

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
24 December 2003 (24.12.2003)

PCT

(10) International Publication Number
WO 03/107129 A2

- (51) International Patent Classification⁷: G06F
- (21) International Application Number: PCT/US03/18717
- (22) International Filing Date: 13 June 2003 (13.06.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
 - 60/389,037 13 June 2002 (13.06.2002) US
 - 10/346,508 15 January 2003 (15.01.2003) US
- (71) Applicant: GP WARE [US/US]; 1455 Adams Drive, Menlo Park, CA 94025 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

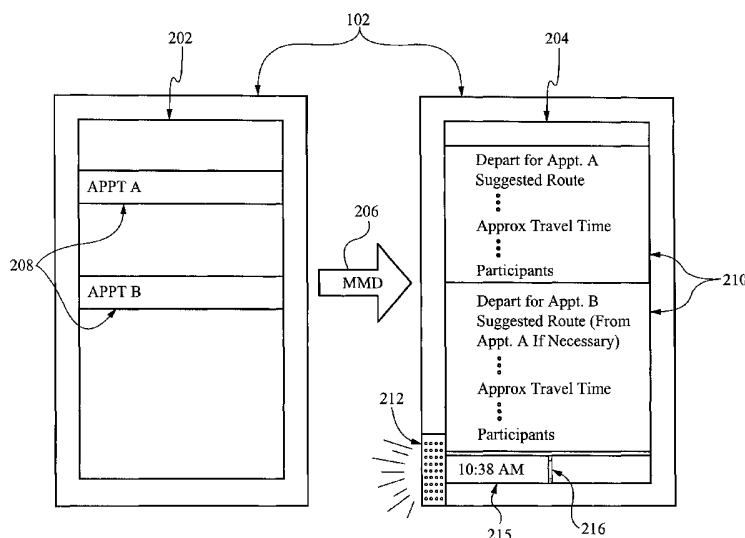
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

- (72) Inventors: LEHAFF, Samir; 4 Applewood Lane, Portola Valley, CA 94028 (US). MILLER, Martin, E.; 4754 Peaceful Lane, Pleasanton, CA 94566 (US).
- (74) Agents: OWENS, Jonathan, O. et al.; Haverstock & Owens LLP, 162 North Wolfe Road, Sunnyvale, CA 94086 (US).

Published:
— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR A CALENDAR TRACKING AND MONITORING SERVICE



(57) Abstract: The present invention is a system and method that provides the scheduling capabilities of a personal calendaring system while incorporating the services available to address and mapping databases users and GPS users. The present invention is a system and method that utilizes a user's existing personal digital assistant or equivalent and contact information residing on an enterprise server to automatically compile appointments, trips and travel times to create a travel schedule. The system and method can then concatenate the calendar schedule with the travel schedule to get a true day schedule. The true day schedule may include departure times for appointments, lists of participants in the scheduled meetings, may notify departing parties of correct departure times and may notify the hosting parties of the anticipated time of arrival.

WO 03/107129 A2

**METHOD AND APPARATUS FOR A CALENDAR TRACKING AND
MONITORING SERVICE**

RELATED APPLICATION(S):

5 This Patent Application claims priority under 35 U.S.C. §119(e) of the co-pending
United States Provisional Patent Application, Serial No. 60/389,037, filed June 13, 2002, and
entitled "METHOD OF AND APPARATUS FOR IN VEHICLE OPERATION OF
HANDHELD DEVICES INCLUDING LOW VOLTAGE POWER SOURCE AND
CALENDAR TRACKING AND MONITORING SERVICE". The Provisional Patent
10 Application, Serial No. 60/389,037, filed June 13, 2002, and entitled "METHOD OF AND
APPARATUS FOR IN VEHICLE OPERATION OF HANDHELD DEVICES INCLUDING
LOW VOLTAGE POWER SOURCE AND CALENDAR TRACKING AND
MONITORING SERVICE" is also hereby incorporated by reference in its entirety.

15 FIELD OF THE INVENTION:

The present invention relates generally to a method and apparatus for a calendar
tracking and monitoring service. More specifically, the present invention relates to a method
and apparatus for generating and monitoring a user's schedule utilizing a desktop calendar
application and an address and mapping database.

20

BACKGROUND OF THE INVENTION:

Personal calendaring systems are becoming more widespread as a necessary tool in
organizing business as well as personal schedules. Personal calendaring systems have been
implemented in desktop systems and laptop systems alike. It is also common for personal
25 calendaring systems to be implemented on personal digital assistants (PDAs) or other
handheld devices, including portable telephones. Personal calendaring systems in a desktop
or laptop system (host system) can be synchronized to a compatible system on a handheld
device. Synchronization allows a user to keep schedule information current on both the
handheld device as well as on the host system.

30 Appointments are readily kept on the aforementioned calendaring systems. Such
appointments usually contain scheduled times, location data, participants, duration and other
data associated with the appointment as specified by the user.

Address and mapping databases are also available through internet outlets such as
Yahoo® and Mapquest®, and also through similar vendors in a disk or CD-Rom format.
35 Such databases are able to map locations based on address data supplied by a user and can
also provide driving routes based on two addresses.

Further, there is currently available a Global Positioning System (GPS) whereby a
device or person having GPS capabilities can be located or tracked using GPS satellites.
Such capabilities are now becoming available in cellular phones, automobiles, wrist watches
40 and pagers, as well as other handheld devices such as PDAs.

There is currently no system that provides the scheduling capabilities of a personal calendaring system that incorporates the services available to address and mapping databases users and GPS users.

5 SUMMARY OF THE INVENTION:

The present invention is a system and method that provides the scheduling capabilities of a personal calendaring system while incorporating the services available to address and mapping database users and GPS users. The present invention is a system and method that utilizes a user's existing personal digital assistant or equivalent and contact information residing on a host system to automatically compile appointments, trips and travel times to 10 create a travel schedule. The system and method can then concatenate the calendar schedule with the travel schedule to get a true day schedule. The true day schedule may include departure times for appointments, lists of participants in the scheduled meetings, may notify departing parties of correct departure times and may notify the hosting parties of the 15 anticipated time of arrival.

An embodiment of the present invention includes a calendar tracking, monitoring and communication system having a desktop calendar application containing a daily schedule wherein a user selects a specific day having at least one appointment, a service bureau coupled with the desktop calendar application, the service bureau containing an address and 20 mapping database and a handheld device coupled with the desktop calendar application, wherein when the user activates a scheduling command for the specific day, the daily schedule concatenates with the service bureau, sending a true day schedule to the handheld device.

The handheld device containing the true day schedule is selectively decoupled after 25 receiving the true day schedule from the desktop calendar application to facilitate mobile access to the true day schedule. The true day schedule generates a departure time based on a travel time for each of the at least one appointments, a list of participating individuals for each of the at least one appointments wherein the list of participating individuals is notified by an email with a map or a voice mail when the user is late, a suggested route for the user to 30 follow to attend each of the at least one appointments and an approximate travel time estimation. The true day schedule includes an estimated time of arrival and an alerting means that activates when the user can not arrive before the estimated time of arrival. The handheld device includes a means for notifying the user of any of the at least one appointments as specified by the user wherein the means for notifying includes a voice notification system. 35 The true day schedule is selectively concatenated for any day in the daily schedule having at least one appointment.

The handheld device includes global positioning and wireless transmission capabilities so that the true day schedule is selectively navigated in real time by wireless transmission to the service bureau. The handheld device has the capability of being tracked 40 using the global positioning and wireless transmission capabilities, of being notified of a

change to the true day schedule using the global positioning and wireless transmission capabilities and to transmit and receive information between a group of one or more handheld devices. The information includes global positioning system coordinates and relative movement and proximity of the handheld device to the group of one or more remote handheld devices. The system of the present invention also includes an accounting application. The accounting application records and organizes data, including mileage covered while navigating the true day schedule and expenses and costs associated with the true day schedule. The service bureau is a desktop-based application coupled with the desktop calendar application. The scheduling command is activated from the desktop calendar application or from the handheld device.

A further embodiment of the present invention includes a method of managing and navigating a personal calendar including selecting a specific day having at least one appointment from a desktop calendar application containing a daily schedule, executing a command activated by a user for the specific day, concatenating the daily schedule with a service bureau, wherein the service bureau is coupled with the desktop calendar application and contains an address and mapping database and sending a true day schedule to a handheld device, wherein the handheld device is coupled with the desktop calendar application.

The method further includes decoupling the handheld device containing the true day schedule after receiving the true day schedule from the desktop calendar application to facilitate mobile access to the true day schedule. The true day schedule includes a departure time for each of the at least one appointments, a list of participating individuals for each of the at least one appointments wherein the list of participating individuals is notified by an email with a map or a voice mail when the user is late, a suggested route for the user to follow to attend each of the at least one appointments and an approximate travel time estimation. The true day schedule includes an estimated time of arrival and an alerting means that activates when the user can not arrive before the estimated time of arrival. The handheld device includes a means for notifying the user of any of the at least one appointments as specified by the user wherein the means for notifying includes a voice notification system. The true day schedule is selectively concatenated for any day in the daily schedule having at least one appointment.

The method further includes navigating the true day schedule by wireless transmission to the service bureau by equipping the handheld device with global positioning and wireless transmission capabilities. The handheld device has the capability of being tracked using the global positioning and wireless transmission capabilities and of being notified of a change to the true day schedule using the global positioning and wireless transmission capabilities. The method further includes wirelessly communicating with a group of one or more remote handheld devices in order to exchange information, including global positioning system coordinates. The method further includes recording and organizing data using an accounting application, including mileage covered while navigating the true day schedule and expenses and costs associated with the true day schedule. The service bureau is a desktop-based

application coupled with the desktop calendar application. The scheduling command is activated from the desktop calendar application or from the handheld device.

