetRep message to said server application;

g) whereby said NetRep message is displayed to said customer accessing said web site when said web site detects the presence of said NetRep message on said server application.

46. The computer implemented method of claim **Error! Reference source not found.**, further comprising:

a) recording at least one of historical information about prior web site visits of said customer, internal data or data maintained outside of said web site in an enterprise-wide data system relevant to said customer and information about previous e-commerce transactions with said web site by said customer.

47. The computer implemented method of claim 46, further comprising:

a) prioritizing customers displayed by said client application in accordance with pre-selected filters by said client application.

48. The computer implemented method of claim **Error! Reference source not found.**, further comprising:

a) displaying, by said client application, at least one of an e-commerce shopping cart of said customer and a web site form at least partially filled out by said customer.

49. A computer implemented system for interacting with a customer browsing a web site, said computer implemented method comprising:

a) a computer-based client application accessible to a NetRep, said client application including means for determining the presence of a customer browsing a web site, means for transmitting a NetRep message from said NetRep to said customer, and a conversation display for displaying a conversation between said NetRep and said customer;

b) said web site including a coding means for transmitting a customer identity associated with said customer to a computer-based server application when said customer accesses said web site and means for retrieving said NetRep message from said server application;

c) said means for determining accessing said customer identity of said customer accessing said web site from said server application;

d) said client application displaying said customer identity to said NetRep;

e) said NetRep composing said NetRep message;

f) means for transmitting said NetRep message to said server application;

g) whereby said NetRep message is displayed to said customer accessing said web site when said web site detects the presence of said NetRep message on said server application.

50. The computer implemented system of claim 49, further comprising:

a) said client application recording at least one of historical information about prior web site visits of said customer, internal data or data maintained outside of said web site in an enterprise-wide data system relevant to said customer and information about previous e-commerce transactions with said web site by said customer.

51. The computer implemented system of claim 50, further comprising:

a) means for prioritizing customers displayed by said client application in accordance with pre-selected filters.

52. The computer implemented system of claim 49, further comprising:

said client application displaying, to said NetRep, at least to said one of an e-commerce shopping cart of said customer and a web site form at least partially filled out by said customer.

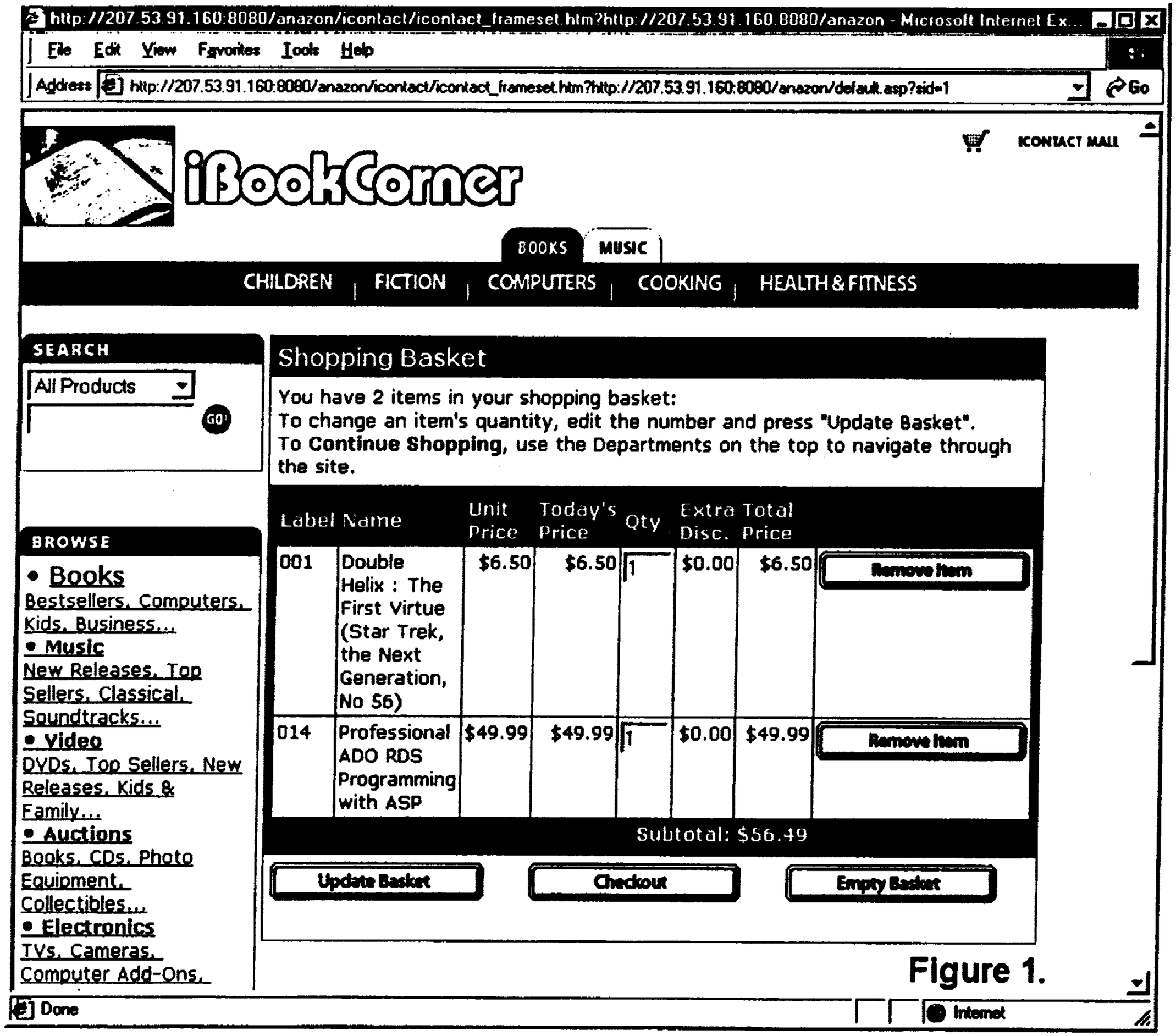

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File Edit View Favorites Tools Help
Address http://207.53.91.160:8080/anazon/icontact/icontact_frameset.htm?http://207.53.91.160:8080/anazon/default.asp?sid=1
Go
iBookCorner
ICONTACT MALL
BOOKS MUSIC
CHILDREN | FICTION | COMPUTERS | COOKING | HEALTH & FITNESS
SEARCH
All Products
GO!
BROWSE
• Books
Bestsellers, Computers, Kids, Business...
• Music
New Releases, Top Sellers, Classical, Soundtracks...
• Video
DVDs, Top Sellers, New Releases, Kids & Family...
• Auctions
Books, CDs, Photo Equipment, Collectibles...
• Electronics
TVs, Cameras, Computer Add-Ons,
Shopping Basket
You have 2 items in your shopping basket:
To change an item's quantity, edit the number and press "Update Basket".
To Continue Shopping, use the Departments on the top to navigate through the site.
Label Name Unit Price Today's Price Qty Extra Disc. Total Price
001 Double Helix : The First Virtue (Star Trek, the Next Generation, No 56) $6.50 $6.50 1 $0.00 $6.50 Remove Item
014 Professional ADO RDS Programming with ASP $49.99 $49.99 1 $0.00 $49.99 Remove Item
Subtotal: $56.49
Update Basket
Checkout
Empty Basket
Done
Internet

Figure 1.

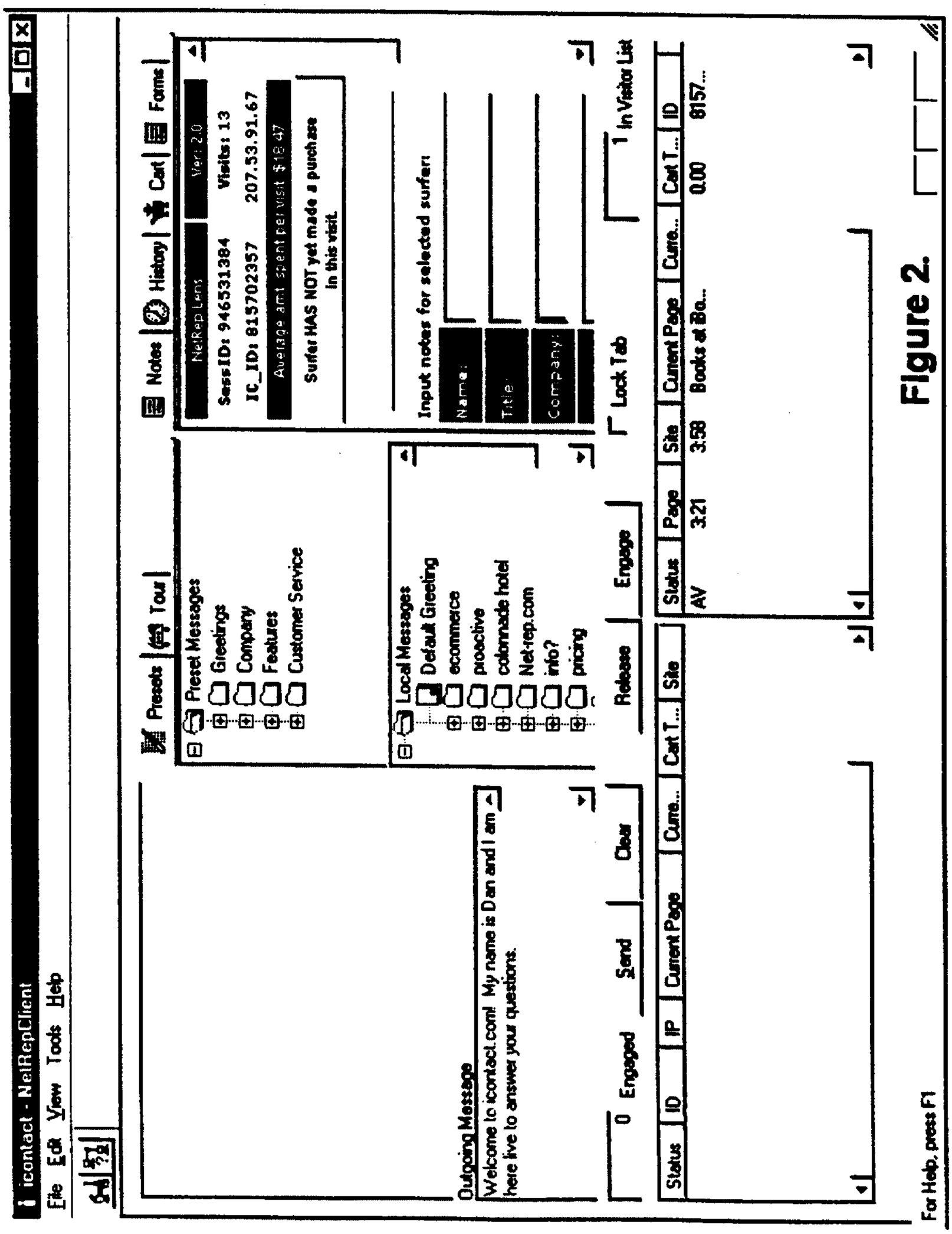

iContact - NetRepClient
File Edit View Tools Help
Presets
Tour
Cart
Forms
Notes
History
NetRep Lens
Preset Messages
Greetings
Company
Features
Customer Service
Local Messages
Default Greeting
ecommerce
proactive
colonnade hotel
Net-rep.com
info?
pricing
Release
Engage
Lock Tab
Outgoing Message
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
Send
Clear
Engaged
In Visitor List
Status
Cart T...
Site
Page
Current Page
ID
IP
Books at Bo...
For Help, press F1

Figure 2.

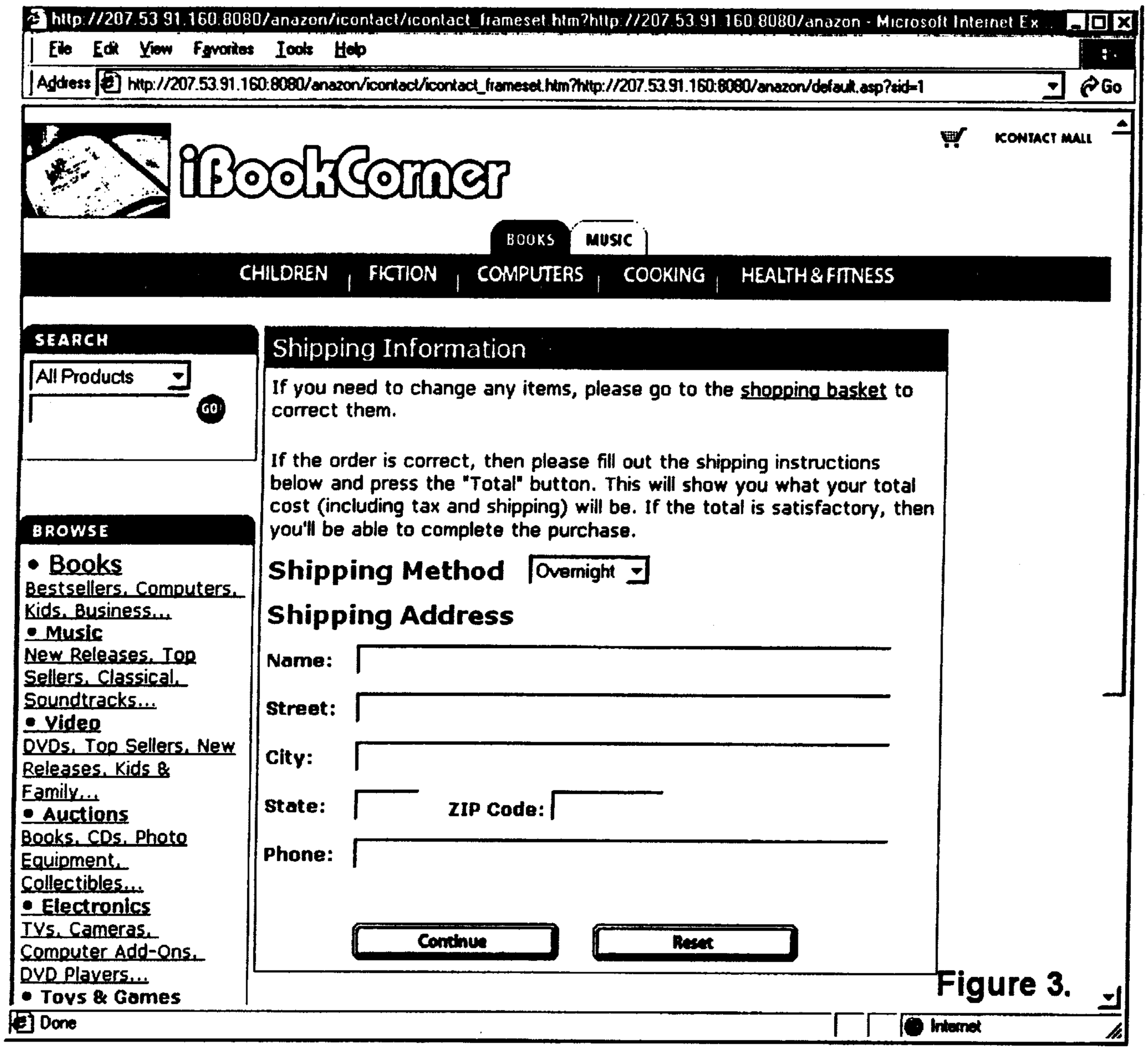

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File Edit View Favorites Tools Help
Address http://207.53.91.160:8080/anazon/icontact/icontact_frameset.htm?http://207.53.91.160:8080/anazon/default.asp?sid=1
Go
iBookCorner
ICONTACT MALL
BOOKS
MUSIC
CHILDREN | FICTION | COMPUTERS | COOKING | HEALTH & FITNESS
SEARCH
All Products
GO!
BROWSE
• Books
Bestsellers, Computers, Kids, Business...
• Music
New Releases, Top Sellers, Classical, Soundtracks...
• Video
DVDs, Top Sellers, New Releases, Kids & Family...
• Auctions
Books, CDs, Photo Equipment, Collectibles...
• Electronics
TVs, Cameras, Computer Add-Ons, DVD Players...
• Toys & Games
Shipping Information
If you need to change any items, please go to the shopping basket to correct them.
If the order is correct, then please fill out the shipping instructions below and press the "Total" button. This will show you what your total cost (including tax and shipping) will be. If the total is satisfactory, then you'll be able to complete the purchase.
Shipping Method
Overnight
Shipping Address
Name:
Street:
City:
State:
ZIP Code:
Phone:
Continue
Reset
Done
Internet

Figure 3.

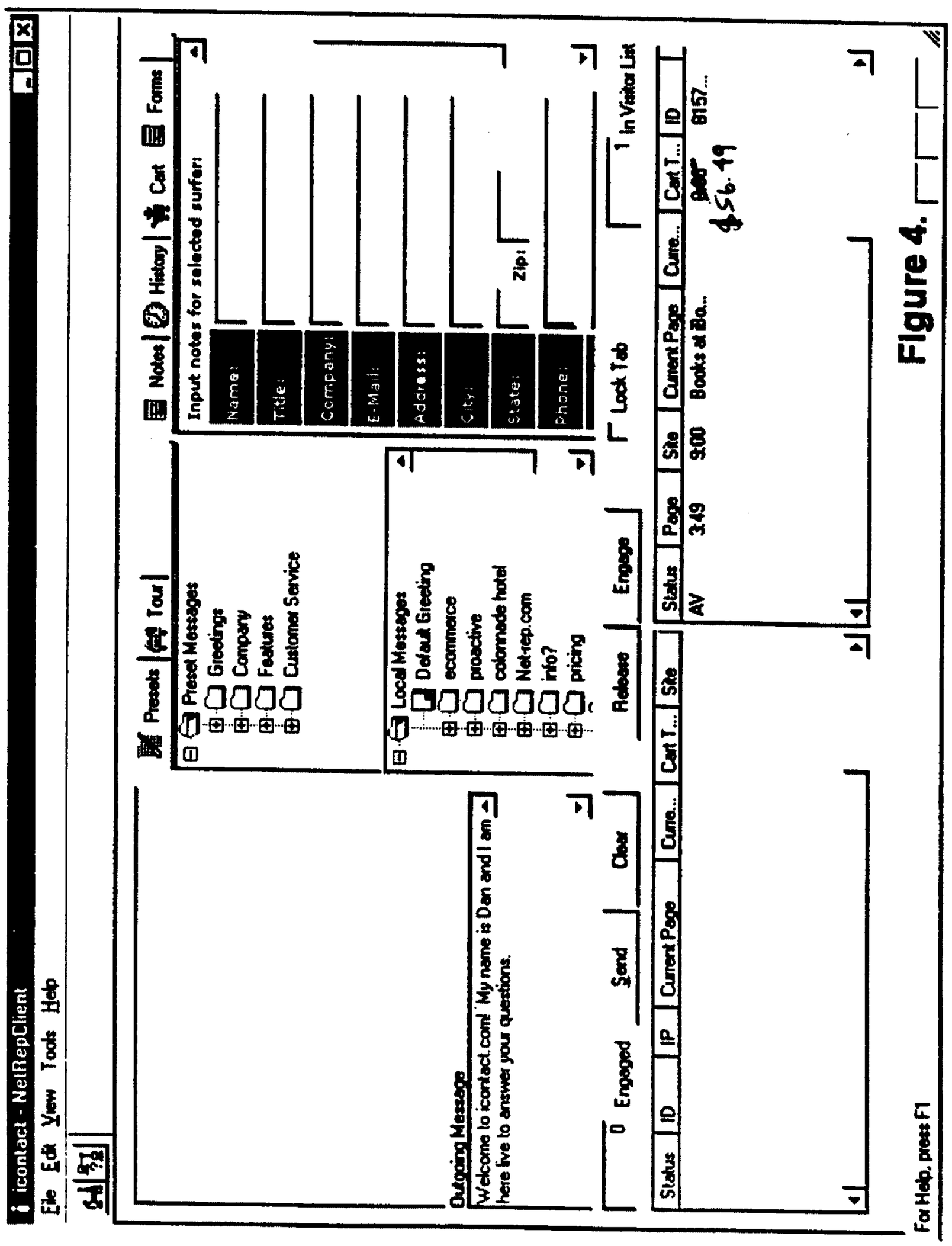

icontact - NetRepClient
File Edit View Tools Help
Presets
Tour
Notes
History
Cart
Forms
Preset Messages
Greetings
Company
Features
Customer Service
Local Messages
Default Greeting
ecommerce
proactive
colonnade hotel
Net-rep.com
info?
pricing
Release
Engage
Lock Tab
Input notes for selected surfer:
Name:
Title:
Company:
E-Mail:
Address:
City:
State:
Zip:
Phone:
1 In Visitor List
Cart T...
Site
Status
Page
Site
Current Page
AV
3:49
3:00
Books at Bo...
Cart T...
Curre...
ID
8157...
$56.49
Outgoing Message
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
0 Engaged
Send
Clear
Status
ID
IP
Current Page
Curre...
For Help, press F1

Figure 4.

