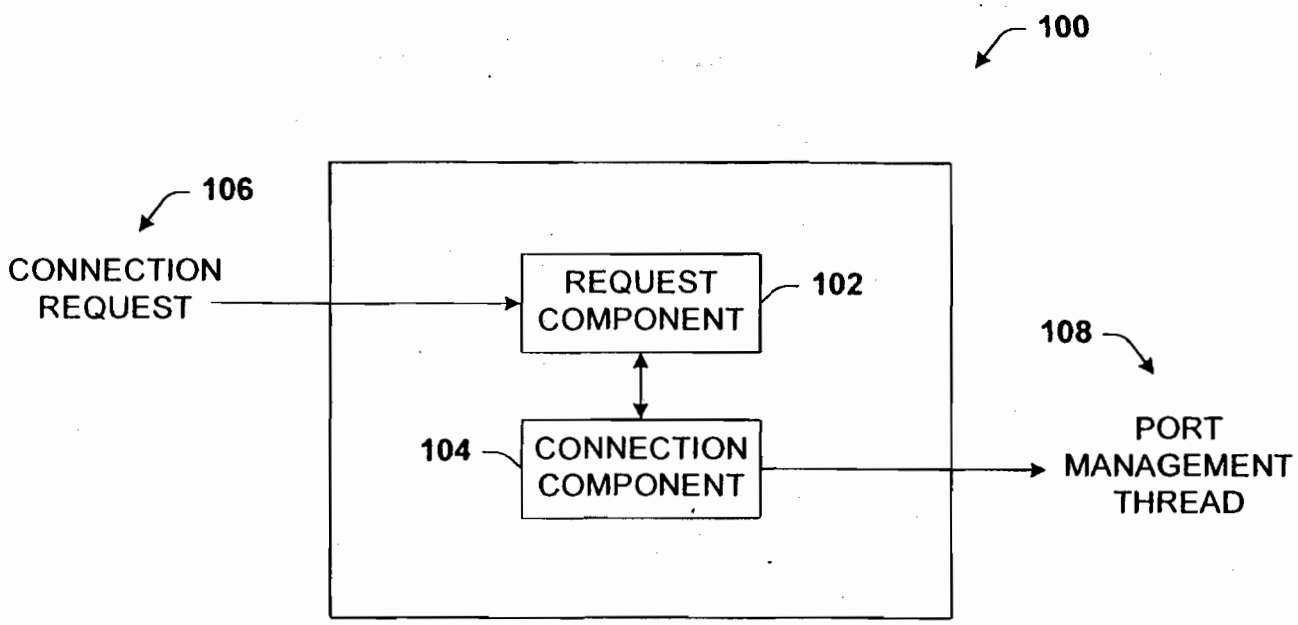

100
106
CONNECTION
REQUEST
REQUEST
COMPONENT
102
108
104
CONNECTION
COMPONENT
PORT
MANAGEMENT
THREAD

FIG. 1

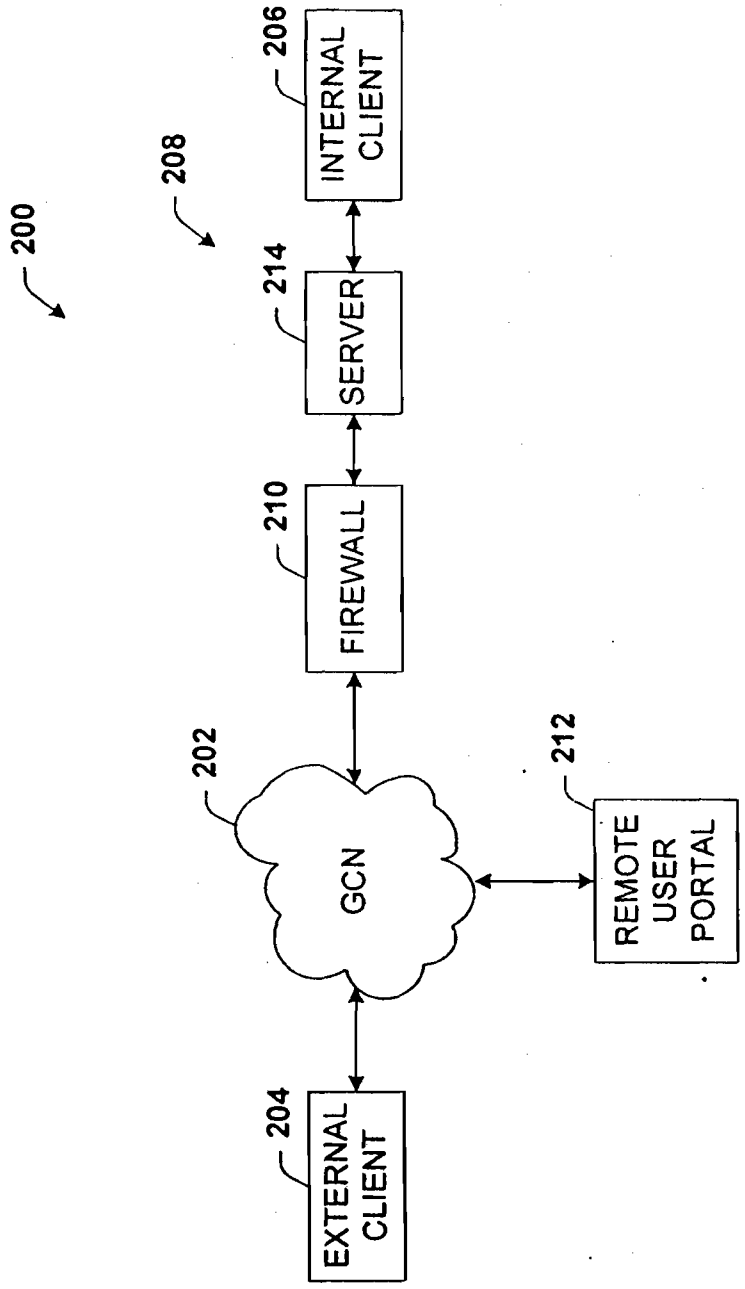

200
208
206
INTERNAL CLIENT
214
SERVER
210
FIREWALL
202
GCN
212
REMOTE USER PORTAL
204
EXTERNAL CLIENT

FIG. 2

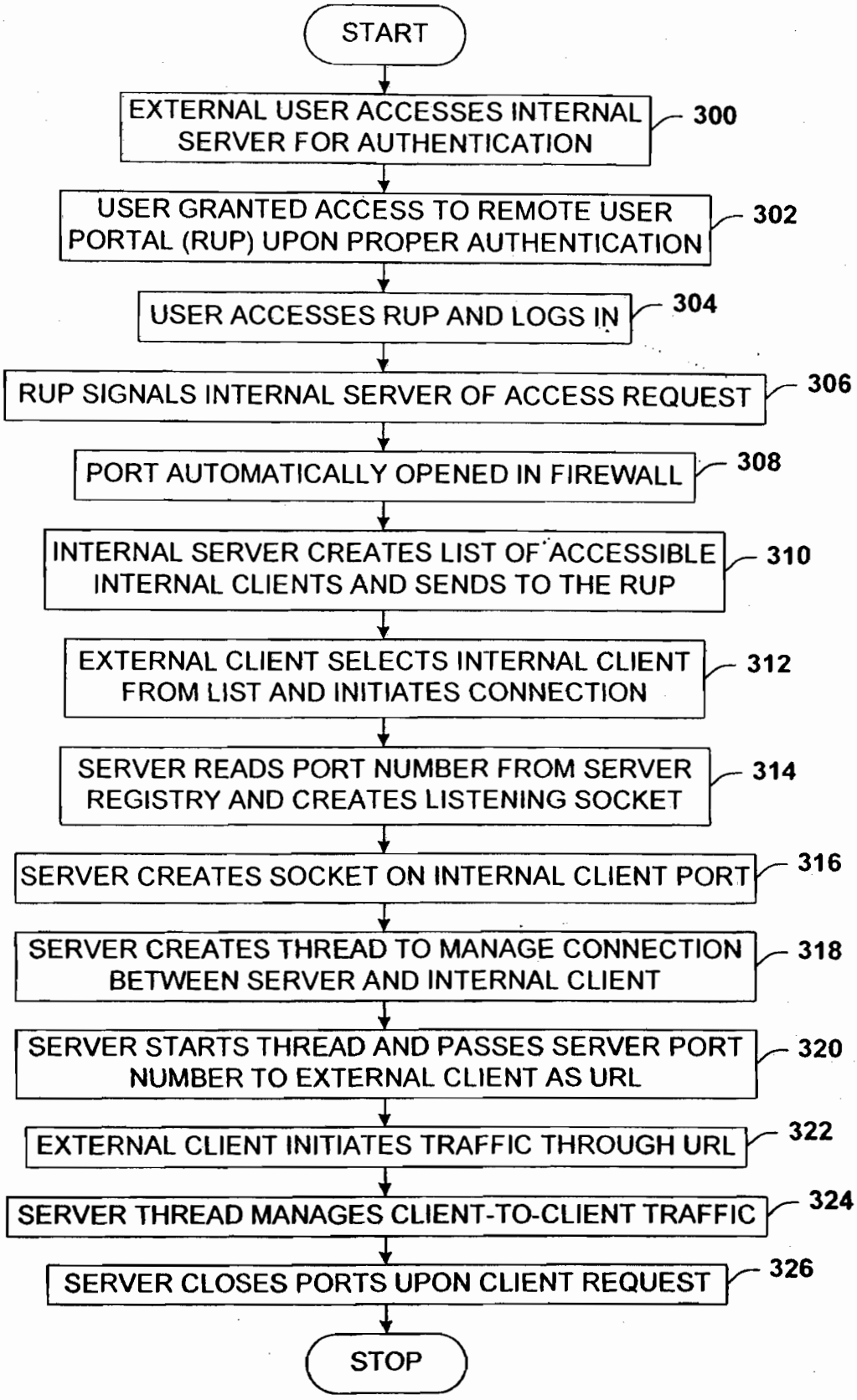

START
EXTERNAL USER ACCESSES INTERNAL SERVER FOR AUTHENTICATION