BRIEF DESCRIPTION OF THE DRAWINGS:

5 Figure 1 illustrates a graphical representation of an embodiment of the present invention.

Figure 2 illustrates a graphical representation of the generation of the true day schedule of an embodiment of the present invention.

10 Figure 3 illustrates a flow chart representation of the preferred embodiment of the present invention.

Figure 4 illustrates a graphical representation of the preferred embodiment of the present invention.

Figure 5 illustrates a graphical representation of a further embodiment of the present invention.

15 Figure 6a illustrates a graphical representation of the generation of the true day schedule of the preferred embodiment of the present invention.

Figure 6b illustrates a graphical representation of the generation of the true day schedule of a further embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT:

20 As illustrated in Figure 1, the present invention is a method and apparatus, which combines a User's 101 existing Personal Digital Assistant (PDA) 102 and a Personal Calendar Application (Calendar Application) 104, having both calendar and contact information with locator and mapping services from a Service Bureau 112 or a Mapping
25 Program 106 to provide a Calendar Tracking and Monitoring Service (Service) 100. This Service 100 concatenates the Daily Schedule 202, as illustrated in Figure 2, from the PDA 102 with a travel schedule produced with the aid of the Service Bureau 112 or Mapping Program 106, to get a True Day Schedule 204, as will be discussed in detail below.

30 Figure 1 depicts an embodiment of the present invention. This embodiment displays a "passive" operation which will be described herein. A User 101 utilizes the System 100 of the present invention by first coupling a PDA 102 to a Host System 108. Preferably, the PDA 102 utilizes the Microsoft® Windows® for Pocket PC Operating System. However, any handheld device having synchronization capabilities and a calendar system that is compatible
35 with that of the Host System 108 may be used as a PDA 102 in this System 100. Also, as used herein, the term PDA preferably includes any appropriate handheld device including devices such as a handheld computer, laptop computer, portable telephone, pager, and messaging device. The PDA 102 is coupled with the Host System 108 so as to allow synchronization between the PDA 102 and the Host System 108. The Host System 108 can
40 be a desktop system or a laptop, or any personal computing system able to support the Calendar Application 104, which is contained in the memory of the Host System 108.

Preferably, the Calendar Application 104 is Microsoft Outlook®. However, any Calendar Application 104 configurable to be synchronized to the PDA 102 may be utilized.

Referring still to Figure 1, the Service Bureau 112 is an address and mapping database that is coupled with the Host System 108. The Service Bureau 112 provides mapping and directional information, as well as travel time data to the Host System 108 when prompted to do so. One embodiment includes the Fixed Service Bureau 106 in a disk multi media format such as, but not limited to, a CD-ROM, DVD or Floppy Disk. Another embodiment includes the Service Bureau 112 accessible to the Host System 108 through the Internet 110.

Referring simultaneously now to Figure 1 and Figure 2, the User 101 initiates the operation of System 100 by coupling the PDA 102 to the Host System 108. The User 101 then selects a particular day from the Calendar Application 104 that the User 101 wishes to schedule. If the User 101 had previously entered the data for this selected day into the PDA 102 or previously synchronized the Calendar Application 104 to the PDA 102, then a Daily Schedule 202 will appear on the particular day selected. A typical Daily Schedule 202 would appear on the PDA 102 as shown in Figure 2. The view of the Daily Schedule 202 as it typically appears on a PDA 102 view will be shown for ease in explanation. The User 101 then activates the Make My Day 206 command from either the PDA 102 or from the Calendar Application 104. The User 101 is able to execute the Make My Day 206 command from the Calendar Application 104 due to a Make My Day 206 command button that is added to the graphical user interface of the Calendar Application 104. This feature may be added to any embodiment of the present invention. If the Daily Schedule 202 does not contain a single Appointment 208, the Calendar Application 104 will prompt the User 101 as to whether the User 101 wishes to select another day. If so, the User 101 may again select a particular Daily Schedule 202 from the Calendar Application 104 for which the User 101 wishes to schedule. If the User 101 does not wish to select a new day, then the operation is finished.

Referring still to Figure 1 and Figure 2, if the selected Daily Schedule 202 does contain at least one Appointment 208, the Calendar Application 104 will concatenate with the Service Bureau 112 or the Mapping Program 106 to create a True Day Schedule 204. Through a synchronization operation, the True Day Schedule 204 is sent to the PDA 102. If the User 101 does not wish to schedule another day, then the operation is finished. The User 101 may then decouple the PDA 102 from the Host System 108 in order to navigate the True Day Schedule 204. When the User 101 is done navigating the True Day Schedule 204, the User 101 may couple the PDA 102 to the Host System 108 in order to start another operation.

Referring now to Figure 2, as stated previously, through normal synchronization, the PDA 102 will presumably contain a Daily Schedule 202 having at least one Appointment 208. In this case, after activating the Make My Day 206 command as described previously, the Host System 108 will concatenate with the Service Bureau 112 or the Mapping Program 106 to create a True Day Schedule 204. The Host System 108 will then send, through a synchronization process, the True Day Schedule 204 to the PDA 102. Now, the User 101 may decouple the PDA 102 from the Host System 108 in order to navigate the True Day

Schedule 204. In other words, the User 101 may take the PDA 102 into an automobile or other means of transportation and follow the True Day Schedule 204 in order to attend the True Day Appointments 210.

Referring now to Figure 2 and Figure 4, the PDA 102 will contain the True Day Schedule 204 having a True Day Appointment 210 corresponding to the Appointments 208 in the Daily Schedule 202. Based on data received from the Service Bureau 112 or the Mapping Program 106, the True Day Appointments 210 selectively contain departure times, suggested routes and approximate travel times for the User 101 to utilize in navigating the True Day Schedule 204. These suggested routes and approximate travel times are calculated from one True Day Appointment 210 to another. For example, the True Day Appointment 210 in Figure 2 indicating that the User 101 should "Depart for Appt. B" can contain a suggested route and approximate travel time from the address at which the True Day Appointment 210 (A) occurred to the address where the True Day Appointment 210 (B) is scheduled to occur. The True Day Appointment 210 will oftentimes take up a larger portion of the True Day Schedule 204 than an Appointment 208 does in the daily Schedule 202. This is due to the True Day Appointment 210 expanding to include approximate travel time. Of course, this type of information will only be available if the PDAs 102, 402 or the Calendar Applications 104, 404 on the Host Systems 108, 408 contain the address data for both of the True Day Appointments 210. As a default, suggested routes and approximate travel times will be calculated by the Service Bureau 112, 412 or the Mapping Program 106, 406 from the address data of the Host System 108, 408. The True Day Appointments 210 may also contain a list of participants or other important data as required by the User 101. Lastly, the True Day Schedule 204 includes a Notification Means 212 or alert that will prompt a User 101 of a departure time or any other event in a True Day Appointment 210 that a User 101 may wish to be notified of.

Referring now to all Figures, any embodiment of the present invention may also include a PDA 102, 402, 502a-c having an ETA Notification 215, 615 (Figures 2, 6a & 6b) as well as a Late Signal 216, 616 (Figures 2, 6a & 6b). The ETA Notification 215, 615 is set to notify the User 101, 401, 501a-c of his estimated time of arrival to the next True Day Appointment 210, 610 on the True Day Schedule 204, 604. The Late Signal 215, 615 will change color or otherwise notify the User 101, 401, 501a-c by a change in appearance that the User 101, 401, 501 a-c cannot make it to the next True Day Appointment 210, 610 by the time displayed on the ETA Notification 215, 615, allowing the User 101, 401, 501a-c to notify a meeting participant that he is running late.

Referring back to Figure 1 and Figure 2, the "passive" embodiment of the present invention will be described. A particular day is chosen on the User's 101 Outlook® calendar (Calendar Application 104) and the Daily Schedule 202 is displayed for which a True Day Schedule 204 is to be made. This Daily Schedule 202 includes a number of Appointments 208 to be included in the True Day Schedule 204. The User 101 executes the Make My Day 206 command and an existing location and mapping database (Service Bureau 112 or

Mapping Program 106) is accessed to generate the True Day Schedule 204. The mapping and location database (Service Bureau 112 or Mapping Program 106) will either be through an internet service such as Yahoo® or Mapquest® (Service Bureau 112 through the Internet 110), or through a fixed multi media device such as a CD-ROM (Mapping Program 106).

5 Using this location and mapping database (Service Bureau 112 or mapping Program 106), the Outlook® schedule (Calendar Application 104) is then synchronized to the PDA 102 and the desired day is transformed into the True Day Schedule 204 and displayed on the User's 101 PDA 102.

10 Still referring to Figure 1 and Figure 2, the True Day Schedule 204 includes departure times for appointments, a list of participants in the scheduled meetings, suggested routes, approximated travel times (True Day Appointments 210) and Notification Means 212 to prompt the User 101 of these occurrences if desired. Additionally, the True Day Schedule 204 will include an accounting application to track mileage, expenses and costs for the User 101. The accounting application may be incorporated entirely in the PDA 102, entirely in the 15 Calendar Application 104 or implemented in both the PDA 102 and the Calendar Application 104.

Figure 3 illustrates a flowchart of a preferred method of the present invention. In the first step 302 of this method, a handheld device is coupled to a host system. This step can be 20 bypassed as shown by the path 320 in an "active" embodiment of the present invention as will be discussed below. After the step 302 of coupling the handheld device to the host system, the next step 304 allows the user to select a day from the user's desktop calendar. After selecting a day from the desktop calendar, at the next step 306 the "Make My Day" command is activated. It is then determined at the step 307 if the selected day contains an appointment. If the selected day does not contain an appointment, then at the step 309, it is determined if 25 the user desires to schedule another day. If the user chooses to schedule another day, then the system returns to the step 304 to allow the user to select another day from the user's desktop calendar. If, at the step 309, it is determined that the user does not want to schedule another day, then the method is finished at the step 318. If it is determined at the step 307 that the selected day does indeed contain an appointment, then at the next step 308 the system 30 concatenates with the service bureau to generate a true day schedule. Then at the step 310, the true day schedule is sent to the handheld device. If he wishes, the user may then decouple the handheld device and navigate the true day schedule. At the step 316, it is then determined if the user wants to schedule another day. If the user does want to schedule another day, then the system jumps to the step 302 in the active embodiment or to the step 304 in the passive 35 embodiment. If the user does not want to scheduled another day, the process ends at the step 318.

