STEC IP LLC v. Amazon.com Inc. et al Doc. 1 Att. 13

EXHIBIT K
(Part 1 of 2)

Dockets.Justia.com

US006963908B1

(12) **United States Patent**
Lynch et al.

(10) **Patent No.: US 6,963,908 B1**
(45) **Date of Patent: Nov. 8, 2005**

(54) **SYSTEM FOR TRANSFERRING CUSTOMIZED HARDWARE AND SOFTWARE SETTINGS FROM ONE COMPUTER TO ANOTHER COMPUTER TO PROVIDE PERSONALIZED OPERATING ENVIRONMENTS**

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(73) Assignee: **Symantec Corporation**, Cupertino, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 640 days.

(21) Appl. No.: **09/709,505**

(22) Filed: **Nov. 13, 2000**

Related U.S. Application Data

(60) Provisional application No. 60/192,860, filed on Mar. 29, 2000.

(51) **Int. Cl.**[7] **G06F 15/177**
(52) **U.S. Cl.** **709/220**; 709/221; 709/222
(58) **Field of Search** 709/220, 221, 709/226, 229, 222; 370/351; 358/500; 710/15; 719/313

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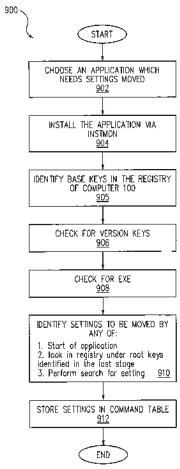
Primary Examiner—Le Hien Luu
(74) *Attorney, Agent, or Firm*—Gunnison, McKay & Hodgson, L.L.P.

(57) **ABSTRACT**

A method and system for transferring information from a first computer-based device to a web site, for temporary storage and later transfer of the stored information from the web site to a second computer-based device. First, a communication link is established between a first computer-based device and the web site. Next, the first computer-based device is scanned, via the web site, to determine the information contained on the first computer-based device. The user then selects which of the scanned information is to be uploaded from the first computer-based device onto the web site for temporary storage. Finally, the selected information is transferred from the first computer-based device onto the web site for temporary storage. Once retrieval of the temporarily stored information is desired, the user establishes a communication link between a second computer-based device and the web site. The second computer-based device is scanned, via the web site, to determine the information contained on the second computer-based device. The temporarily stored information, from the first computer-based device on the web site, is then displayed to the user and the user selects which of this temporary information, from the first computer-based device, is to be downloaded from the web site onto the second computer-based device. The selected information is finally downloaded from the website onto the second computer-based device.

69 Claims, 30 Drawing Sheets



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2002/0111972	A1	8/2002	Lynch et al.	707/523
2003/0159028	A1	8/2003	Mackin et al.	713/100

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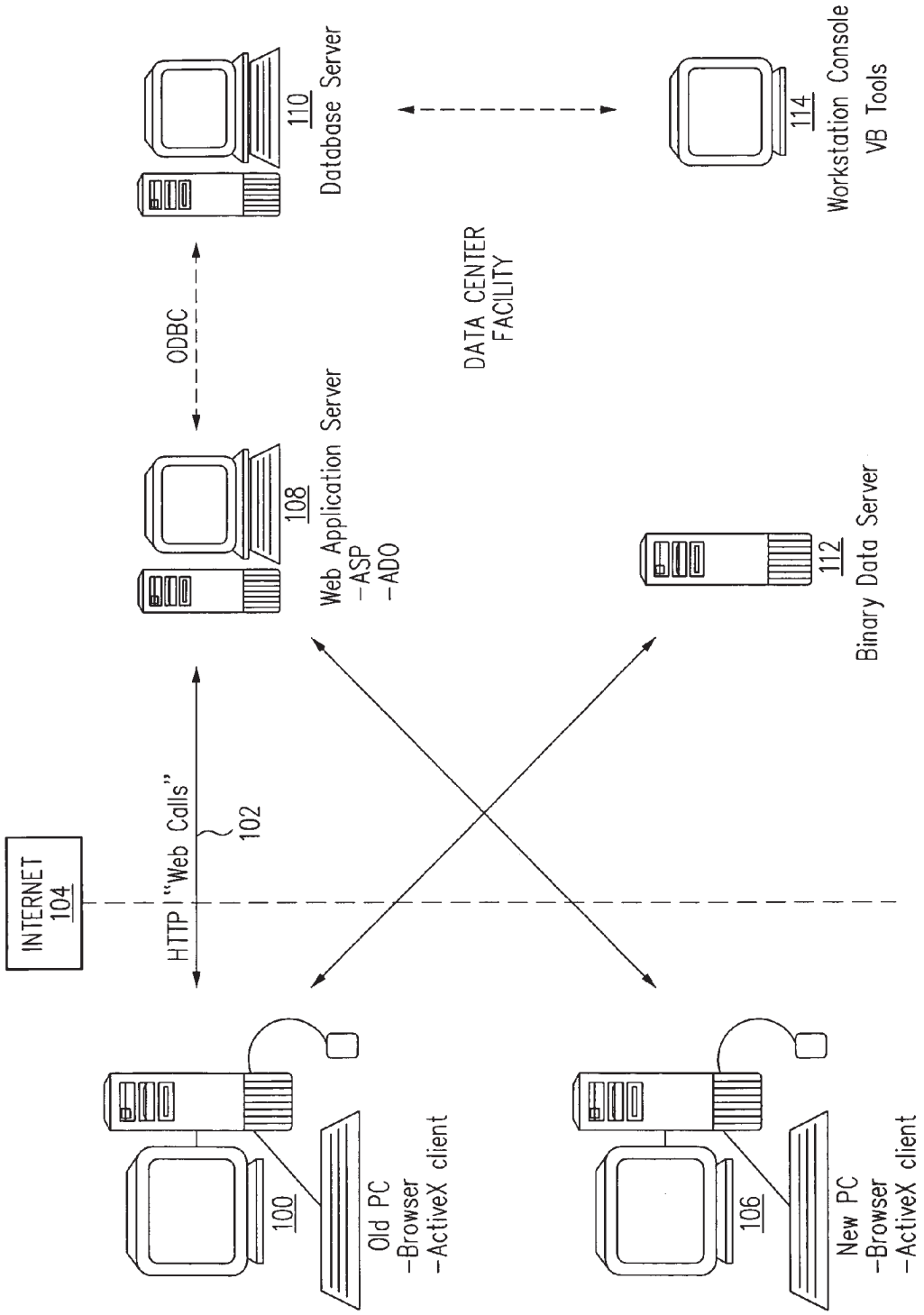
INTERNET
104
HTTP "Web Calls"
102
100
Old PC
-Browser
-ActiveX client
106
New PC
-Browser
-ActiveX client
108
Web Application Server
-ASP
-ADO
110
Database Server
ODBC
112
Binary Data Server
DATA CENTER
FACILITY
114
Workstation Console
VB Tools

FIG. 1

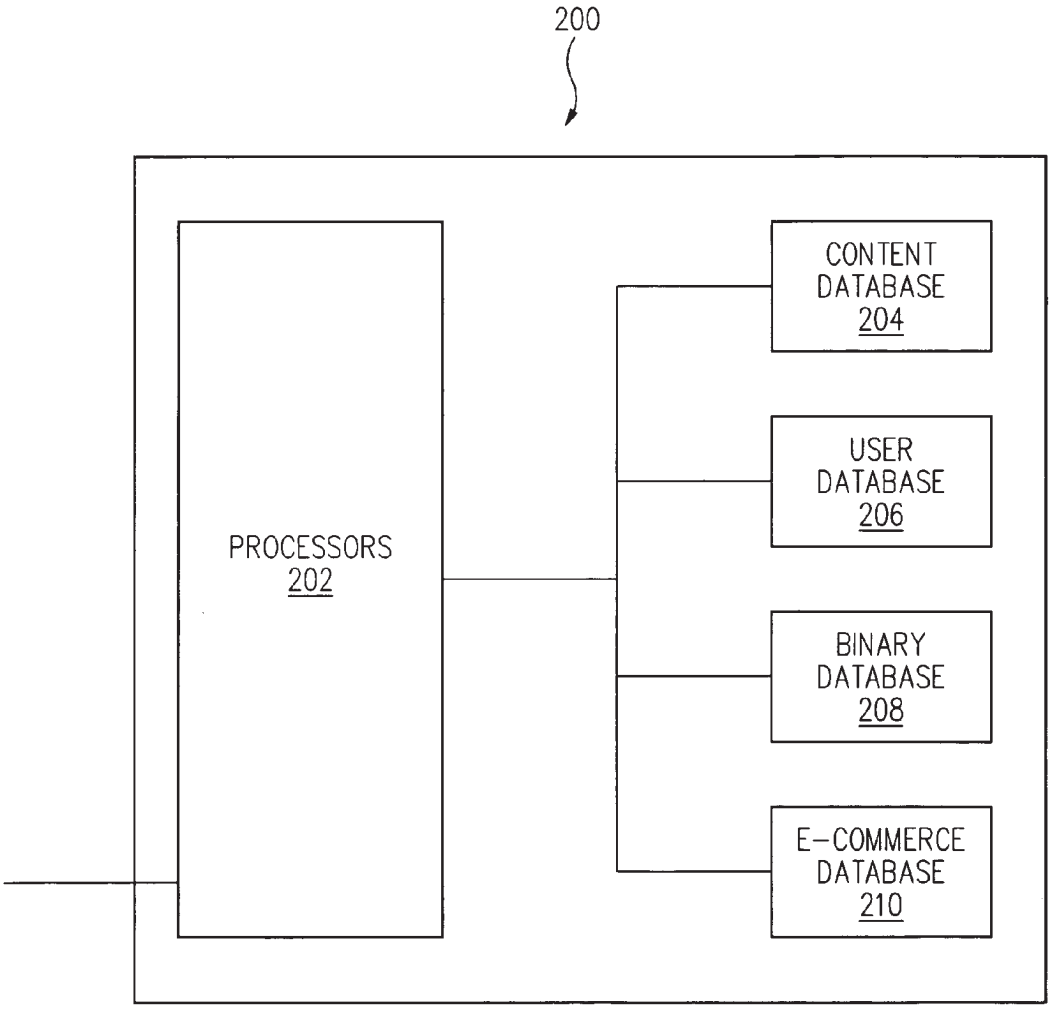
200
PROCESSORS
202
CONTENT
DATABASE
204
USER
DATABASE
206
BINARY
DATABASE
208
E-COMMERCE
DATABASE
210

FIG. 2

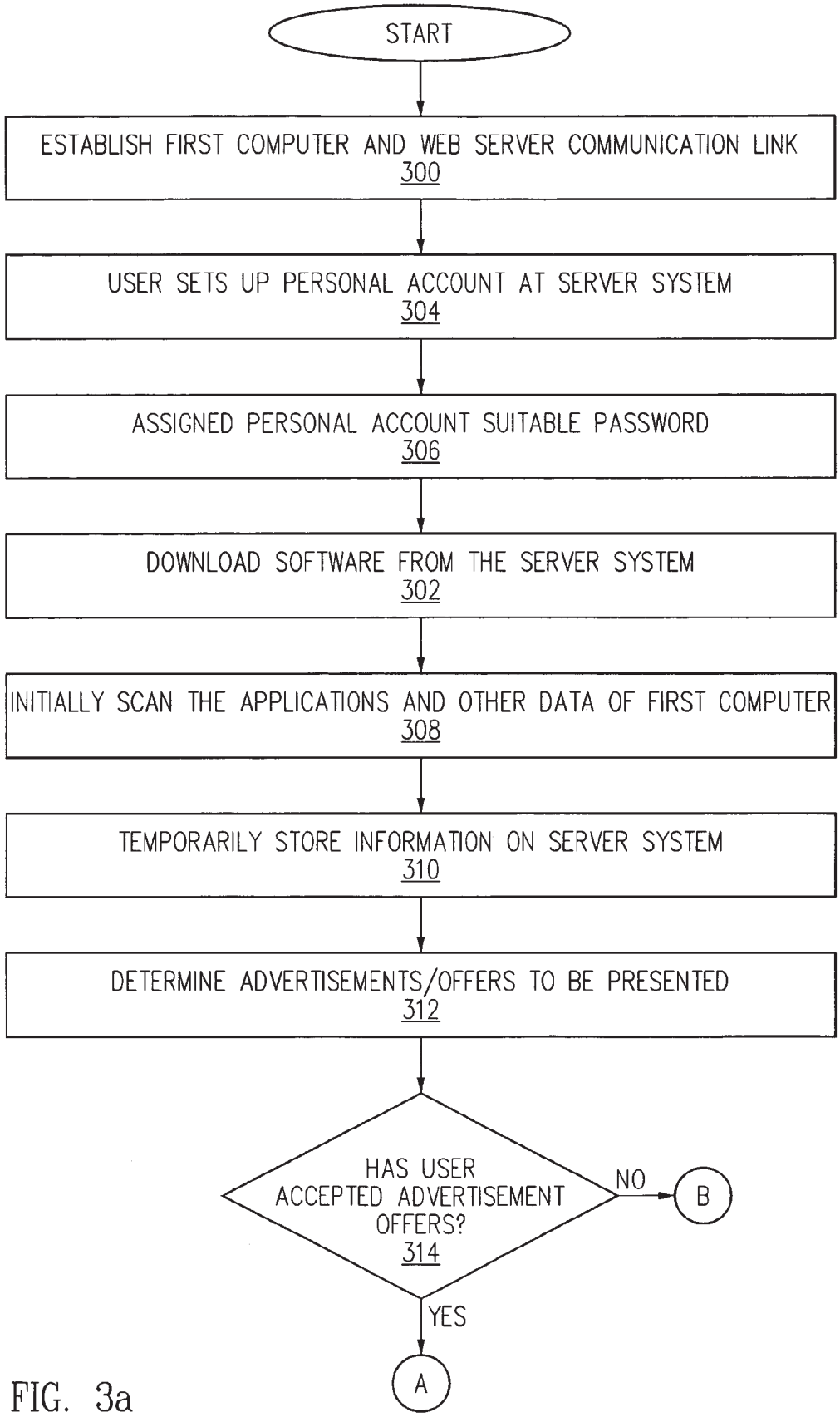
START
ESTABLISH FIRST COMPUTER AND WEB SERVER COMMUNICATION LINK
300
USER SETS UP PERSONAL ACCOUNT AT SERVER SYSTEM
304
ASSIGNED PERSONAL ACCOUNT SUITABLE PASSWORD
306
DOWNLOAD SOFTWARE FROM THE SERVER SYSTEM
302
INITIALLY SCAN THE APPLICATIONS AND OTHER DATA OF FIRST COMPUTER
308
TEMPORARILY STORE INFORMATION ON SERVER SYSTEM
310
DETERMINE ADVERTISEMENTS/OFFERS TO BE PRESENTED
312
HAS USER ACCEPTED ADVERTISEMENT OFFERS?
314
NO
B
YES
A

FIG. 3a

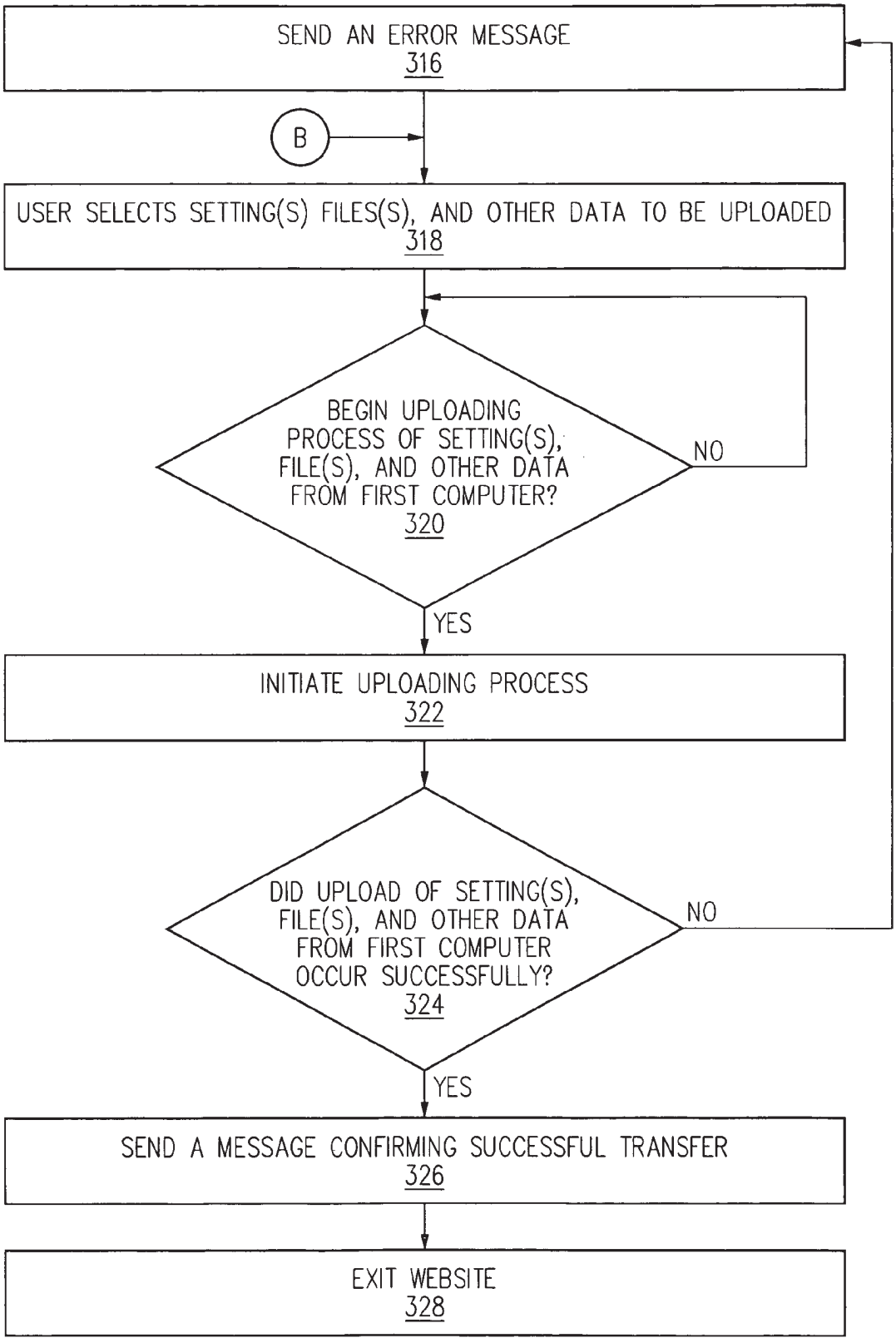
SEND AN ERROR MESSAGE
316
B
USER SELECTS SETTING(S) FILES(S), AND OTHER DATA TO BE UPLOADED
318
BEGIN UPLOADING PROCESS OF SETTING(S), FILE(S), AND OTHER DATA FROM FIRST COMPUTER?
320
NO
YES
INITIATE UPLOADING PROCESS
322
DID UPLOAD OF SETTING(S), FILE(S), AND OTHER DATA FROM FIRST COMPUTER OCCUR SUCCESSFULLY?
324
NO
YES
SEND A MESSAGE CONFIRMING SUCCESSFUL TRANSFER
326
EXIT WEBSITE
328