300
USER GRANTED ACCESS TO REMOTE USER PORTAL (RUP) UPON PROPER AUTHENTICATION
302
USER ACCESSES RUP AND LOGS IN
304
RUP SIGNALS INTERNAL SERVER OF ACCESS REQUEST
306
PORT AUTOMATICALLY OPENED IN FIREWALL
308
INTERNAL SERVER CREATES LIST OF ACCESSIBLE INTERNAL CLIENTS AND SENDS TO THE RUP
310
EXTERNAL CLIENT SELECTS INTERNAL CLIENT FROM LIST AND INITIATES CONNECTION
312
SERVER READS PORT NUMBER FROM SERVER REGISTRY AND CREATES LISTENING SOCKET
314
SERVER CREATES SOCKET ON INTERNAL CLIENT PORT
316
SERVER CREATES THREAD TO MANAGE CONNECTION BETWEEN SERVER AND INTERNAL CLIENT
318
SERVER STARTS THREAD AND PASSES SERVER PORT NUMBER TO EXTERNAL CLIENT AS URL
320
EXTERNAL CLIENT INITIATES TRAFFIC THROUGH URL
322
SERVER THREAD MANAGES CLIENT-TO-CLIENT TRAFFIC
324
SERVER CLOSES PORTS UPON CLIENT REQUEST
326
STOP