Figure 4 depicts a preferred embodiment of the present invention. In this preferred embodiment, the User 401 utilizes a GPS enabled PDA 402 with wireless capabilities. As in the previous embodiment, the System 400 of this further embodiment includes a Calendar 40 Application 404 located on a Host System 408. Likewise, a Mapping Program 406 is loaded 40

on to the Host System 408 or a Service Bureau 412 is coupled to the Host System 408 via the Internet 410. The operation of the System 400 in this preferred embodiment is similar to that of the previous embodiment. However, the GPS enabled PDA 402 allows the User 401 to execute the Make My Day 206 command without Coupling 302 the PDA 402 to the Host System 408. Preferably, the User 401 may still execute the Make My Day 206 command and receive the True Day Schedule 204 through a hard wired synchronization to the Host System 408 as was explained in the previous embodiment.

Still referring to Figure 4, the User 401 is able to navigate the True Day Schedule 204 with the wirelessly connected PDA 408 by connecting to the Service Bureau 412 through a wireless Internet 410 connection, or to the Mapping Program 406 through a wireless connection to the Host System 408. This wireless navigation allows a User 401 to navigate the True Day Schedule 204 in real time as either Service Bureau 406, 412 would relay driving directions to the User 401 through the PDA 402, while tracking the GPS enabled PDA 402. This preferred embodiment is referred to as an "active" form of the present invention and preferably includes a GPS enabled PDA 402 which will enable the User 401 to navigate the True Day Schedule 204 in real time according to a location and mapping application (Service Bureau 406, 412) via a wireless connection.

This preferred "active" embodiment of Figure 4 also allows a User 401 to book a new meeting using the PDA 402 Address Database in conjunction with the Service Bureau 412 or Mapping Program 406, as well as outside sources that the PDA 402 will be able to access remotely. The GPS enabled PDA 402 has the ability to be tracked by the Host System 408, enabling the Host System 408 to notify the User 401 through the PDA 402 of any changes to the True Day Schedule 604, as pictured in Figure 6a.

Figures 4 and 6a depict the preferred embodiment of the present invention, while Figure 6b depicts a further embodiment of the present invention. The Notification Means 612 will also notify the User 410 of navigation events that occur while the User 401 navigates the True Day Schedule 604. For example, the Notification Means 612 can tell a User 401 to "turn right here" or "stop at signal in one mile." The Notification Means 612 as described with reference to Figures 4, 6a and 6b may also be incorporated in any embodiment of the present invention. Still referring to Figures 4, 6a and 6b, upon receiving such a notification from the Host System 408, the PDA 402 will add or modify the new True Day Appointment 610 to the True Day Schedule 604. Alternatively, the PDA 402 may communicate with a desired meeting participant and enable that participant to accept or deny a meeting request. Upon receiving an acceptance, the PDA 402 will add or modify the new True Day Appointment 610 to the True Day Schedule 604. Further, the PDA 402 is able to notify the meeting participant when the User 401 is going to be late for a True Day Appointment 610. In such a case, the PDA 402 may prompt the User 401 for instruction to either send the meeting participant a phone message or an email informing the meeting participant that the User 401 is running late. In this embodiment, if the User 401, elects to send an email to the meeting participant, the email will include a map indicating the User's 401 present location

and estimated time of arrival. Of course, this feature of the present invention may be incorporated into further embodiments as well.

Referring back to Figure 3 while still referring to Figure 4, the preferred "active" embodiment System 400 allows a User 401 to essentially bypass the step 302 of coupling at the beginning of System 400 operation as shown by path 320, or after the step 314 of navigating a True Day Schedule 204, as shown by path 322. This preferred "active" embodiment provides the User 401 greater mobility as well as an added freedom, as the User 401 would not be required to visit his or her office to complete the step 302 of coupling 302 the PDA 402 to the Host System 408.

The preferred "active" embodiment of the present invention also includes the capability to track a User 401 throughout a particular day or more specifically, throughout a particular True Day Schedule 204 (Figure 2), while notifying customers or participants in a meeting when the User 401 is running late, early, rescheduling, stuck in traffic, etc. As stated earlier, the "active" embodiment of Figure 4 includes a GPS enabled PDA 402. Here, the Host System 408 is able to track the GPS enabled PDA 402 as the User 401 navigates the True Day Schedule 204 (Figure 2). If the User 401 is not navigating the True Day Schedule 204 according to the True Day Appointments 210 (Figure 2), the Host system 408, will concatenate with the Mapping Program 406 or the Service Bureau 412 through the Internet 410 to estimate a new True Day Appointment 210, and further, regenerate the User's 401 True Day Schedule 204 if needed. The Host System 408 will also have the capability to contact participants or customers by email through the Internet 410 in order to notify them of the User's 401 change in True Day Schedule 204.

Referring to Figure 2 and Figure 4 simultaneously, the all day tracking capability described in the preceding paragraph will be useful in a number of applications. A salesperson or business professional having a True Day Schedule 204 full of True Day Appointments 210 will be able to notify meeting participants, through email, pager, pre-recorded phone messages about possible delays due to traffic, car troubles or earlier meetings that have gone over time. The Host System 408 also has the capability to inquire to the meeting participants of future True Day Appointments 210 as to whether a new meeting time can be scheduled. A response to this inquiry received by the Host System 408 through the Internet 410 will be re-concatenated with either the Service Bureau 412 or the Mapping Program 406, before being wirelessly transmitted to the User's 401 PDA 402, amending the current True Day Schedule 204 accordingly.

This preferred embodiment may also be used in the field of service calls. For example, utility installation workers or other workers employed to make house calls, tend to have several appointments a day and generally have schedules that change during the course of the day due to unforeseen problems such as equipment failure or technical difficulties as well as the usual traffic problems, etc. The preferred embodiment described above would be able to notify a customer of the serviceman's progress and essentially shorten the service time window given to the customer. For example, if a customer had an appointment for

installation between the hours of 12PM and 2PM and the installation technician encountered a time consuming problem at his 10AM installation, the Host System 408 could call the customer after receiving an estimate of the additional time it will take for the technician to solve the problem, thus allowing the customer to alter his or her schedule accordingly. If the technician then is delayed in heavy traffic on his way to the 12PM appointment, the Host System could again notify the customer of this delay. This embodiment allows a customer to be apprized of the technicians' progress at all stages of the day at which the technician is delayed so that the customer may alter his or her schedule accordingly, thus allowing the customer to make his or her day as productive as possible instead of simply waiting for the technician and wasting valuable hours.

Figure 5 depicts a further embodiment of the present invention. This embodiment displays a "connected" operation which will be described herein. A plurality of Users 501a-c utilize the System 500 by first coupling the PDAs 502a-c to a Host System 508. The PDAs 502a-c for each individual User 501a-c must either be attached to the Host System 508 separately, or alternatively, each PDA 502a-c will be connected to the Host System 508 one at a time, and a separate Make My Day 606 command (Figures 6a & 6b) will be activated for each individual PDA 502a-c, before that particular PDA 502a-c is disconnected. In other words, the PDAs 502a-c will "stand in line" to activate the Make My Day 606 command and receive the True Day Schedule 604. Of course, the number of Users 502a-c may vary, but must include at least two. The use of three (502a-c) PDAs here is for purely illustrative purposes. Preferably, the PDAs 502a-c utilize the Microsoft® Windows® for Pocket PC Operating System. However, any handheld device having synchronization capabilities and a calendar system that is compatible with that of the Host System 508 may be used as a PDA 502a-c in this System 500. Each of the PDAs 502a-c is coupled with the Host System 508 so as to allow synchronization between the PDAs 502a-c and the Host System 508. The Host System 508 can be a desktop system or a laptop, or any personal computing system able to support the Calendar Application 504, which is contained in the memory of the Host System 508. Preferably, the Calendar Application 504 is Microsoft Outlook®. However, any Calendar Application 504 configurable to be synchronized to the PDAs 502a-c may be utilized.

Referring still to Figure 5, the Service Bureau 512 and Mapping Program 506 are address and mapping databases that are coupled with the Host System 508. The Service Bureau 512 and Mapping Program 506 provide mapping, directional as well as travel time data to the Host System 508 when prompted to do so. One embodiment includes the fixed Mapping Program 506 in a hard disk multi media format such as, but not limited to, a CD-ROM, DVD or Disk. Another embodiment includes the Service Bureau 512 coupled to the Host System 508 through the Internet 510.

Referring simultaneously now to Figures 5, 6a and 6b, each of the Users 501a-c initiate System 500 operation by coupling his PDA 502a-c to the Host System 508. The User 501a-c then selects a particular day from the Calendar Application 504 that the User 501a-c

wishes to schedule. If the User 501a-c had previously entered the data for this selected day into the PDA 502a-c or previously synchronized the Calendar Application 504 to the PDA 502a-c, then a Daily Schedule 602 will appear on the particular day selected. A typical Daily Schedule 602 would appear on the PDA 502a-c as shown in Figure 6a. The PDA 502a-c view will be shown for ease in explanation. The User 501a-c then activates the Make My Day 606 command from either the PDA 502a-c or from the Calendar Application 504. If the Daily Schedule 602 does not contain a single Appointment 608, the Calendar Application 504 will prompt the User 501a-c as to whether the User 501a-c wishes to select another day. If so, the User 501a-c may again select a particular Daily Schedule 602 from the Calendar Application 504 the User 501a-c wishes to schedule. If the User 501a-c does not wish to select a new day, then the operation is finished. As stated earlier, this method can be repeated for each of the User's 501a-c PDA 502a-c.