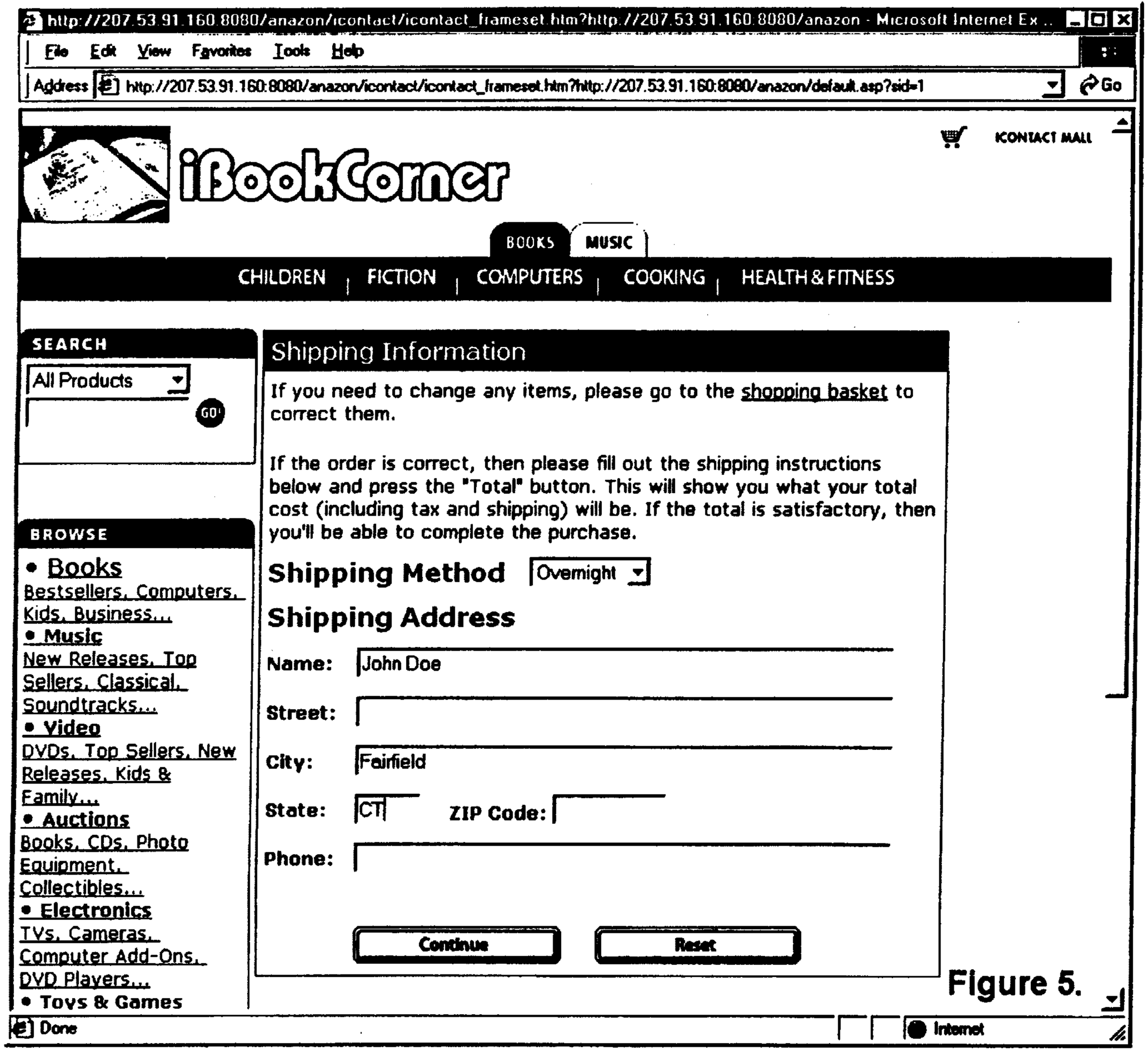

http://207.53.91.160:8080/anazon/icontact/icontact_frameset.htm?http://207.53.91.160:8080/anazon - Microsoft Internet Ex...
File Edit View Favorites Tools Help
Address http://207.53.91.160:8080/anazon/icontact/icontact_frameset.htm?http://207.53.91.160:8080/anazon/default.asp?sid=1
Go
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GO!
BROWSE
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Bestsellers, Computers, Kids, Business...
• Music
New Releases, Top Sellers, Classical, Soundtracks...
• Video
DVDs, Top Sellers, New Releases, Kids & Family...
• Auctions
Books, CDs, Photo Equipment, Collectibles...
• Electronics
TVs, Cameras, Computer Add-Ons, DVD Players...
• Toys & Games
Shipping Information
If you need to change any items, please go to the shopping basket to correct them.
If the order is correct, then please fill out the shipping instructions below and press the "Total" button. This will show you what your total cost (including tax and shipping) will be. If the total is satisfactory, then you'll be able to complete the purchase.
Shipping Method
Overnight
Shipping Address
Name:
John Doe
Street:
City:
Fairfield
State:
CT
ZIP Code:
Phone:
Continue
Reset
Done
Internet

Figure 5.

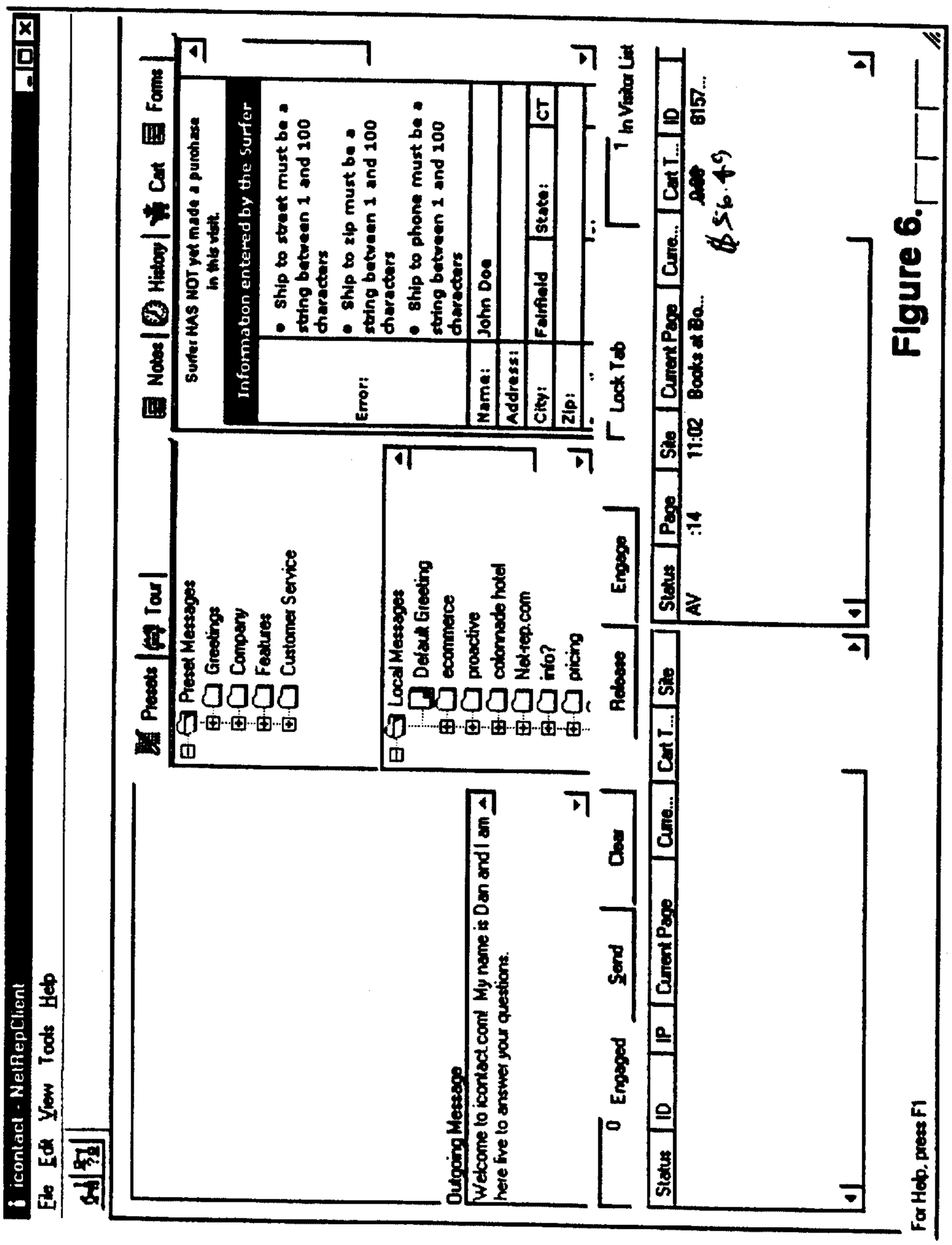

iconlact - NetRepClient
File Edit View Tools Help
Notes
History
Cart
Forms
Presets
Tour
Preset Messages
Greetings
Company
Features
Customer Service
Local Messages
Default Greeting
ecommerce
proactive
colonnade hotel
Net-rep.com
info?
pricing
Release
Engage
Surfer HAS NOT yet made a purchase in this visit.
Information entered by the Surfer
Error:
Name:
John Doe
Address:
City:
Fairfield
State:
CT
Zip:
Lock Tab
In Visitor List
Outgoing Message
Welcome to iconlact.com! My name is Dan and I am here five to answer your questions.
0 Engaged
Send
Close
Cart T...
Site
Status
Page
Site
Curre...
Cart T...
ID
AV
:14
11:02
Current Page
IP
For Help, press F1

Figure 6.

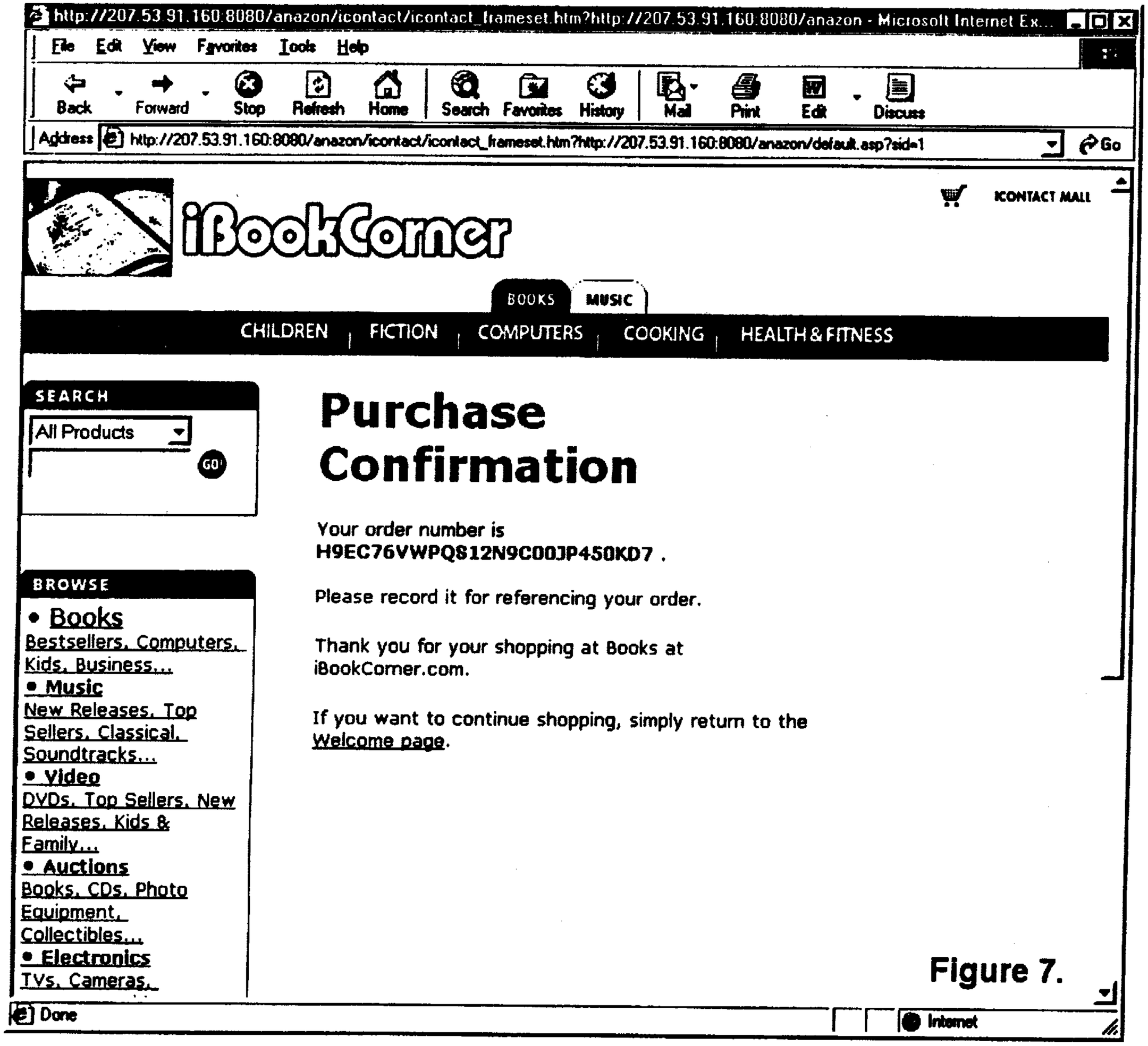

http://207.53.91.160:8080/anazon/icontact/icontact_frameset.htm?http://207.53.91.160:8080/anazon - Microsoft Internet Ex...
File Edit View Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss
Address http://207.53.91.160:8080/anazon/icontact/icontact_frameset.htm?http://207.53.91.160:8080/anazon/default.asp?sid=1
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• Music
New Releases, Top Sellers, Classical, Soundtracks...
• Video
DVDs, Top Sellers, New Releases, Kids & Family...
• Auctions
Books, CDs, Photo Equipment, Collectibles...
• Electronics
TVs, Cameras,
Purchase Confirmation
Your order number is
H9EC76VWPQS12N9C00JP450KD7 .
Please record it for referencing your order.
Thank you for your shopping at Books at iBookCorner.com.
If you want to continue shopping, simply return to the Welcome page.
Done
Internet

Figure 7.

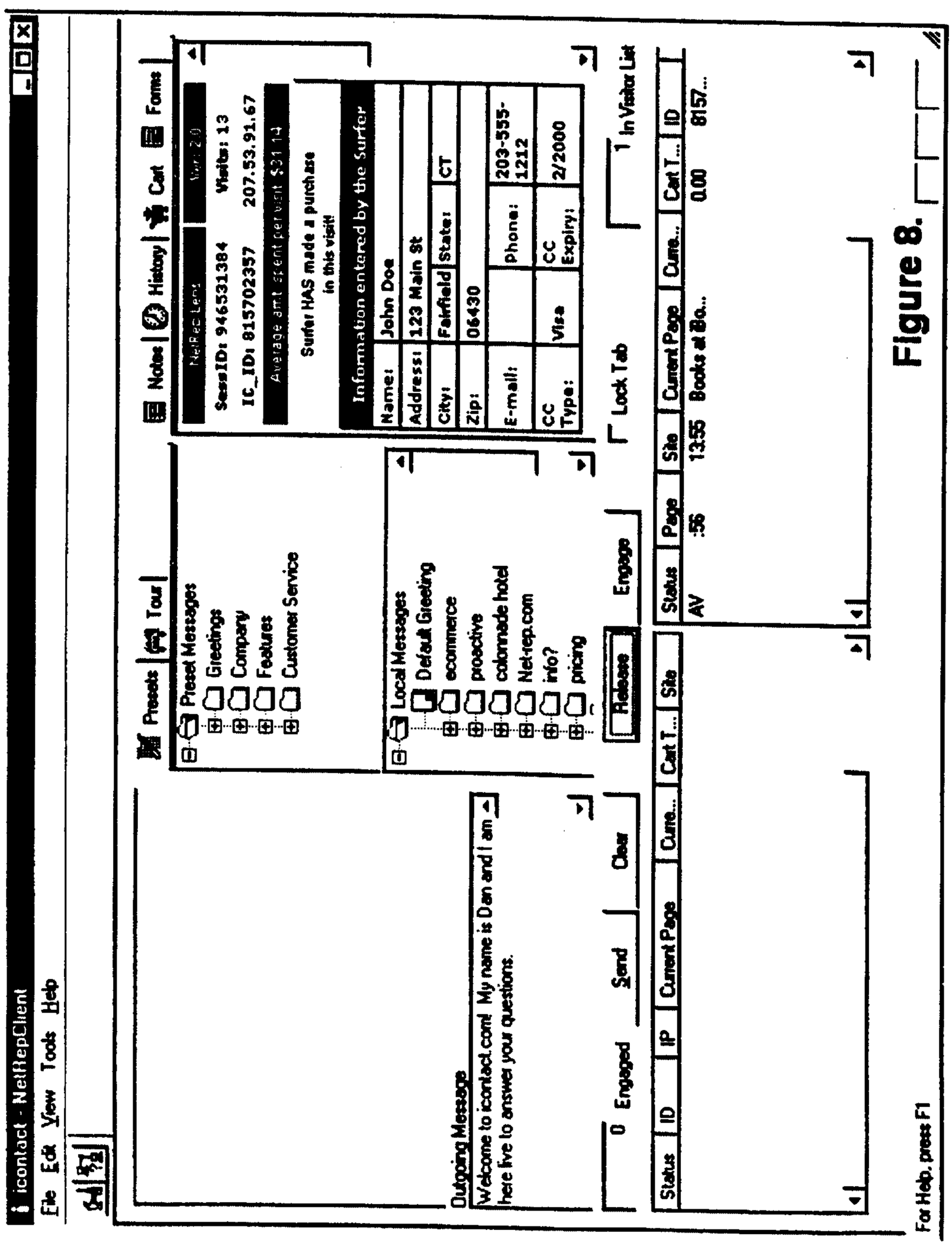

iContact - NetRepClient
File Edit View Tools Help
Notes
History
Cart
Forms
Presets
Tour
Preset Messages
Greetings
Company
Features
Customer Service
Local Messages
Default Greeting
ecommerce
proactive
colonnade hotel
Net-rep.com
info?
pricing
Release
Engage
Surfer HAS made a purchase in this visit!
Information entered by the Surfer
Name: John Doe
Address: 123 Main St
City: Fairfield
State: CT
Zip: 06430
E-mail:
Phone: 203-555-1212
CC Type: Visa
CC Expiry: 2/2000
Lock Tab
1 In Visitor List
Cart T...
Site
Status
Page
Site
Current Page
Curre...
Cart T...
ID
AV
:56
13:55
Books at Bo...
0.00
8157...
Outgoing Message
Welcome to icontact.com! My name is Dan and I am here five to answer your questions.
Send
Clear
0 Engaged
Status
ID
IP
Current Page
Curre...
For Help, press F1

Figure 8.

Diagram 1

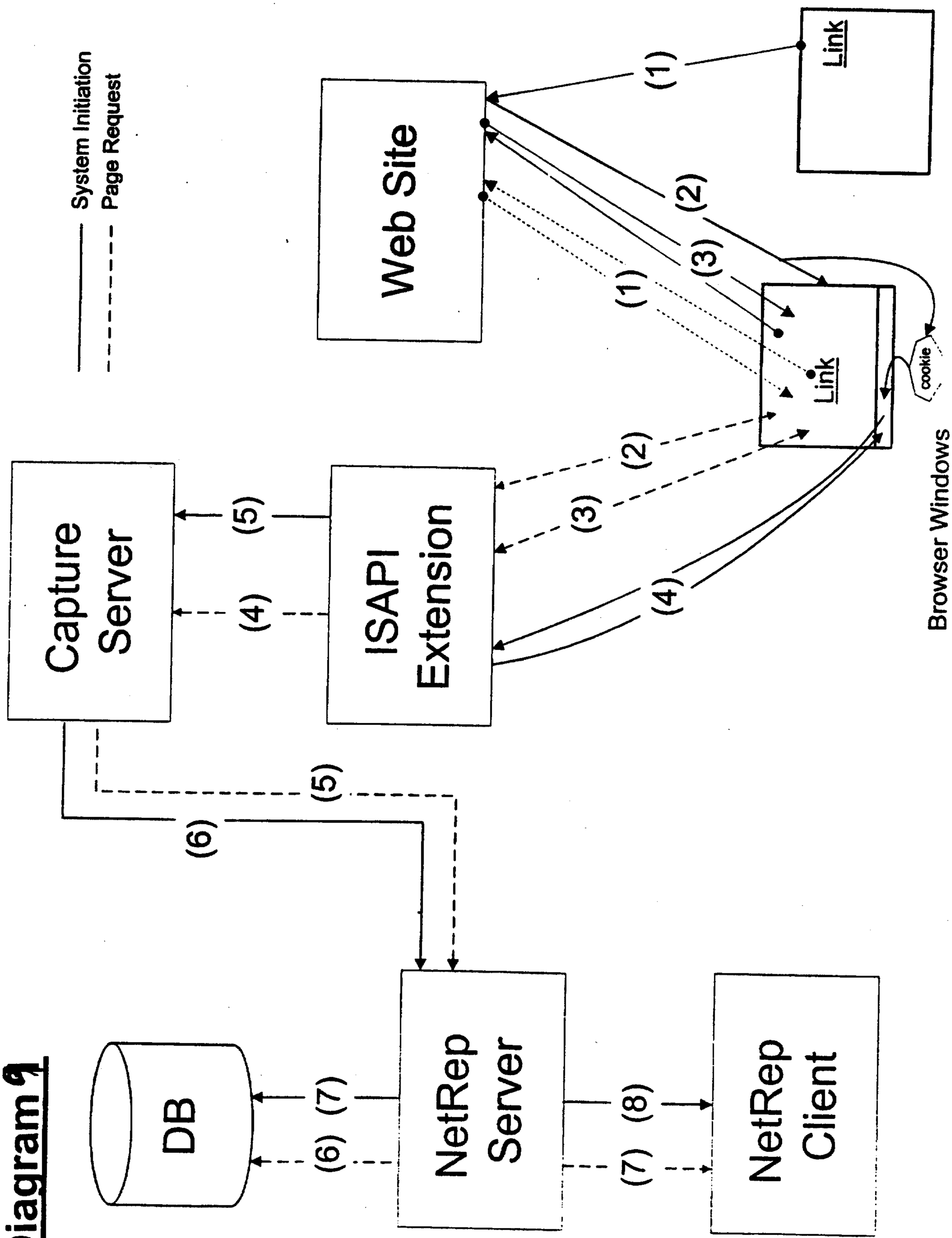
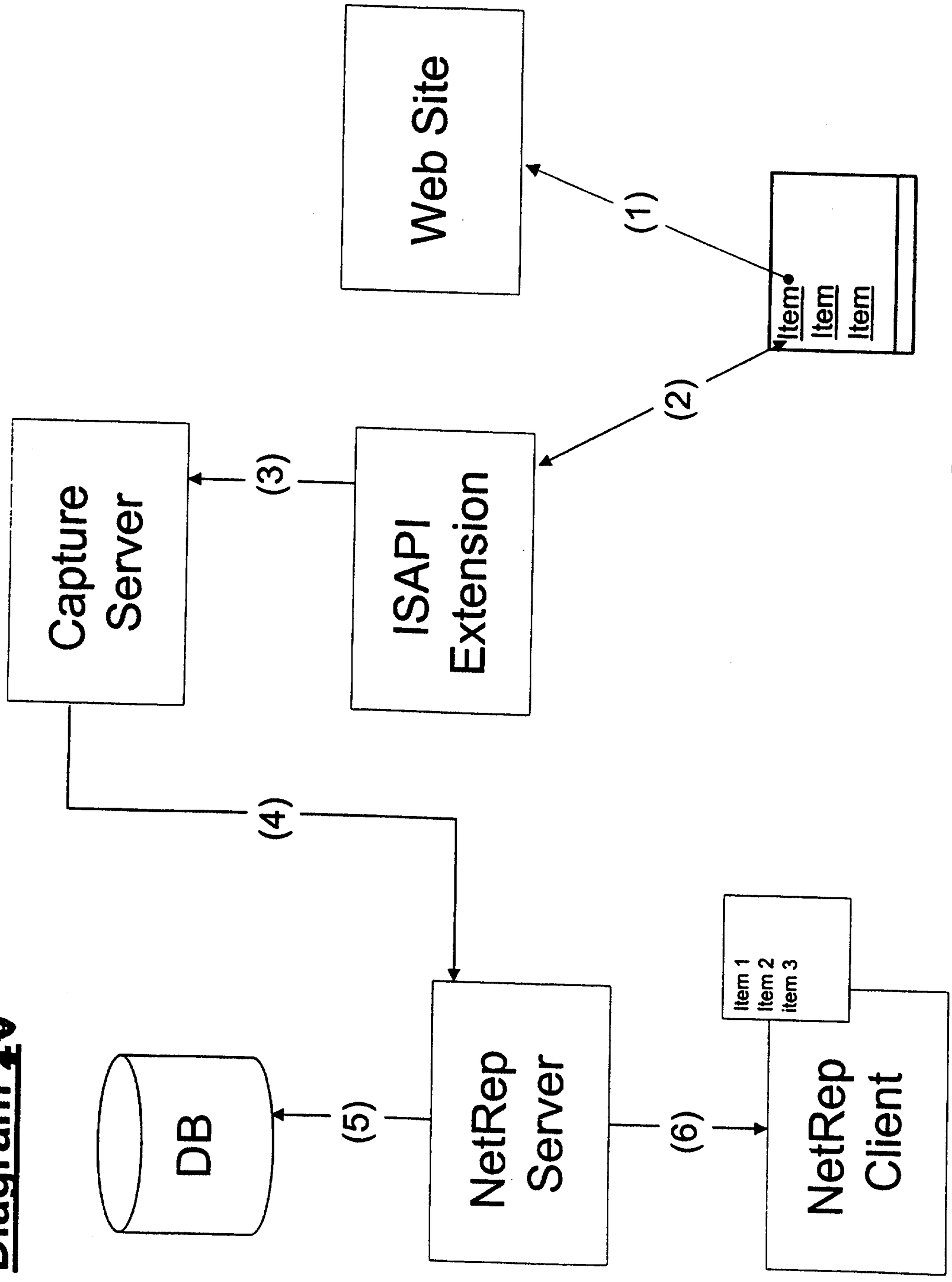