FIG. 3

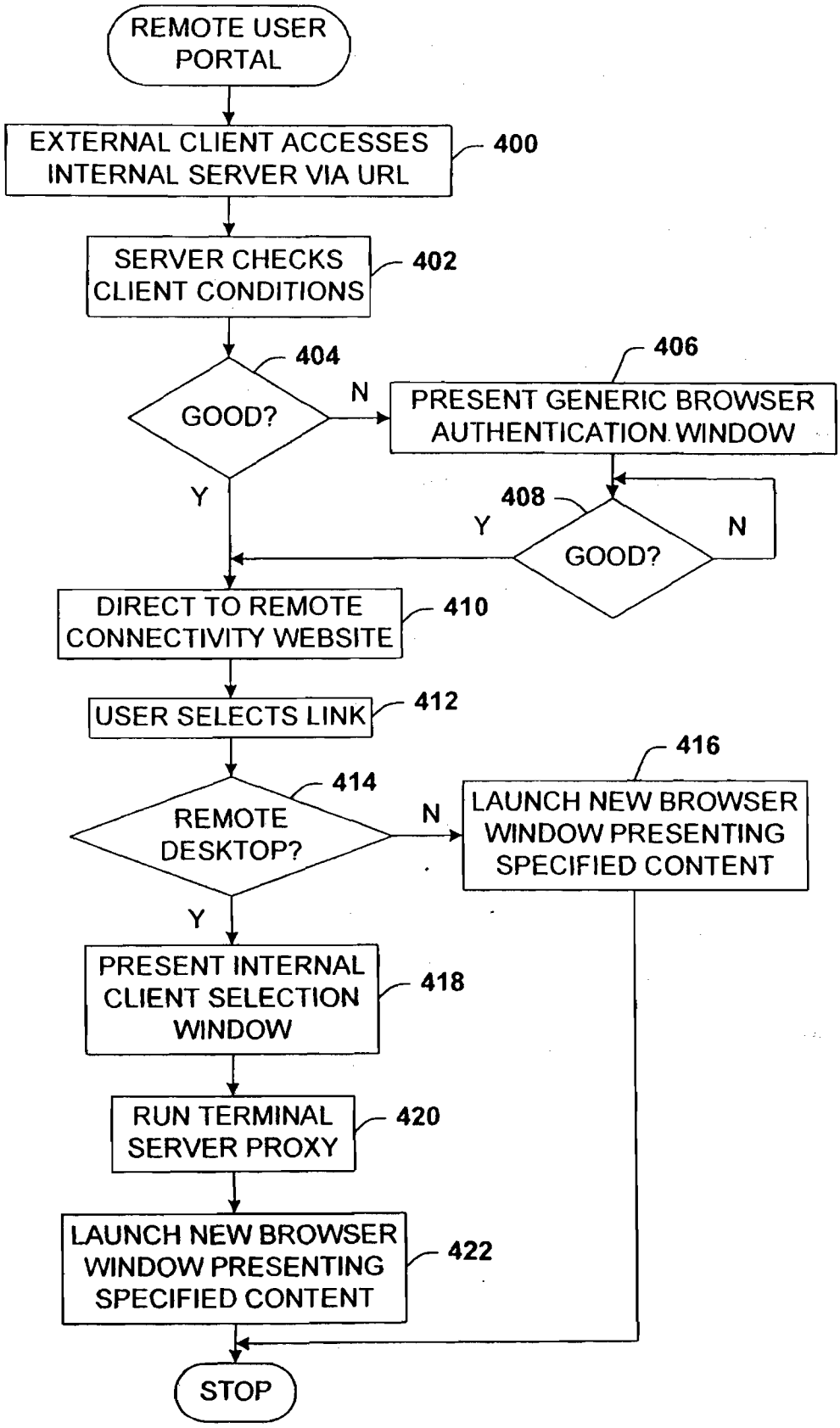

REMOTE USER PORTAL
EXTERNAL CLIENT ACCESSES INTERNAL SERVER VIA URL
400
SERVER CHECKS CLIENT CONDITIONS
402
404
GOOD?
N
406
PRESENT GENERIC BROWSER AUTHENTICATION WINDOW
Y
408
Y
N
GOOD?
DIRECT TO REMOTE CONNECTIVITY WEBSITE
410
USER SELECTS LINK
412
414
REMOTE DESKTOP?
N
416
LAUNCH NEW BROWSER WINDOW PRESENTING SPECIFIED CONTENT
Y
PRESENT INTERNAL CLIENT SELECTION WINDOW
418
RUN TERMINAL SERVER PROXY
420
LAUNCH NEW BROWSER WINDOW PRESENTING SPECIFIED CONTENT
422
STOP