FIG. 3b

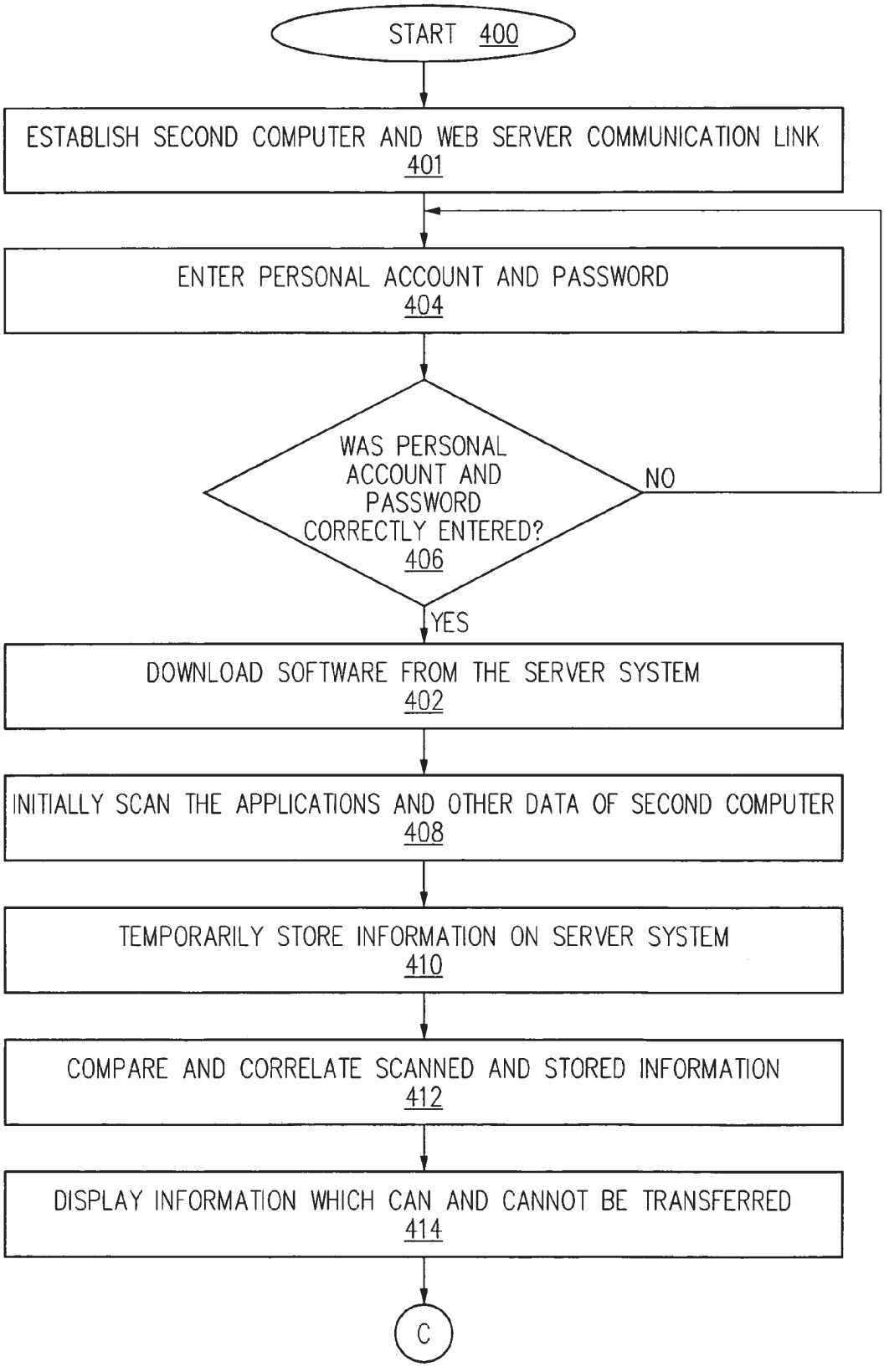
START 400
ESTABLISH SECOND COMPUTER AND WEB SERVER COMMUNICATION LINK 401
ENTER PERSONAL ACCOUNT AND PASSWORD 404
WAS PERSONAL ACCOUNT AND PASSWORD CORRECTLY ENTERED? 406
NO
YES
DOWNLOAD SOFTWARE FROM THE SERVER SYSTEM 402
INITIALLY SCAN THE APPLICATIONS AND OTHER DATA OF SECOND COMPUTER 408
TEMPORARILY STORE INFORMATION ON SERVER SYSTEM 410
COMPARE AND CORRELATE SCANNED AND STORED INFORMATION 412
DISPLAY INFORMATION WHICH CAN AND CANNOT BE TRANSFERRED 414
C

FIG. 4a

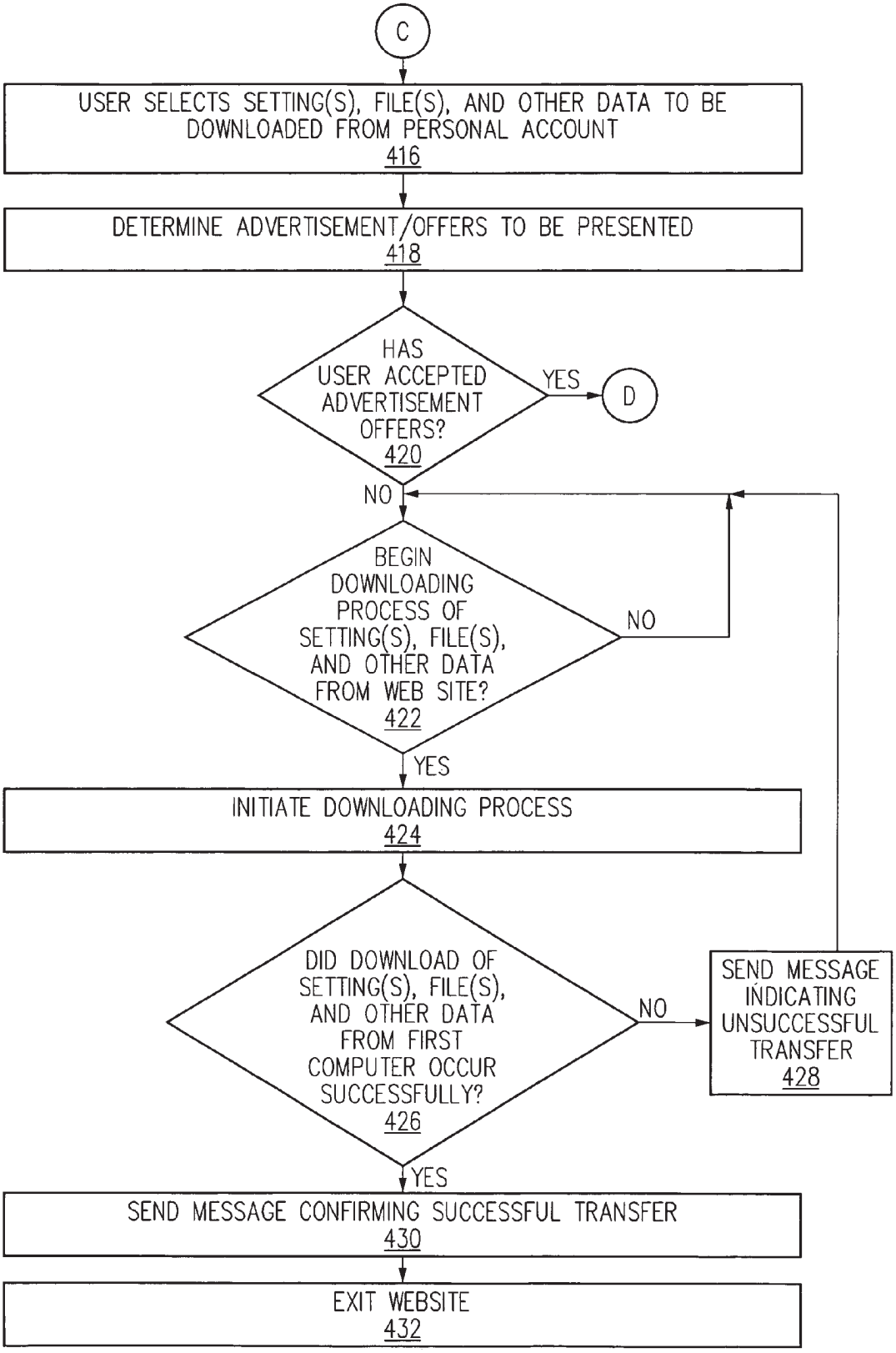
C
USER SELECTS SETTING(S), FILE(S), AND OTHER DATA TO BE DOWNLOADED FROM PERSONAL ACCOUNT
416
DETERMINE ADVERTISEMENT/OFFERS TO BE PRESENTED
418
HAS USER ACCEPTED ADVERTISEMENT OFFERS?
420
YES
D
NO
BEGIN DOWNLOADING PROCESS OF SETTING(S), FILE(S), AND OTHER DATA FROM WEB SITE?
422
NO
YES
INITIATE DOWNLOADING PROCESS
424
DID DOWNLOAD OF SETTING(S), FILE(S), AND OTHER DATA FROM FIRST COMPUTER OCCUR SUCCESSFULLY?
426
NO
SEND MESSAGE INDICATING UNSUCCESSFUL TRANSFER
428
YES
SEND MESSAGE CONFIRMING SUCCESSFUL TRANSFER
430
EXIT WEBSITE
432

FIG. 4b

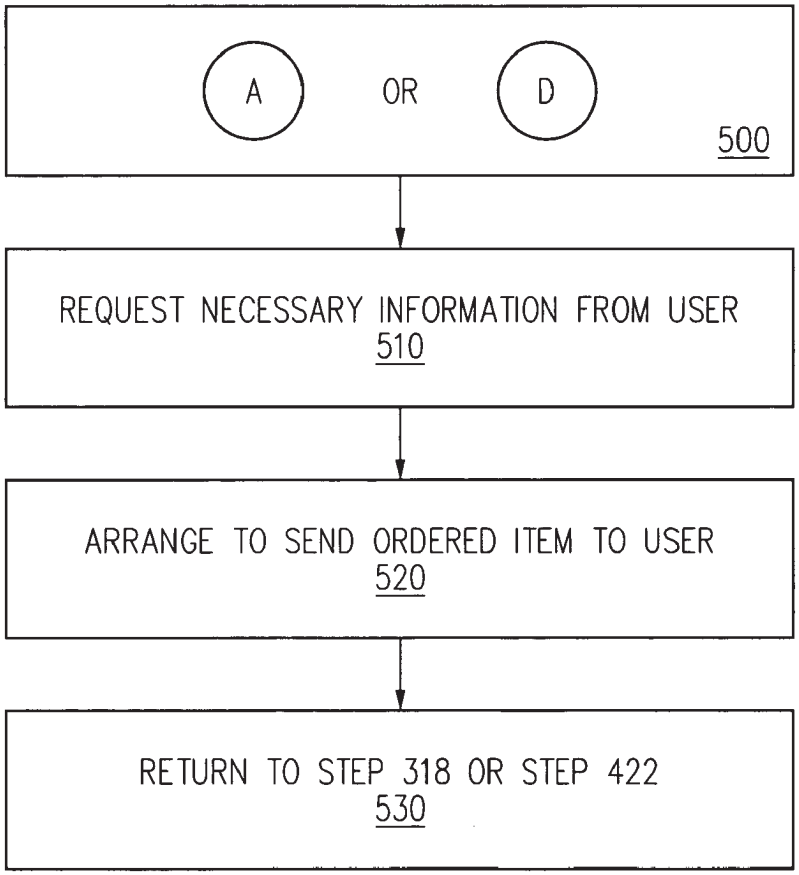
A
OR
D
500
REQUEST NECESSARY INFORMATION FROM USER
510
ARRANGE TO SEND ORDERED ITEM TO USER
520
RETURN TO STEP 318 OR STEP 422
530

FIG. 5

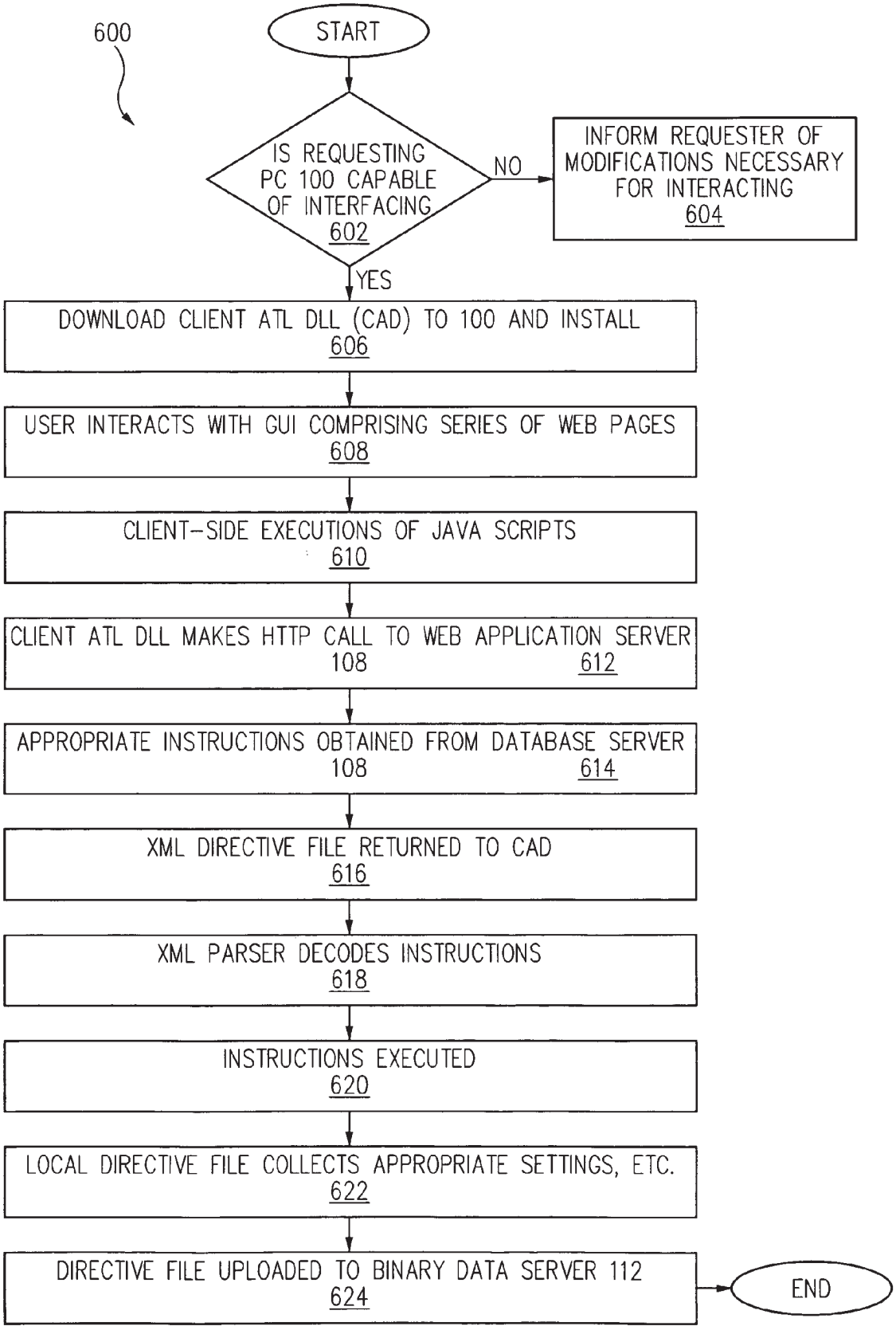
600
START
IS REQUESTING PC 100 CAPABLE OF INTERFACING 602
NO
INFORM REQUESTER OF MODIFICATIONS NECESSARY FOR INTERACTING 604
YES
DOWNLOAD CLIENT ATL DLL (CAD) TO 100 AND INSTALL 606
USER INTERACTS WITH GUI COMPRISING SERIES OF WEB PAGES 608
CLIENT-SIDE EXECUTIONS OF JAVA SCRIPTS 610
CLIENT ATL DLL MAKES HTTP CALL TO WEB APPLICATION SERVER 108 612
APPROPRIATE INSTRUCTIONS OBTAINED FROM DATABASE SERVER 108 614
XML DIRECTIVE FILE RETURNED TO CAD 616
XML PARSER DECODES INSTRUCTIONS 618
INSTRUCTIONS EXECUTED 620
LOCAL DIRECTIVE FILE COLLECTS APPROPRIATE SETTINGS, ETC. 622
DIRECTIVE FILE UPLOADED TO BINARY DATA SERVER 112 624
END