System Initiation
Page Request
Web Site
Link
(1)
(2)
(3)
(4)
(5)
(6)
(7)
(8)
Capture Server
ISAPI Extension
Link
cookie
Browser Windows
DB
NetRep Server
NetRep Client

Diagram 10


Web Site
(1)
Item
Item
Item
Browser Window
(2)
Capture Server
(3)
ISAPI Extension
(4)
DB
(5)
NetRep Server
(6)
Item 1
Item 2
item 3
NetRep Client

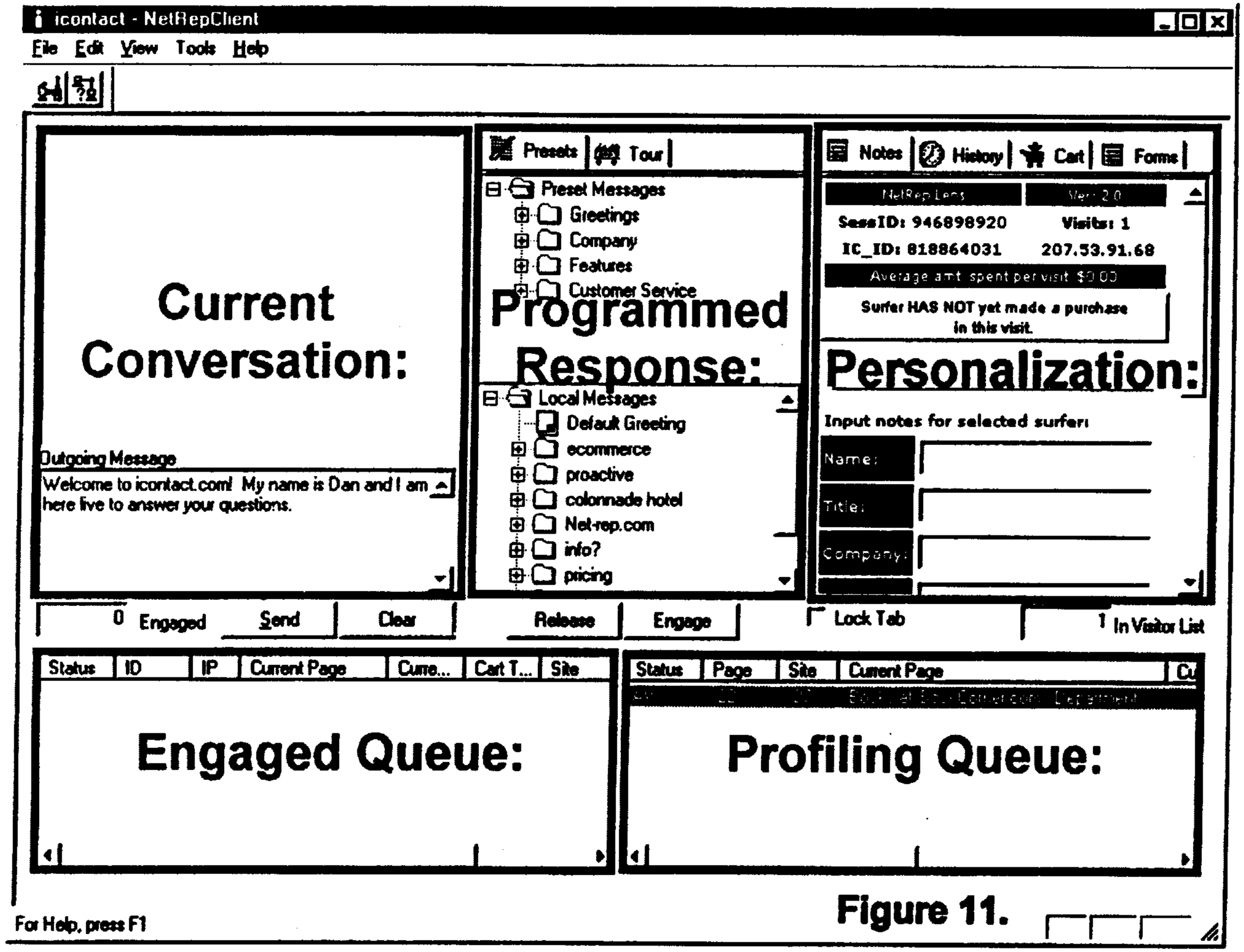

icontact - NetRepClient
File Edit View Tools Help
Current Conversation:
Outgoing Message
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
Presets
Tour
Preset Messages
Greetings
Company
Features
Customer Service
Programmed Response:
Local Messages
Default Greeting
ecommerce
proactive
colonnade hotel
Net-rep.com
info?
pricing
Notes
History
Cart
Forms
NetRep Lens
Ver: 2.0
SessID: 946898920
Visits: 1
IC_ID: 818864031
207.53.91.68
Average amt spent per visit $0.00
Surfer HAS NOT yet made a purchase in this visit.
Personalization:
Input notes for selected surfer:
Name:
Title:
Company:
0 Engaged
Send
Clear
Release
Engage
Lock Tab
1 In Visitor List
Status
ID
IP
Current Page
Curre...
Cart T...
Site
Engaged Queue:
Status
Page
Site
Current Page
Profiling Queue:
For Help, press F1

Figure 11.

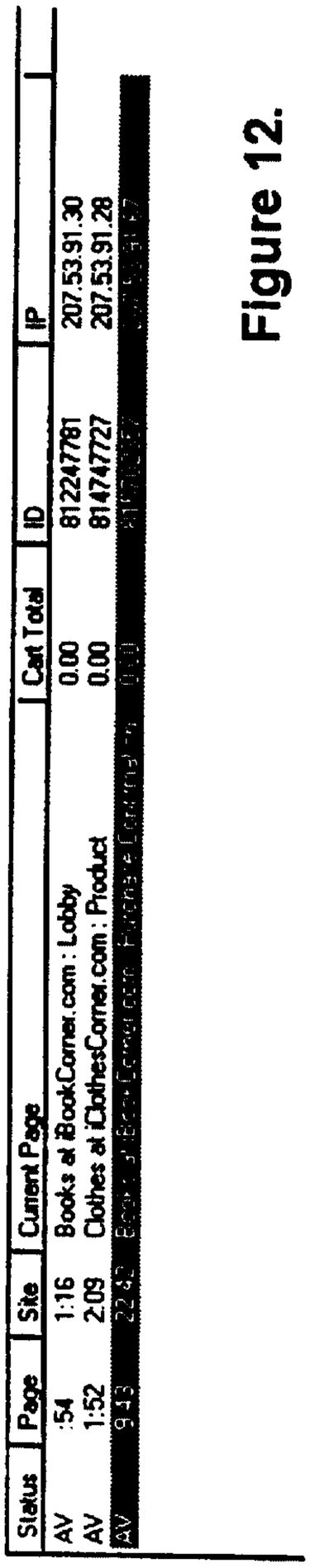

Status
Page
Site
Current Page
Cart Total
ID
IP
AV :54 1:16 Books at BookCorner.com : Lobby 0.00 812247781 207.53.91.30
AV 1:52 2:09 Clothes at iClothesCorner.com : Product 0.00 814747727 207.53.91.28

Figure 12.

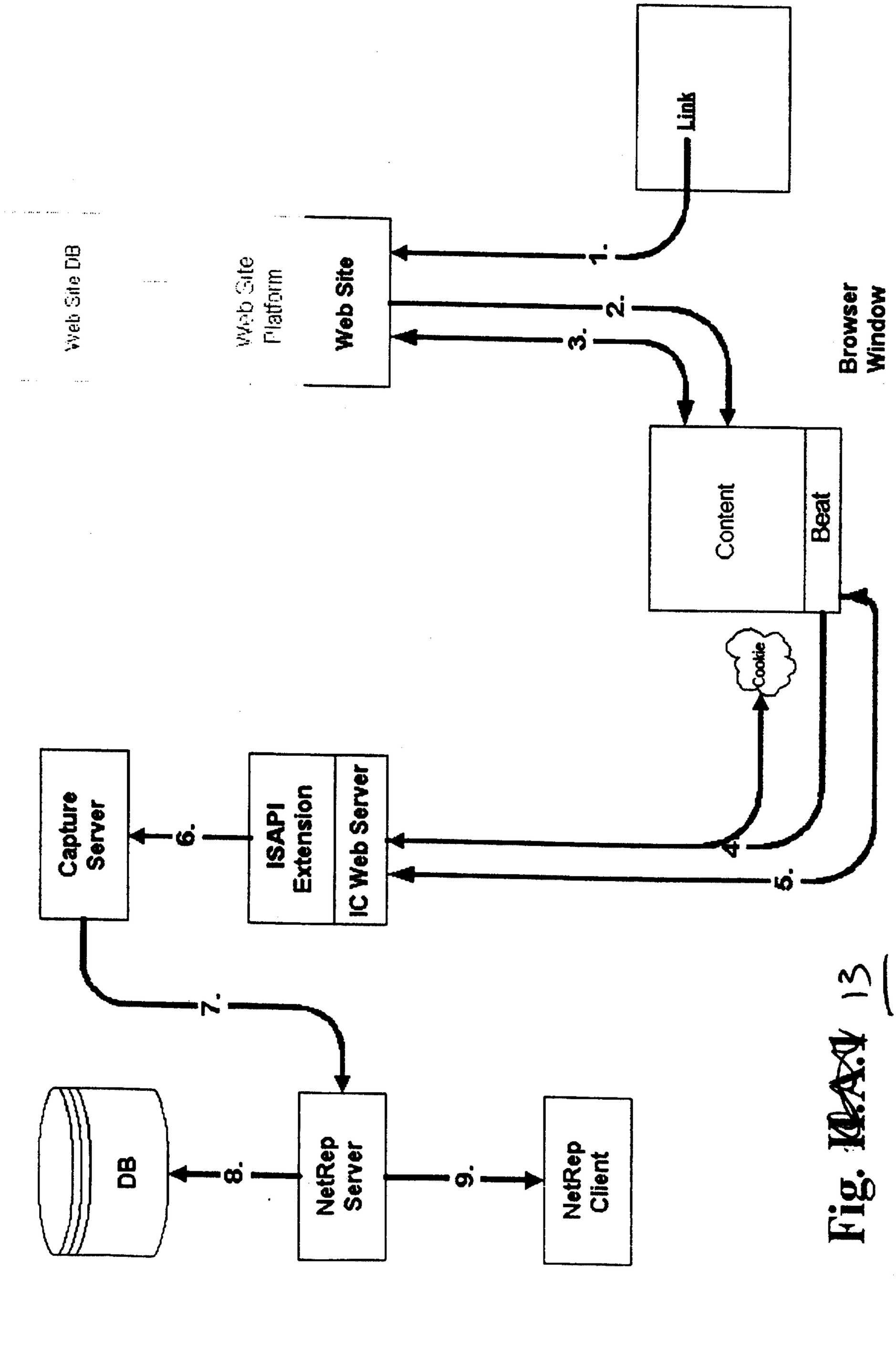

Web Site DB
Web Site Platform
Web Site
Link
1.
2.
3.
Browser Window
Content
Beat
Cookie
4.
5.
Capture Server
6.
ISAPI Extension
IC Web Server
7.
DB
8.
NetRep Server
9.
NetRep Client

Fig. 13

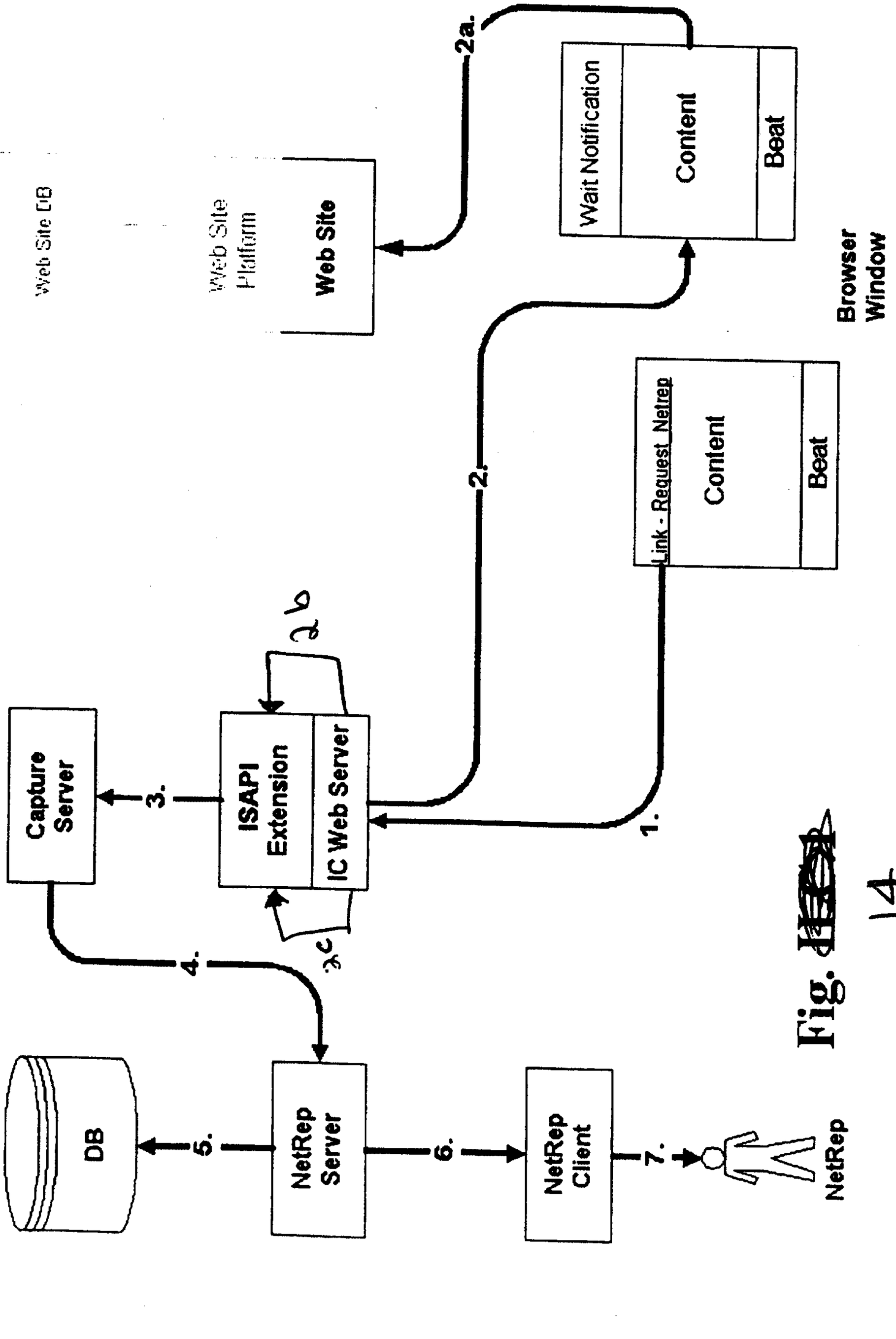

Web Site DB
Web Site Platform
Web Site
2a.
Wait Notification
Content
Beat
Browser Window
2.
Link - Request Netrep
Content
Beat
2b
Capture Server
3.
ISAPI Extension
IC Web Server
3c
4.
1.
DB
5.
NetRep Server
6.
NetRep Client
7.
NetRep

Fig. 14

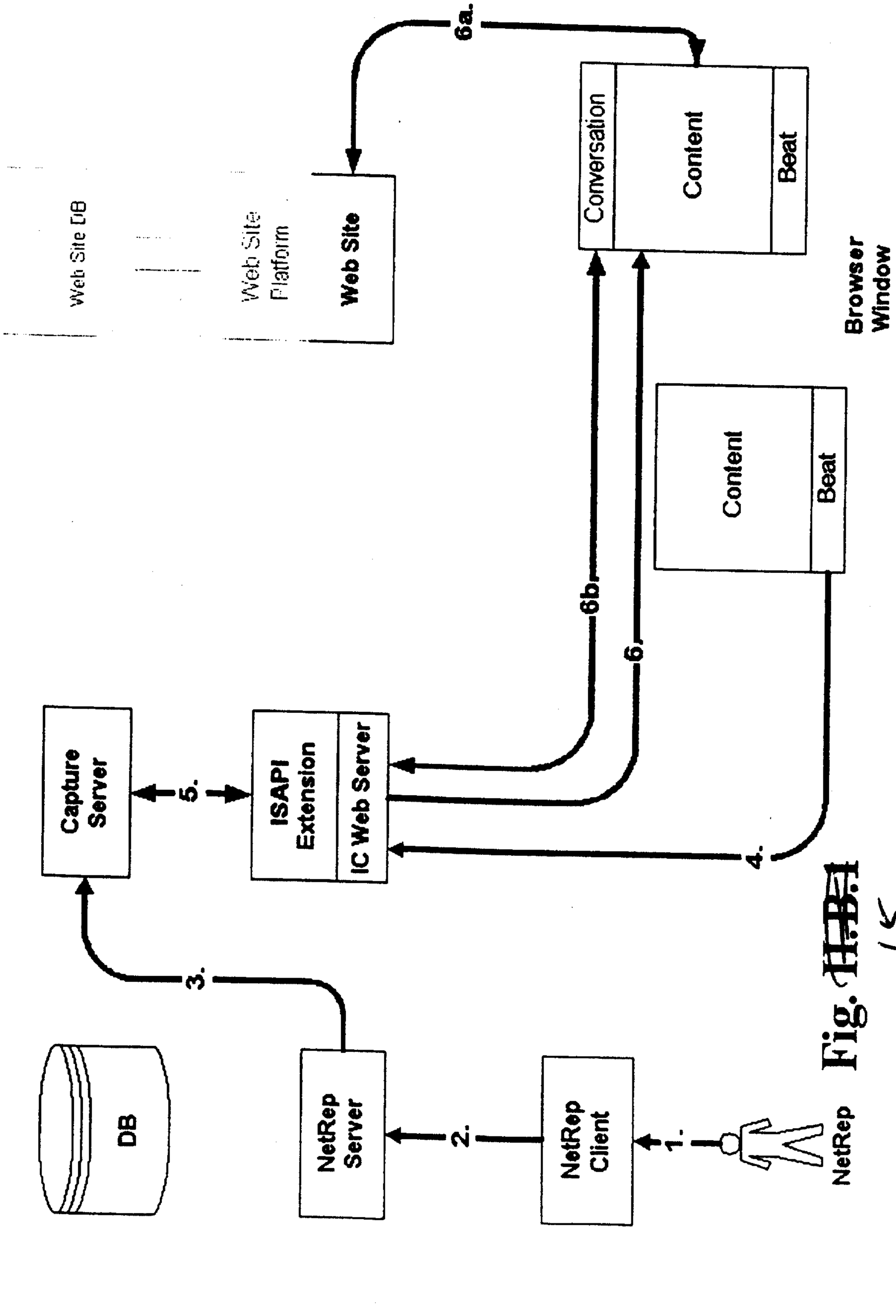

NetRep
1.
NetRep Client
2.
NetRep Server
3.
DB
4.
Capture Server
5.
ISAPI Extension
IC Web Server
6.
6b.
6a.
Web Site DB
Web Site Platform
Web Site
Browser Window
Conversation
Content
Beat
Content
Beat