FIG. 4

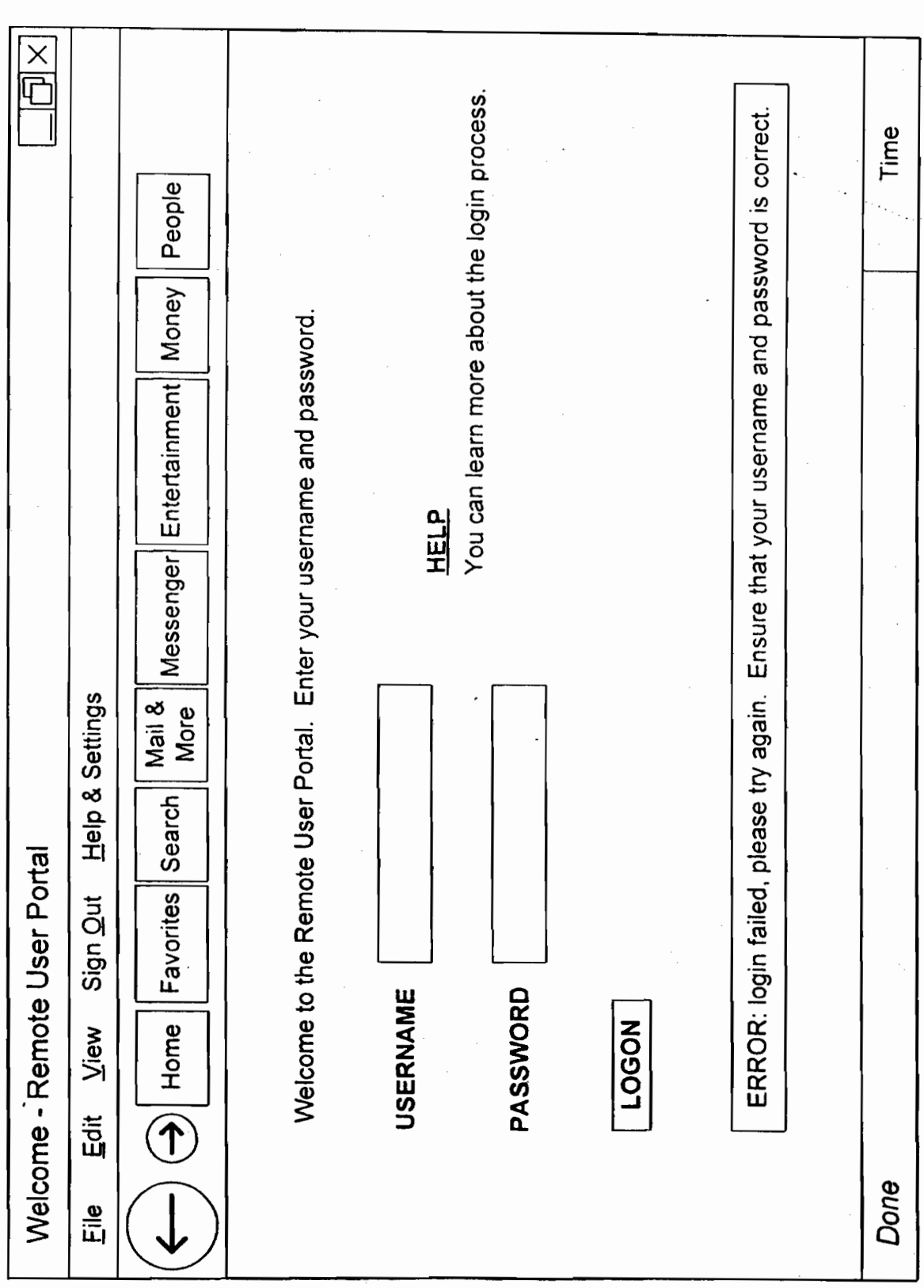

500
Welcome - Remote User Portal
File Edit View Sign Out Help & Settings
Home
Favorites
Search
Mail & More
Messenger
Entertainment
Money
People
Welcome to the Remote User Portal. Enter your username and password.
USERNAME
PASSWORD
LOGON
HELP
You can learn more about the login process.
ERROR: login failed, please try again. Ensure that your username and password is correct.
Done
Time