Referring still to Figures 5, 6a and 6b, if the selected Daily Schedule 602 does contain at least one Appointment 608, the Calendar Application 504 will concatenate with the Service Bureau 512 and Mapping Program 506 to create a True Day Schedule 604. Through a synchronization operation, the True Day Schedule 604 is sent to the appropriate PDA 502a-c. The User 501a-c may then decouple the PDA from the Host System 508 in order to navigate the True Day Schedule 604. When the User 501a-c is done navigating the True Day Schedule 604, the User 501a-c may couple the PDA 502a-c to the Host System 508 in order to start another operation. If the User 501a-c does not wish to schedule another day, then the operation is finished.

Referring now to the preferred embodiment as depicted in Figure 6a, as stated previously, through normal synchronization, the PDA 502a-c will presumably contain a Daily Schedule 602 having at least one Appointment 608. In this case, after activating the Make My Day 606 command as described previously in Figure 3, the Host System 508 will concatenate with the Service Bureau 512 or Mapping Program 506 to create a True Day Schedule 604. The Host System 508 will then send, through a synchronization process, the True Day Schedule 604 to the PDA 502a-c. Now, the User 501a-c may decouple the PDA 502a-c from the Host System 508 in order to navigate the True Day Schedule 604. In other words, the User 501a-c may take the PDA 502a-c into an automobile or other means of transportation and follow the True Day Schedule 604 in order to attend the True Day Appointment 610.

Referring still to the preferred embodiment as depicted in Figure 6a, the PDA 502a-c will contain the True Day Schedule 604 having a True Day Appointment 610 corresponding to the Appointments 608 in the Daily Schedule 602. Based on data received from the Service Bureau 512 or Mapping Program 506, the True Day Appointments 610 preferably contain departure times, suggested routes and approximate travel times for the User 501a-c to utilize in navigating the True Day Schedule 604. These suggested routes and approximate travel times can be calculated from one True Day Appointment 610 to another. For example, the True Day Appointment 610 in Figure 6a indicating that the User 501a-c should "Depart for

Appt. B” can contain a suggested route and approximate travel time from the address at which the True Day Appointment 610 (A) occurred to the address where the True Day Appointment 610 (B) is scheduled to occur. Of course, this type of information will only be available if the PDA 502a-c or the Calendar Application 504 on the Host System 508 contains the address data for both of the True Day Appointments 610. As a default, suggested routes and approximate travel times will be calculated by the Service Bureau or Mapping Program 506 from the address data of the Host System 508. Lastly, the True Day Schedule 604 includes a Notification Means 612 that will prompt a User 501a-c of a departure time or any other event in a True Day Appointment 610 that a User 501a-c may wish to be notified of. Referring to Figure 6b, an alternative embodiment of the present invention includes a True Day Appointment 610 having the Travel Times 620 separate and not incorporated in to the Appointments 608 and the Participants/Instructions 614 list.

Referring now to Figures 6a and 6b, the True Day Appointments 610 may also contain a list of Participants/Instructions 614 as required by the User 501a-c. This list of Participants/Instructions 614 will provide the User 501a-c with a list of all of the Users 501a-c currently navigating the common True Day Schedule 604. This list of Participants/Instructions 614 will also contain the location of each User 501a-c in GPS coordinates and directions and travel time to connect with those Users 501a-c. Such an application will prove useful in such cases as a caravan whereby one User 501a-c may or may not be deemed the leader, allowing the Users 501a-c to coordinate routes, rest stops and to generally track the fleet in the event that one or more Users 501a-c gets lost. This embodiment may also be useful in a dispatch or house call type application as well.

This “connected” embodiment of the present invention will include the elements of the previous embodiments, and also will include Means for Notifying 612 the departing parties (Users 501a-c) of the right time of departure and means for notifying the hosting or lead party (if one is selected) of the anticipated time of arrival, e.g. on time, too early, too late, etc. The “connected” model then may utilize a dynamic or persistent buddy list definition (Participants/Instructions 614) for the trip which would reveal to Users 501a-c their location and expected time of arrival with a text message or with a map.

Referring simultaneously to Figures 5, 6a and 6b, one example of how this embodiment will be particularly useful is in the case of a “convoy” or group of travelers embarking on a car trip. For example, if each auto leaving on a car trip from the San Francisco Bay Area to Lake Tahoe has a GPS enabled PDA 501a-c as described in the “connected” embodiment of the present invention, the cars will be wirelessly connected and have identical True Day Schedules 604 with identical True Day Appointments 610. If one of the cars gets separated, the True Day Schedule 604, through the Host System 508 may be altered to show how far behind the stray car is and the new expected travel times, arrival time, etc. This is effectuated by utilizing the GPS and wireless capabilities of the PDAs 502a-c. Further, if one car is separated and actually gets lost from the group, the True Day Schedule 604, after tracking the stray car through its GPS enabled PDA 502a-c, will be

altered by providing new driving instructions in the specific True Day Appointment 610 in the Participants/Instructions 614 portion. Such an embodiment will allow a group of cars to stay together and provide information to correct driving errors or occurrences through the PDAs 502a-c.

5 The “connected” embodiment of Figure 5 also allows a User 501a-c to book a new meeting using the PDA 502a-c Address Database in conjunction with the Service Bureau 512 or Mapping Program 506, as well as outside sources that the PDA 502a-c will be able to access remotely. The GPS enabled PDA 502a-c has the ability to be tracked by the Host System 508, enabling the Host System 508 to notify the User 501a-c through the PDA 502a-c
10 of any changes to the True Day Schedule 604, as pictured in Figures 5, 6a and 6b. Still referring to Figures 5, 6a and 6b, upon receiving such a notification from the Host System 508, the PDA 502a-c will add or modify the new True Day Appointment 610 to the True Day Schedule 604. Alternatively, the PDA 502a-c may communicate with a desired meeting participant and enable that participant to accept or deny a meeting request. Upon receiving an
15 acceptance, the PDA 502a-c will add or modify the new True Day Appointment 610 to the True Day Schedule 604.

 The present invention has been described in terms of specific embodiments incorporating details to facilitate the understanding of the principles of construction and operation of the invention. Such reference herein to specific embodiments and details thereof
20 is not intended to limit the scope of the claims appended hereto. For example, the application of the true day schedule of the present invention is not limited to business ventures. It will be apparent to those skilled in the art that modifications can be made in the embodiment chosen for illustration without departing from the spirit and scope of the invention.

CLAIMS

What is claimed is:

- 1 1. A calendar tracking, monitoring and communication system, comprising:
 - 2 a. a desktop calendar application containing a daily schedule wherein a user
3 selects a specific day having at least one appointment;
 - 4 b. a service bureau coupled with the desktop calendar application, the service
5 bureau containing an address and mapping database; and
 - 6 c. a handheld device coupled with the desktop calendar application,
7 wherein when the user activates a scheduling command for the specific day, the daily
8 schedule concatenates with the service bureau, sending a true day schedule to the handheld
9 device.
- 1 2. The system as claimed in claim 1, wherein the handheld device containing the true
2 day schedule is selectively decoupled after receiving the true day schedule from the
3 desktop calendar application to facilitate mobile access to the true day schedule.
- 1 3. The system as claimed in claim 1, wherein the true day schedule generates a departure
2 time based on a travel time for each of the at least one appointments.
- 1 4. The system as claimed in claim 1, wherein the true day schedule includes a list of
2 participating individuals for each of the at least one appointments.
- 1 5. The system as claimed in claim 4, wherein the list of participating individuals is
2 notified when the user is late for any of the at least one appointments.
- 1 6. The system as claimed in claim 5, wherein the list of participating individuals is
2 notified by email, the email including a map showing the current location of the user.
- 1 7. The system as claimed in claim 5, wherein the list of participating individuals is
2 notified by voice mail.
- 1 8. The system as claimed in claim 1, wherein the true day schedule includes a suggested
2 route for the user to follow to attend each of the at least one appointments.
- 1 9. The system as claimed in claim 1, wherein the true day schedule includes an
2 approximate travel time estimation.

- 1 10. The system as claimed in claim 1, wherein the true day schedule includes an estimated
2 time of arrival for each of the at least one appointments.
- 1 11. The system as claimed in claim 10, wherein the true day schedule includes an alerting
2 means for late notification that activates when the user will not arrive at one of the at
3 least one appointments before the estimated time of arrival.
- 1 12. The system as claimed in claim 1, wherein the handheld device includes a means for
2 notifying the user of any of the at least one appointments as specified by the user.
- 1 13. The system as claimed in claim 12, wherein the notification means includes a voice
2 notification system to assist the user in navigation of the true day schedule.
- 1 14. The system as claimed in claim 1, wherein the true day schedule is selectively
2 concatenated for any day in the daily schedule having at least one appointment.
- 1 15. The system as claimed in claim 1, wherein the handheld device includes global
2 positioning and wireless transmission capabilities so that the true day schedule is
3 selectively navigated by wireless transmission to the service bureau.
- 1 16. The system as claimed in claim 15, wherein the handheld device has the capability of
2 being tracked using the global positioning and wireless transmission capabilities.
- 1 17. The system as claimed in claim 15, wherein the handheld device has the capability of
2 being notified of a change to the true day schedule using the global positioning and
3 wireless transmission capabilities.
- 1 18. The system as claimed in claim 15, wherein the handheld device has the capability to
2 transmit and receive information between a group of one or more handheld devices.
- 1 19. The system as claimed in claim 18, wherein the information includes global
2 positioning system coordinates and relative movement and proximity of the handheld
3 device to the group of one or more remote handheld devices.
- 1 20. The system as claimed in claim 1, further comprising an accounting application,
2 wherein the accounting application records and organizes data.
- 1 21. The system as claimed in claim 20, wherein the data includes mileage covered while
2 navigating the true day schedule.