FIG. 6

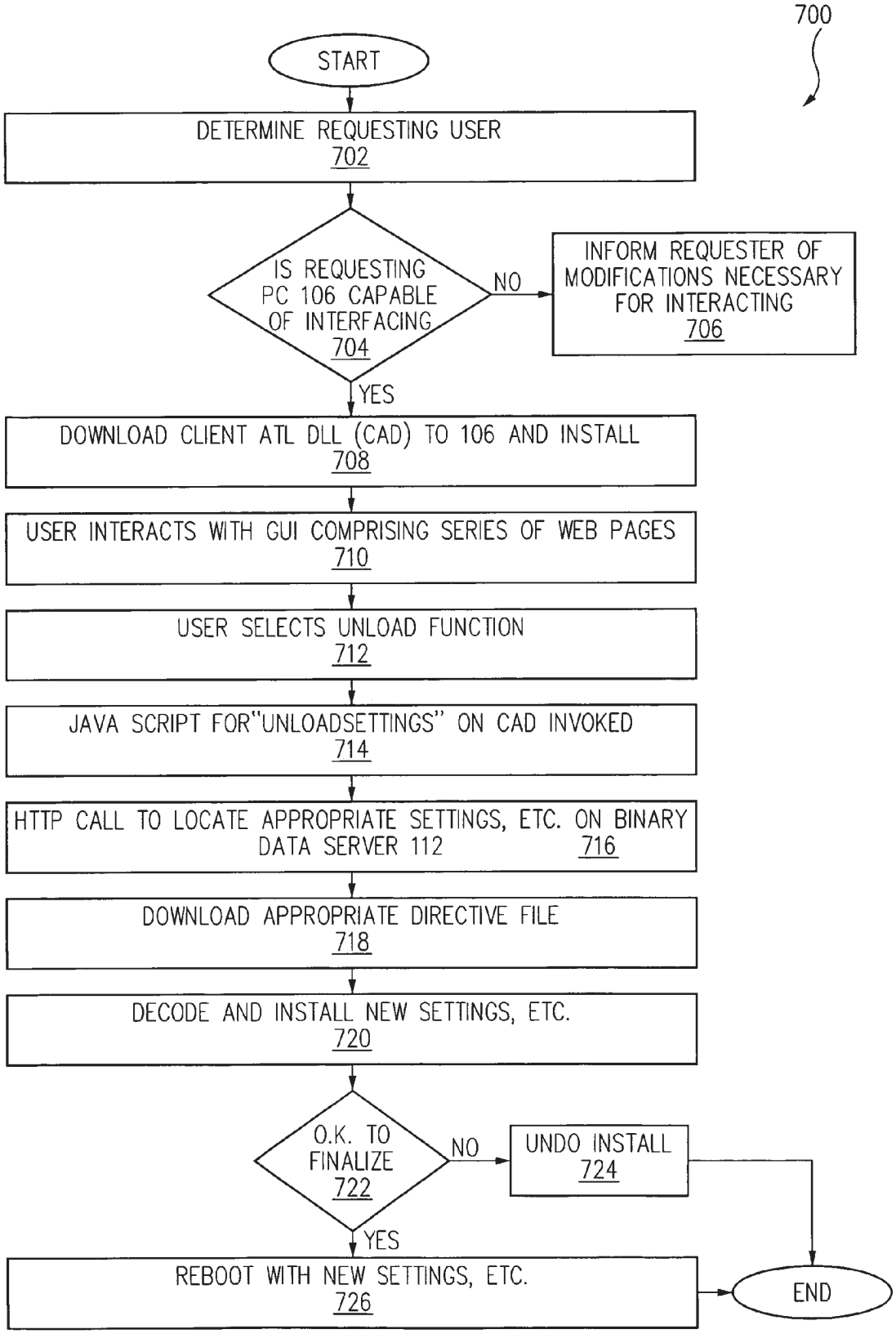
700
START
DETERMINE REQUESTING USER
702
IS REQUESTING PC 106 CAPABLE OF INTERFACING
704
NO
INFORM REQUESTER OF MODIFICATIONS NECESSARY FOR INTERACTING
706
YES
DOWNLOAD CLIENT ATL DLL (CAD) TO 106 AND INSTALL
708
USER INTERACTS WITH GUI COMPRISING SERIES OF WEB PAGES
710
USER SELECTS UNLOAD FUNCTION
712
JAVA SCRIPT FOR"UNLOADSETTINGS" ON CAD INVOKED
714
HTTP CALL TO LOCATE APPROPRIATE SETTINGS, ETC. ON BINARY DATA SERVER 112
716
DOWNLOAD APPROPRIATE DIRECTIVE FILE
718
DECODE AND INSTALL NEW SETTINGS, ETC.
720
O.K. TO FINALIZE
722
NO
UNDO INSTALL
724
YES
REBOOT WITH NEW SETTINGS, ETC.
726
END

FIG. 7

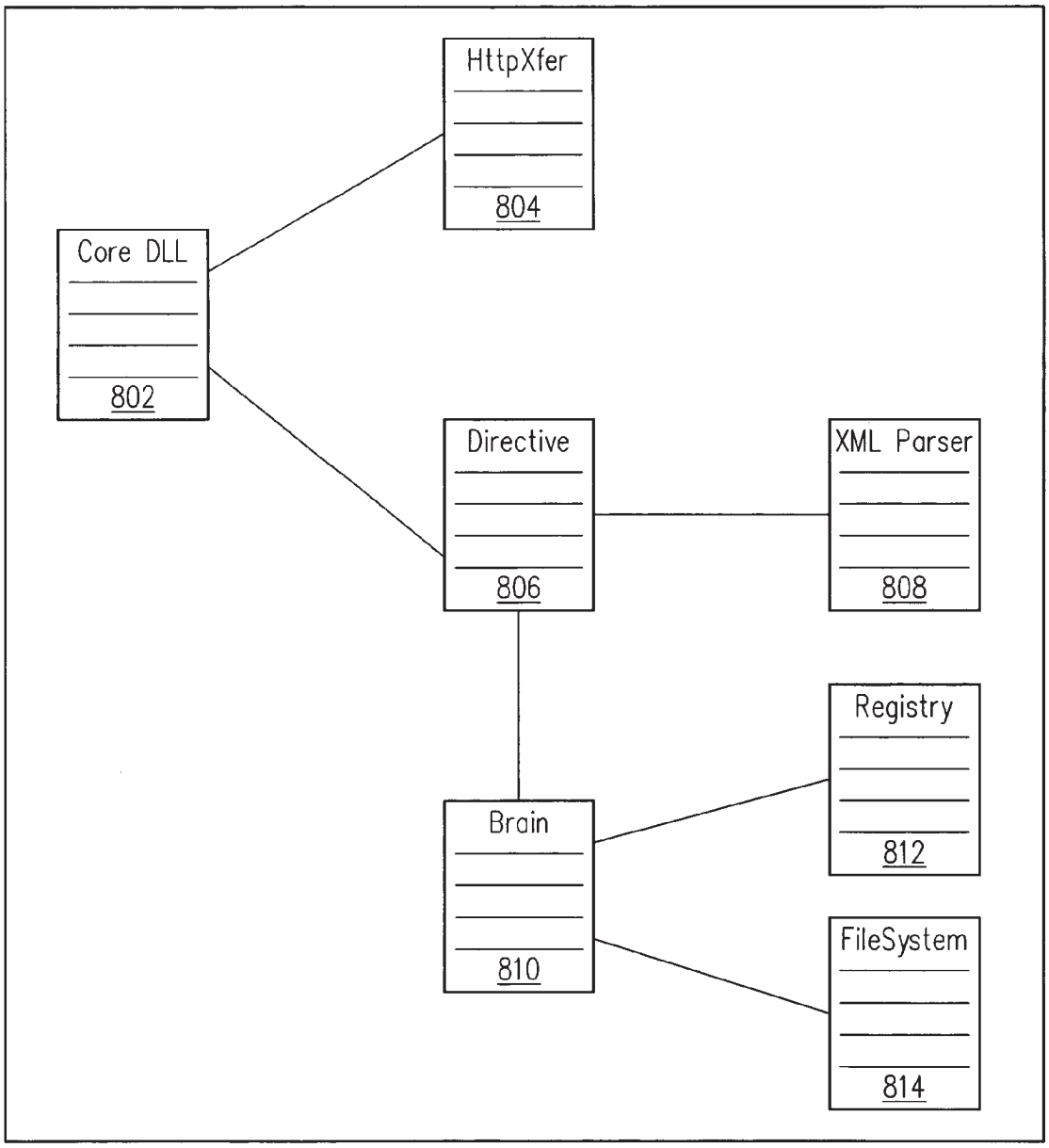
HttpXfer
804
Core DLL
802
Directive
806
XML Parser
808
Registry
812
Brain
810
FileSystem
814

FIG. 8

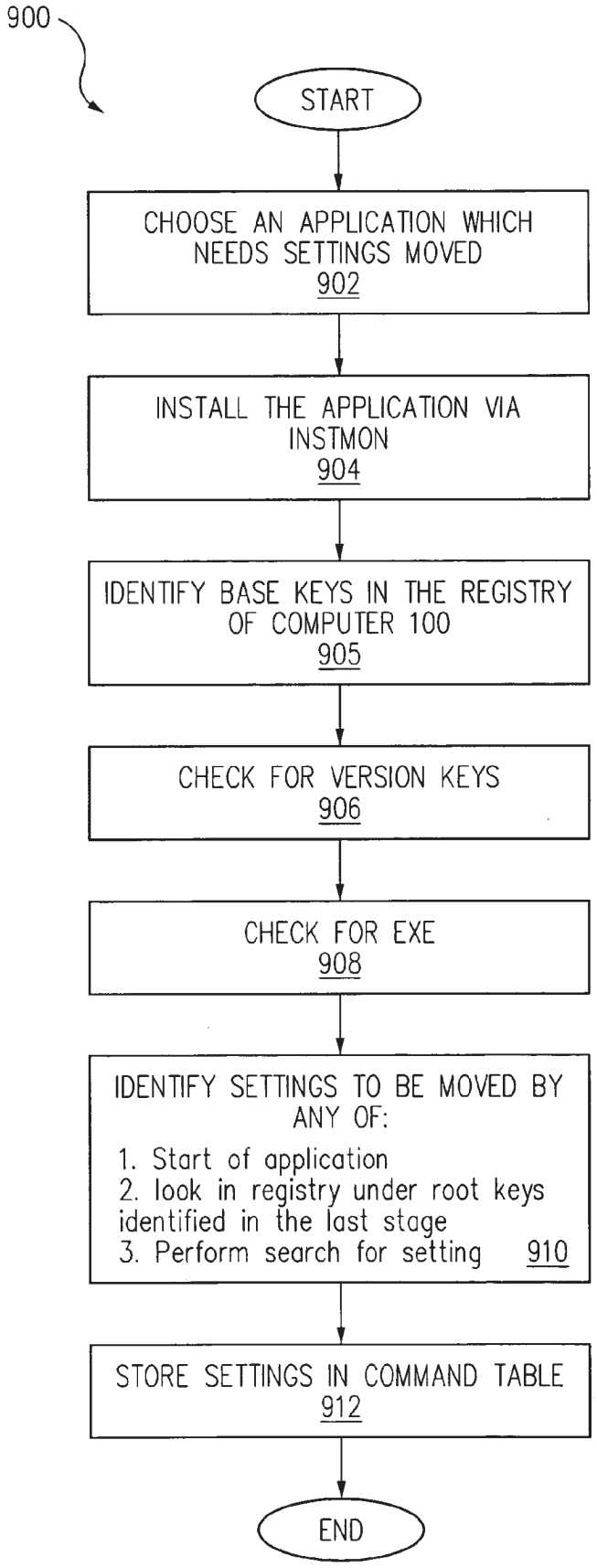
900
START
CHOOSE AN APPLICATION WHICH NEEDS SETTINGS MOVED
902
INSTALL THE APPLICATION VIA INSTMON
904
IDENTIFY BASE KEYS IN THE REGISTRY OF COMPUTER 100
905
CHECK FOR VERSION KEYS
906
CHECK FOR EXE
908
IDENTIFY SETTINGS TO BE MOVED BY ANY OF:
1. Start of application
2. look in registry under root keys identified in the last stage
3. Perform search for setting
910
STORE SETTINGS IN COMMAND TABLE
912
END

FIG. 9

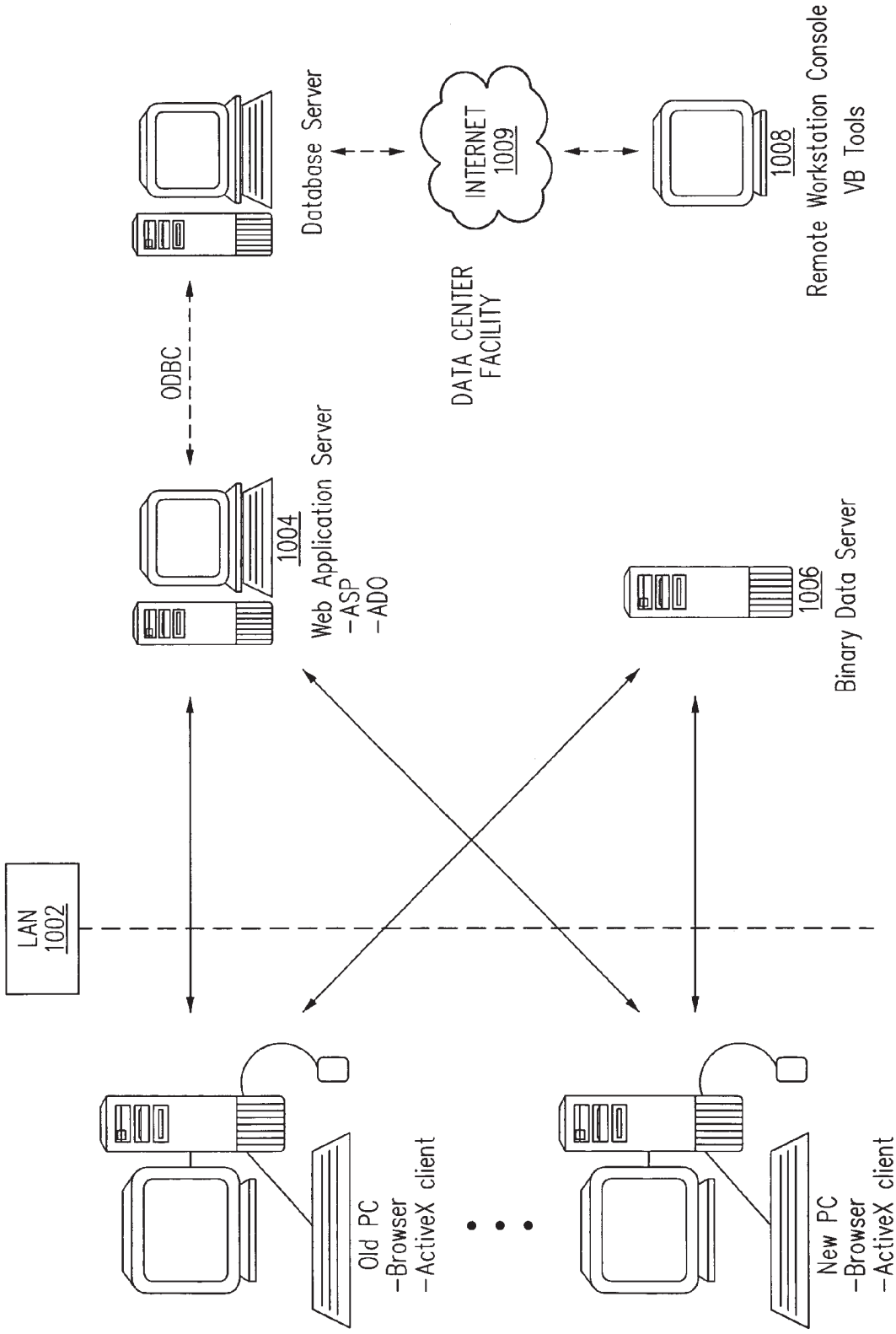
LAN
1002
Old PC
-Browser
-ActiveX client
New PC
-Browser
-ActiveX client
1004
Web Application Server
-ASP
-ADO
ODBC
1006
Binary Data Server
Database Server
DATA CENTER
FACILITY
INTERNET
1009
1008
Remote Workstation Console
VB Tools

FIG. 10

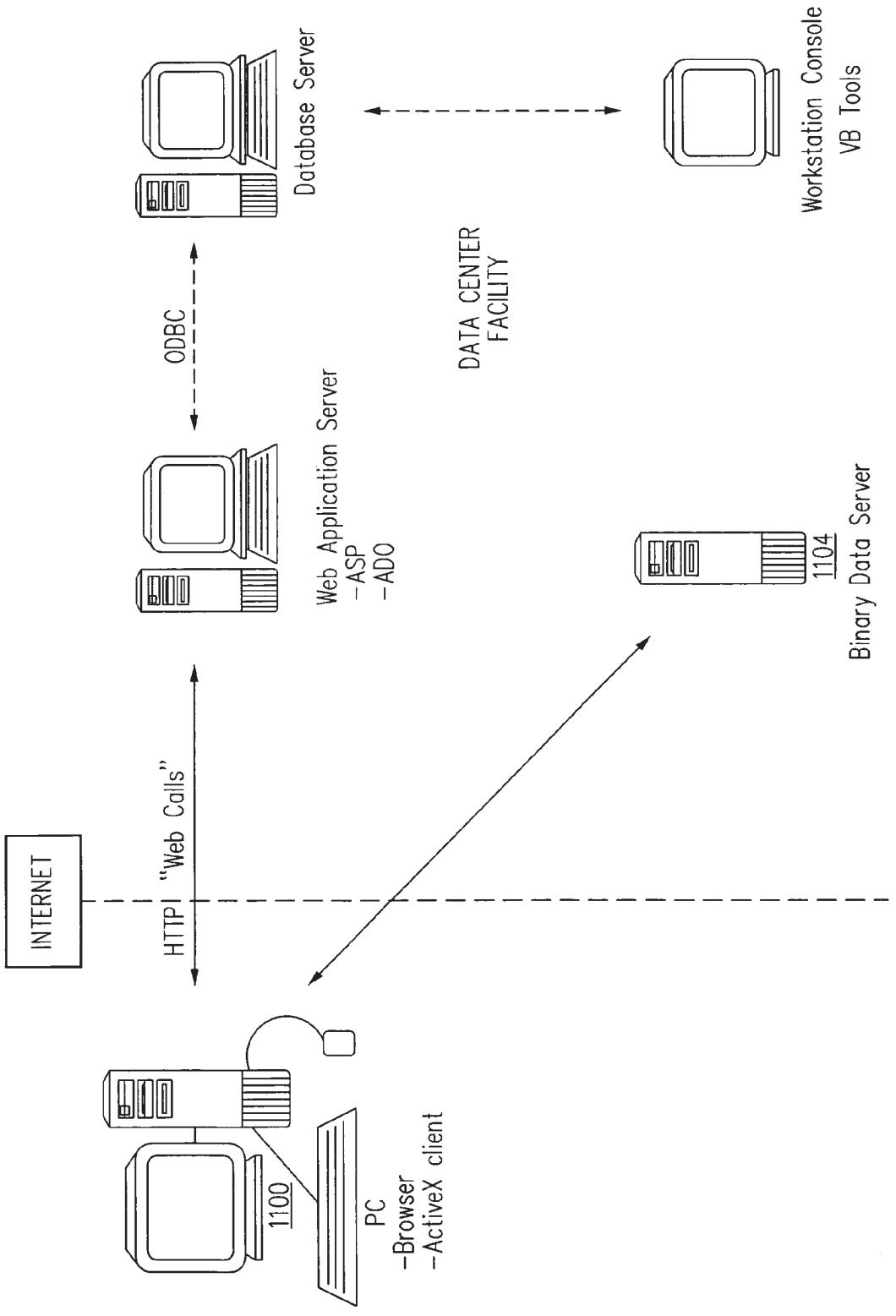
Database Server
Workstation Console
VB Tools
ODBC
DATA CENTER
FACILITY
Web Application Server
-ASP
-ADO
1104
Binary Data Server
INTERNET
HTTP "Web Calls"
1100
PC
-Browser
-ActiveX client