FIG. 5

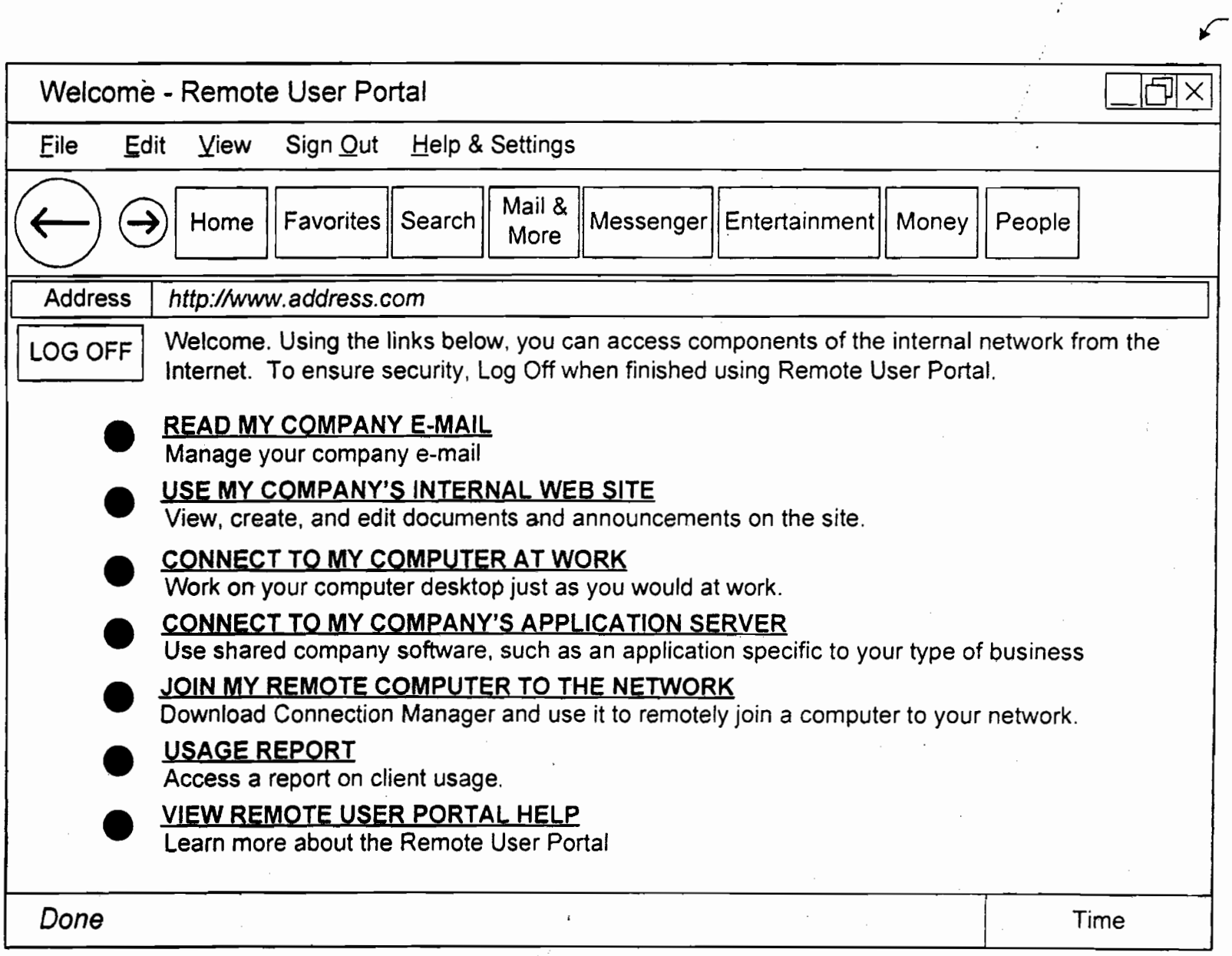

600
Welcome - Remote User Portal
File Edit View Sign Out Help & Settings
Home
Favorites
Search
Mail & More
Messenger
Entertainment
Money
People
Address
http://www.address.com
LOG OFF
Welcome. Using the links below, you can access components of the internal network from the Internet. To ensure security, Log Off when finished using Remote User Portal.
READ MY COMPANY E-MAIL
Manage your company e-mail
USE MY COMPANY'S INTERNAL WEB SITE
View, create, and edit documents and announcements on the site.
CONNECT TO MY COMPUTER AT WORK
Work on your computer desktop just as you would at work.
CONNECT TO MY COMPANY'S APPLICATION SERVER
Use shared company software, such as an application specific to your type of business
JOIN MY REMOTE COMPUTER TO THE NETWORK
Download Connection Manager and use it to remotely join a computer to your network.
USAGE REPORT
Access a report on client usage.
VIEW REMOTE USER PORTAL HELP
Learn more about the Remote User Portal
Done
Time