- 1 22. The system as claimed in claim 20, wherein the data includes expenses and costs
2 associated with the true day schedule.
- 1 23. The system as claimed in claim 1, wherein the service bureau is coupled with the
2 desktop calendar application through an internet connection.
- 1 24. The system as claimed in claim 1, wherein the service bureau is a desktop-based
2 application.
- 1 25. The system as claimed in claim 1, wherein the scheduling command is activated by
2 the user from the desktop calendar application.
- 1 26. The system as claimed in claim 1, wherein the scheduling command is activated by
2 the user from the handheld device.
- 1 27. A method of managing and navigating a personal calendar, comprising:
2 a. selecting a specific day having at least one appointment from a desktop
3 calendar application containing a daily schedule;
4 b. executing a command activated by a user for the specific day, concatenating
5 the daily schedule with a service bureau, wherein the service bureau is coupled
6 with the desktop calendar application and contains an address and mapping
7 database; and
8 c. sending a true day schedule to a handheld device, wherein the handheld device
9 is coupled with the desktop calendar application.
- 1 28. The method as claimed in claim 27, further comprising the step of decoupling the
2 handheld device containing the true day schedule after receiving the true day schedule
3 from the desktop calendar application to facilitate mobile access to the true day
4 schedule.
- 1 29. The method as claimed in claim 27, wherein the true day schedule includes a
2 departure time for each of the at least one appointments.
- 1 30. The method as claimed in claim 27, wherein the true day schedule includes a list of
2 participating individuals for each of the at least one appointments.
- 1 31. The method as claimed in claim 30, wherein the list of participating individuals is
2 notified when the user is late for any of the at least one appointments.

- 1 32. The method as claimed in claim 31, wherein the list of participating individuals is
2 notified by email, the email including a map showing the current location of the user.
- 1 33. The method as claimed in claim 31, wherein the list of participating individuals is
2 notified by voice mail.
- 1 34. The method as claimed in claim 27, wherein the true day schedule includes a
2 suggested route for the user to follow to attend each of the at least one appointments.
- 1 35. The method as claimed in claim 27, wherein the true day schedule includes an
2 approximate travel time estimation.
- 1 36. The method as claimed in claim 27, wherein the true day schedule includes an
2 estimated time of arrival for each of the at least one appointments.
- 1 37. The method as claimed in claim 36, wherein the true day schedule includes an alerting
2 means for late notification that activates when the user will not arrive at one of the at
3 least one appointments before the estimated time of arrival.
- 1 38. The method as claimed in claim 27, wherein the handheld device includes a means for
2 notifying the user of any of the at least one appointment as specified by user.
- 1 39. The method as claimed in claim 38, wherein the notification means includes a voice
2 notification system to assist the user in navigation of the true day schedule.
- 1 40. The method as claimed in claim 27, wherein the true day schedule is selectively
2 concatenated for any day in the daily schedule having at least one appointment.
- 1 41. The method as claimed in claim 27, further comprising the step of navigating the true
2 day schedule by wireless transmission to the service bureau by equipping the handheld
3 device with global positioning and wireless transmission capabilities.
- 1 42. The method as claimed in claim 41, wherein the handheld device has the capability of
2 being tracked using the global positioning and wireless transmission capabilities.
- 1 43. The method as claimed in claim 41, wherein the handheld device has the capability of
2 being notified of a change to the true day schedule using the global positioning and
3 wireless transmission capabilities.

- 1 44. The method as claimed in claim 41, further comprising the step of wirelessly
2 communicating with a group of one or more remote handheld devices in order to
3 exchange information.
- 1 45. The method as claimed in claim 44, wherein the information includes global
2 positioning system coordinates.
- 1 46. The method as claimed in claim 27, further comprising the step of recording and
2 organizing data using an accounting application.
- 1 47. The method as claimed in claim 46, wherein the data includes mileage covered while
2 navigating the true day schedule.
- 1 48. The method as claimed in claim 46, wherein the data includes expenses and costs
2 associated with the true day schedule.
- 1 49. The method as claimed in claim 27, wherein the service bureau is coupled with the
2 desktop calendar application through an internet connection.
- 1 50. The method as claimed in claim 27, wherein the service bureau is a desktop-based
2 application.
- 1 51. The method as claimed in claim 27, wherein the scheduling command is activated by
2 the user from the desktop calendar application.
- 1 52. The method as claimed in claim 27, wherein the scheduling command is activated by
2 the user from the handheld device.
- 1 53. A calendar tracking, monitoring and communication system, comprising:
2 a. means for selecting a specific day having at least one appointment from a
3 desktop calendar application containing a daily schedule;
4 b. means for executing a command activated by a user for the specific day,
5 concatenating the daily schedule with a service bureau, wherein the service
6 bureau is coupled with the desktop calendar application and contains an
7 address and mapping database; and
8 c. means for sending a true day schedule to a handheld device, wherein the
9 handheld device is coupled with the desktop calendar application.
- 1 54. The system as claimed in claim 53, further comprising means for decoupling the
2 handheld device containing the true day schedule after receiving the true day schedule

- 3 from the desktop calendar application to facilitate mobile access to the true day
4 schedule.
- 1 55. The system as claimed in claim 53, wherein the true day schedule includes a departure
2 time for each of the at least one appointments.
- 1 56. The system as claimed in claim 53, wherein the true day schedule includes a list of
2 participating individuals for each of the at least one appointments.
- 1 57. The system as claimed in claim 56, wherein the list of participating individuals is
2 notified when the user is late for any of the at least one appointments.
- 1 58. The system as claimed in claim 57, wherein the list of participating individuals is
2 notified by email, the email including a map showing the current location of the user.
- 1 59. The system as claimed in claim 57, wherein the list of participating individuals is
2 notified by voice mail.
- 1 60. The system as claimed in claim 53, wherein the true day schedule includes a
2 suggested route for a user to follow to attend each of the at least one appointments.
- 1 61. The system as claimed in claim 53, wherein the true day schedule includes an
2 approximate travel time estimation.
- 1 62. The system as claimed in claim 53, wherein the true day schedule includes an
2 estimated time of arrival for each of the at least one appointments.
- 1 63. The system as claimed in claim 62, wherein the true day schedule includes an alerting
2 means for late notification that activates when the user will not arrive at one of the at
3 least one appointments before the estimated time of arrival.
- 1 64. The system as claimed in claim 53, wherein the handheld device includes a means for
2 notifying the user of any of the at least one appointment as specified by user.
- 1 65. The system as claimed in claim 64, wherein the notification means includes a voice
2 notification system to assist the user in navigation of the true day schedule.
- 1 66. The system as claimed in claim 53, wherein the true day schedule is selectively
2 concatenated for any day in the daily schedule having at least one appointment.

- 1 67. The system as claimed in claim 53, further comprising means for navigating the true
2 day schedule by wireless transmission to the service bureau by equipping the handheld
3 device with global positioning and wireless transmission capabilities.
- 1 68. The system as claimed in claim 67, wherein the handheld device has the capability of
2 being tracked using the global positioning and wireless transmission capabilities.
- 1 69. The system as claimed in claim 67, wherein the handheld device has the capability of
2 being notified of a change to the true day schedule using the global positioning and
3 wireless transmission capabilities.
- 1 70. The system as claimed in claim 67, further comprising means for wirelessly
2 communicating with a group of one or more remote handheld devices in order to
3 exchange information.
- 1 71. The system as claimed in claim 56, wherein the information includes global
2 positioning system coordinates.
- 1 72. The system as claimed in claim 53, further comprising means for recording and
2 organizing data using an accounting application.
- 1 73. The system as claimed in claim 72, wherein the data includes mileage covered while
2 navigating the true day schedule.
- 1 74. The system as claimed in claim 72, wherein the data includes expenses and costs
2 associated with the true day schedule.
- 1 75. The system as claimed in claim 53, wherein the service bureau is coupled with the
2 desktop calendar application through an internet connection.
- 1 76. The system as claimed in claim 53, wherein the service bureau is a desktop-based
2 application.
- 1 77. The system as claimed in claim 53, wherein the scheduling command is activated by
2 the user from the desktop calendar application.
- 1 78. The system as claimed in claim 53, wherein the scheduling command is activated by
2 the user from the handheld device.
- 1 79. A calendar tracking, monitoring and communication system, comprising:

2 a. a desktop calendar application containing a daily schedule wherein a user
3 selects a specific day having at least one appointment;
4 b. a service bureau coupled with the desktop calendar application, the service
5 bureau containing an address and mapping database; and
6 c. a handheld device including global positioning and wireless transmission
7 capabilities coupled with the desktop calendar application;
8 wherein when the user activates a scheduling command for the specific day, the daily
9 schedule concatenates with the service bureau, sending a true day schedule to the handheld
10 device and further wherein the true day schedule is selectively navigated by wireless
11 transmission to the service bureau, thereby having the capability of being tracked and notified
12 of a change to the true day schedule using the global positioning and wireless transmission
13 capabilities.

1 80. The system as claimed in claim 79, wherein the handheld device containing the true
2 day schedule is selectively decoupled after receiving the true day schedule from the
3 desktop calendar application to facilitate mobile access to the true day schedule.

1 81. The system as claimed in claim 79, wherein the true day schedule generates a
2 departure time based on a travel time for each of the at least one appointments.

1 82. The system as claimed in claim 79, wherein the true day schedule includes a list of
2 participating individuals for each of the at least one appointments.