FIG. 11

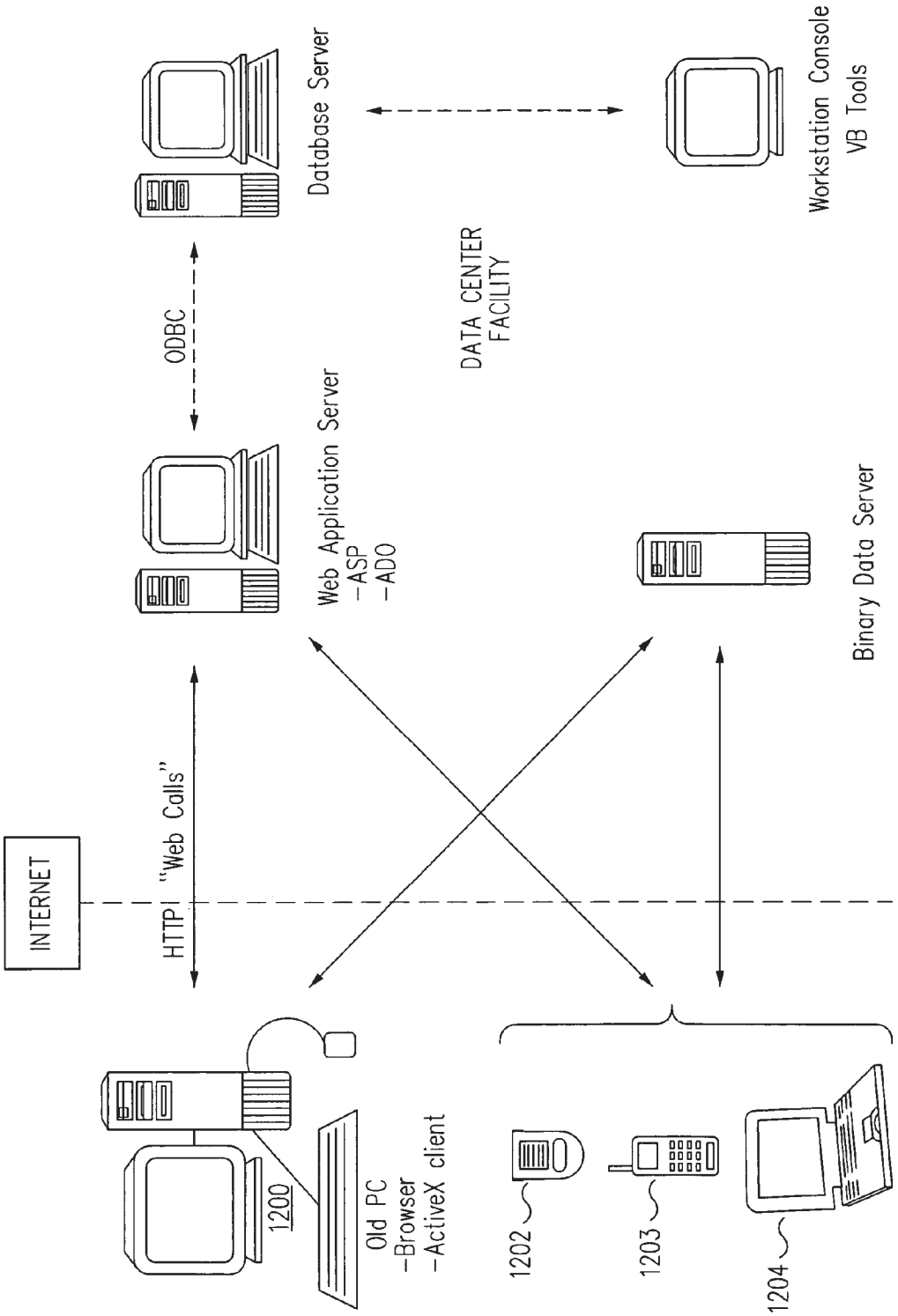
INTERNET
HTTP/ "Web Calls"
ODBC
Database Server
Web Application Server
-ASP
-ADO
DATA CENTER
FACILITY
Workstation Console
VB Tools
Binary Data Server
1200
Old PC
-Browser
-ActiveX client
1202
1203
1204

FIG. 12

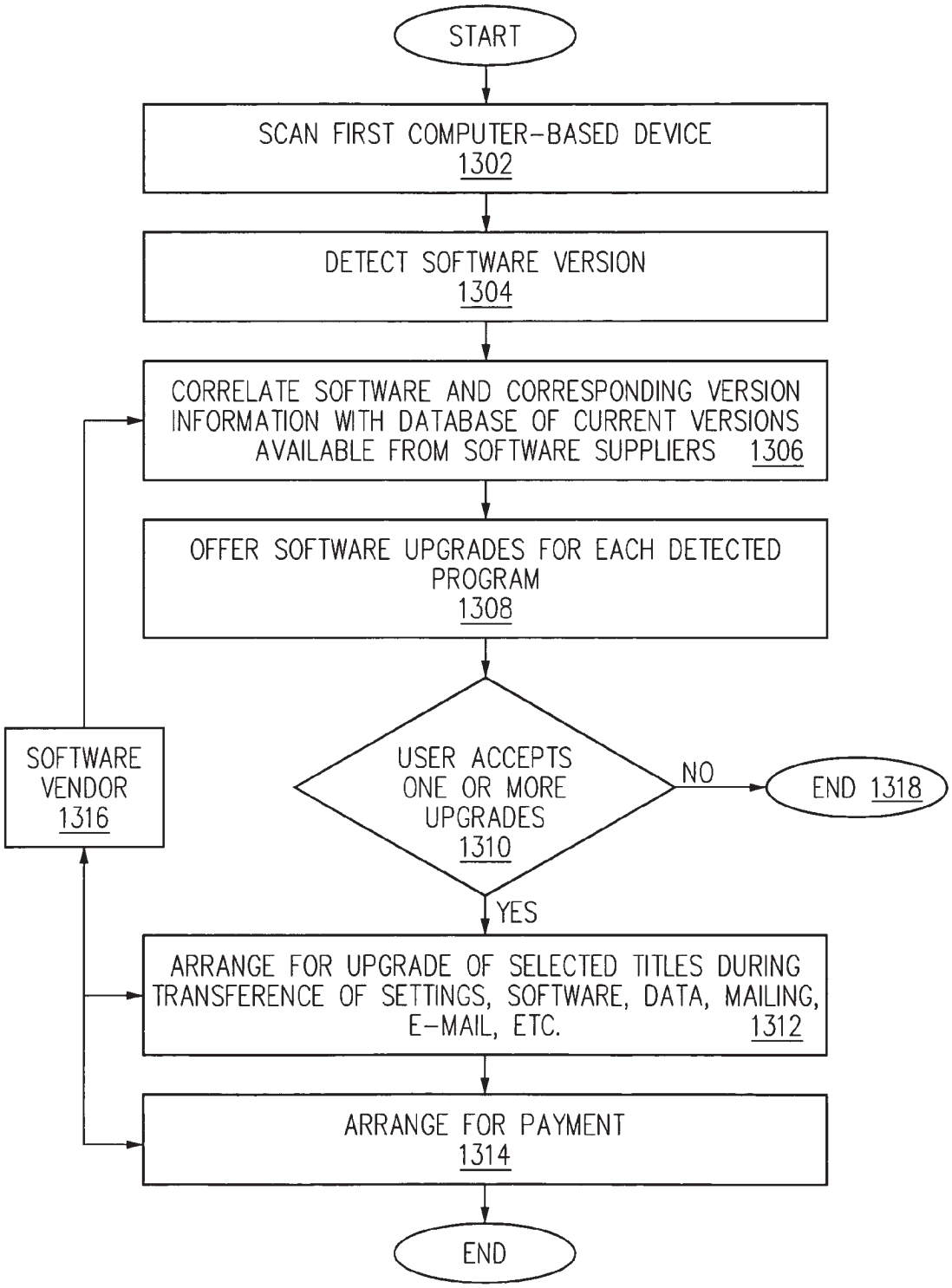
START
SCAN FIRST COMPUTER-BASED DEVICE 1302
DETECT SOFTWARE VERSION 1304
CORRELATE SOFTWARE AND CORRESPONDING VERSION INFORMATION WITH DATABASE OF CURRENT VERSIONS AVAILABLE FROM SOFTWARE SUPPLIERS 1306
OFFER SOFTWARE UPGRADES FOR EACH DETECTED PROGRAM 1308
USER ACCEPTS ONE OR MORE UPGRADES 1310
NO
END 1318
YES
SOFTWARE VENDOR 1316
ARRANGE FOR UPGRADE OF SELECTED TITLES DURING TRANSFERENCE OF SETTINGS, SOFTWARE, DATA, MAILING, E-MAIL, ETC. 1312
ARRANGE FOR PAYMENT 1314
END

FIG. 13

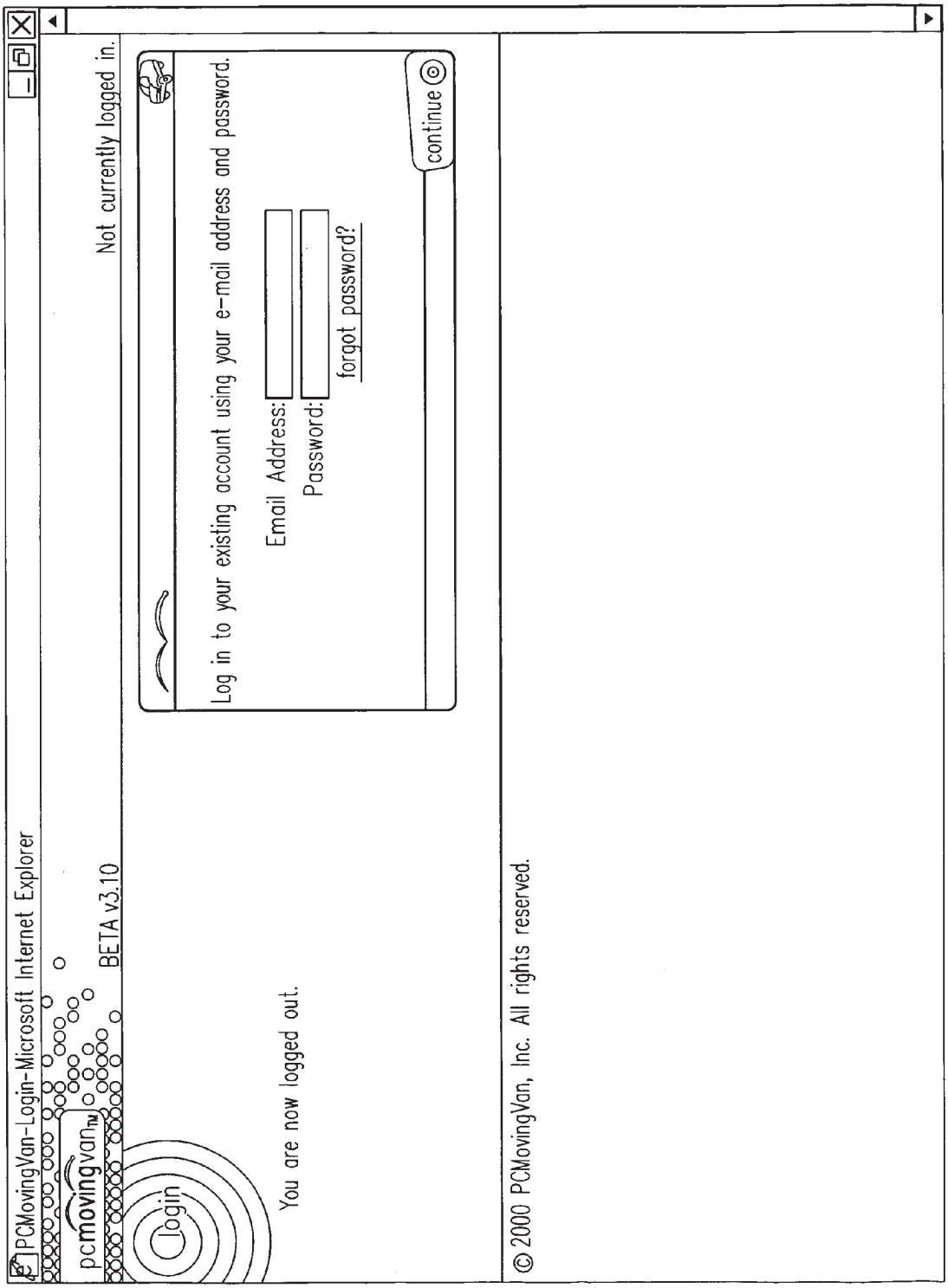
PCMovingVan-Login-Microsoft Internet Explorer
pcmovingvan
BETA v3.10
Not currently logged in.
Login
You are now logged out.
Log in to your existing account using your e-mail address and password.
Email Address:
Password:
forgot password?
continue
© 2000 PCMovingVan, Inc. All rights reserved.

FIG. 14

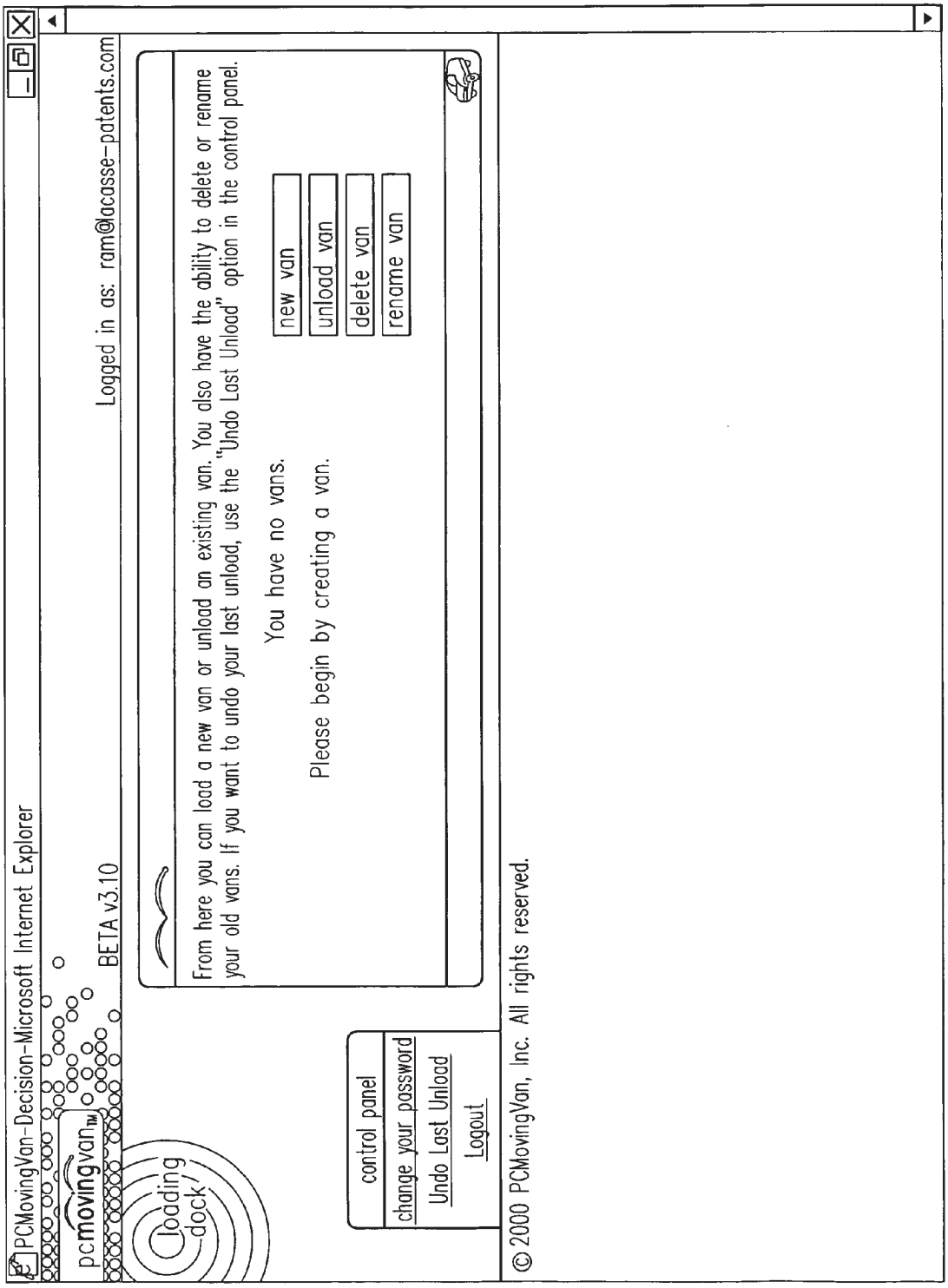
PCMovingVan-Decision-Microsoft Internet Explorer
pcmovingvan™
BETA v3.10
Logged in as: ram@lacasse-patents.com
loading dock
From here you can load a new van or unload an existing van. You also have the ability to delete or rename your old vans. If you want to undo your last unload, use the "Undo Last Unload" option in the control panel.
You have no vans.
Please begin by creating a van.
new van
unload van
delete van
rename van
control panel
change your password
Undo Last Unload
Logout
© 2000 PCMovingVan, Inc. All rights reserved.