Fig. 4B.1

15

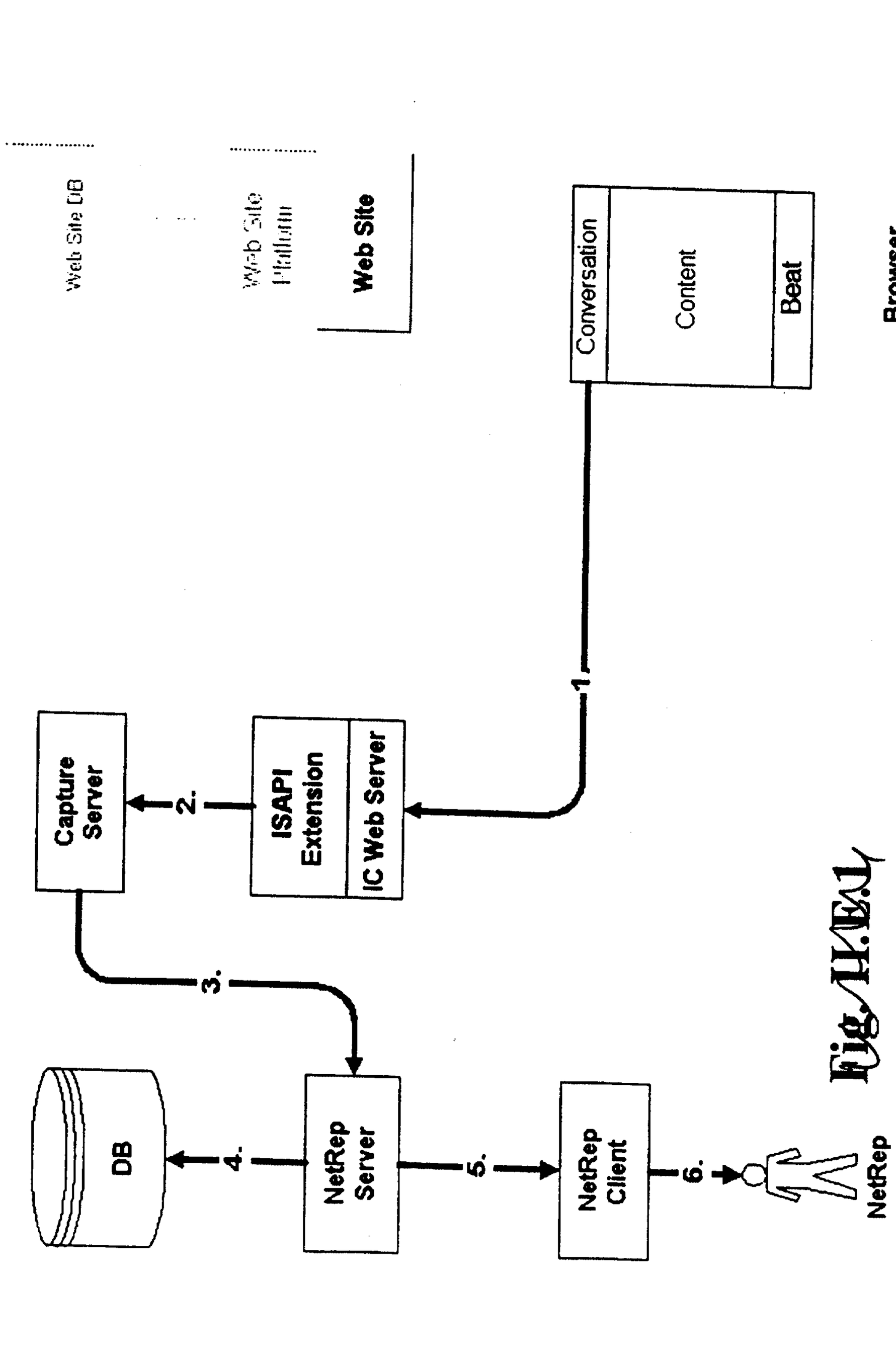

Web Site DB
Web Site Pictures
Web Site
Conversation
Content
Beat
Browser Window
Capture Server
ISAPI Extension
IC Web Server
1.
2.
3.
4.
5.
6.
DB
NetRep Server
NetRep Client
NetRep

Fig. 1A

Fig. 1

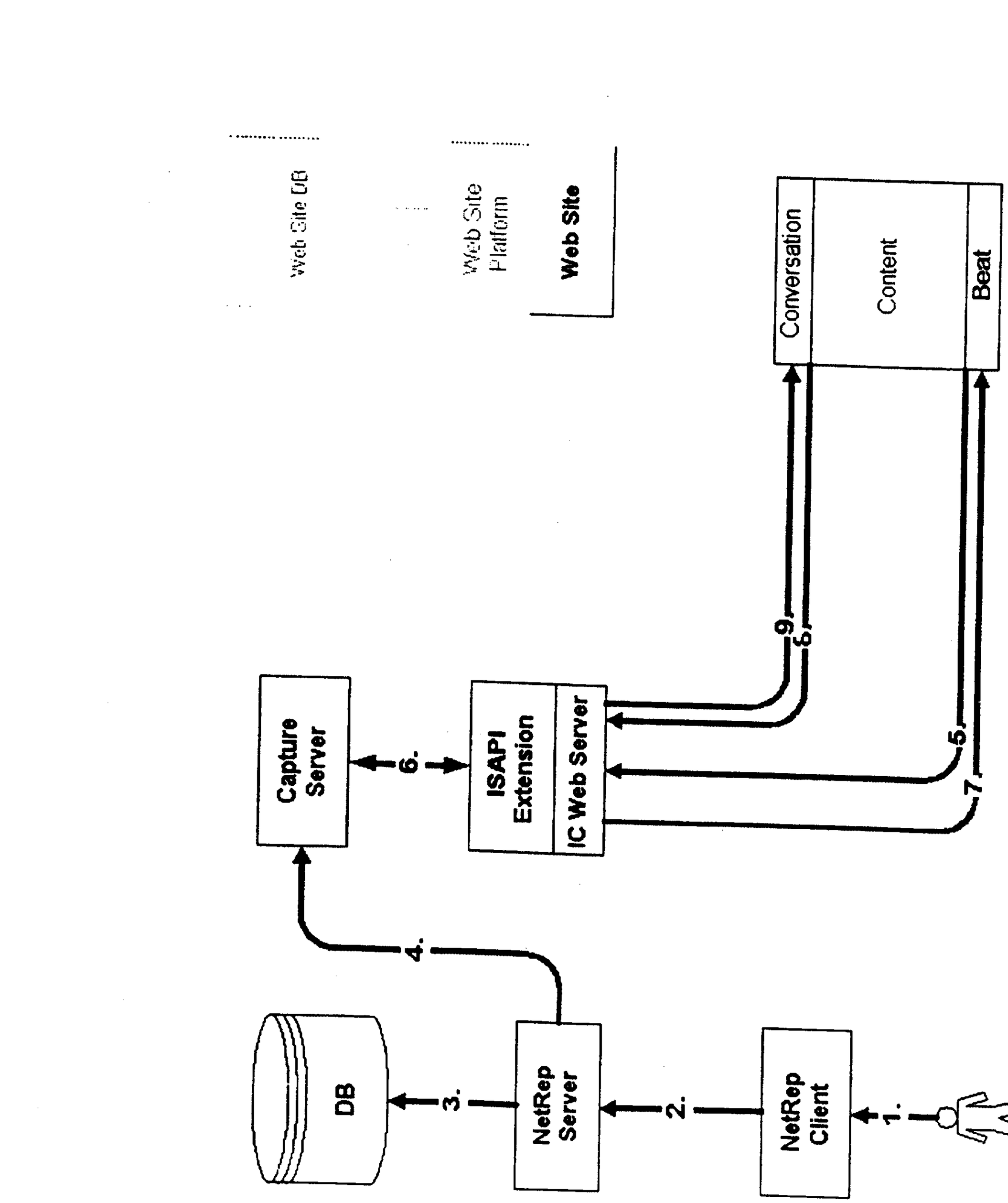

Web Site DB
Web Site Platform
Web Site
Conversation
Content
Beat
Browser Window
Capture Server
6.
ISAPI Extension
IC Web Server
9.
6.
5.
7.
4.
DB
3.
NetRep Server
2.
NetRep Client
1.
NetRep

Fig. 1

17

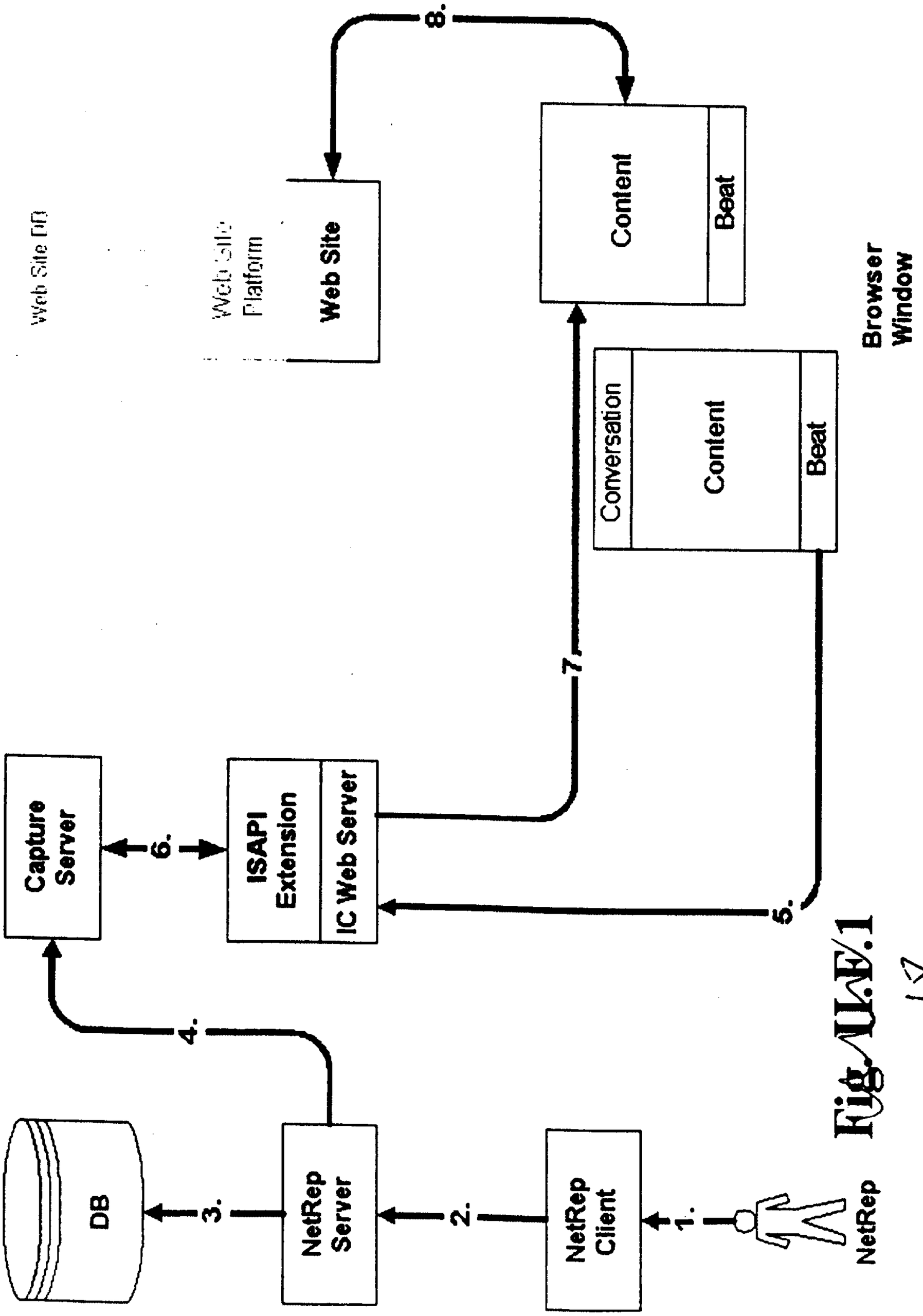


Fig. 4A.1

(Prior Art)

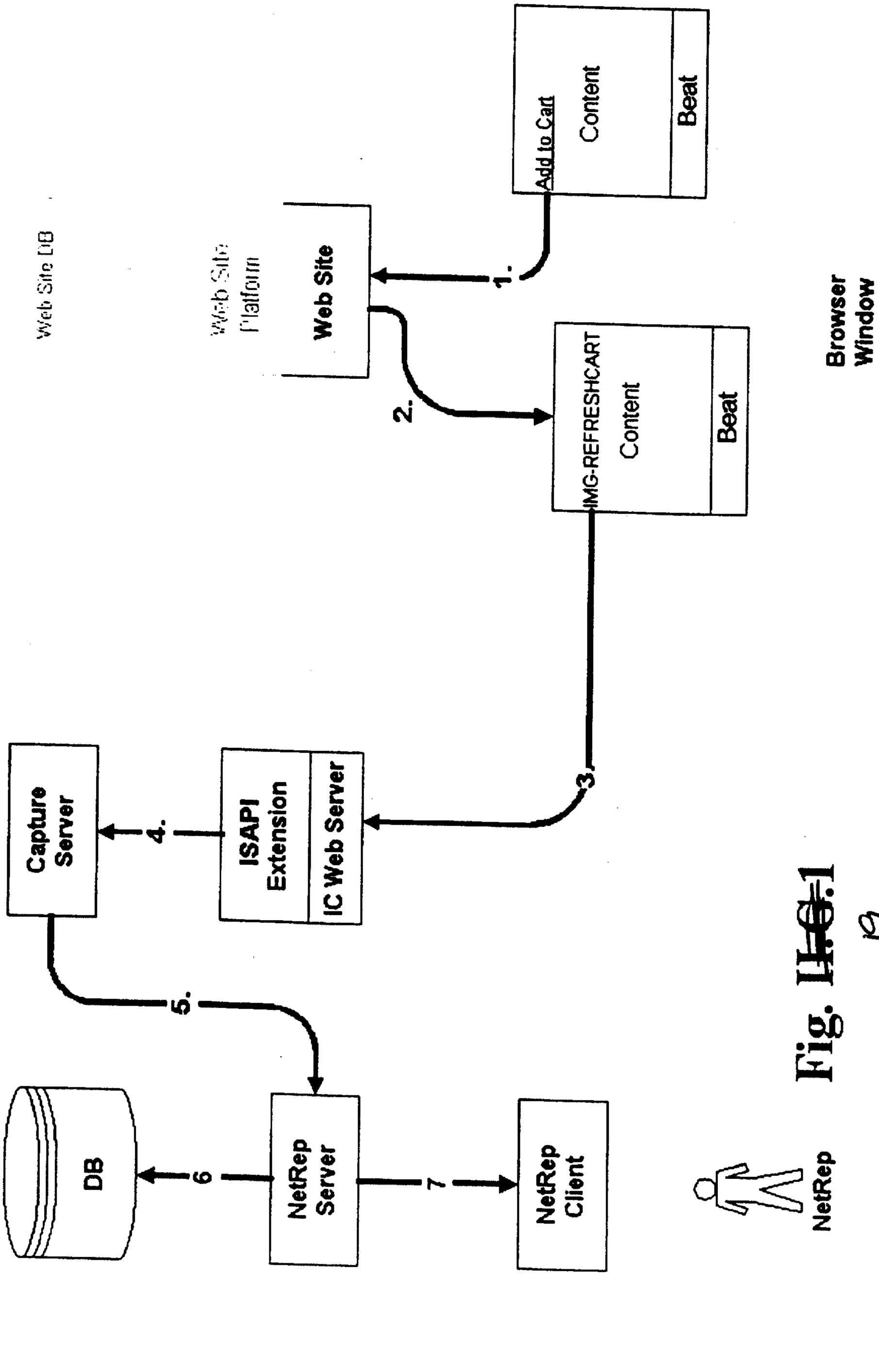

Web Site DB
Web Site Platform
Web Site
Add to Cart
Content
Beat
1.
2.
IMG-REFRESHCART
Content
Beat
Browser Window
3.
Capture Server
4.
ISAPI Extension
IC Web Server
5.
DB
6
NetRep Server
7
NetRep Client
NetRep

Fig. 1

9

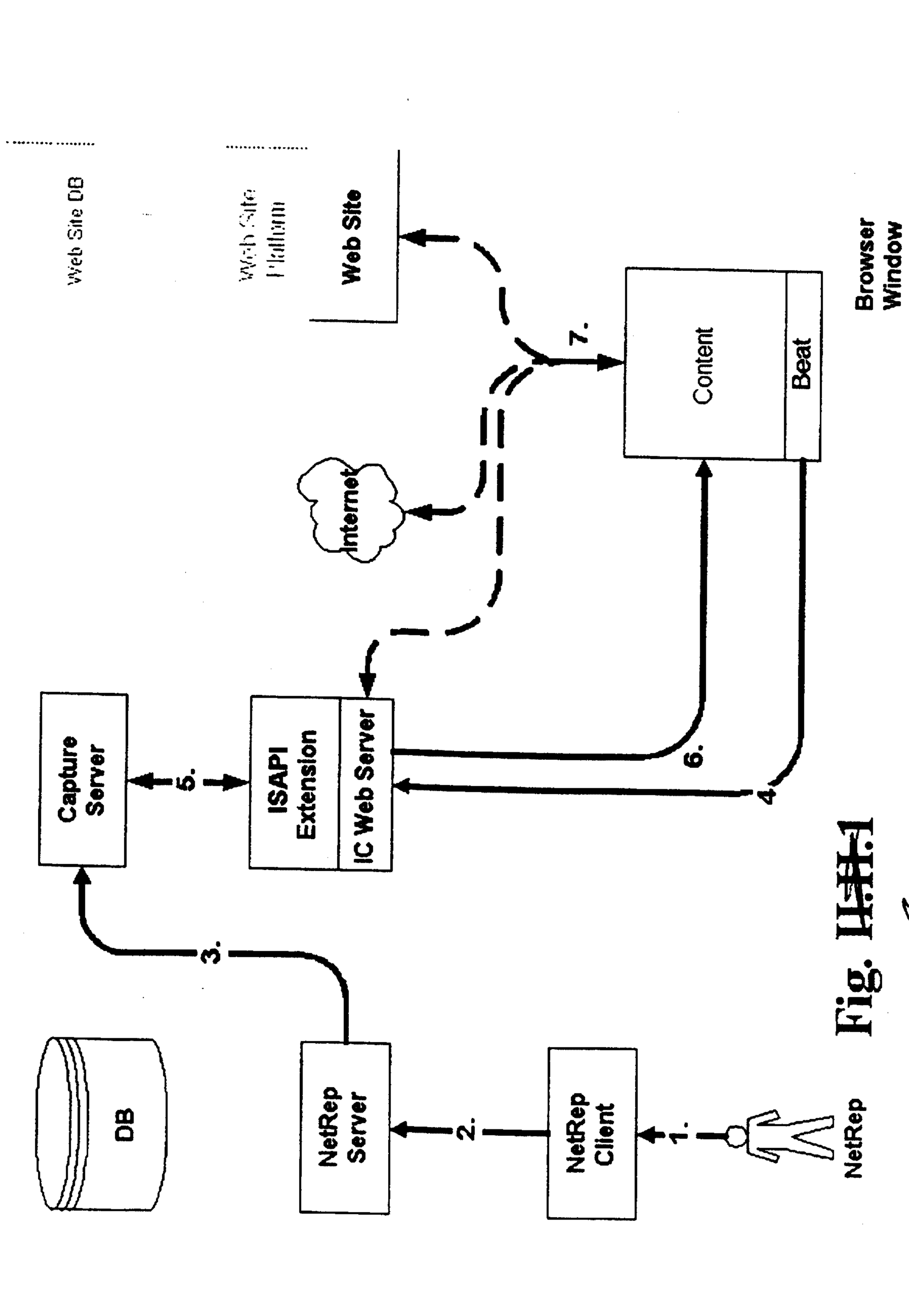

Web Site DB
Web Site Platform
Web Site
Internet
Browser Window
Content
Beat
7.
6.
4
Capture Server
5.
ISAPI Extension
IC Web Server
3.
DB
NetRep Server
2.
NetRep Client
1.
NetRep