FIG. 6

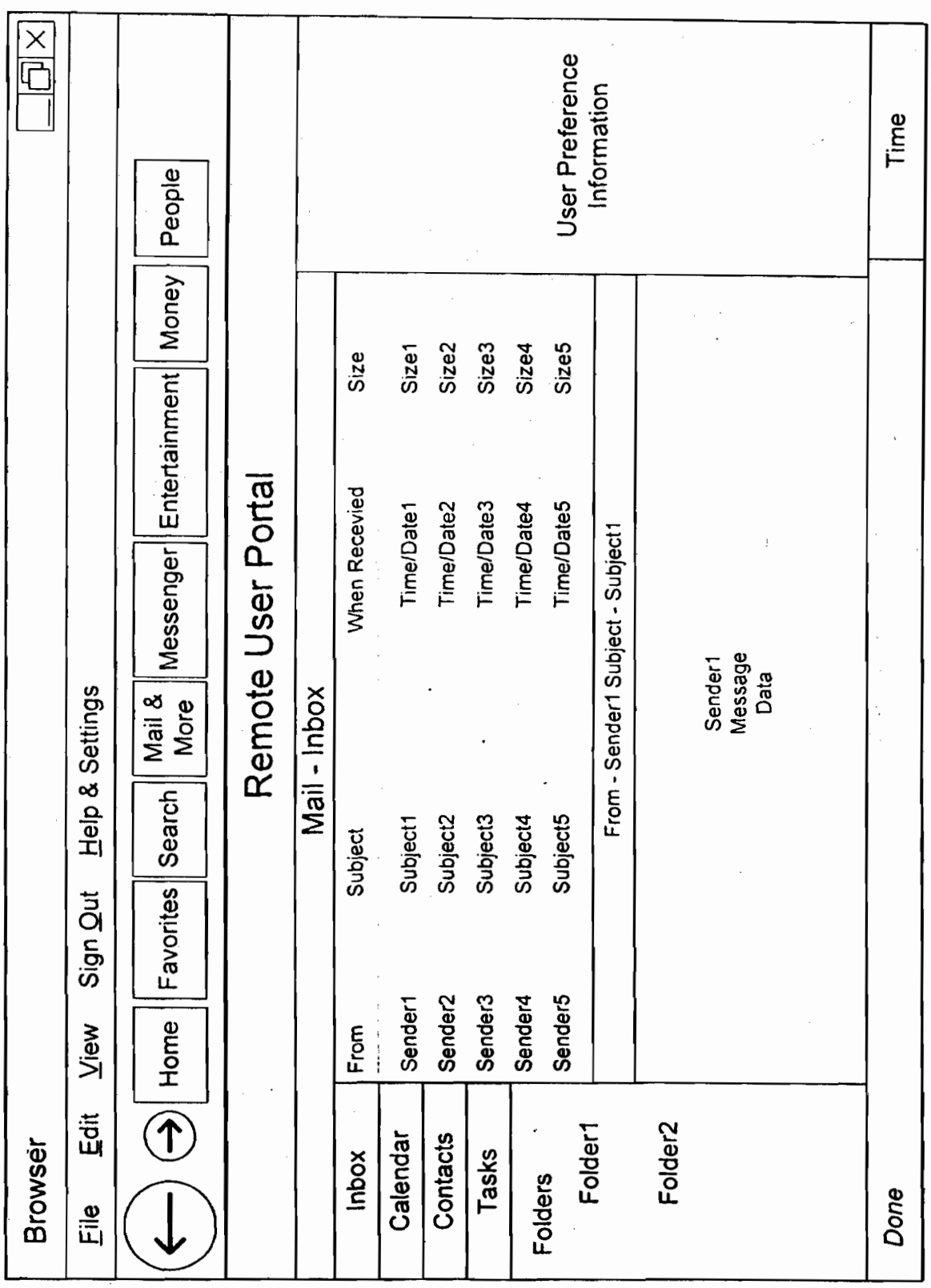

700
Browser
File Edit View Sign Out Help & Settings
Home
Favorites
Search
Mail & More
Messenger
Entertainment
Money
People
Remote User Portal
Mail - Inbox
Inbox
Calendar
Contacts
Tasks
Folders
Folder1
Folder2
From
Subject
When Recevied
Size
Sender1 Subject1 Time/Date1 Size1
Sender2 Subject2 Time/Date2 Size2
Sender3 Subject3 Time/Date3 Size3
Sender4 Subject4 Time/Date4 Size4
Sender5 Subject5 Time/Date5 Size5
From - Sender1 Subject - Subject1
Sender1
Message
Data
User Preference Information
Done
Time