FIG. 15

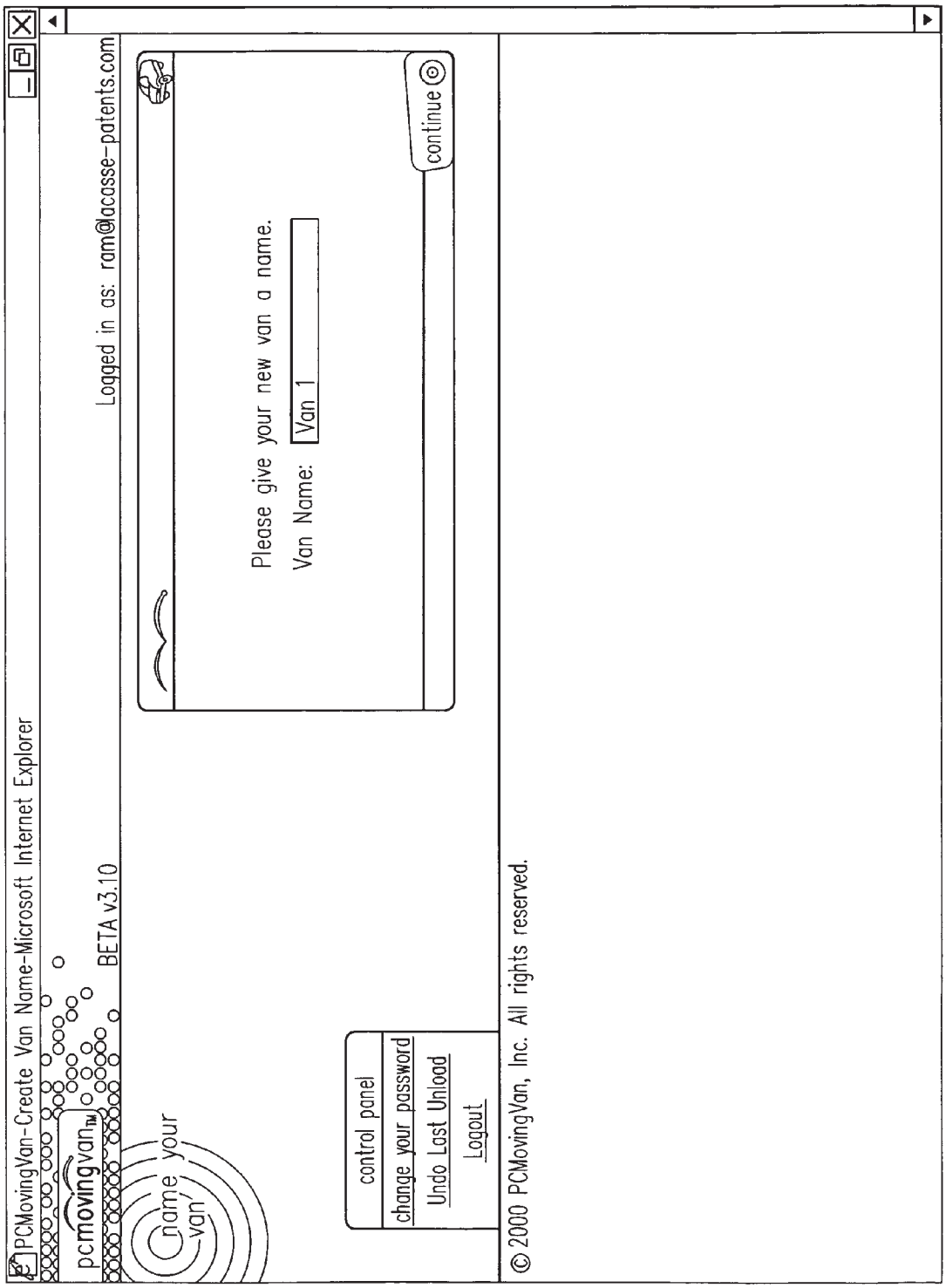
PCMovingVan-Create Van Name-Microsoft Internet Explorer
pcmovingvan™
BETA v3.10
Logged in as: ram@acasse-patents.com
name your van
control panel
change your password
Undo Last Unload
Logout
Please give your new van a name.
Van Name: Van 1
continue
© 2000 PCMovingVan, Inc. All rights reserved.

FIG. 16

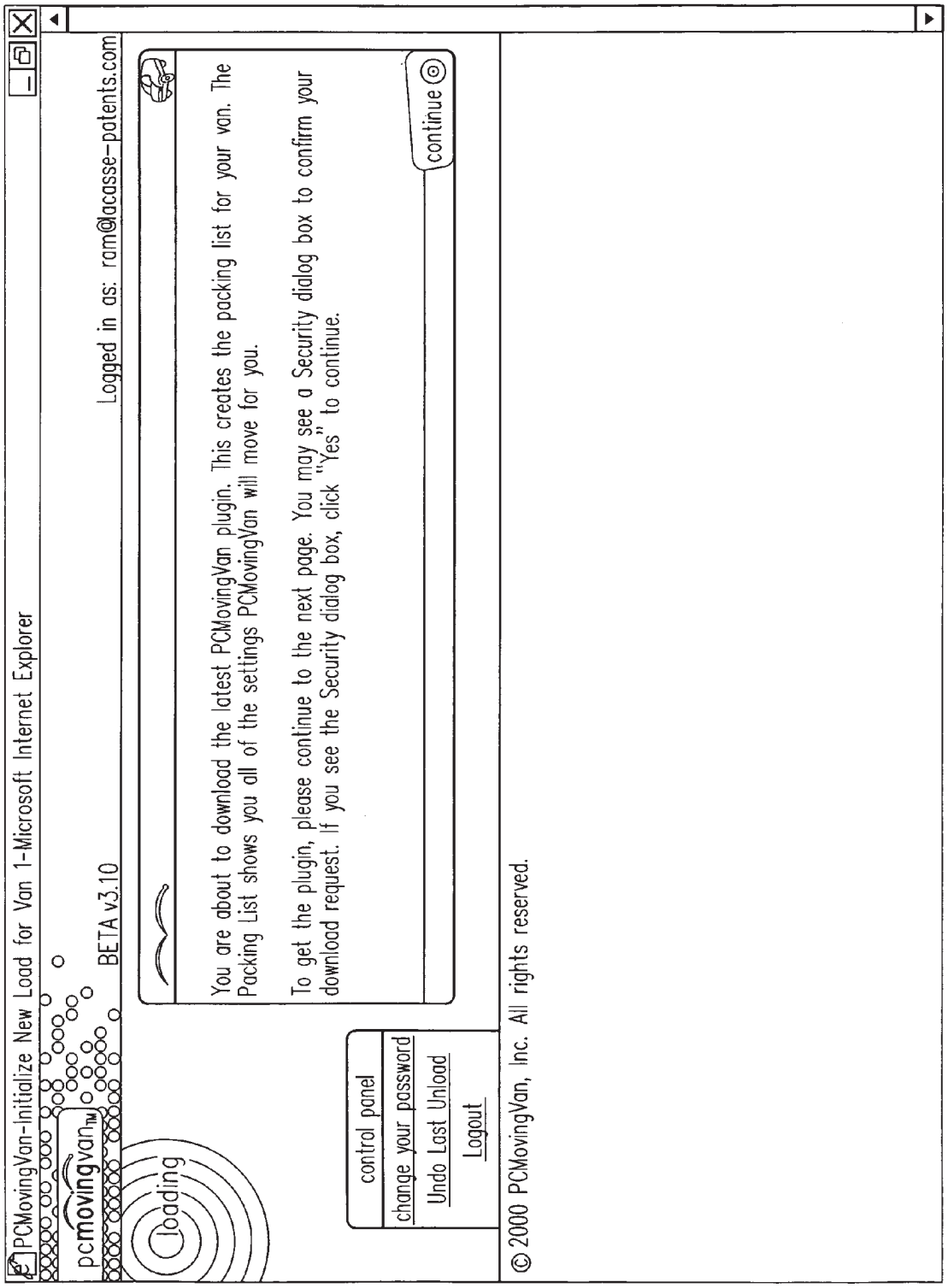
PCMovingVan-Initialize New Load for Van 1-Microsoft Internet Explorer
pcmovingvan™
BETA v3.10
Logged in as: ram@lacasse-patents.com
Loading
You are about to download the latest PCMovingVan plugin. This creates the packing list for your van. The Packing List shows you all of the settings PCMovingVan will move for you.
To get the plugin, please continue to the next page. You may see a Security dialog box to confirm your download request. If you see the Security dialog box, click "Yes" to continue.
continue
control panel
change your password
Undo Last Unload
Logout
© 2000 PCMovingVan, Inc. All rights reserved.

FIG. 17

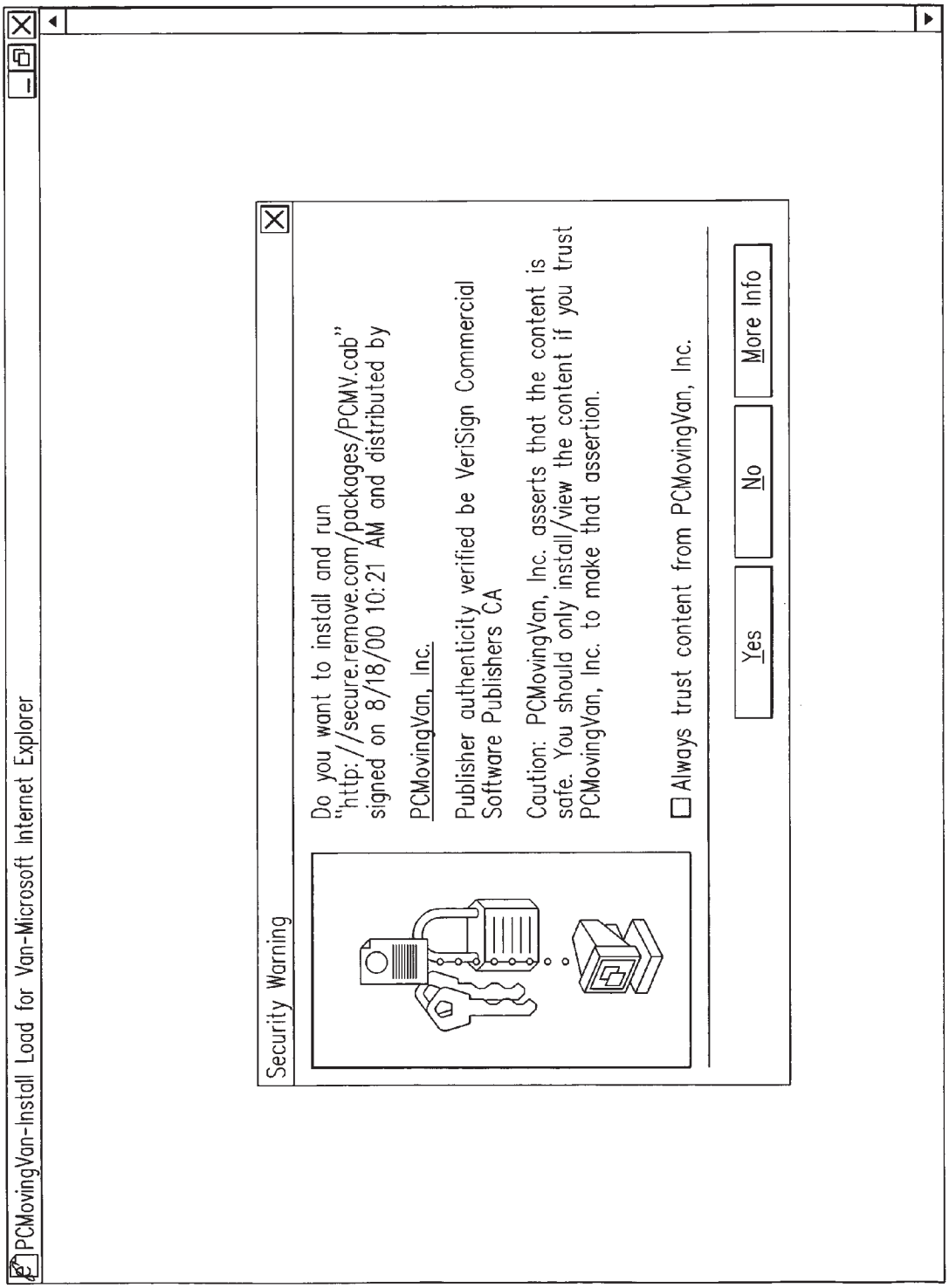
PCMovingVan-Install Load for Van-Microsoft Internet Explorer
Security Warning
Do you want to install and run "http://secure.remove.com/packages/PCMV.cab" signed on 8/18/00 10:21 AM and distributed by
PCMovingVan, Inc.
Publisher authenticity verified be VeriSign Commercial Software Publishers CA
Caution: PCMovingVan, Inc. asserts that the content is safe. You should only install/view the content if you trust PCMovingVan, Inc. to make that assertion.
Always trust content from PCMovingVan, Inc.
Yes
No
More Info

FIG. 18

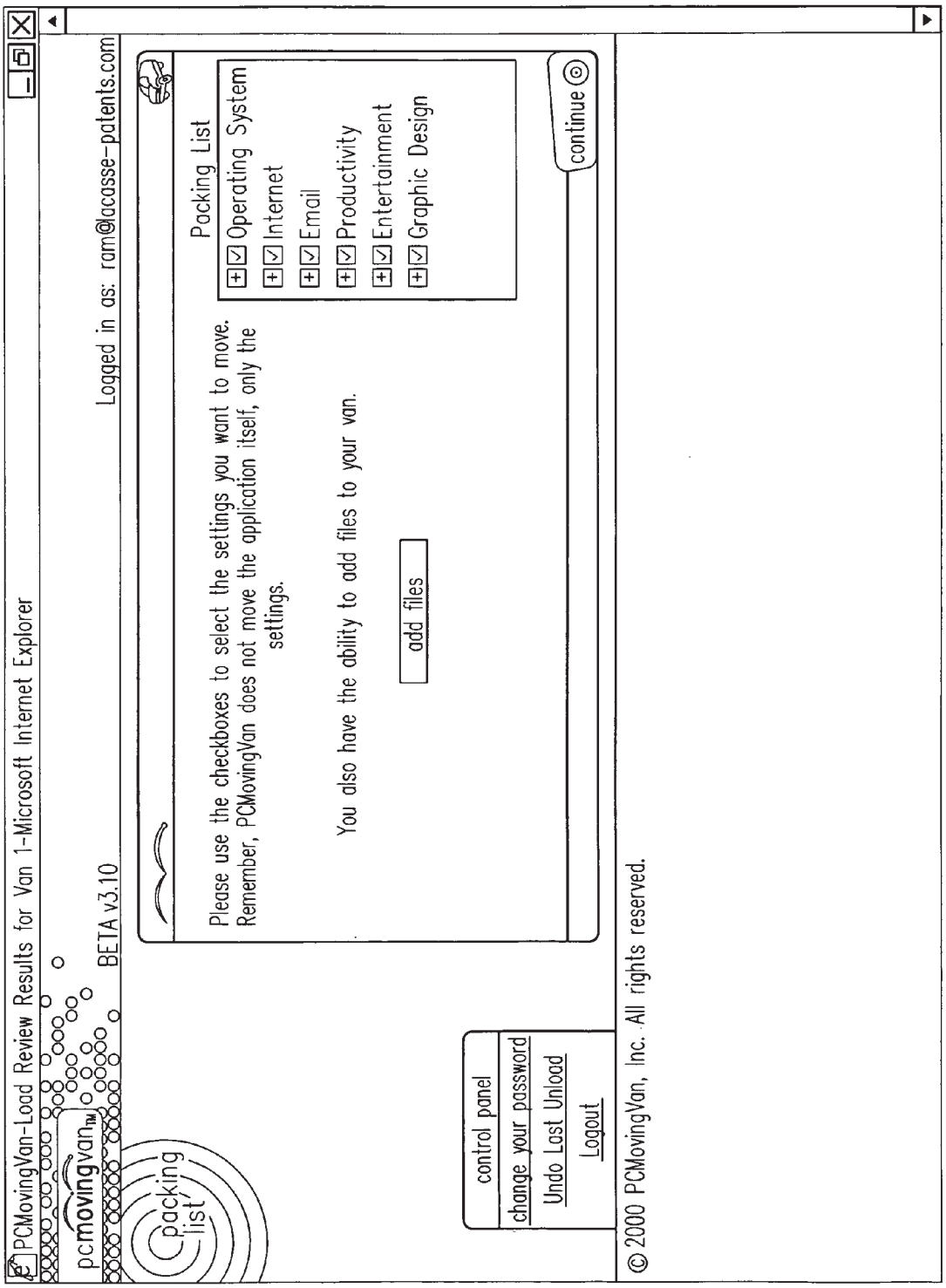
PCMovingVan-Load Review Results for Van 1-Microsoft Internet Explorer
pcmovingvan™
BETA v3.10
Logged in as: ram@lacasse-patents.com
Packing List
Please use the checkboxes to select the settings you want to move.
Remember, PCMovingVan does not move the application itself, only the settings.
You also have the ability to add files to your van.
add files
Packing List
Operating System
Internet
Email
Productivity
Entertainment
Graphic Design
continue
control panel
change your password
Undo Last Unload
Logout
© 2000 PCMovingVan, Inc. All rights reserved.

FIG. 19

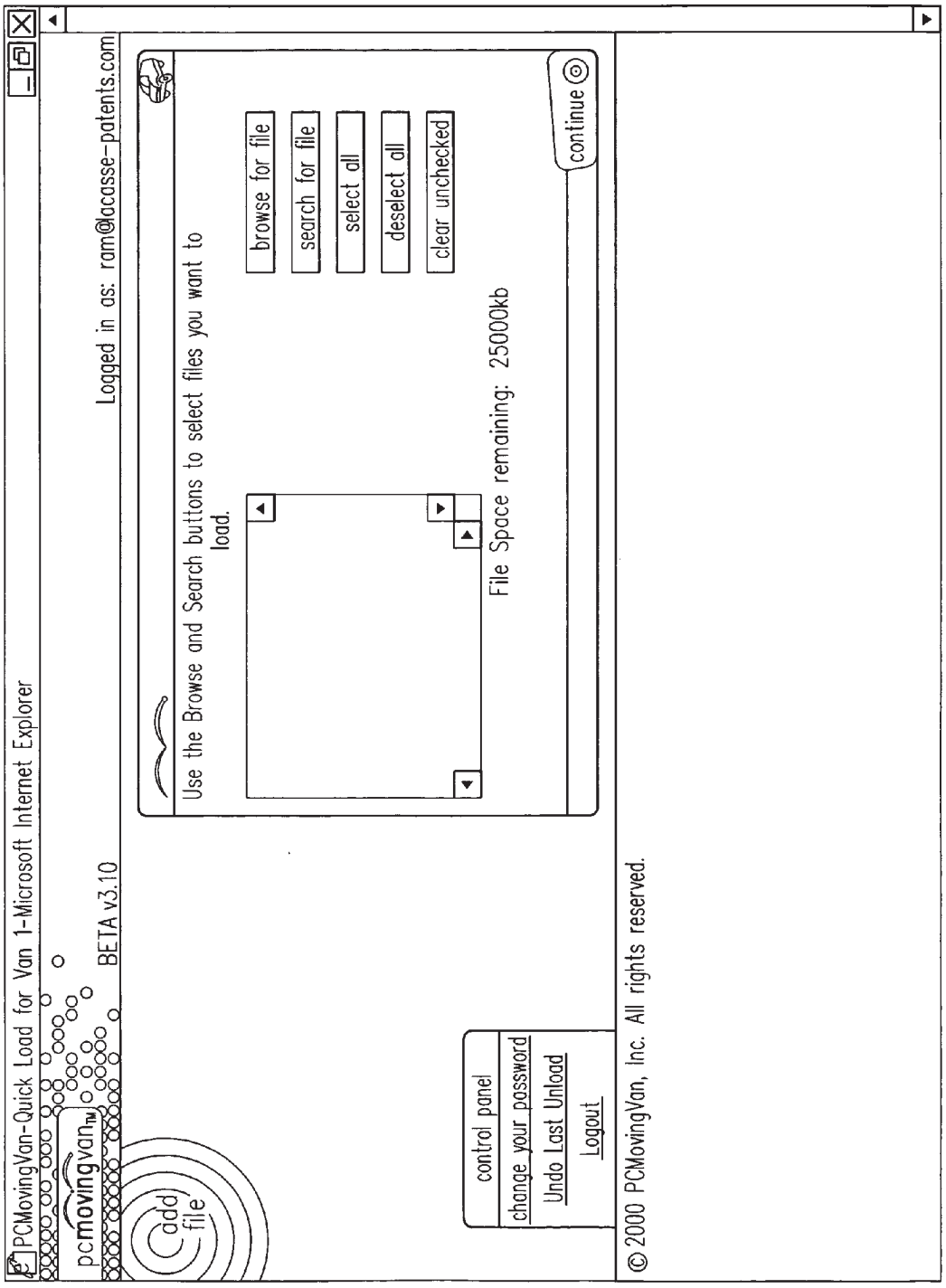
PCMovingVan-Quick Load for Van 1-Microsoft Internet Explorer
pcmovingvan™
BETA v3.10
Logged in as: ram@lacasse-patents.com
add file
Use the Browse and Search buttons to select files you want to load.
browse for file
search for file
select all
deselect all
clear unchecked
File Space remaining: 25000kb
continue
control panel
change your password
Undo Last Unload
Logout
© 2000 PCMovingVan, Inc. All rights reserved.