Fig. 1

20

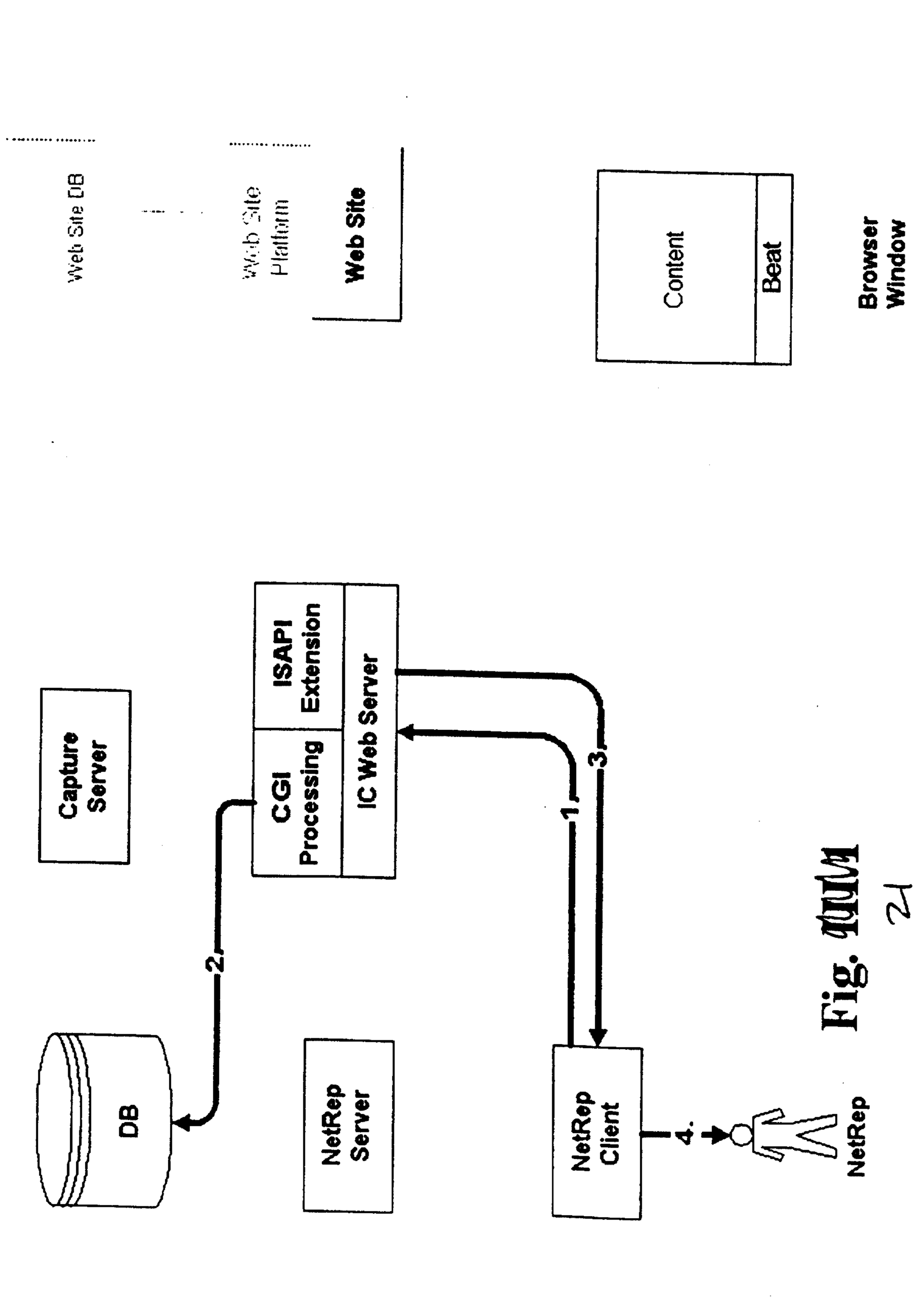

Web Site DB
Web Site Platform
Web Site
Content
Beat
Browser Window
Capture Server
CGI Processing
ISAPI Extension
IC Web Server
DB
NetRep Server
NetRep Client
1
2
3
4
NetRep

Fig. 4UUM
21

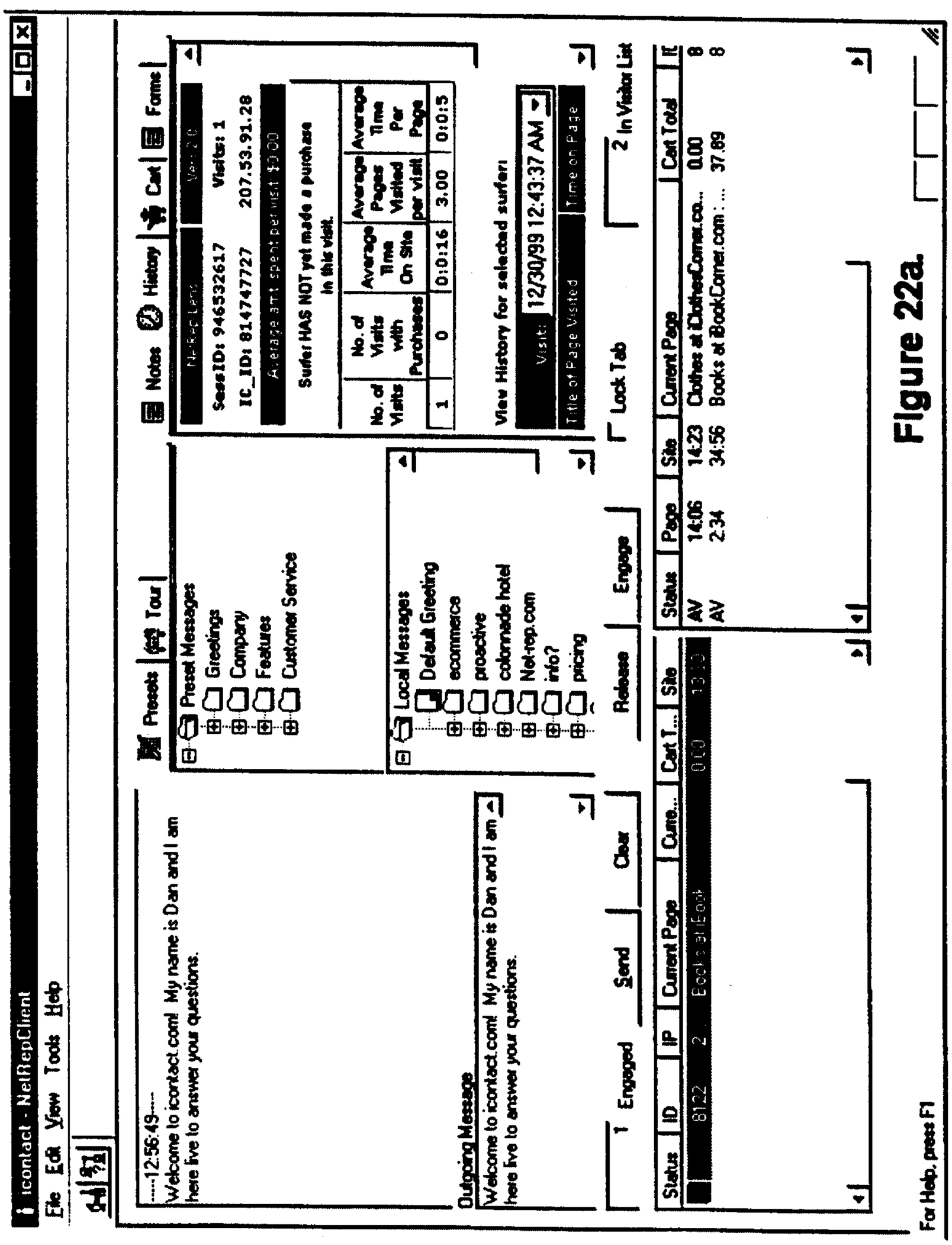

icontact - NetRepClient
File Edit View Tools Help
Presets
Tour
Cart
Forms
Notes
History
Preset Messages
Greetings
Company
Features
Customer Service
Local Messages
Default Greeting
ecommerce
proactive
colonnade hotel
Net-rep.com
info?
pricing
Release
Engage
Visits: 1
207.53.91.28
made a purchase
visit.
Average Pages Visited per visit
Average Time Per Page
3.00
0:0:16
0:0:5
2 In Visitor List
Time on Page
Cart Total
0.00
37.89
Lock Tab
Sess ID: 946532617
IC_ID: 814747727
No. of Visits
No. of Visits with Purchases
Average Time On Site
0:0:16
View History for selected
Visit: 12/30/99 12
Title of Page Visited
Cart T...
Site
Status
Page
Site
Current Page
AV 14:06 14:23 Clothes at ClothesCorner.co...
AV 2:34 34:56 Books at BookCorner.com
----12:56:49----
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
Outgoing Message
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
1 Engaged
Send
Clear
Status
ID
IP
Current Page
Cume...
8122 2
For Help, press F1

Figure 22a.

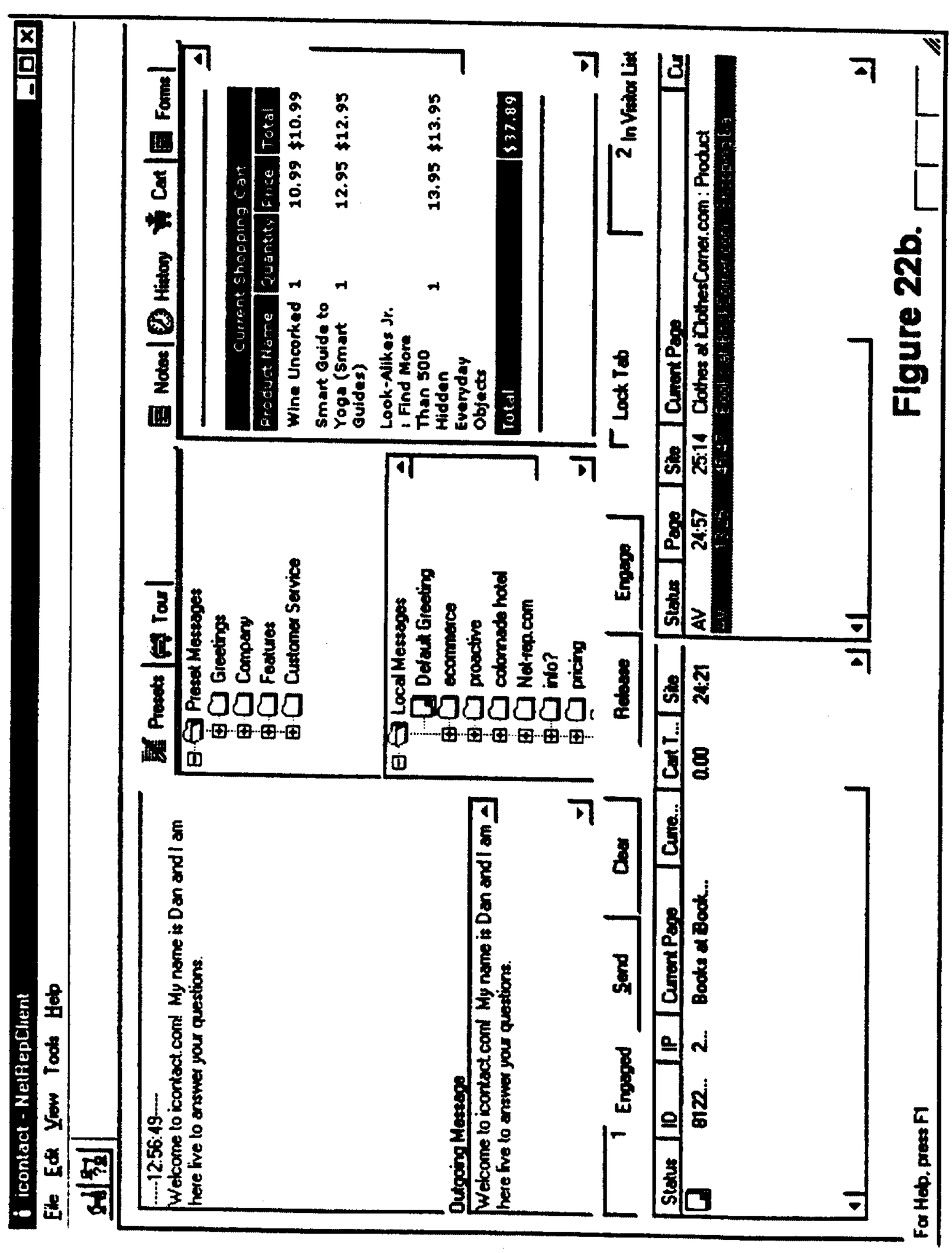

Presets
Tour
Notes
History
Cart
Forms
Preset Messages
Greetings
Company
Features
Customer Service
Local Messages
Default Greeting
ecommerce
proactive
colonnade hotel
Net-rep.com
info?
pricing
Release
Engage
Lock Tab
Current Shopping Cart
Product Name
Quantity
Price
Total
Wine Uncorked
Smart Guide to Yoga (Smart Guides)
Look-Alikes Jr.
I Find More Than 500 Hidden Everyday Objects
10.99 $10.99
12.95 $12.95
13.95 $13.95
$37.89
2 In Visitor List
Status
Page
Site
Current Page
AV
24:57
25:14
Clothes at iClothesCorner.com : Product
Cart T...
Site
0.00
24:21
icontact - NetRepClient
File Edit View Tools Help
Go!
----12:56:49----
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
Outgoing Message
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
1 Engaged
Send
Clear
Status
ID
IP
Current Page
Come...
8122...
2...
Books at Book...
For Help, press F1

Figure 22b.

815702357 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://207.53.91.160:8080/bin/icx.dll?cap?%2Fanazon%2Fdefault%2Easp&815702357 Go

Message from NetRep

> Welcome to ic-mall.com! My name is Dan and I am here live to answer your questions.

enabled by icontact
icontact.com
Patent Pending

Your Message to NetRep

[redacted]

ICONTACT MALL

iBookCorner

BOOKS | MUSIC

CHILDREN | FICTION | COMPUTERS | COOKING | HEALTH & FITNESS

SEARCH

All Products GO

BROWSE

- **Books**
  Bestsellers, Computers, Kids, Business...
- **Music**
  New Releases, Top Sellers, Classical, Soundtracks...
- **Video**
  DVDs, Top Sellers, New

Shopping Basket

You have 3 items in your shopping basket:
To change an item's quantity, edit the number and press "Update Basket".
To **Continue Shopping**, use the Departments on the top to navigate through the site.

Label	Name	Unit Price	Today's Price	Qty	Extra Disc.	Total Price	
007	Wine Uncorked	$10.99	$10.99	1	$0.00	$10.99	Remove Item
002	Smart Guide to Yoga (Smart Guides)	$12.95	$12.95	1	$0.00	$12.95	Remove Item
101	Look-Alikes Jr	$13.95	$13.95	1	$0.00	$13.95	Remove Item

Done Internet

Figure 22c.

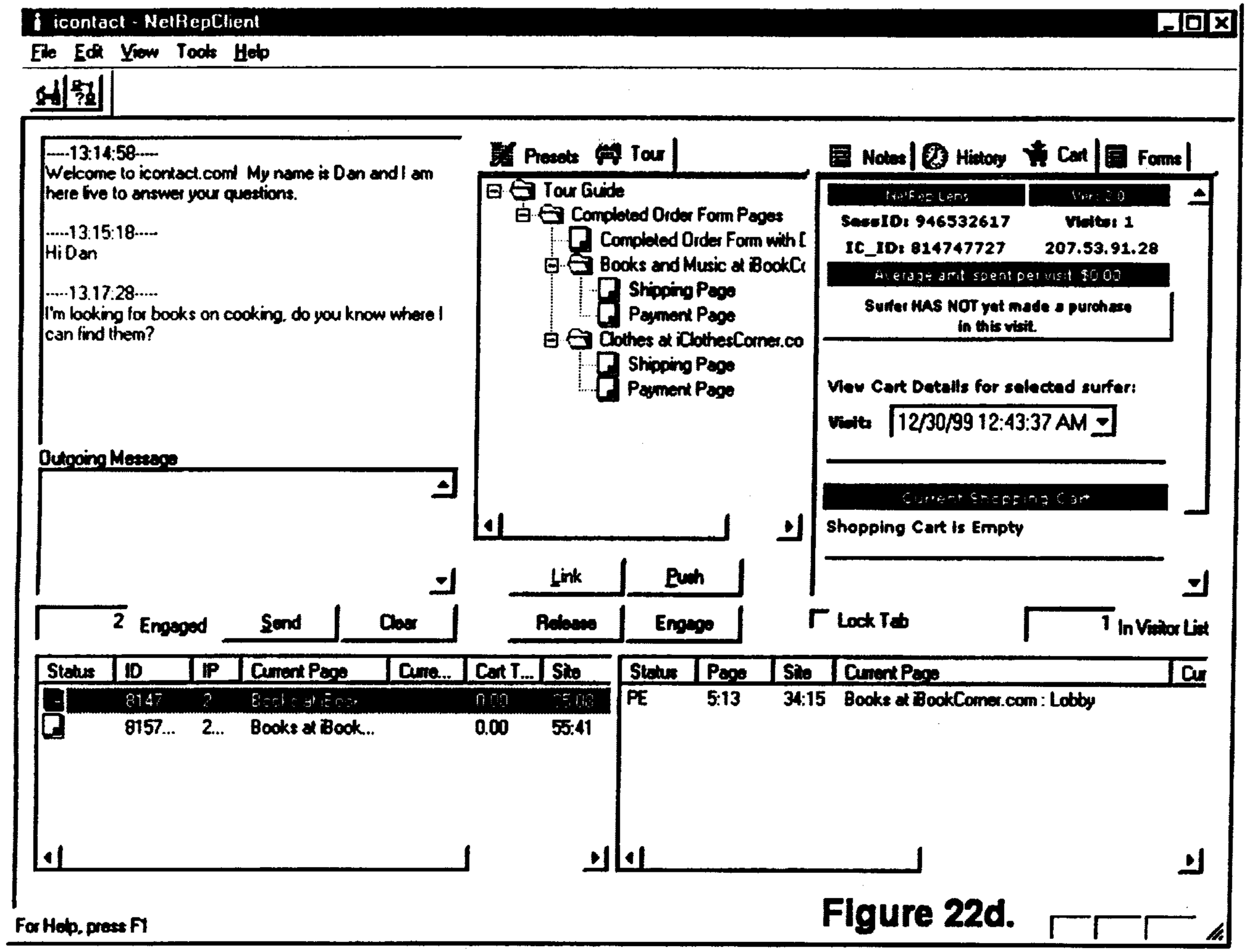

icontact - NetRepClient
File Edit View Tools Help
----13:14:58----
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
----13:15:18----
Hi Dan
----13.17:28----
I'm looking for books on cooking, do you know where I can find them?
Outgoing Message
Presets Tour
Tour Guide
Completed Order Form Pages
Completed Order Form with [
Books and Music at iBookC
Shipping Page
Payment Page
Clothes at iClothesCorner.co
Shipping Page
Payment Page
Notes History Cart Forms
NetRep Lens
SessID: 946532617
Visits: 1
IC_ID: 814747727
207.53.91.28
Surfer HAS NOT yet made a purchase in this visit.
View Cart Details for selected surfer:
Visit: 12/30/99 12:43:37 AM
Shopping Cart Is Empty
2 Engaged
Send
Clear
Link
Push
Release
Engage
Lock Tab
1 In Visitor List
Status ID IP Current Page Curre... Cart T... Site
8147 2 0.00
8157... 2... Books at iBook... 0.00 55:41
Status Page Site Current Page
PE 5:13 34:15 Books at iBookCorner.com : Lobby
For Help, press F1

Figure 22d.

815702357 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://207.53.91.160:8080/bin/icx.dll?cap?%2Fanazon%2Fdefault%2Easp&815702357 Go

Message from NetRep

> Welcome to ic-mall.com! My name is Dan and I am here live to answer your questions.

enabled by icontact
icontact.com
Patent Pending

Type your message to the NetRep in this box.
Hit your 'Enter' key or click 'Send' to send.

Do you have any books on Computers?

Send Reset

ICONTACT MALL

iBookCorner

BOOKS MUSIC

CHILDREN | FICTION | COMPUTERS | COOKING | HEALTH & FITNESS

SEARCH

All Products GO

BROWSE

- **Books**
  Bestsellers, Computers, Kids, Business...
- **Music**
  New Releases, Top Sellers, Classical, Soundtracks...
- **Video**
  DVDs, Top Sellers, New

Shopping Basket

You have 3 items in your shopping basket:
To change an item's quantity, edit the number and press "Update Basket".
To **Continue Shopping**, use the Departments on the top to navigate through the site.

Label	Name	Unit Price	Today's Price	Qty	Extra Disc.	Total Price	
007	Wine Uncorked	$10.99	$10.99	1	$0.00	$10.99	Remove Item
002	Smart Guide to Yoga (Smart Guides)	$12.95	$12.95	1	$0.00	$12.95	Remove Item
101	Look-Alikes Jr	$13.95	$13.95	1	$0.00	$13.95	Remove Item

Done Internet

Figure 22e.