1 83. The system as claimed in claim 82, wherein the list of participating individuals is
2 notified when the user is late for any of the at least one appointments.

1 84. The system as claimed in claim 83, wherein the list of participating individuals is
2 notified by email, the email including a map showing the current location of the user.

1 85. The system as claimed in claim 83, wherein the list of participating individuals is
2 notified by voice mail.

1 86. The system as claimed in claim 79, wherein the true day schedule includes a
2 suggested route for the user to follow to attend each of the at least one appointments.

1 87. The system as claimed in claim 79, wherein the true day schedule includes an
2 approximate travel time estimation.

1 88. The system as claimed in claim 79, wherein the true day schedule includes an
2 estimated time of arrival for each of the at least one appointments.

- 1 89. The system as claimed in claim 88, wherein the true day schedule includes an alerting
2 means for late notification that activates when the user will not arrive at one of the at
3 least one appointments before the estimated time of arrival.
- 1 90. The system as claimed in claim 79, wherein the handheld device includes a means for
2 notifying the user of any of the at least one appointments as specified by the user.
- 1 91. The system as claimed in claim 90, wherein the notification means includes a voice
2 notification system to assist the user in navigation of the true day schedule.
- 1 92. The system as claimed in claim 79, wherein the true day schedule is selectively
2 concatenated for any day in the daily schedule having at least one appointment.
- 1 93. The system as claimed in claim 79, wherein the handheld device has the capability to
2 transmit and receive information between a group of one or more handheld devices.
- 1 94. The system as claimed in claim 93, wherein the information includes global
2 positioning system coordinates and relative movement and proximity of the handheld
3 device to the group of one or more remote handheld devices.
- 1 95. The system as claimed in claim 79, further comprising an accounting application,
2 wherein the accounting application records and organizes data.
- 1 96. The system as claimed in claim 95, wherein the data includes mileage covered while
2 navigating the true day schedule.
- 1 97. The system as claimed in claim 95, wherein the data includes expenses and costs
2 associated with the true day schedule.
- 1 98. The system as claimed in claim 79, wherein the service bureau is coupled with the
2 desktop calendar application through an internet connection.
- 1 99. The system as claimed in claim 79, wherein the service bureau is a desktop-based
2 application.
- 1 100. The system as claimed in claim 79, wherein the scheduling command is activated by
the user from the desktop calendar application.
- 1 101. The system as claimed in claim 79, wherein the scheduling command is activated by
the user from the handheld device.