FIG. 20

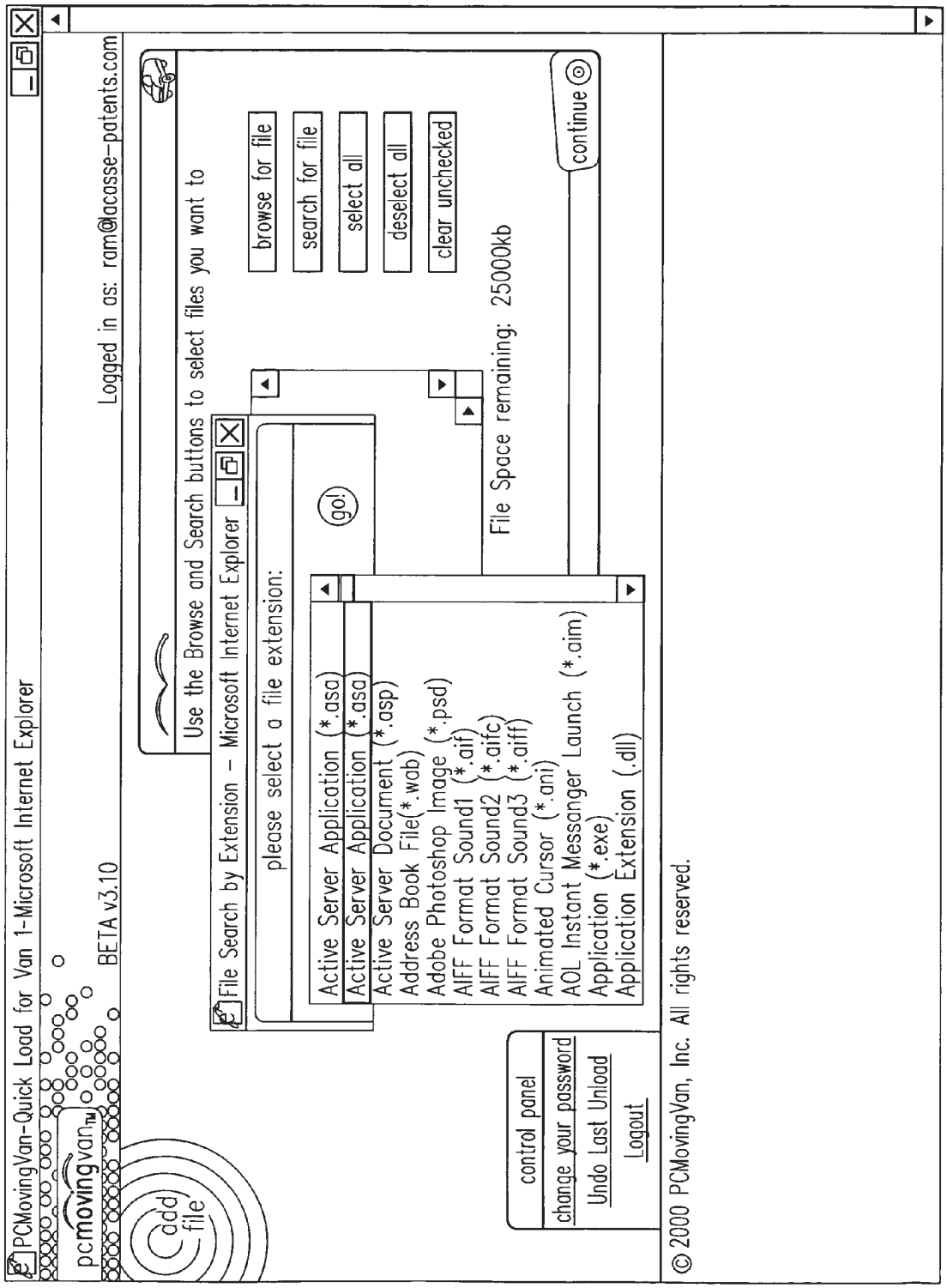
PCMovingVan-Quick Load for Van 1-Microsoft Internet Explorer
pcmovingvan™
BETA v3.10
Logged in as: ram@lacasse-patents.com
Add file
Use the Browse and Search buttons to select files you want to
browse for file
search for file
select all
deselect all
clear unchecked
File Search by Extension – Microsoft Internet Explorer
please select a file extension:
Active Server Application (*.asa)
Active Server Application (*.asa)
Active Server Document (*.asp)
Address Book File(*.wab)
Adobe Photoshop Image (*.psd)
AIFF Format Sound1 (*.aif)
AIFF Format Sound2 (*.aifc)
AIFF Format Sound3 (*.aiff)
Animated Cursor (*.ani)
AOL Instant Messanger Launch (*.aim)
Application (*.exe)
Application Extension (.dll)
go!
File Space remaining: 25000kb
continue
control panel
change your password
Undo Last Unload
Logout
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FIG. 21

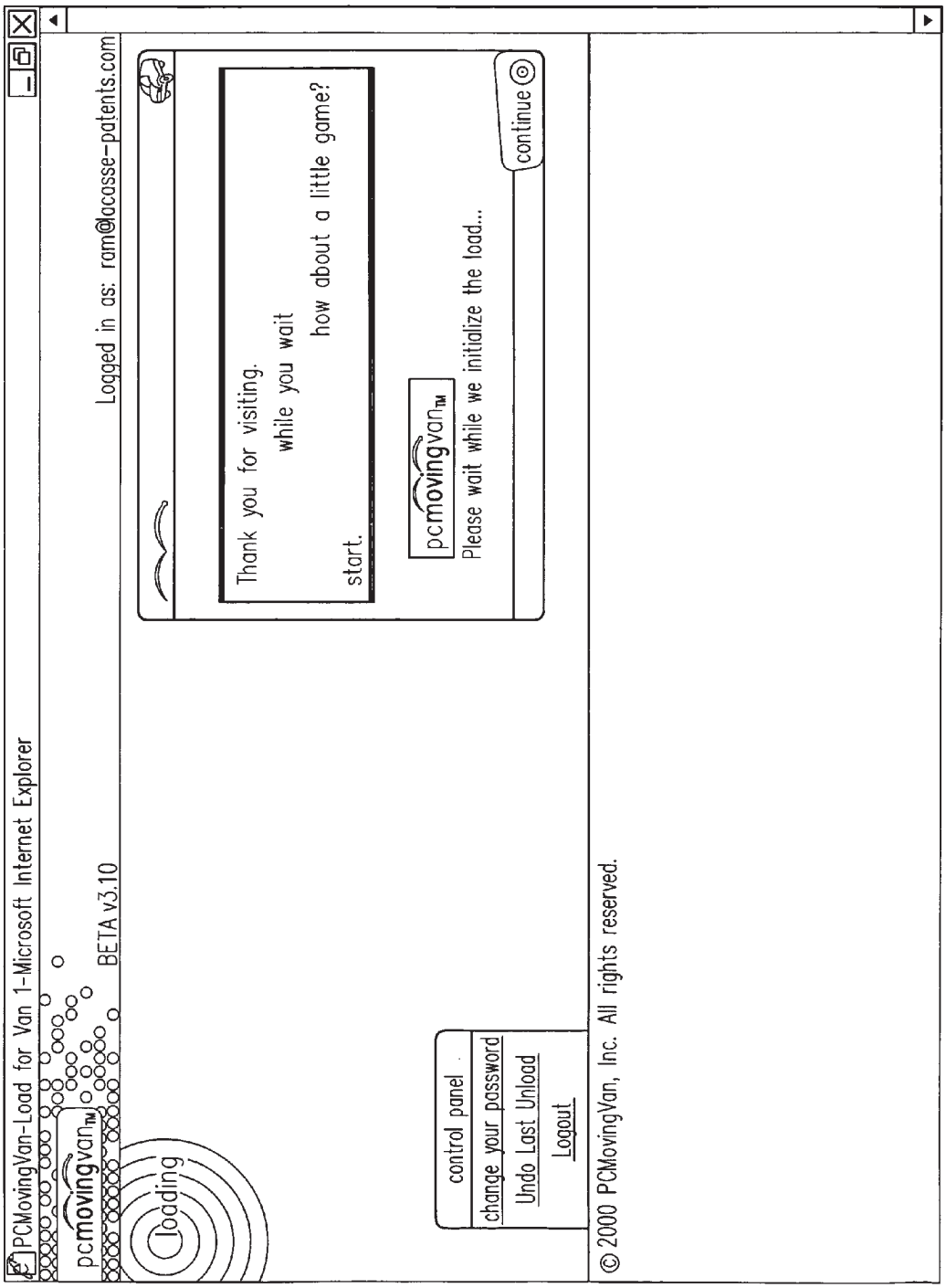
PCMovingVan-Load for Van 1-Microsoft Internet Explorer
pcmovingvan™
BETA v3.10
Logged in as: ram@lacasse-patents.com
Loading
Thank you for visiting.
while you wait
how about a little game?
start.
pcmovingvan™
Please wait while we initialize the load...
continue
control panel
change your password
Undo Last Unload
Logout
© 2000 PCMovingVan, Inc. All rights reserved.

FIG. 22

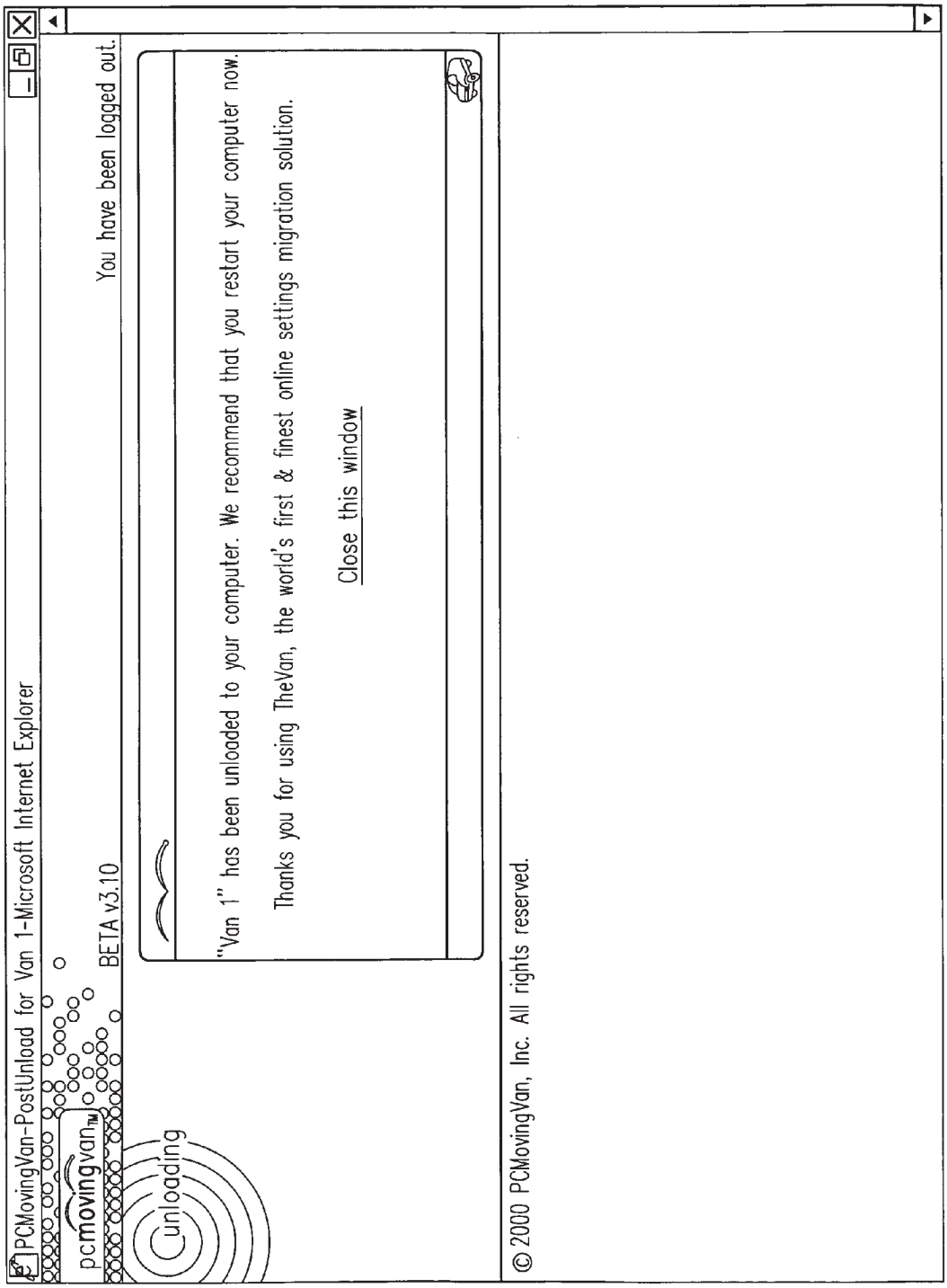
PCMovingVan-PostUnload for Van 1-Microsoft Internet Explorer
pcmovingvan™
BETA v3.10
You have been logged out.
Unloading
"Van 1" has been unloaded to your computer. We recommend that you restart your computer now.
Thanks you for using TheVan, the world's first & finest online settings migration solution.
Close this window
© 2000 PCMovingVan, Inc. All rights reserved.

FIG. 23

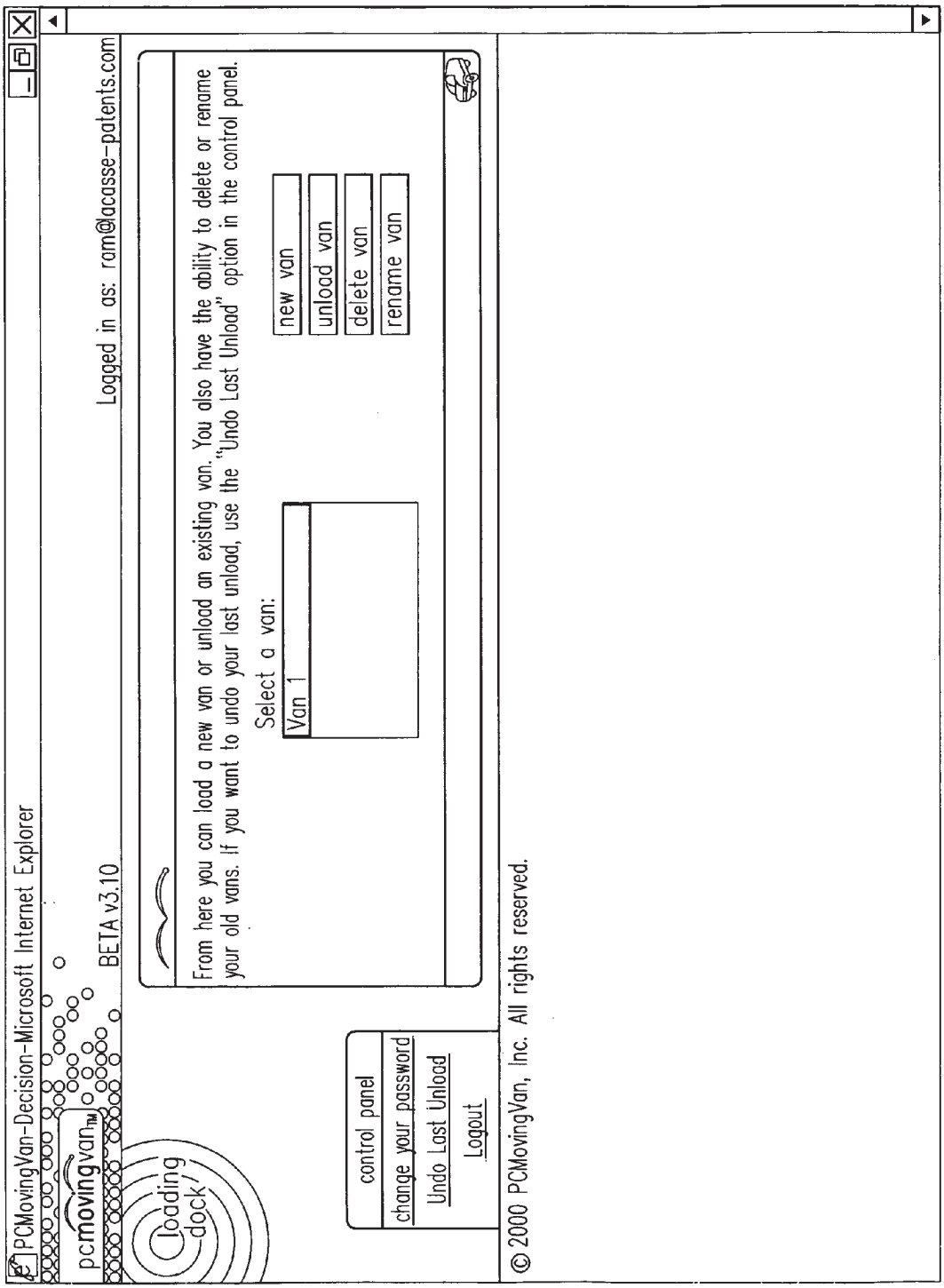
PCMovingVan-Decision-Microsoft Internet Explorer
pcmovingvan™
BETA v3.10
Logged in as: ram@acasse-patents.com
loading dock
From here you can load a new van or unload an existing van. You also have the ability to delete or rename your old vans. If you want to undo your last unload, use the "Undo Last Unload" option in the control panel.
Select a van:
Van 1
new van
unload van
delete van
rename van
control panel
change your password
Undo Last Unload
Logout
© 2000 PCMovingVan, Inc. All rights reserved.