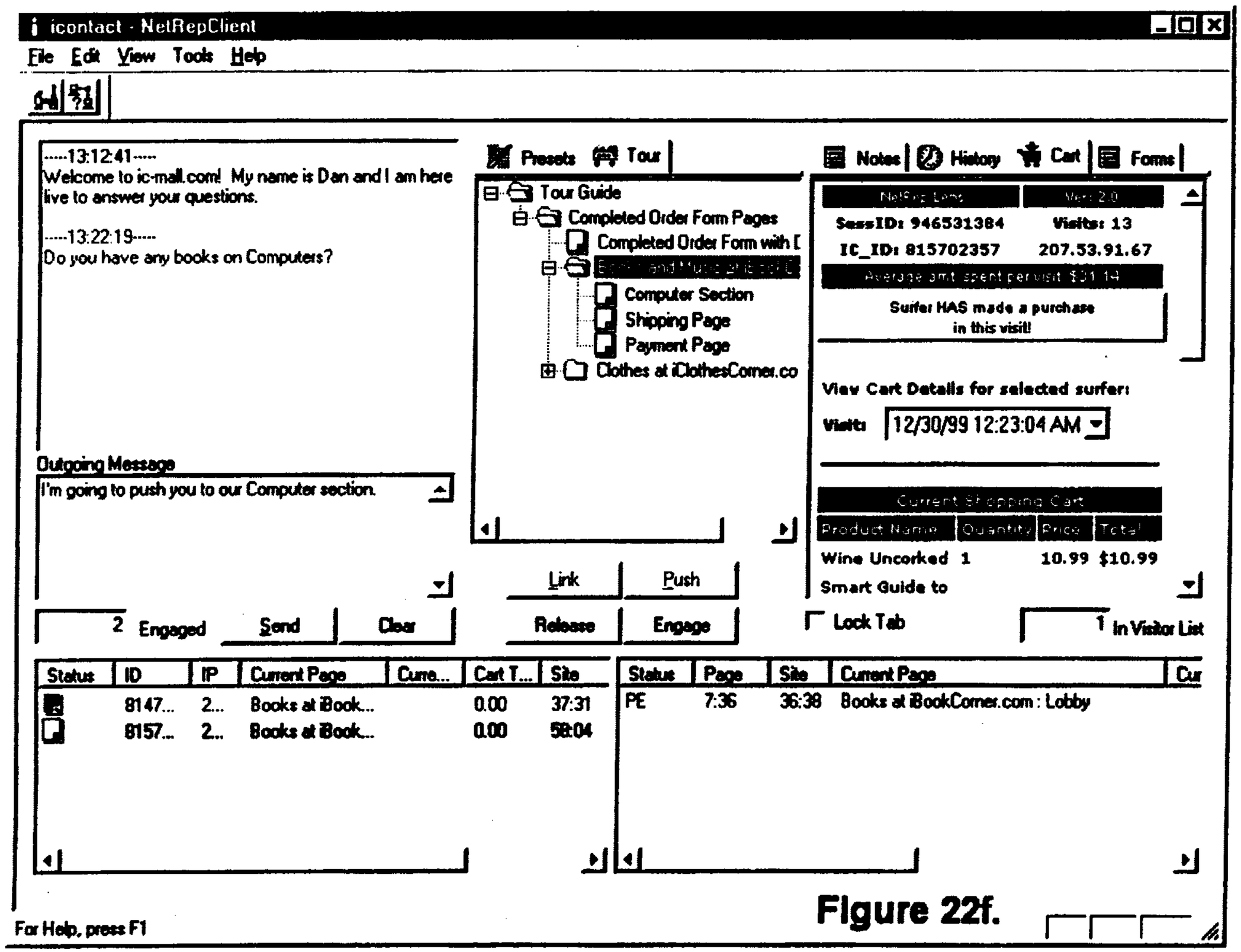

icontact - NetRepClient
File Edit View Tools Help
-----13:12:41-----
Welcome to ic-mall.com! My name is Dan and I am here live to answer your questions.
-----13:22:19-----
Do you have any books on Computers?
Outgoing Message
I'm going to push you to our Computer section.
2 Engaged
Send
Clear
Presets
Tour
Tour Guide
Completed Order Form Pages
Completed Order Form with [
Computer Section
Shipping Page
Payment Page
Clothes at iClothesCorner.co
Link
Push
Release
Engage
Notes
History
Cart
Forms
SessID: 946531384
Visits: 13
IC_ID: 815702357
207.53.91.67
Surfer HAS made a purchase in this visit!
View Cart Details for selected surfer:
Visit: 12/30/99 12:23:04 AM
Product Name
Quantity
Price
Total
Wine Uncorked 1
10.99 $10.99
Smart Guide to
Lock Tab
1 In Visitor List
Status
ID
IP
Current Page
Cart T...
Site
8147...
2...
Books at iBook...
0.00
37:31
8157...
2...
Books at iBook...
0.00
58:04
Status
Page
Site
Current Page
PE
7:36
36:38
Books at iBookCorner.com : Lobby
For Help, press F1

Figure 22f.

815702357 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://207.53.91.160:8080/bin/icx.dll?cap?%2Fanazon%2Fdefault%2Easp&815702357 Go

Message from NetRep

> Welcome to icontact.com! My name is Dan and I am here live to answer your questions.

enabled by icontact
icontact.com
Patent Pending

Your Message to NetRep

[redacted]

> Do you have any books on Computers?

iBookCorner

ICONTACT MALL

BOOKS MUSIC

CHILDREN | FICTION | COMPUTERS | COOKING | HEALTH & FITNESS

SEARCH

All Products GO!

BROWSE

- Books

Bestsellers, Computers, Kids, Business...

- Music

New Releases, Top Sellers, Classical, Soundtracks...

- Video

DVDs, Top Sellers, New

Computer - Professional Programming books

Automated Software Testing

Automated Software Testing: Introduction, Management, and Performance

First and foremost, Automated Software Testing presents a methodology for test managers called Automated Testing Lifecycle Management (ATLM).

Software for Use: A Practical Guide to the Models and Methods of UsageCentered Design (ACM Press)

Constantine & Lockwood SOFTWARE FOR USE

For anyone who designs

Done Internet

Figure 22g.

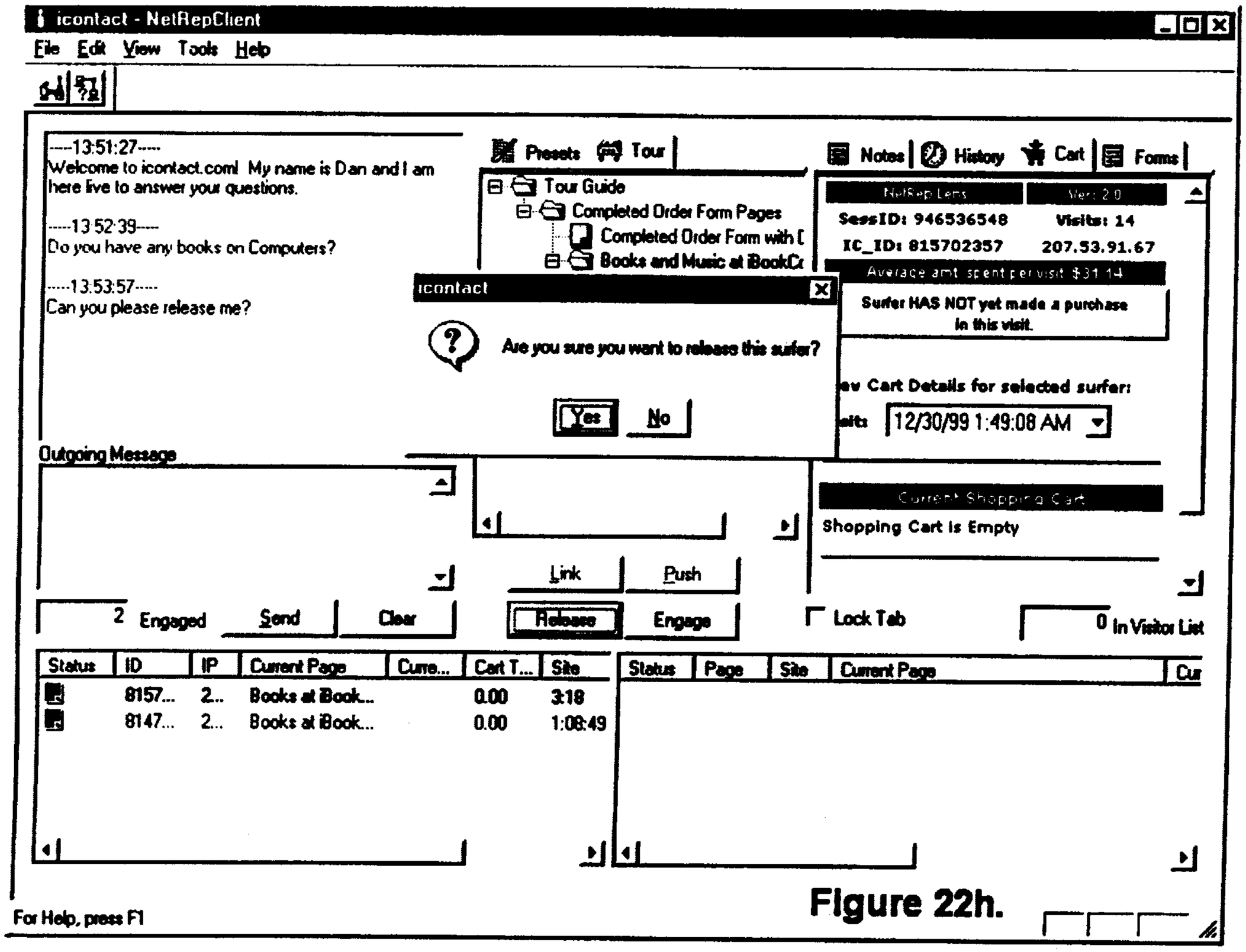

icontact - NetRepClient
File Edit View Tools Help
----13:51:27----
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
----13:52:39----
Do you have any books on Computers?
----13:53:57----
Can you please release me?
Presets Tour
Tour Guide
Completed Order Form Pages
Completed Order Form with [
Books and Music at iBookCx
Notes History Cart Forms
NetRep Lens
Ver: 2.0
SessID: 946536548
Visits: 14
IC_ID: 815702357
207.53.91.67
Average amt spent per visit $31.14
Surfer HAS NOT yet made a purchase in this visit.
icontact
Are you sure you want to release this surfer?
Yes
No
ew Cart Details for selected surfer:
its: 12/30/99 1:49:08 AM
Outgoing Message
Current Shopping Cart
Shopping Cart is Empty
Link
Push
2 Engaged
Send
Clear
Release
Engage
Lock Tab
0 In Visitor List
Status ID IP Current Page Curre... Cart T... Site
8157... 2... Books at iBook... 0.00 3:18
8147... 2... Books at iBook... 0.00 1:08:49
Status Page Site Current Page Cur
For Help, press F1

Figure 22h.

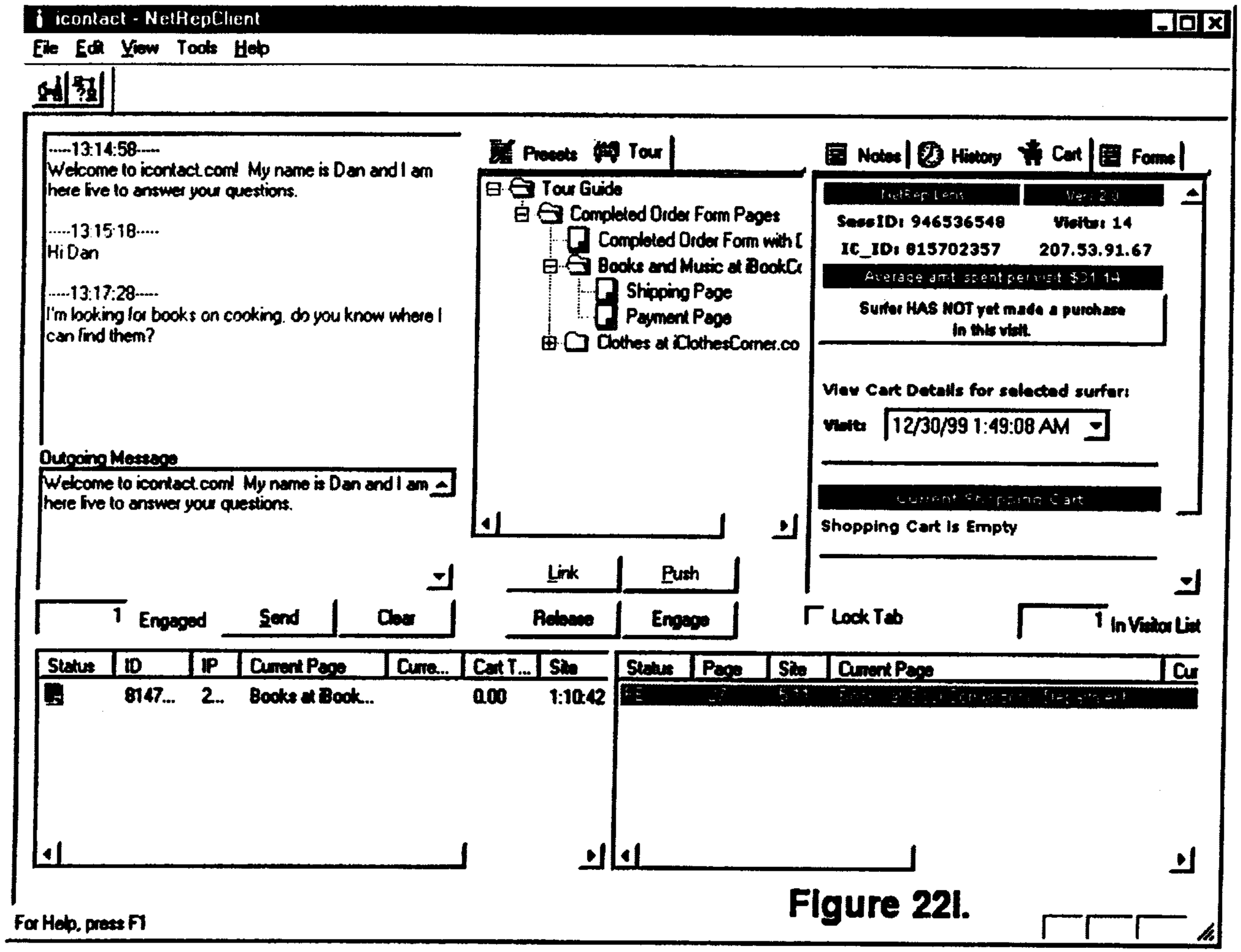

icontact - NetRepClient
File Edit View Tools Help
-----13:14:58-----
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
-----13:15:18-----
Hi Dan
-----13:17:28-----
I'm looking for books on cooking. do you know where I can find them?
Outgoing Message
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
1 Engaged
Send
Clear
Presets
Tour
Tour Guide
Completed Order Form Pages
Completed Order Form with [
Books and Music at iBookC
Shipping Page
Payment Page
Clothes at iClothesCorner.co
Link
Push
Release
Engage
Notes
History
Cart
Forms
SessID: 946536548
Visits: 14
IC_ID: 815702357
207.53.91.67
Surfer HAS NOT yet made a purchase in this visit.
View Cart Details for selected surfer:
Visit: 12/30/99 1:49:08 AM
Shopping Cart Is Empty
Lock Tab
1 In Visitor List
Status
ID
IP
Current Page
Curre...
Cart T...
Site
8147...
2...
Books at iBook...
0.00
1:10:42
Status
Page
Site
Current Page
For Help, press F1

Figure 22l.

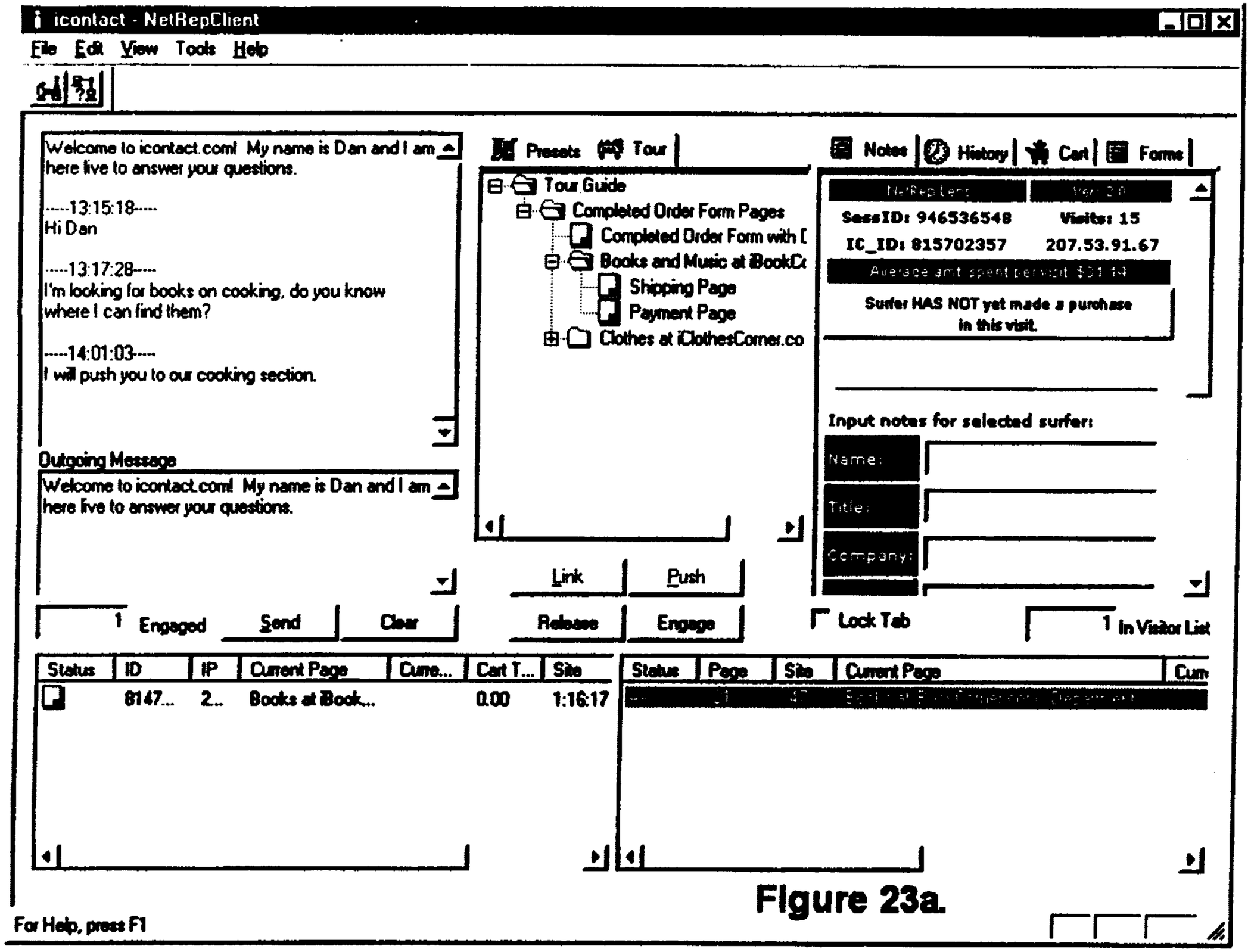

icontact - NetRepClient
File Edit View Tools Help
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
-----13:15:18-----
Hi Dan
-----13:17:28-----
I'm looking for books on cooking, do you know where I can find them?
-----14:01:03-----
I will push you to our cooking section.
Outgoing Message
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
1 Engaged
Send
Clear
Presets
Tour
Tour Guide
Completed Order Form Pages
Completed Order Form with [
Books and Music at iBookC
Shipping Page
Payment Page
Clothes at iClothesCorner.co
Link
Push
Release
Engage
Notes
History
Cart
Forms
SessID: 946536548
Visits: 15
IC_ID: 815702357
207.53.91.67
Surfer HAS NOT yet made a purchase in this visit.
Input notes for selected surfer:
Name:
Title:
Company:
Lock Tab
1 In Visitor List
Status
ID
IP
Current Page
Curre...
Cart T...
Site
8147...
2...
Books at iBook...
0.00
1:16:17
Status
Page
Site
Current Page
Cum
For Help, press F1

Figure 23a.

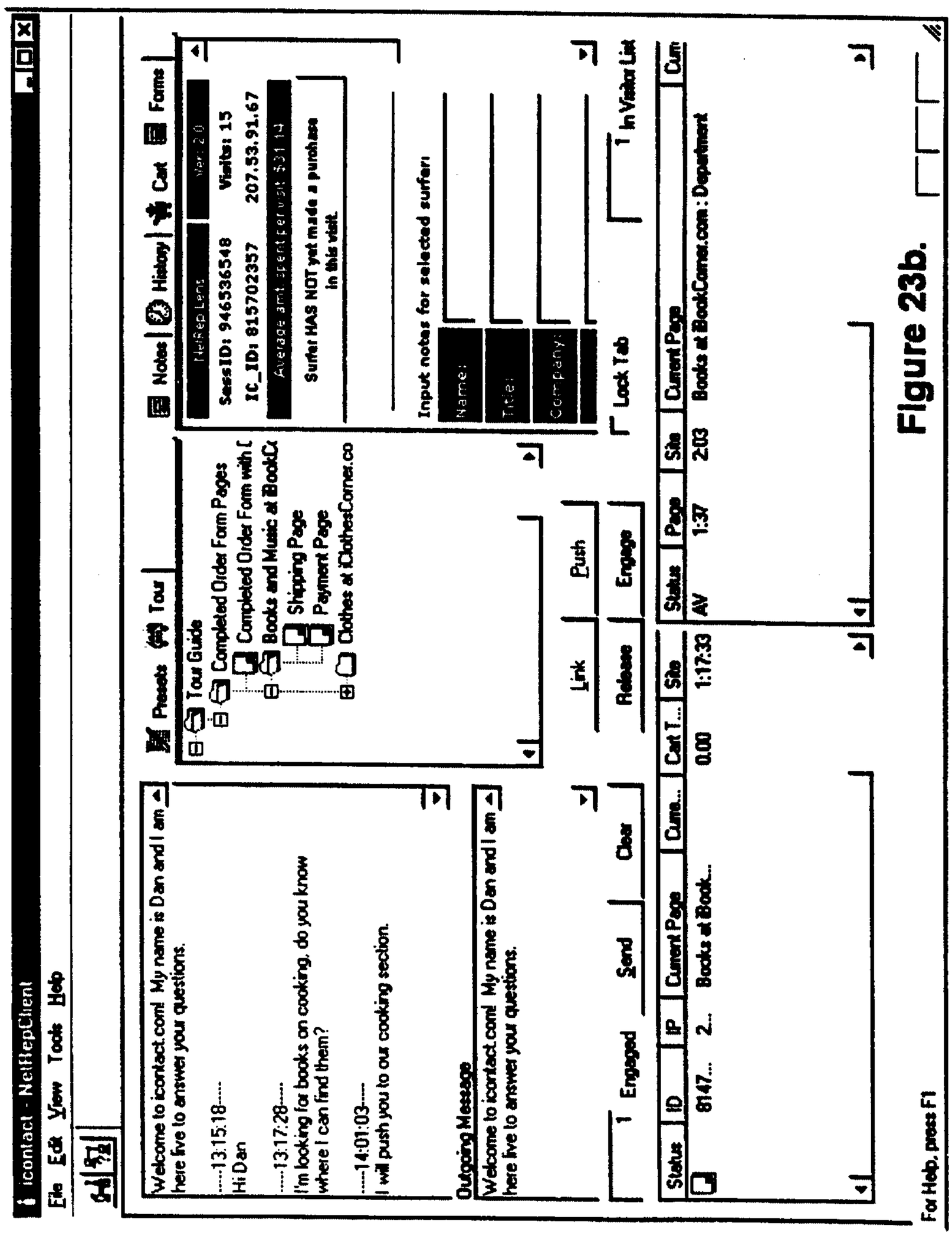

Presets
Tour
Cart
Forms
Notes
History
Tour Guide
Completed Order Form Pages
Completed Order Form with C
Books and Music at BookCo
Shipping Page
Payment Page
Clothes at iClothesComes.co
Visits: 15
207.53.91.67
Input notes for selected
Name:
Title:
Company:
Lock Tab
1 In Visitor List
Link
Push
Release
Engage
Cum
Cart T...
Site
Status
Page
Site
Current Page
0.00
1:17:33
AV
1:37
203
Books at BookComes.com : Department
Welcome to icontact.com! My name is Dan and I am here five to answer your questions.
----13:15:18----
Hi Dan
----13:17:28----
I'm looking for books on cooking, do you know where I can find them?
----14:01:03----
I will push you to our cooking section.
Outgoing Message
Welcome to icontact.com! My name is Dan and I am here five to answer your questions.
1 Engaged
Send
Clear
Status
ID
IP
Current Page
Cume...
8147...
2...
Books at Book...
For Help, press F1

Figure 23b.