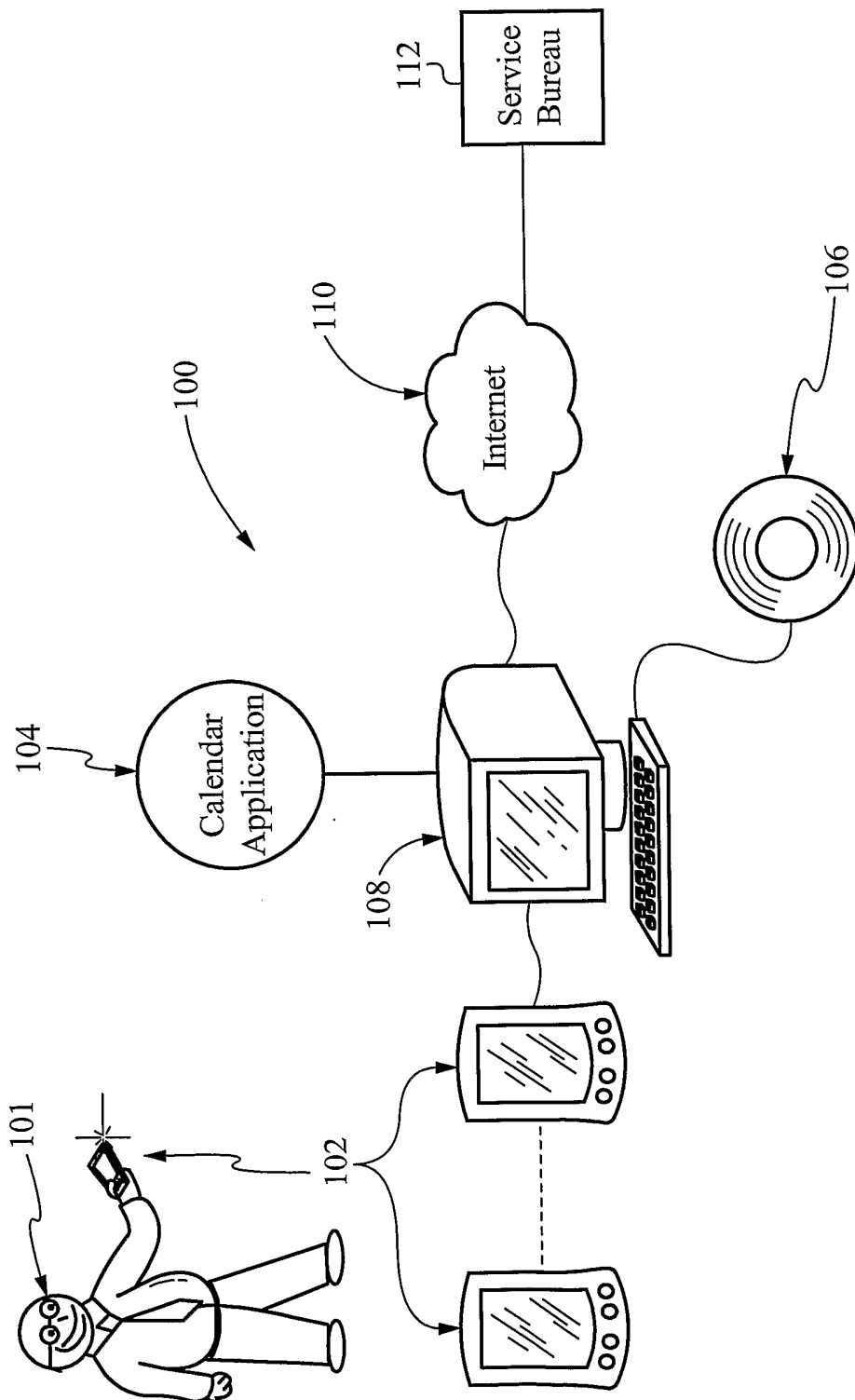


Fig. 1

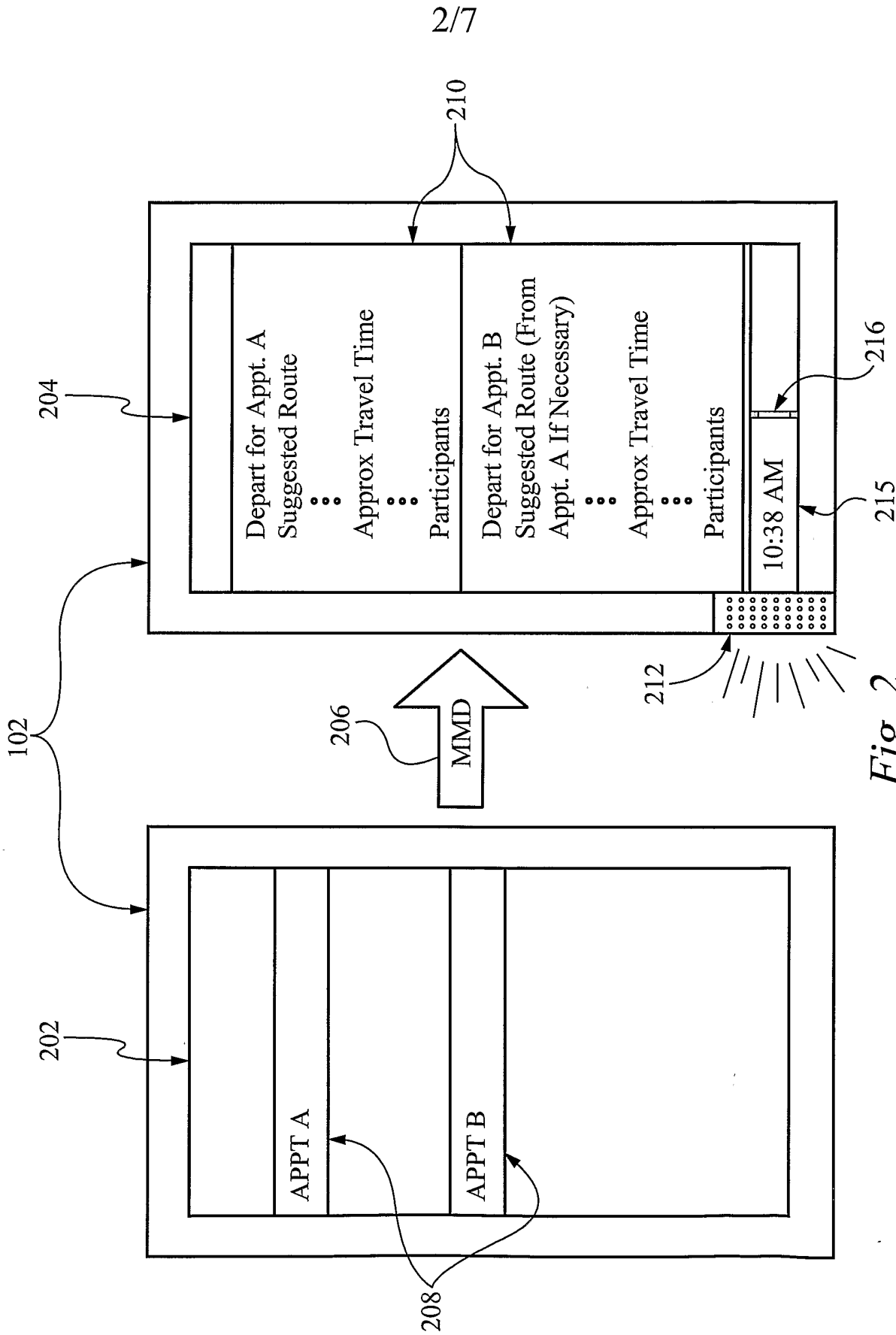


Fig. 2

3/7

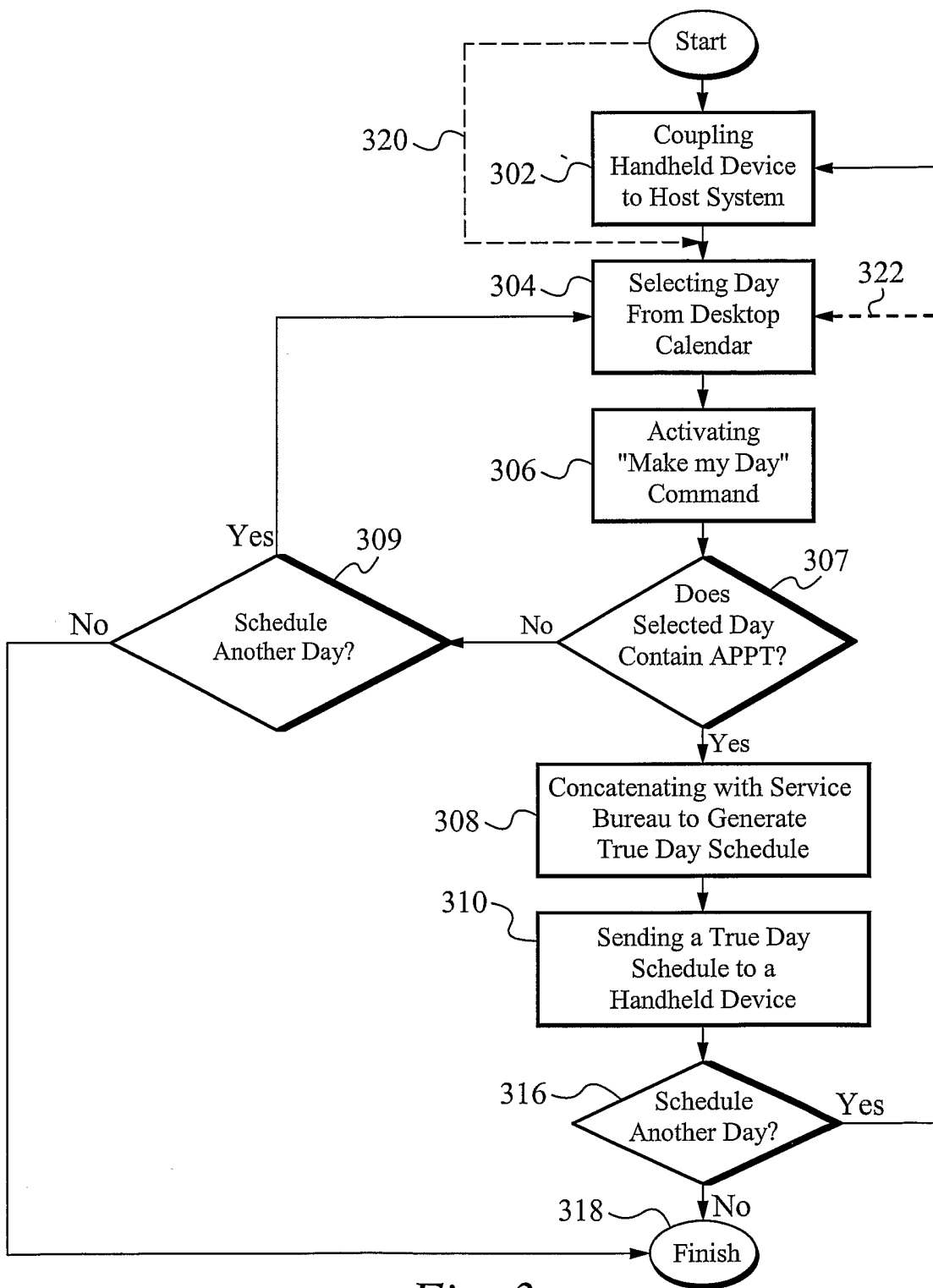


Fig. 3

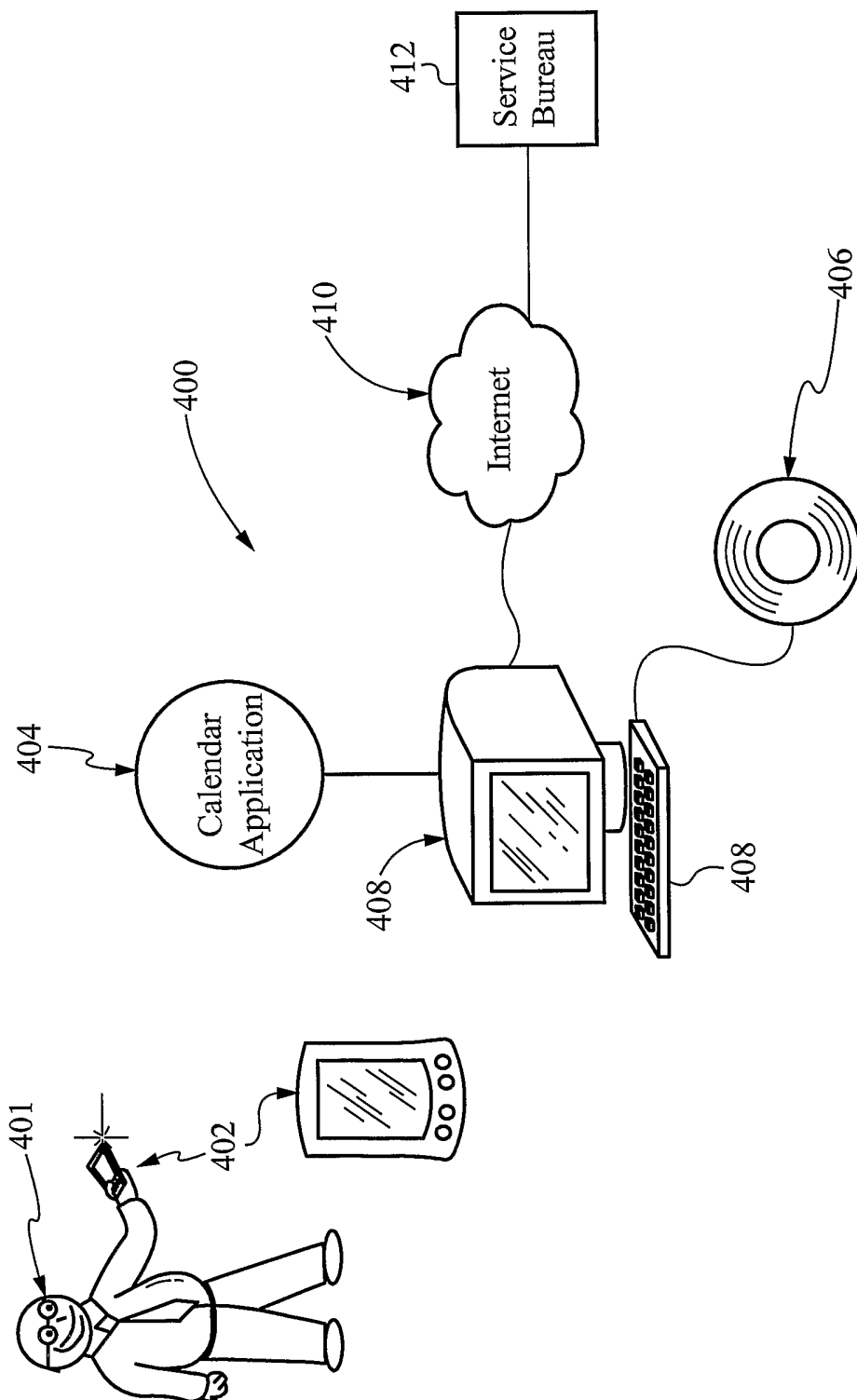