FIG. 24

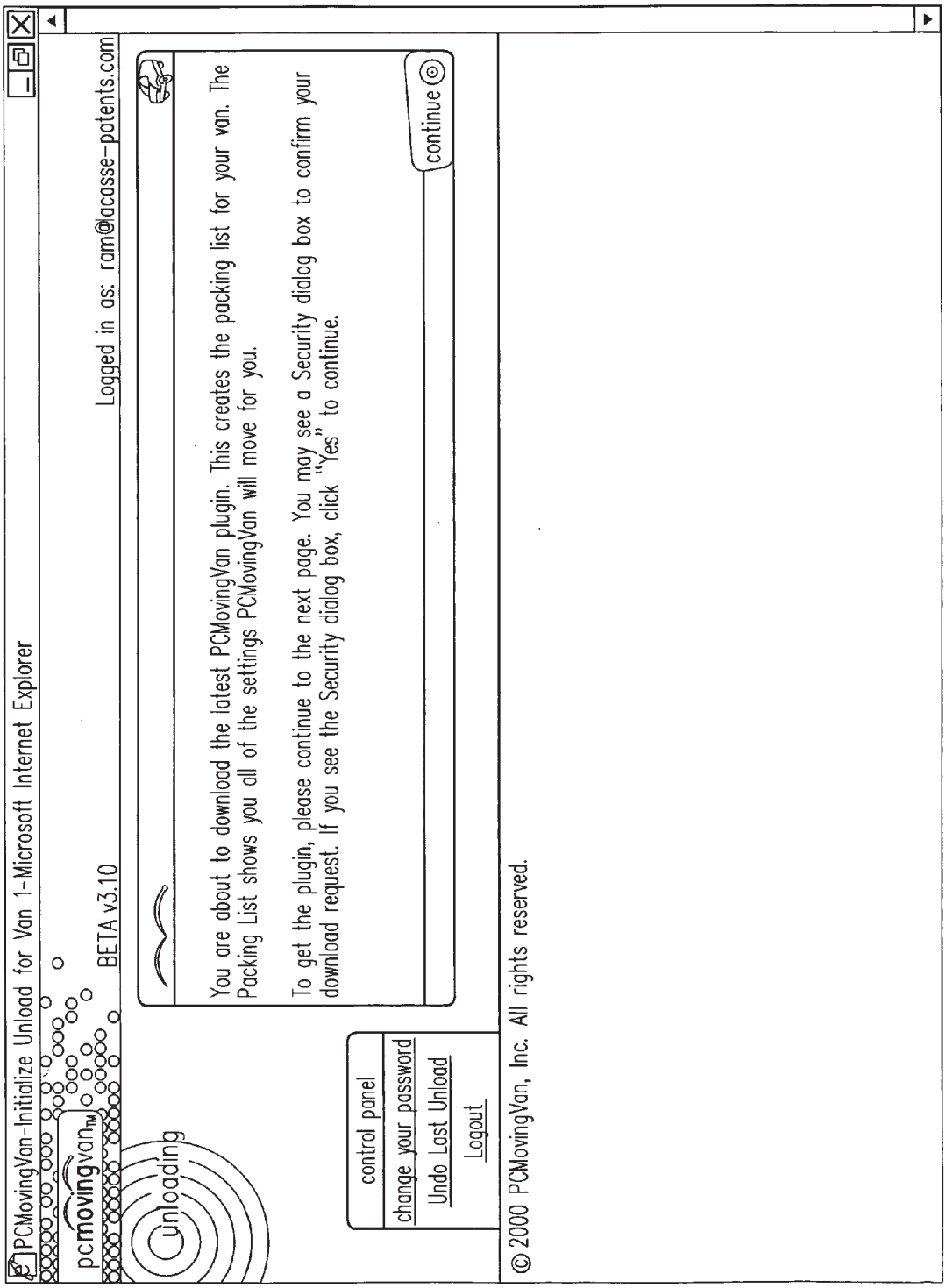
PCMovingVan-Initialize Unload for Van 1-Microsoft Internet Explorer
pcmovingvan™
BETA v3.10
Logged in as: ram@acasse-patents.com
Unloading
control panel
change your password
Undo Last Unload
Logout
You are about to download the latest PCMovingVan plugin. This creates the packing list for your van. The Packing List shows you all of the settings PCMovingVan will move for you.
To get the plugin, please continue to the next page. You may see a Security dialog box to confirm your download request. If you see the Security dialog box, click "Yes" to continue.
continue
© 2000 PCMovingVan, Inc. All rights reserved.

FIG. 25

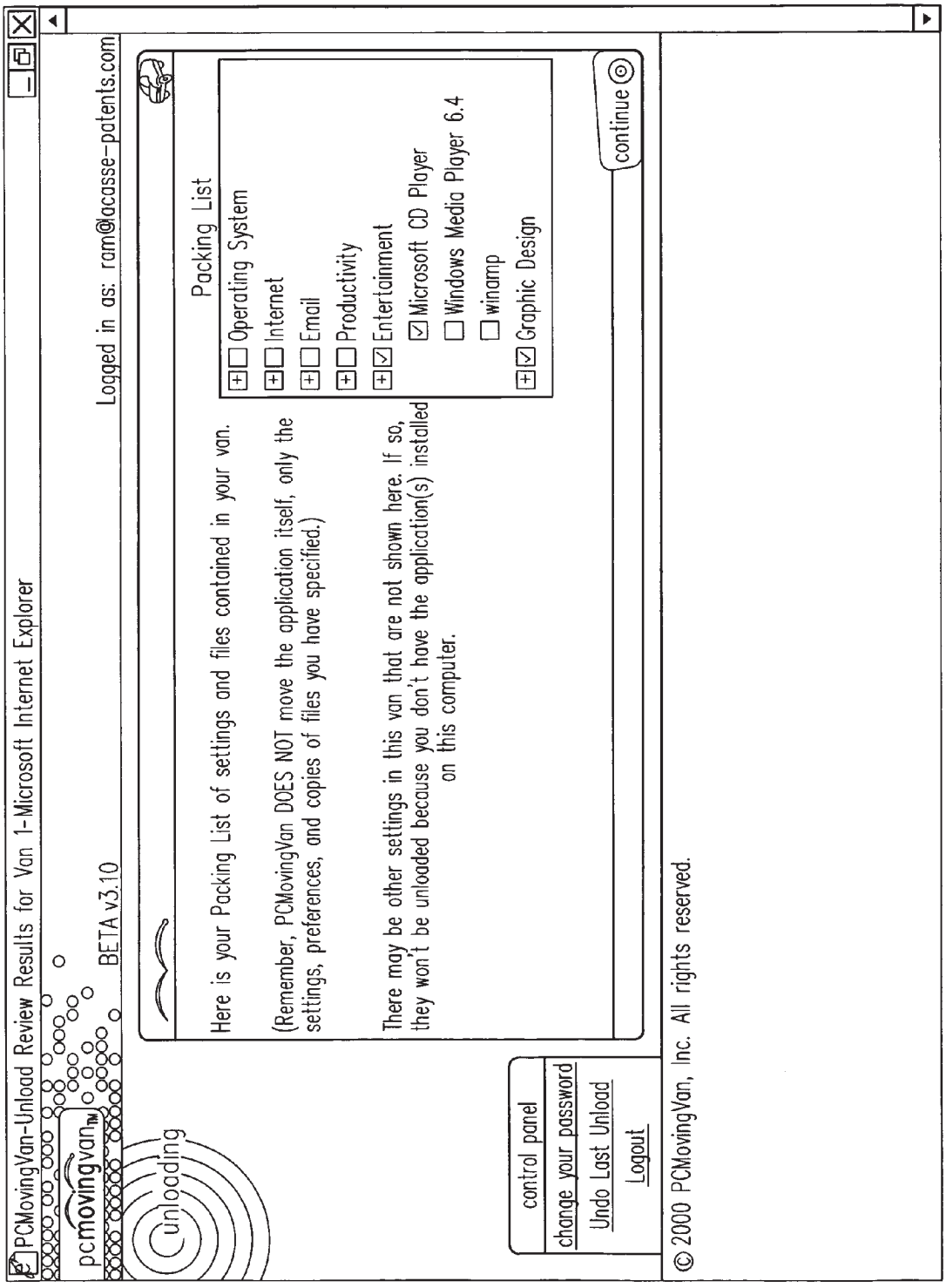
PCMovingVan-Unload Review Results for Van 1-Microsoft Internet Explorer
pcmovingvan™
BETA v3.10
Logged in as: ram@lacasse-patents.com
Unloading
Here is your Packing List of settings and files contained in your van.
(Remember, PCMovingVan DOES NOT move the application itself, only the settings, preferences, and copies of files you have specified.)
There may be other settings in this van that are not shown here. If so, they won't be unloaded because you don't have the application(s) installed on this computer.
Packing List
Operating System
Internet
Email
Productivity
Entertainment
Microsoft CD Player
Windows Media Player 6.4
winamp
Graphic Design
continue
control panel
change your password
Undo Last Unload
Logout
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FIG. 26

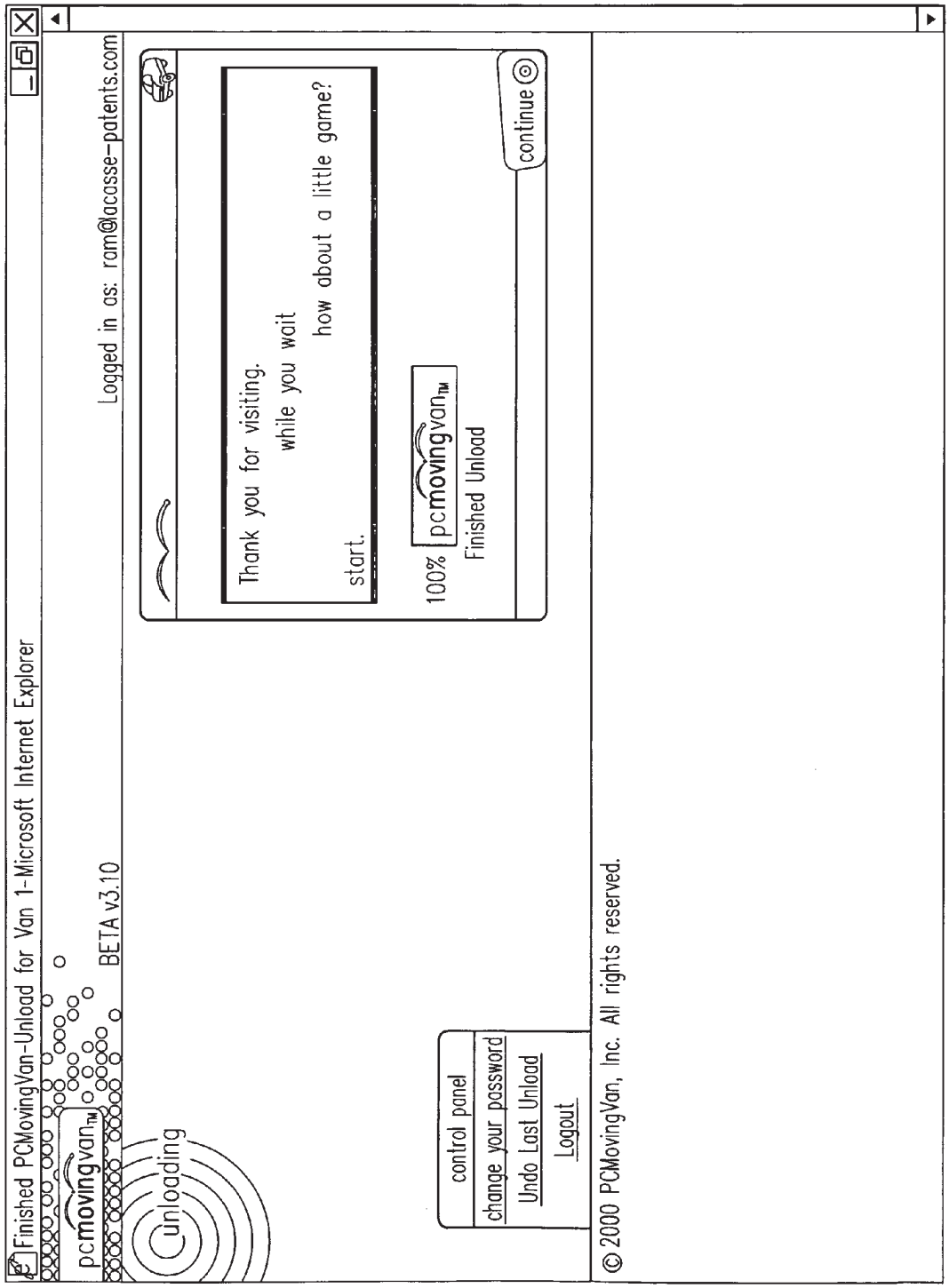
Finished PCMovingVan-Unload for Van 1-Microsoft Internet Explorer
pcmovingvan™
BETA v3.10
Logged in as: ram@lacasse-patents.com
Unloading
Thank you for visiting.
while you wait
how about a little game?
start.
100% pcmovingvan™
Finished Unload
continue
control panel
change your password
Undo Last Unload
Logout
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FIG. 27

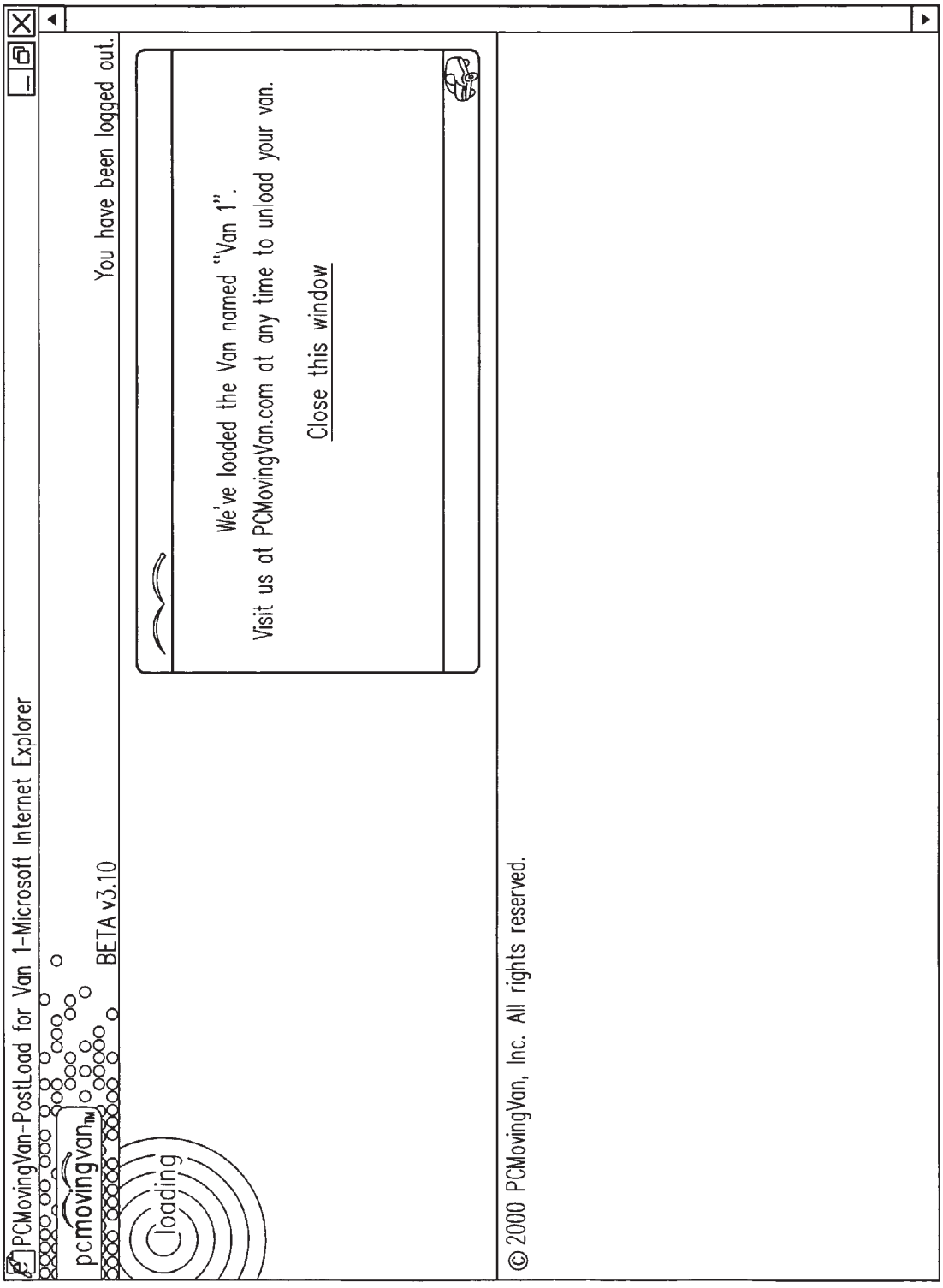
PCMovingVan-PostLoad for Van 1-Microsoft Internet Explorer
pcmovingvan
BETA v3.10
Loading
You have been logged out.
We've loaded the Van named "Van 1".
Visit us at PCMovingVan.com at any time to unload your van.
Close this window
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FIG. 28

SYSTEM FOR TRANSFERRING CUSTOMIZED HARDWARE AND SOFTWARE SETTINGS FROM ONE COMPUTER TO ANOTHER COMPUTER TO PROVIDE PERSONALIZED OPERATING ENVIRONMENTS

PRIORITY

The present application claims the benefit of provisional patent application "Method and System for Transferring Application Settings, Files and Other Data From One Computer to Another Computer," Ser. No. 60/192,860, filed Mar. 29, 2000.