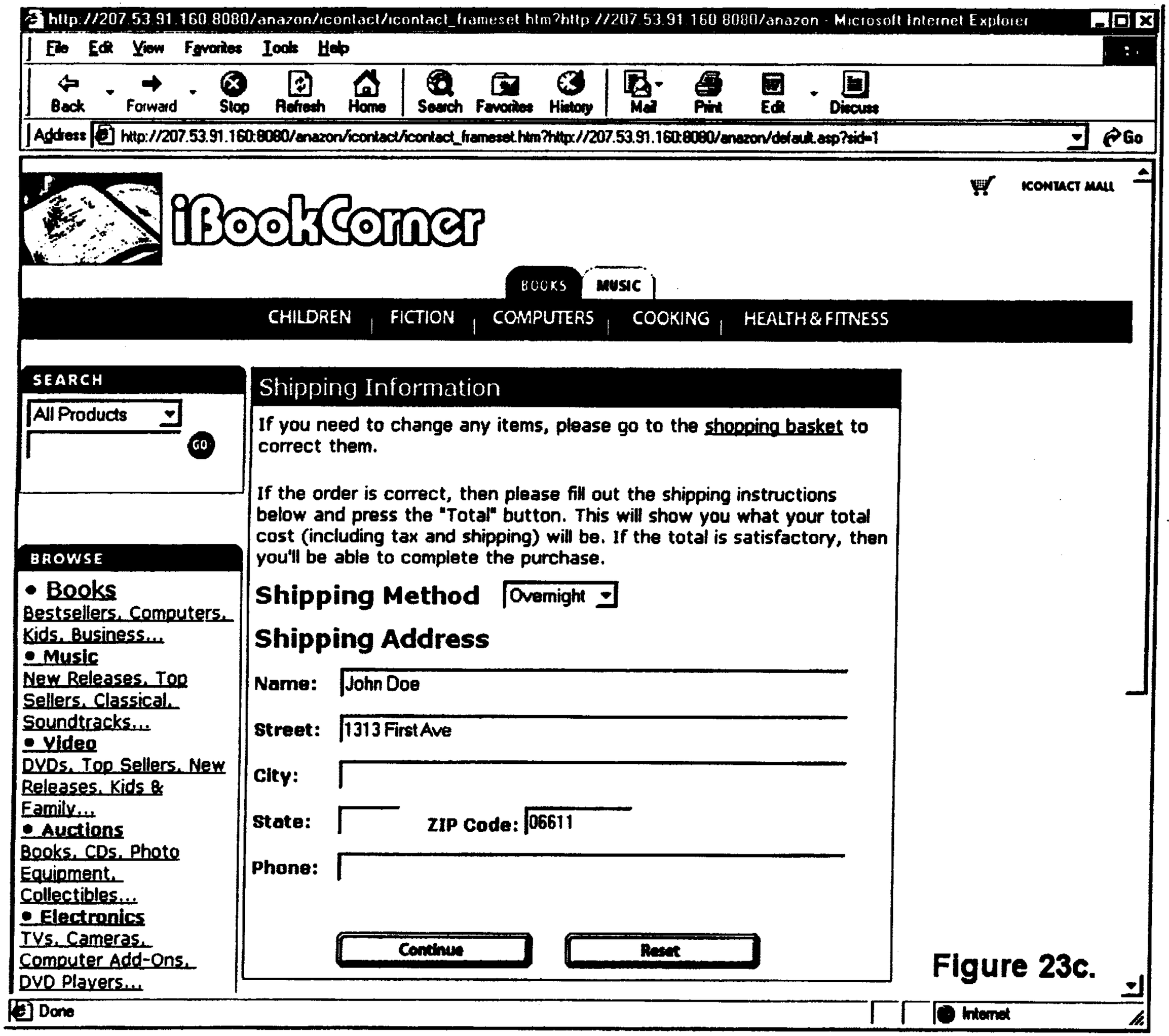

http://207.53.91.160:8080/anazon/icontact/icontact_frameset.htm?http://207.53.91.160:8080/anazon - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss
Address http://207.53.91.160:8080/anazon/icontact/icontact_frameset.htm?http://207.53.91.160:8080/anazon/default.asp?sid=1
Go
iBookCorner
ICONTACT MALL
BOOKS MUSIC
CHILDREN | FICTION | COMPUTERS | COOKING | HEALTH & FITNESS
SEARCH
All Products
GO
BROWSE
• Books
Bestsellers, Computers, Kids, Business...
• Music
New Releases, Top Sellers, Classical, Soundtracks...
• Video
DVDs, Top Sellers, New Releases, Kids & Family...
• Auctions
Books, CDs, Photo Equipment, Collectibles...
• Electronics
TVs, Cameras, Computer Add-Ons, DVD Players...
Shipping Information
If you need to change any items, please go to the shopping basket to correct them.
If the order is correct, then please fill out the shipping instructions below and press the "Total" button. This will show you what your total cost (including tax and shipping) will be. If the total is satisfactory, then you'll be able to complete the purchase.
Shipping Method Overnight
Shipping Address
Name: John Doe
Street: 1313 First Ave
City:
State:
ZIP Code: 06611
Phone:
Continue
Reset
Done
Internet

Figure 23c.

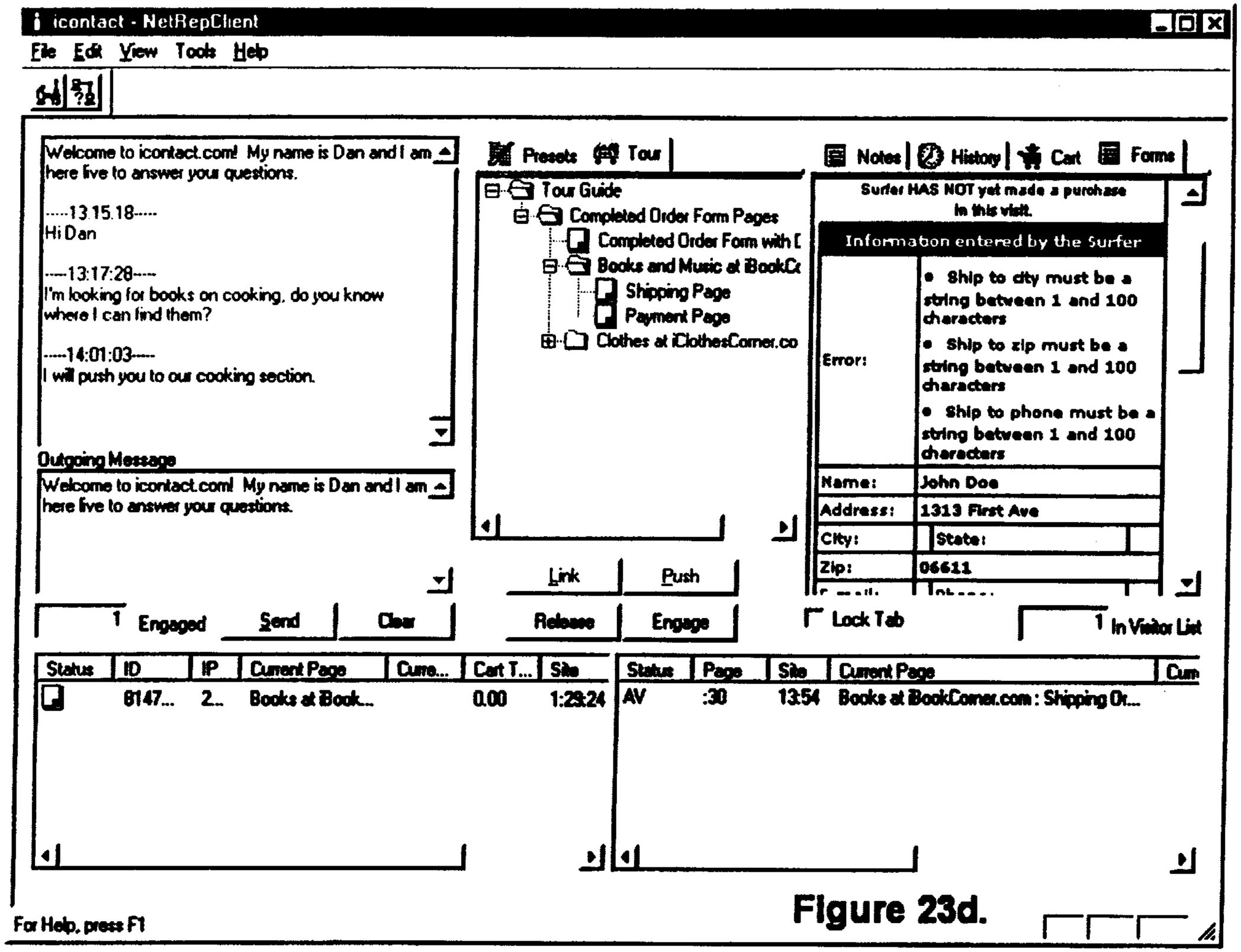

icontact - NetRepClient
File Edit View Tools Help
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
-----13:15:18-----
Hi Dan
-----13:17:28-----
I'm looking for books on cooking, do you know where I can find them?
-----14:01:03-----
I will push you to our cooking section.
Outgoing Message
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
Engaged
Send
Clear
Presets
Tour
Tour Guide
Completed Order Form Pages
Completed Order Form with [
Books and Music at iBookCo
Shipping Page
Payment Page
Clothes at iClothesCorner.co
Link
Push
Release
Engage
Notes
History
Cart
Forms
Surfer HAS NOT yet made a purchase in this visit.
Information entered by the Surfer
Error:
• Ship to city must be a string between 1 and 100 characters
• Ship to zip must be a string between 1 and 100 characters
• Ship to phone must be a string between 1 and 100 characters
Name: John Doe
Address: 1313 First Ave
City:
State:
Zip: 06611
Lock Tab
In Visitor List
Status ID IP Current Page Curre... Cart T... Site
8147... 2... Books at iBook... 0.00 1:29:24
Status Page Site Current Page Cum
AV :30 13:54 Books at iBookCorner.com : Shipping Or...
For Help, press F1

Figure 23d.

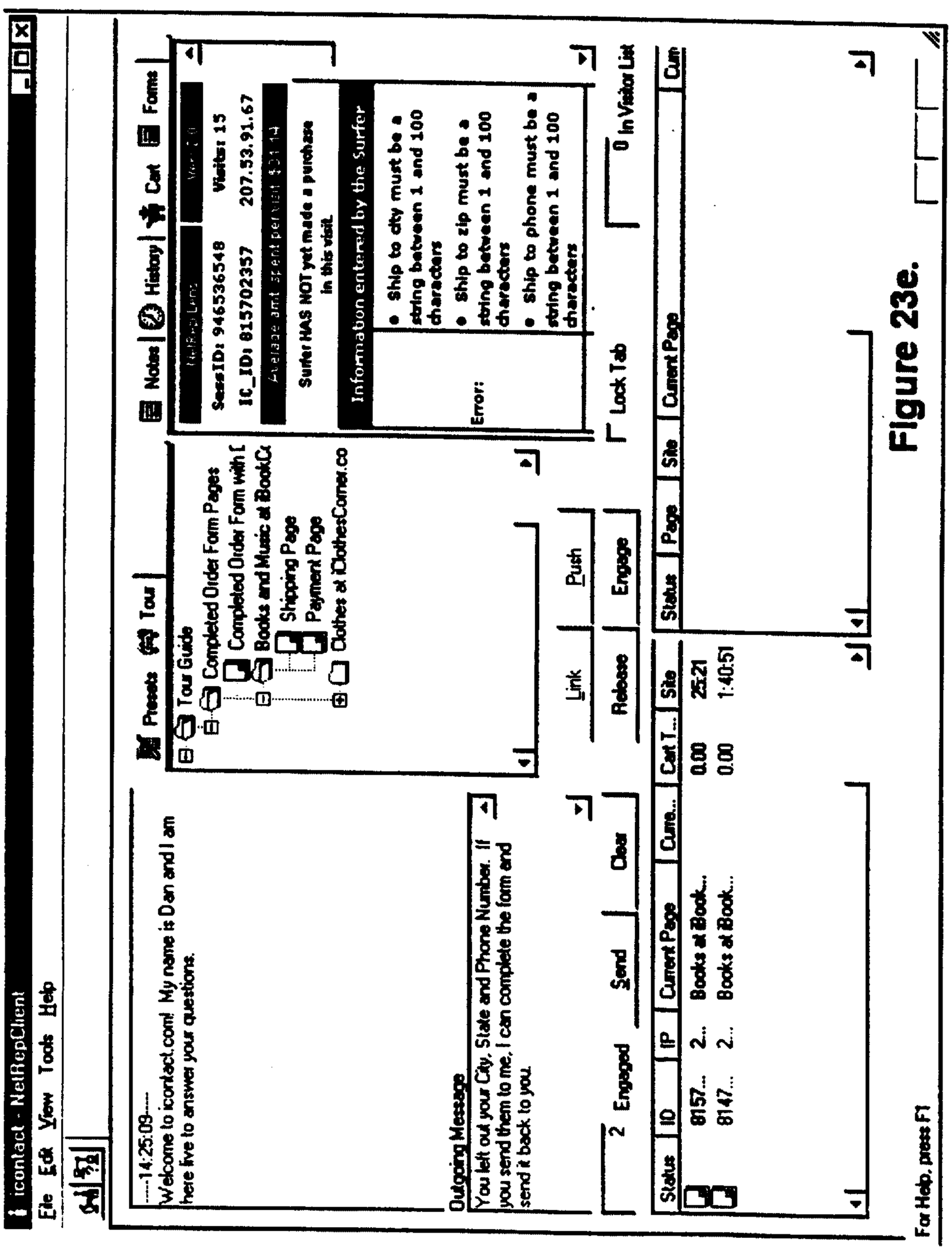

icontact - NetRepClient
File Edit View Tools Help
Presets
Tour
Notes
History
Cart
Forms
Tour Guide
Completed Order Form Pages
Completed Order Form with [
Books and Music at BookC
Shipping Page
Payment Page
Clothes at ClothesCorner.co
SessID: 946536548
Visits: 15
IC_ID: 815702357
207.53.91.67
Surfer HAS NOT yet made a purchase in this visit
Information entered by the Surfer
Ship to city must be a string between 1 and 100 characters
Ship to zip must be a string between 1 and 100 characters
Ship to phone must be a string between 1 and 100 characters
Error:
Link
Push
Release
Engage
0 In Visitor List
Lock Tab
Status
Page
Site
Current Page
Cart T...
Site
0.00 25:21
0.00 1:40:51
----14:25:09----
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
Outgoing Message
You left out your City, State and Phone Number. If you send them to me, I can complete the form and send it back to you.
2 Engaged
Send
Clear
Status
ID
IP
Current Page
Curre...
8157... 2... Books at Book...
8147... 2... Books at Book...
For Help, press F1

Figure 23e.

815702357 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://207.53.91.160:8080/bin/icx.dll?cap?http%3A%2F%2F207%2E53%2E91%2E160%3A8080%2Fanazon%2Fshipping%2Easp%3F!815702357 Go

Message from NetRep

> You left out your City, State and Phone Number. If you send them to me, I can complete the form and send it back to you.

> Welcome to icontact.com! My name is Dan and I am here live to answer your questions.

enabled by icontact
icontact.com
Patent Pending

Your Message to NetRep

[redacted]

ICONTACT MALL

iBookCorner

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CHILDREN | FICTION | COMPUTERS | COOKING | HEALTH & FITNESS

SEARCH
All Products
GO!

BROWSE
- **Books**
  Bestsellers, Computers, Kids, Business...
- **Music**
  New Releases, Top Sellers, Classical, Soundtracks...
- **Video**
  DVDs, Top Sellers, New

We are sorry, but we are unable to process your request:

- Ship to city must be a string between 1 and 100 characters
- Ship to zip must be a string between 1 and 100 characters
- Ship to phone must be a string between 1 and 100 characters

Please go back and correct the error and try again.

Done Internet

Figure 23f.

815702357 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://207.53.91.160:8080/bin/icx.dll?cap?http%3A%2F%2F207%2E53%2E91%2E160%3A8080%2Fanazon%2Fshipping%2Easp%3F&815702357 Go

Message from NetRep

> You left out your City, State and Phone Number. If you send them to me, I can complete the form and send it back to you.

> Welcome to icontact.com! My name is Dan and I am here live to answer your questions.

enabled by icontact
icontact.com
Patent Pending

Type your message to the NetRep in this box.
Hit your 'Enter' key or click 'Send' to send.

Thanks! They are as follows: Trumbull, CT 203-555-1212

Send Reset

ICONTACT MALL

iBookCorner

BOOKS MUSIC

CHILDREN | FICTION | COMPUTERS | COOKING | HEALTH & FITNESS

SEARCH

All Products GO

BROWSE

- **Books**
  Bestsellers, Computers, Kids, Business...
- **Music**
  New Releases, Top Sellers, Classical, Soundtracks...
- **Video**
  DVDs, Top Sellers, New...

We are sorry, but we are unable to process your request:

- Ship to city must be a string between 1 and 100 characters
- Ship to zip must be a string between 1 and 100 characters
- Ship to phone must be a string between 1 and 100 characters

Please go back and correct the error and try again.

Done Internet

Figure 23g.

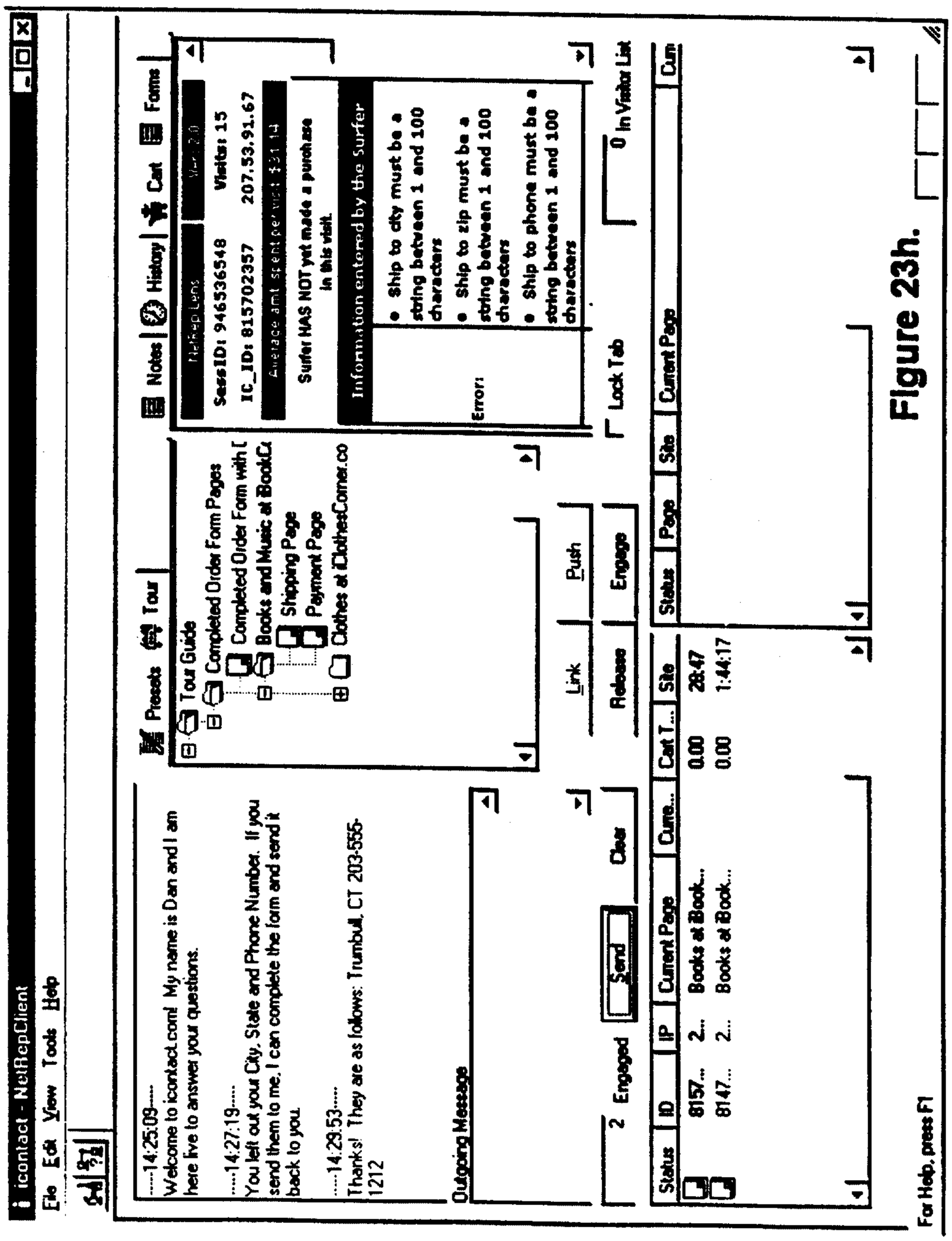

iContact - NetRepClient
File Edit View Tools Help
Presets Tour
Tour Guide
Completed Order Form Pages
Completed Order Form with [
Books and Music at BookCo
Shipping Page
Payment Page
Clothes at iClothesCorner.co
Notes
History
Cart
Forms
Rep Lens
Visits: 15
207.53.91.67
Surfer HAS NOT yet made a purchase in this visit.
Information entered by the Surfer
• Ship to city must be a string between 1 and 100 characters
• Ship to zip must be a string between 1 and 100 characters
• Ship to phone must be a string between 1 and 100 characters
Error:
0 In Visitor List
Lock Tab
Link
Push
Release
Engage
Status
Page
Site
Current Page
Cart T...
Site
0.00 28:47
0.00 1:44:17
Books at Book...
Books at Book...
14:25:09----
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
14:27:19----
You left out your City, State and Phone Number. If you send them to me, I can complete the form and send it back to you.
14:29:53----
Thanks! They are as follows: Trumbull, CT 203-555-1212
Outgoing Message
2 Engaged
Send
Clear
Status
ID
IP
Current Page
Cume...
8157... 2... Books at Book...
8147... 2... Books at Book...
For Help, press F1

Figure 23h.