Fig. 4

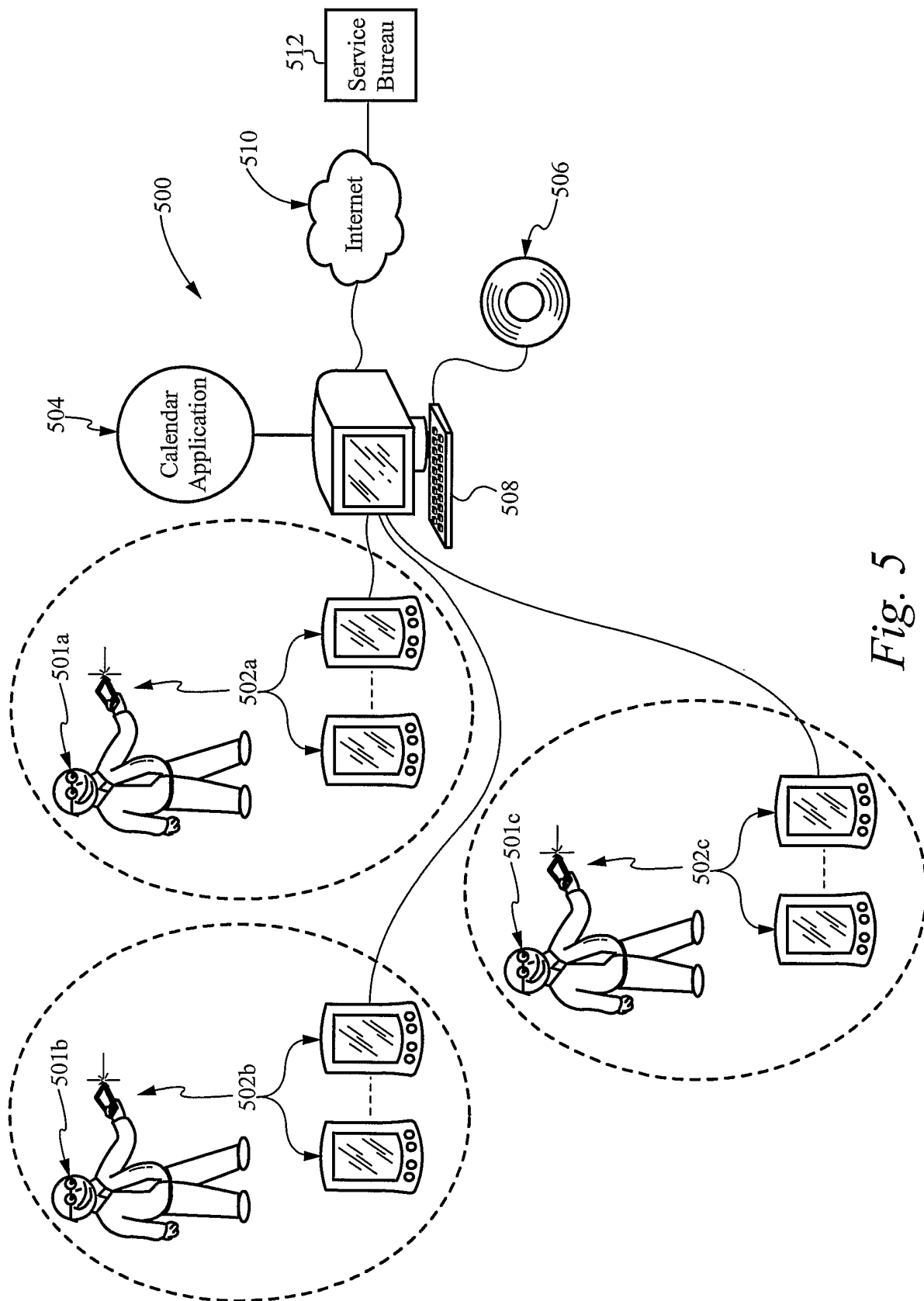


Fig. 5

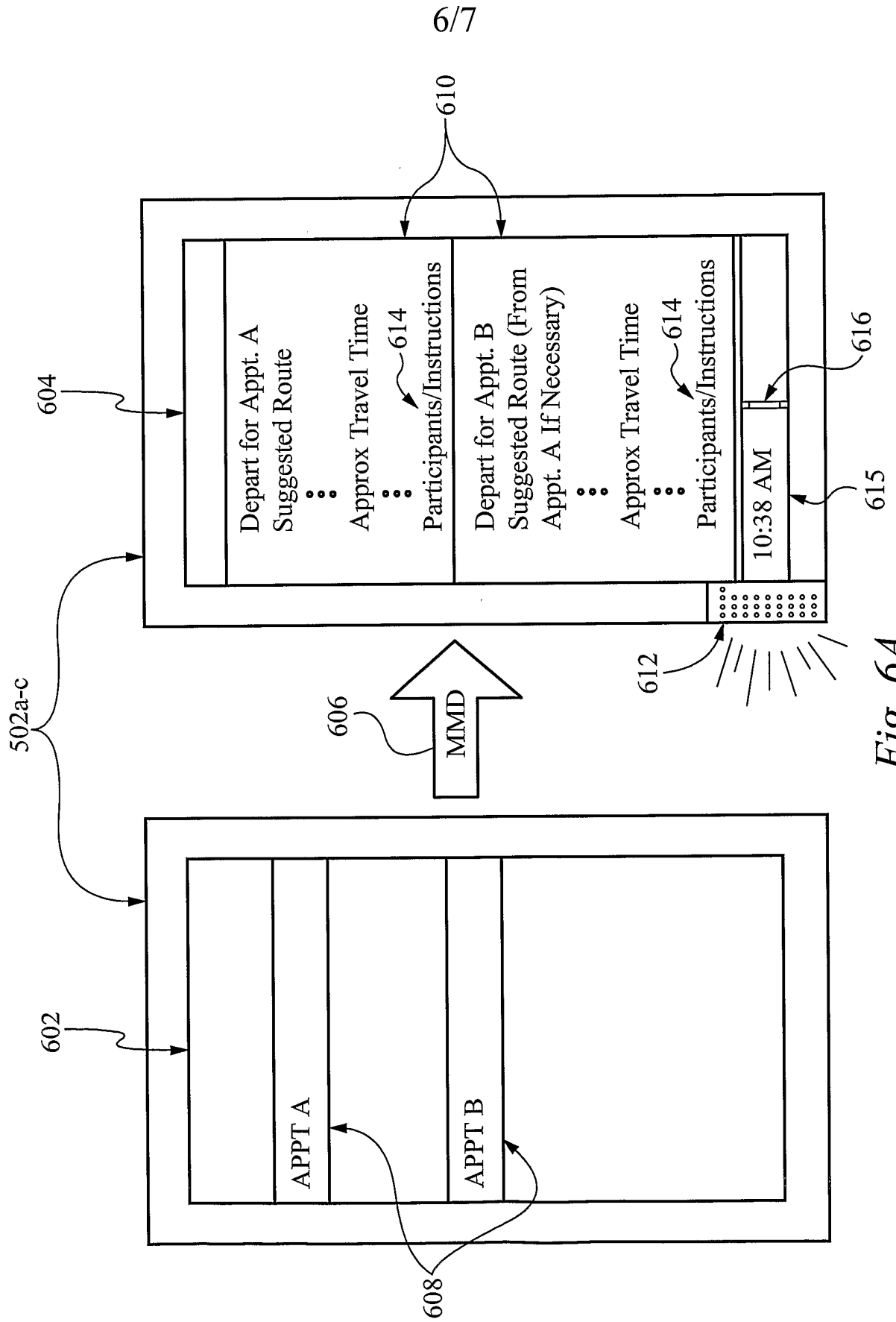


Fig. 6A

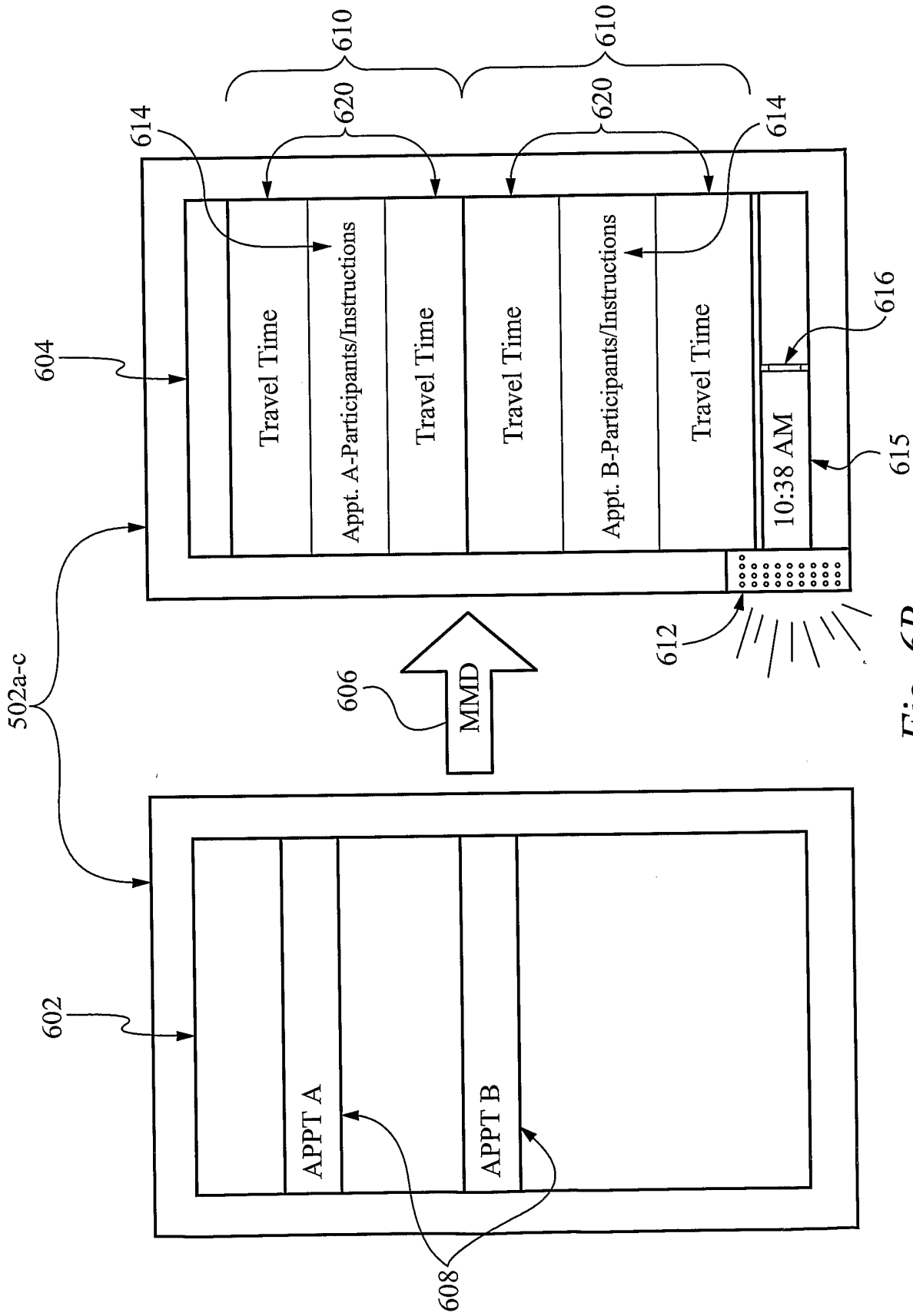


Fig. 6B