FIELD OF INVENTION

The present invention relates to a method and system for transferring, via the HTTP protocol, application settings, files and other data from a first computer-based device (e.g., an older PC) including, but not limited to, wired PCs /workstations, etc., wireless electronic devices (e.g., laptops, palm-based systems, telephones, WAP devices, etc.), to a second computer-based device, such as a new replacement PC, so that the second computer-based device will have a substantially similar operating environment as the first computer-based device.

BACKGROUND OF THE INVENTION

In the enterprise, industrial and residential marketplaces, computer-based devices and information applications have become standard. In addition to the continued growth of computer use, turnover of computer-based devices has increased as newer and better ones are produced. As a result, businesses and individual computer-based device users are frequently replacing their computer-based devices with the latest models. This trend will undoubtedly continue as the price of computer-based devices continues to decrease and the need for processing power increases.

One major problem associated with purchasing a new computer-based device is reconfiguring the new system to have the identical or similar operating environment as the one being replaced. Although a user may be interested in a new computer-based device's increased speed or storage capacity, the user typically wants the new computer-based device to have the same "feel" as the one being replaced.

Computer users typically arrange their personal or work computer to suit their preferences. For example on a PC, desktop settings, such as the background design on the monitor, e.g., the "wallpaper", desktop settings or automatic start-up commands are frequently customized. Over time, individuals will normally store certain software applications and data on their PCs. These applications are typically customized to suit the individual user's particular preferences. For instance, with regard to a word processing application, the user may specify a preferred default font, a custom page layout, customized spell-checking dictionaries, and easy access to frequently retrieved files.

More recently, users tend to personalize their computer-based devices so that certain Internet features are stored for later use. For example, users normally customize their computer-based devices to allow easy dial-up access to their preferred Internet service provider or to save their favorite World Wide Web ("WWW") sites, e-mail addresses, browser bookmarks, etc. At the present time, a user must endure both the time and effort to customize every new

device that they purchase. No method exists to easily enable the user to selectively direct transference of the "look and feel" or content of existing devices to new or other devices which may differ in format, form factor, capacity, platform, operating system or function. It would be useful to carry the user's configuration from device to device without requiring the user to reconfigure each time (i.e., customizing hardware and software settings, reloading software and files, etc.).

When a user purchases a new replacement computer-based device, it can take many hours to reconfigure the replacement so that the operating environment is similar to the environment of the original. Most software applications are customized according to each individual user's personal preferences. By simply reloading the original software program discs on the replacement computer-based device, the user will lose all of his or her personal preferences. Thus, the user must reconfigure all the applications so they are customized to his or her liking. Not only can this process be time consuming, but it can also be technically difficult for those users with moderate computer-based device experience. In addition, older software applications may be incompatible with the newer computer-based device's operating system, or may require upgrades, and this may further complicate the transfer process.

Normally, the transfer is conducted by one of a variety of tedious and time-consuming methods. A user may opt to copy all the files on the older computer-based device onto a disc or some other storage device and then reload the files on the new computer-based device. This method is extremely time consuming and may possibly be technically infeasible for some users. For instance, many application files are so large that they cannot be stored on a single standard floppy disc or other smaller storage device, thereby making this method unworkable.

Another method involves physically connecting the older and the new systems to one another through some type of compatible cable or networking. After the devices are connected, the user can directly transfer files from one computer-based device to another. This procedure requires the equipment necessary to connect the two computer-based devices to one another, and the steps necessary to make the appropriate transfer is typically beyond the knowledge of most conventional computer-based device users. Even if a user was sufficiently knowledgeable about facilitating such transfer, the present invention expedites the transfer of the desired information.

Each of the options discussed above are time consuming, technically demanding on the user and fail to allow conversion between differing devices, differing software, hardware, platforms, environments, communications standards, etc. Most consumer users, especially residential users, do not have the resources or the know how to undertake the transfer of the appropriate files and settings from one computer-based device to another in a quick and efficient manner. In the enterprise or industrial environment, introducing new computer-based devices or moving/upgrading existing ones becomes a burden because of compatibility, loss of data, and time issues.

What is needed is a system and method which can provide an easy, fast and comprehensive transference of settings, software, and data, while considering modifications thereof based on compatibility, the selected receiving device and user selections. Whatever the precise merits, features and advantages of the prior art, it fails to achieve or fulfill the purposes of the present invention.

SUMMARY OF THE INVENTION

Wherefore, it is an object of the present invention to overcome the above noted drawbacks associated with customizing a second computer-based device, e.g. a new replacement PC, to operate in substantially the same fashion as a first older PC to be replaced.

A further object of the invention is to facilitate a quick and easy method and system for transferring various application settings, files and other personal data from a first computer-based device to a secure temporary storage site and, thereafter, allow the temporarily stored files, settings and other data to be retrieved from the temporary storage site and downloaded onto a second computer-based device, e.g. a new replacement PC, so that the second device will have substantially the same operating environment and personalized feel as the first one.

A further object of the invention is to facilitate a quick and easy method and system for backing-up various application settings, files and other personal data for a computer-based device, storage to a secure temporary storage site and, thereafter, allow the temporarily stored files, settings and other data to be retrieved from the temporary storage site and downloaded back (restore function) to the computer-based device, so that it will continue to have substantially the same operating environment and personalized feel.

A further object of the present invention is to streamline the transportation of the desired application settings, files and other personal data from a first computer-based device to a second computer-based device, without requiring the user to install or use any cabling, other than a conventional connection to the Internet which, in most circumstances, already exists on the first computer-based device.

A further object of the present invention is to streamline the transportation of the desired application settings, files and other personal data in an enterprise or industrial environment, from a first computer-based device to a second computer-based device, e.g. a new replacement computer-based device, without requiring the user to install or use any cabling, other than a conventional connection to an internal LAN, WAN, Intranet or virtual network.

Another object of the present invention is to provide a method and system which initially scans the original first computer-based device to determine the manufacturer, brand, type, version, model, etc., of any software, communications parameters, mouse, keyboard, monitor, printer and other peripherals installed on or electrically coupled to the first computer-based device.

Yet another object of the present invention is to provide a method and system in which the user of the method and system is readily able to select the desired applications settings, files and other data that are to be transferred from the original, first computer-based device to the temporary storage site and also facilitate selection of the files, settings and other personal data to be downloaded, from the temporary storage site onto a second computer-based device, e.g. a new replacement computer-based device.

Still another object of the present invention is to facilitate scanning of the second computer-based device, e.g. the new replacement computer-based device, prior to the downloading of any of application settings, files and other data to ensure that the second computer-based device has the necessary capabilities, e.g. hardware, software, etc., to allow downloading of the temporarily saved files, settings and other personal data on the second computer-based device.

Another object of the present invention is to utilize the HTTP protocol over the Internet, WWW, LANs or other communications networks to facilitate and streamline the process of transferring the application settings, files, data and other personal settings from the first computer-based device to the temporary storage site and finally onto the second computer-based device with little or no technical know how related to the transfer process. The user can simply follow easy and thorough directions supplied by the graphical user interface (GUI), such as e.g., web page interface, operated as part of this invention.

A still further object of the present invention is to facilitate a simple manner in which software applications, installed on the first computer-based device, can be scanned and checked against the currently available versions of each respective application contained on that computer-based device. This can be done in order to determine whether the user possesses the most current version of a particular software application. In the event that the user does not possess the most current version of a particular software application, the system and method will alert the user to that fact and provide the user with the option to make an on-line purchase of the appropriate upgrade of that particular software application for the second new computer-based device.

Yet another object of the present invention is to provide a system which allows computer-based devices, employing a variety of different operating systems, to interact with the website of the server system.

Yet another object of the present invention is to provide a system which allows computer-based devices, employing a variety of different communications standards, to interact with the website of the server system.

A further object of the present invention is to streamline the transportation of the desired application settings, files and other personal data in a consumer, enterprise or industrial environment, employing computer-based devices with a variety of different hardware and software formats.

A further object of the present invention is to streamline the transportation of the desired application settings, files and other personal data using an XML-based solution.

A further object of the present invention is to provide a simple reconnection mechanism to an Internet Service Provider (ISP) and also provide a method and apparatus that allows a user to "undo" a download for one reason or another.

Still another object of the present invention is to provide a system which allows various offers to be presented and allows various advertisers to target specific users based upon the user operating environment information acquired and categorized by the present invention, during the scan of the computer-based devices, to ensure that extremely relevant offers and advertising materials are presented to the users of the scanned computer-based devices with respect to privacy.

The present invention relates to a method for transferring information from a first computer-based device to a web site, for temporary storage and for later transfer of the stored information from the web site to a second computer-based device, the method comprising the steps of: establishing a communication link between a first computer-based device and a web site having a storage capability; scanning the first computer-based device, via the web site, to determine the information contained on the first computer-based device; allowing a user to select which of the scanned information, determined by the web site, is to be uploaded from the first computer-based device onto the web site for temporary storage; and transferring the information, contained on the first computer-based device and selected by the user, onto the web site for temporary storage.

The present invention relates to a system for transferring information from a first computer-based device to a web site, for temporary storage and for later transfer of the stored information from the web site to a second computer-based device, the system comprising: means for establishing a communication link between a first computer-based device and a web site, the web site having storage means for temporary storage of information; means for scanning the first computer-based device, via the web site, to determine the information contained on the first computer-based device; means for allowing a user to select which of the scanned information, determined by the web site, is to be uploaded from the first computer-based device onto the web site for temporary storage; and means for transferring the information, contained on the first computer-based device and selected by the user, onto the web site for temporary storage.

These and other objects and advantages of the present invention will become more apparent after consideration of the following description and the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will now be described, by way of example, with reference to the accompanying drawings in which:

FIG. **1** is a diagrammatic illustration of the architecture of the present invention in an Internet embodiment.

FIG. **2** is a diagrammatic illustration of the various components comprising the website server according to the present invention;

FIGS. **3***a* and **3***b*, collectively illustrate an overview of the upload steps of the present invention.

FIGS. **4***a* and **4***b*, collectively illustrate an overview of the download steps of the present invention.

FIG. **5** is a diagrammatic illustration of an e-commerce embodiment, e.g., for a user accepting an advertisement or order.

FIG. **6** is a diagrammatic flow diagram illustrating a routine transferring application settings, files, and other data from a first computer-based device onto the web site for temporary storage, conversion and downloading to a differing computer-based device;

FIG. **7** is a diagrammatic flow diagram illustrating the routine for retrieving the temporarily stored application settings, files, and other data from the web site onto a new computer-based device;

FIG. **8** is a diagrammatic illustration including the client ATL DLL according to the present invention;

FIG. **9** is a diagrammatic illustration of a partial CAD implementation.

FIG. **10** is a diagrammatic illustration of the architecture of the present invention in an enterprise or industrial embodiment.

FIG. **11** is a diagrammatic flow diagram illustrating a back-up routine transferring application settings, files, and other data from a first computer-based device onto the web site for temporary storage and returning thereof.

FIG. **12** is a diagrammatic flow diagram illustrating transferring application settings, files, and other data from a first computer-based device onto the web site for temporary storage and returning thereof to one or more second computer-based devices of a differing format.

FIG. **13** is a diagrammatic flow diagram illustrating a software version upgrade routine performed during transferring application settings, files, and other data from a first computer-based device to a second computer-based device.

FIGS. **14–28** collectively illustrate, through screenshots, a working example of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

While this invention is illustrated and described in a preferred embodiment, the device may be produced in many different configurations, forms and materials. There is depicted in the drawings, and will herein be described in detail, a preferred embodiment of the invention, with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and the associated functional specifications for its construction and is not intended to limit the invention to the embodiment illustrated. Those skilled in the art will envision many other possible variations within the scope of the present invention. Specifically, the preferred embodiment will be described using an upgrade of an old PC to a new PC, however the present invention can be applied equally to any computer-based device without departing from the scope and spirit intended.

Throughout the following descriptions, figures and claims, the terms PC, computer and computer-based device may be interchanged without departing from the scope of the present invention. The process of transferring settings, etc. from the first computer-based device to the server is referred to as the "load" or equivalently "upload" stage. The process of transferring settings, etc. from the server to the second computer-based device is referred to as the "unload" or equivalently "download" stage. In addition, the term "van" is used when referring to the collected settings, files and personal data.

With reference to FIGS. **1** and **2**, a brief general description of the present invention will first be provided and this will then be followed by a detailed description of the present invention.

As shown in FIG. **1**, a first PC, generally designated as **100**, has an internal or external modem (not shown) which is electronically coupled by a conventional connection **102** (wired or wireless) to a communication system, e.g. the Internet (preferred for consumer environment), some other desired local area network (LAN-preferred for enterprise environment), wide area network (WAN), virtual private network (VPN), Intranet, wireless web, or equivalents, generally designated as **104**. The PC **100** is also electrically coupled to a display device, e.g. a monitor, by conventional cabling, an input device, e.g. a keyboard, by conventional cabling, and to a mouse. As with typical computer-based devices, the PC **100** also has a plurality of internal components (not separately designated or shown) such as a central processing unit (CPU), some ROM, some RAM, a hard disc drive, and internal computer software. The PC **100**, is typically loaded with conventional software, some of which was initially installed on the computer-based device at the time of purchase, while a remainder of the computer software may have been periodically installed by the user in a conventional manner. It is to be appreciated that a variety of other PCs **106**, having similar components, may also be simultaneously connected to the website of the server system **108**. For the sake of simplicity, an explanation relating to the transfer of information from only one PC **100** to a second PC **106** will be provided. Additional applicable embodiments include, but are not limited to, one-to-plural, plural-to-one and one-to-itself (e.g., using the present invention to backup or restore only the first PC).

As can be seen in FIG. **2**, a block diagram of the server system, showing the components **200** that facilitate allowing a user to transfer application settings, files and other data from a first computer-based device onto the web site for later retrieval by another computer-based device, is shown. The website of the server system **200** comprises conventional processors **202** which are electrically coupled, in a conventional manner, to a plurality of databases, such as a content database **204**, a user database **206**, a binary database **208**, and an e-commerce database **210**.

Processors **202** comprise and operate the programmed routines that run on the first computer-based device **100** and the second computer-based device **106** to scan those computer-based devices and detect the software applications, application settings, files and hardware data, and any other information necessary for a successful transfer of desired information. After scanning both the first and second computer-based devices involved in the transfer of information (as discussed below in further detail), the SMOD then compare and correlate the relevant data from the first computer-based device **100** with that of the second computer-based device **106** to determine what application settings, files and other data are available for transfer. The processors **202** facilitate displaying of this information to the user and ultimately facilitate the transfer of the application settings, files and other data that the user selects to be transferred from the first computer-based device **100** into storage and later onto the second computer-based device **106**, as discussed below.

Server system **200** also comprises one or more individual databases **204–210** to enable the storage and retrieval of user data, web site content data, internal use data, data regarding current software application versions, and other miscellaneous data. The processors **202** are able to interact with each database to retrieve data necessary to carry out the desired routines. The processors **202** are also able to interact with each of the individual databases in order to store data within those databases.

This server system **200** contains a content database **204** for the purpose of storing any data (WAF) that is displayed to the user, e.g., GUIs, web site pages, advertisements, offers, etc., as well as any data related to applications and application settings obtained from the manufacturers of the respective software applications. This database will be updated frequently to continually contain the most current data regarding software applications and their application settings.

Server system **200** also contains a user database **206** for the purpose of storing data related to each individual user's computer-based device, personal profile, applications, account number, login password to the system server, etc. The processors **202** will utilize this user data to facilitate the transfer process. The user data can also be used to trigger the server system to display to the user, via the web site, advertisements and offers targeted to the user's particular profile, as discussed below in further detail.

Server system **200** also contains a Binary Database **208** to store binary files, e.g., documents, e-mails, address books, etc. uploaded from the first computer **100**. The user selects specific data stored for download to the second computer **106**.

Server system **200** also contains an e-commerce database **210** to store data related to on-line purchases by the user with relation to the transfer process. For instance, during the transfer process, the server system may have detected and informed the user that a software application on the first computer-based device **100** has since been upgraded. In turn, the user may decide to purchase, through the server system, the most recent upgraded version of the software for the second computer-based device. All the data necessary for this purchase, e.g. credit card information, billing information, etc., can be handled and stored in this database.

An overview of the process of uploading and temporarily storing settings, files and other data on the web site of the server system **200**, for later transfer to a new replacement second computer-based device **106**, will now be described with reference to FIGS. **1** and **3**. When a user of the first computer-based device **100** desires to replace the first computer-based device **100** with a second computer-based device **106**, for example, the user accesses the web site of the appropriate server system **108**, via the communication system (e.g., modem-not shown) and the conventional connection **102** of the first computer-based device **100**, to transfer various software applications, files, settings and other data of the first computer-based device onto the web site of the appropriate server system **110** for later transfer to the second computer-based device, e.g. a replacement computer-based device **106**.

The user of the computer-based device **100** accesses the website of the server system **200** by initializing the modem and communicating with the web site of the server system via the communication system, in a conventional fashion, at step **300** (FIG. **3**). As such connection is conventional and well known in the art, and forms no part per se of the present invention, a detailed description concerning the same is not provided.

Once a communication link is established, at step **300**, between the first computer-based device and the web site of the server system, the user sets up a personal account to be maintained by the server system, at step **304**, to which all of the files, settings and other data to be uploaded from the first computer-based device are to be temporarily stored. This personal account is assigned a suitable password, in a conventional manner at step **306**, by the user prior to uploading all of the desired files, settings and other data from the first computer-based device.

Then, the user of the first computer-based device can download software (client ATL DLL-CAD) from the server system, at step **302**, so that the user can then interact with the website of the server system to select the desired setting, files, information and other data to be uploaded from the first computer-based device **100** for temporary storage and later retrieval as desired.

After the user downloads the necessary software (client ATL DLL-CAD) from the web site of the server system to the first computer-based device, via the communication system, the user can then begin interacting with the web site of the server system, and the user requests the server system, via the server system's web site, to initially read or scan all of the software applications and other data stored on the first computer-based device, at step **308**. During this initial scanning process, the manufacturer, the brand, the version, the type, etc., are determined for each installed software application(s), mouse, keyboard, monitor, printer and other peripherals and the personal settings designated for each software application as well as other information concerning the operating environment of the first computer-based device are ascertained. Upon completion of the initial scanning step, this scanned information is temporarily stored in the user database **206** of the web site of the server system, at step **310**. Once the user's personal account has been set up, the user requests the server system, via the server system's web site, to initially read or scan all of the software applications and other data stored on the first computer-