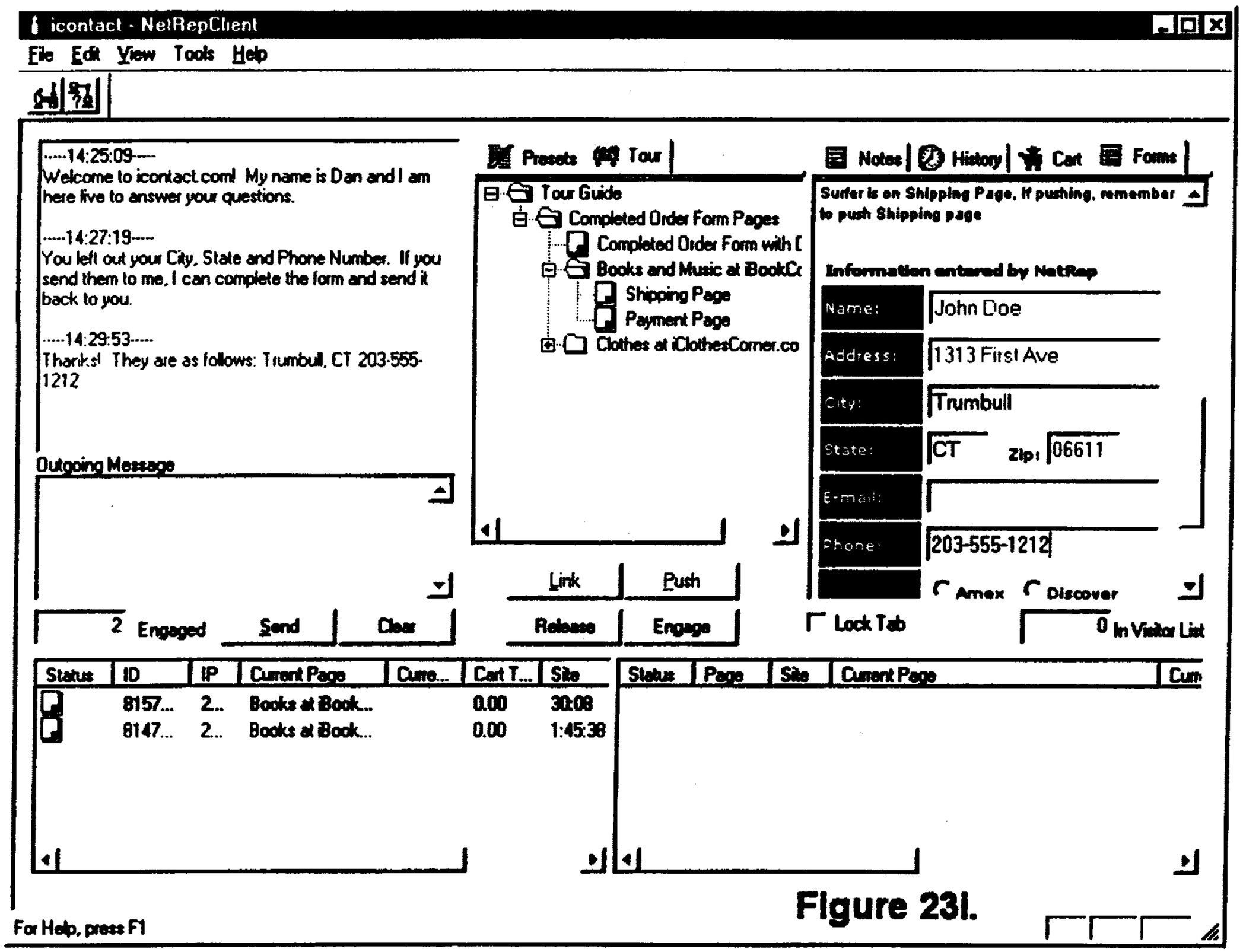

icontact - NetRepClient
File Edit View Tools Help
-----14:25:09-----
Welcome to icontact.com! My name is Dan and I am here live to answer your questions.
-----14:27:19-----
You left out your City, State and Phone Number. If you send them to me, I can complete the form and send it back to you.
-----14:29:53-----
Thanks! They are as follows: Trumbull, CT 203-555-1212
Outgoing Message
2 Engaged
Send
Clear
Presets
Tour
Tour Guide
Completed Order Form Pages
Completed Order Form with [
Books and Music at iBookCo
Shipping Page
Payment Page
Clothes at iClothesCorner.co
Link
Push
Release
Engage
Notes
History
Cart
Forms
Surfer is on Shipping Page, if pushing, remember to push Shipping page
Information entered by NetRep
Name: John Doe
Address: 1313 First Ave
City: Trumbull
State: CT
Zip: 06611
E-mail:
Phone: 203-555-1212
Amex
Discover
Lock Tab
0 In Visitor List
Status ID IP Current Page Curre... Cart T... Site
8157... 2... Books at iBook... 0.00 30:08
8147... 2... Books at iBook... 0.00 1:45:38
Status Page Site Current Page Cum
For Help, press F1

Figure 23I.

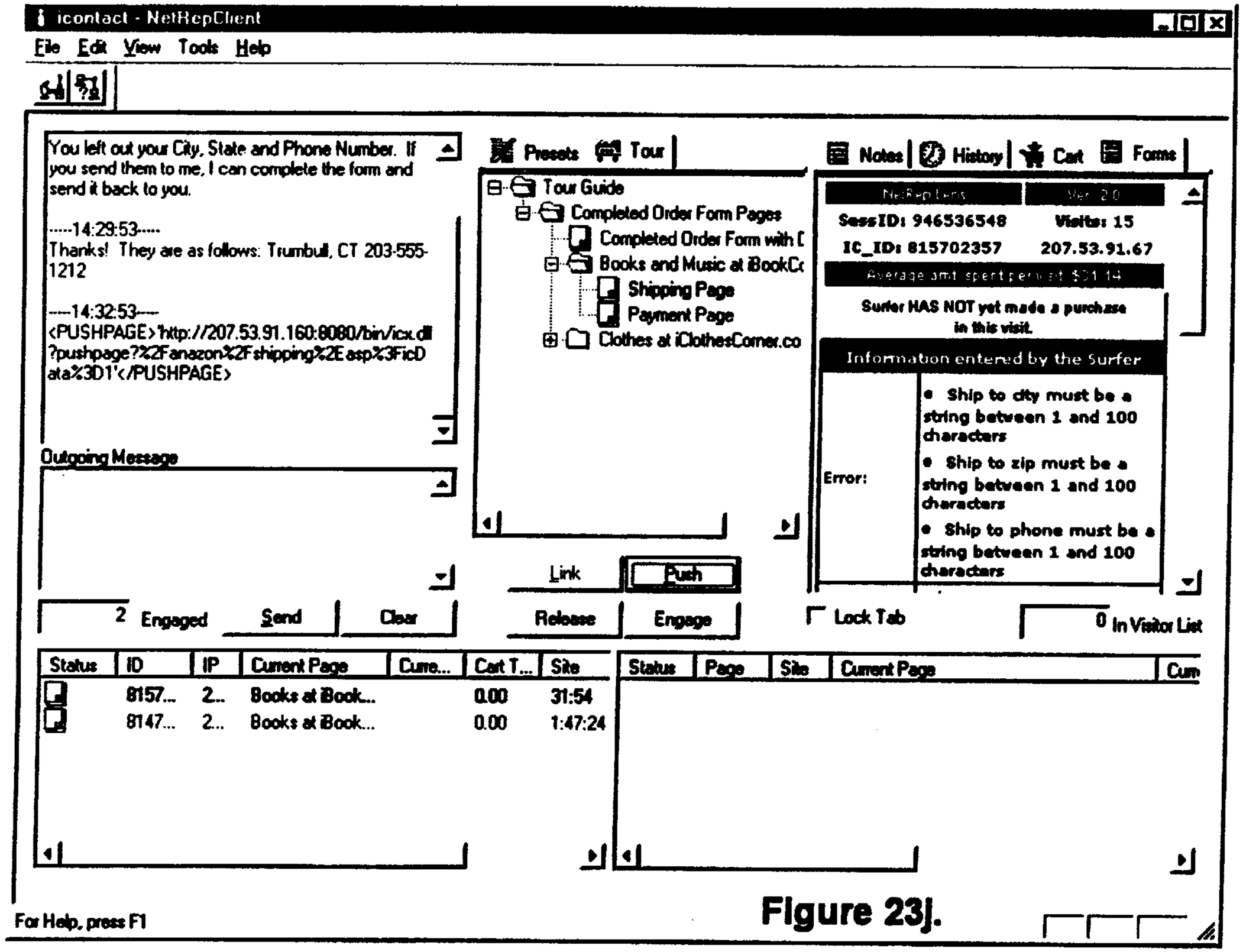

icontact - NetRepClient
File Edit View Tools Help
You left out your City, State and Phone Number. If you send them to me, I can complete the form and send it back to you.
-----14:29:53-----
Thanks! They are as follows: Trumbull, CT 203-555-1212
----14:32:53----
<PUSHPAGE>'http://207.53.91.160:8080/bin/icx.dll?pushpage?%2Fanazon%2Fshipping%2Easp%3FicData%3D1'</PUSHPAGE>
Outgoing Message
2 Engaged
Send
Clear
Presets
Tour
Tour Guide
Completed Order Form Pages
Completed Order Form with [
Books and Music at iBookCo
Shipping Page
Payment Page
Clothes at iClothesCorner.co
Link
Push
Release
Engage
Notes
History
Cart
Forms
NetReplens
Ver 2.0
SessID: 946536548
Visits: 15
IC_ID: 815702357
207.53.91.67
Average amt spent per visit $31.14
Surfer HAS NOT yet made a purchase in this visit.
Information entered by the Surfer
Error:
• Ship to city must be a string between 1 and 100 characters
• Ship to zip must be a string between 1 and 100 characters
• Ship to phone must be a string between 1 and 100 characters
Lock Tab
0 In Visitor List
Status
ID
IP
Current Page
Curre...
Cart T...
Site
8157...
2...
Books at iBook...
0.00
31:54
8147...
2...
Books at iBook...
0.00
1:47:24
Status
Page
Site
Current Page
Cum
For Help, press F1

Figure 23j.

815702357 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://207.53.91.160:8080/bin/icx.dll?pushpage?%2Fanazon%2Fshipping%2Easp%3FicData%3D1 Go

Message from NetRep

> You left out your City, State and Phone Number. If you send them to me, I can complete the form and send it back to you.

> Welcome to icontact.com! My name is Dan and I am here live to answer your questions.

created by icontact
icontact.com
Patent Pending

Type your message to the NetRep in this box.
Hit your 'Enter' key or click 'Send' to send.

Thank You...that is correct!

Send Reset

CHILDREN | FICTION | COMPUTERS | COOKING | HEALTH&FITNESS

SEARCH

All Products GO!

BROWSE

- **Books**
  Bestsellers, Computers, Kids, Business...
- **Music**
  New Releases, Top Sellers, Classical, Soundtracks...
- **Video**
  DVDs, Top Sellers, New Releases, Kids & Family...
- **Auctions**
  Books, CDs, Photo Equipment, Collectibles...
- **Electronics**

Shipping Information

If you need to change any items, please go to the shopping basket to correct them.

If the order is correct, then please fill out the shipping instructions below and press the "Total" button. This will show you what your total cost (including tax and shipping) will be. If the total is satisfactory, then you'll be able to complete the purchase.

Shipping Method Overnight

Shipping Address

Name: John Doe

Street: 1313 First Ave

City: Trumbull

State: CT **ZIP Code:** 06611

Phone: 203-555-1212

Done Internet

Figure 23k.

815702357 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://207.53.91.160:8080/bin/icx.dll?pushpage?%2Fanazon%2Fshipping%2Easp%3FicData%3D1 Go

Message from NetRep

> You left out your City, State and Phone Number. If you send them to me, I can complete the form and send it back to you.

> Welcome to icontact.com! My name is Dan and I am here live to answer your questions.

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Your Message to NetRep

[redacted]

> Thank You...that is correct!

> Thanks! They are as follows: Trumbull, CT 203-555-1212

iBookCorner

BOOKS | MUSIC

CHILDREN | FICTION | COMPUTERS | COOKING | HEALTH & FITNESS

SEARCH

All Products GO!

BROWSE

- Books

Bestsellers, Computers, Kids, Business...

- Music

New Releases, Top Sellers, Classical, Soundtracks...

- Video

DVDs, Top Sellers, New Releases, Kids &

Purchase Confirmation

Your order number is
PRC0PX52PUS12NHC00JP450KD7 .

Please record it for referencing your order.

Thank you for your shopping at Books at iBookCorner.com.

If you want to continue shopping, simply return to the Welcome page.

Done Internet

Figure 23I.

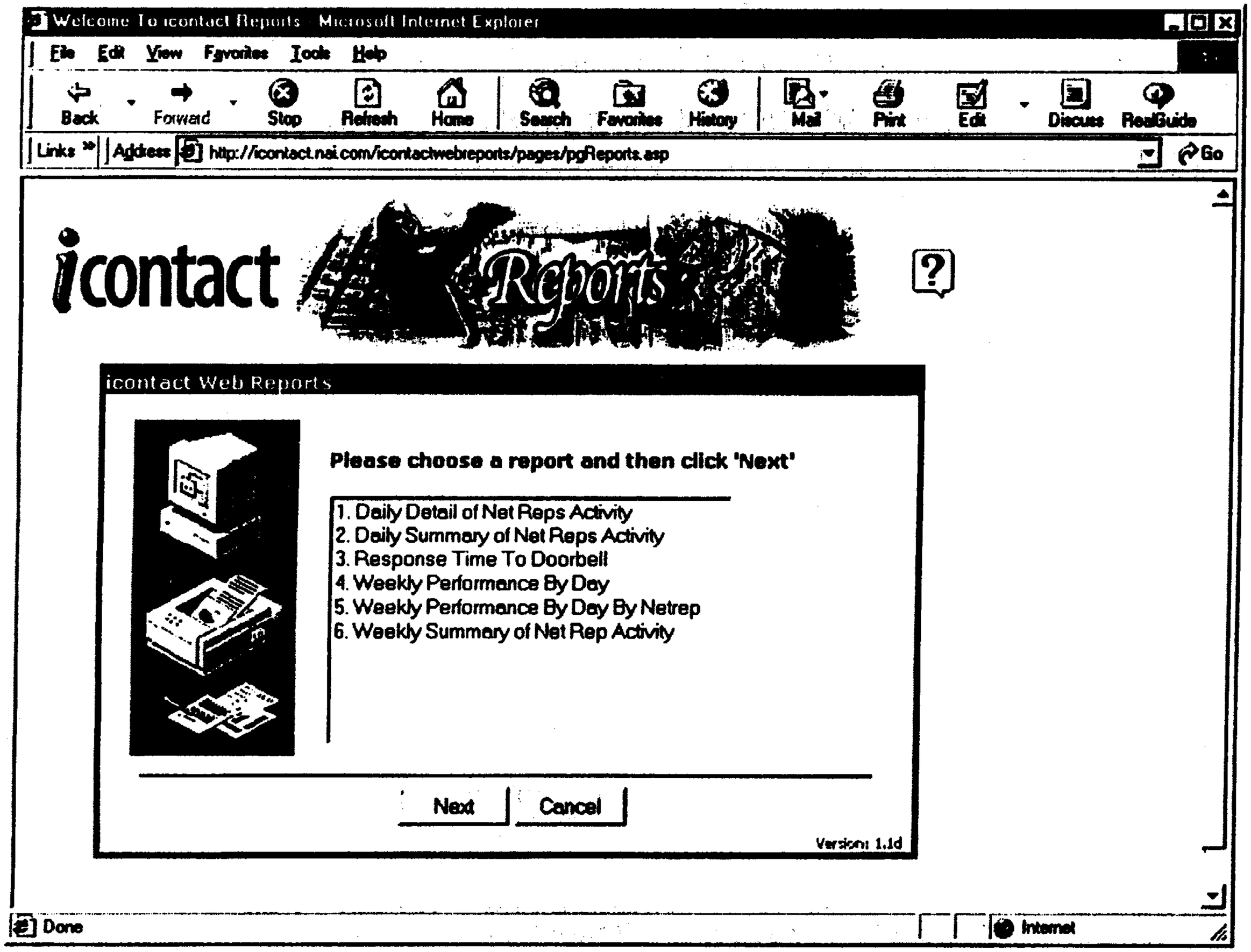
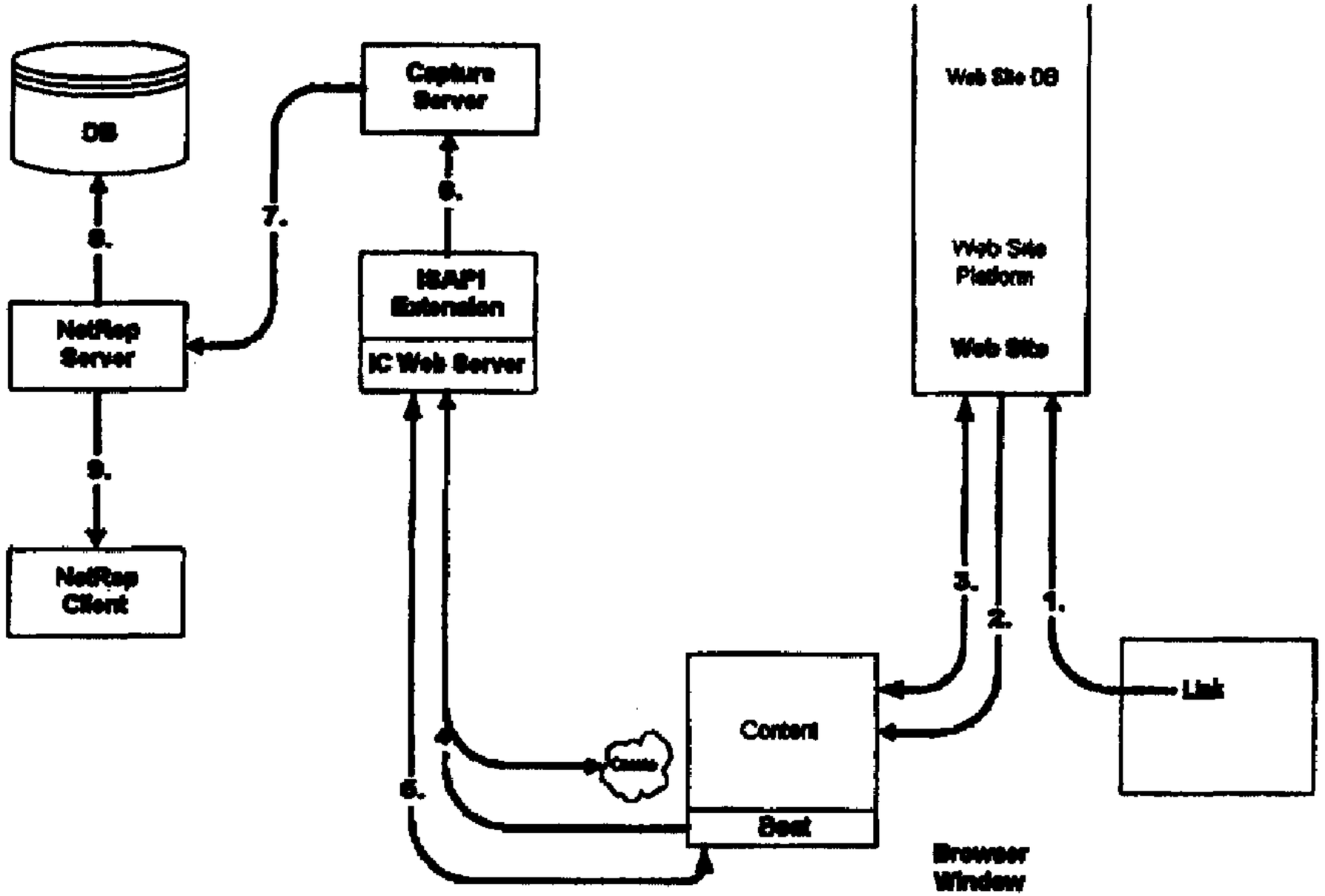

Welcome To icontact Reports - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss RealGuide
Links Address http://icontact.nai.com/icontactwebreports/pages/pgReports.asp
Go
icontact
Reports
icontact Web Reports
Please choose a report and then click 'Next'
1. Daily Detail of Net Reps Activity
2. Daily Summary of Net Reps Activity
3. Response Time To Doorbell
4. Weekly Performance By Day
5. Weekly Performance By Day By Netrep
6. Weekly Summary of Net Rep Activity
Next
Cancel
Version 1.1d
Done
Internet

Fig. 4A

24


DB
Capture Server
7.
6.
8.
NetRep Server
ISAPI Extension
IC Web Server
9.
NetRep Client
Web Site DB
Web Site Platform
Web Site
3.
2.
1.
Link
Content
Cache
5.
Shell
Browser Window