FIG. 7

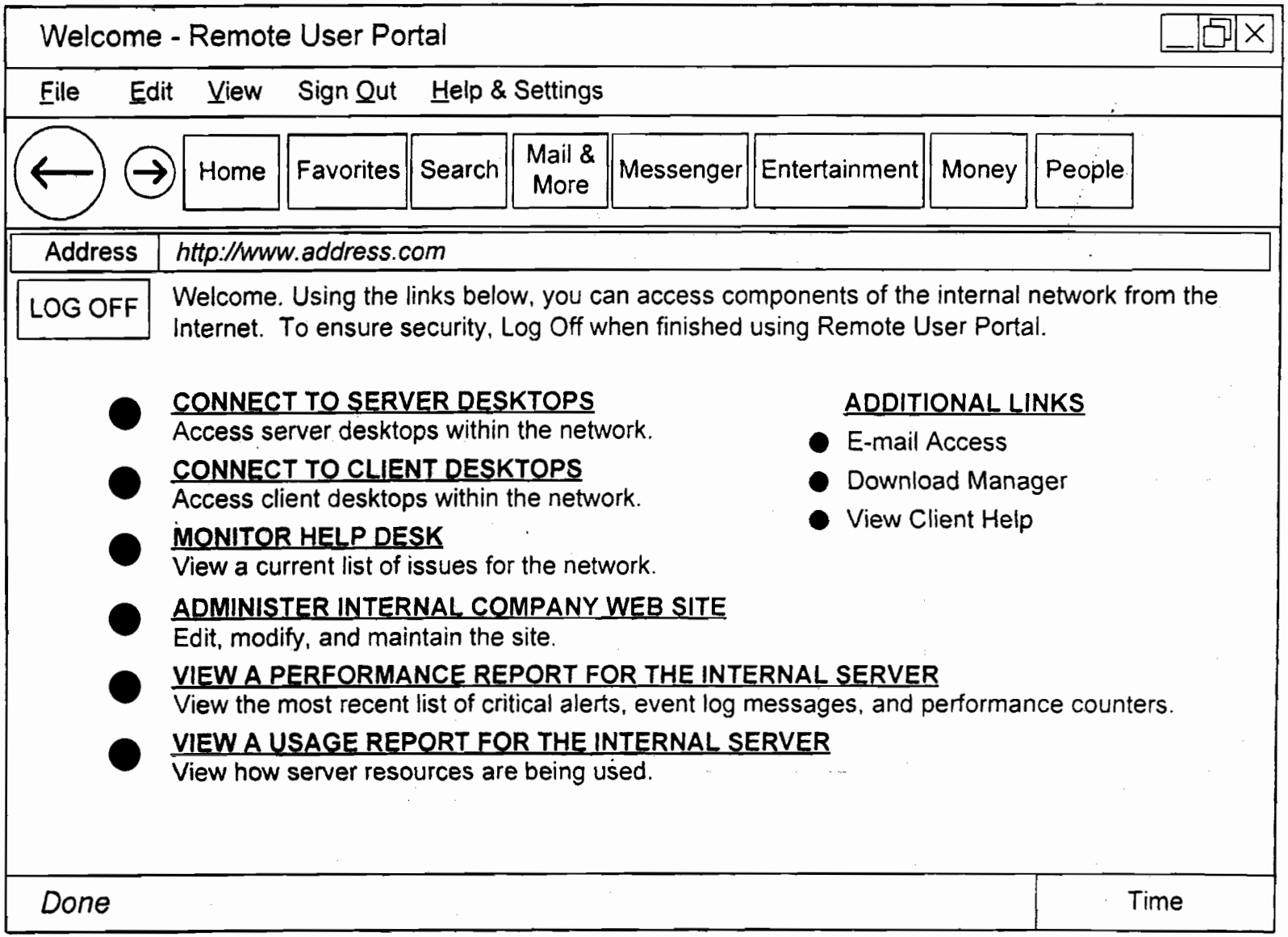

Welcome - Remote User Portal
File Edit View Sign Out Help & Settings
Home
Favorites
Search
Mail & More
Messenger
Entertainment
Money
People
Address
http://www.address.com
LOG OFF
Welcome. Using the links below, you can access components of the internal network from the Internet. To ensure security, Log Off when finished using Remote User Portal.
CONNECT TO SERVER DESKTOPS
Access server desktops within the network.
CONNECT TO CLIENT DESKTOPS
Access client desktops within the network.
MONITOR HELP DESK
View a current list of issues for the network.
ADMINISTER INTERNAL COMPANY WEB SITE
Edit, modify, and maintain the site.
VIEW A PERFORMANCE REPORT FOR THE INTERNAL SERVER
View the most recent list of critical alerts, event log messages, and performance counters.
VIEW A USAGE REPORT FOR THE INTERNAL SERVER
View how server resources are being used.
ADDITIONAL LINKS
E-mail Access
Download Manager
View Client Help
Done
Time

FIG. 8

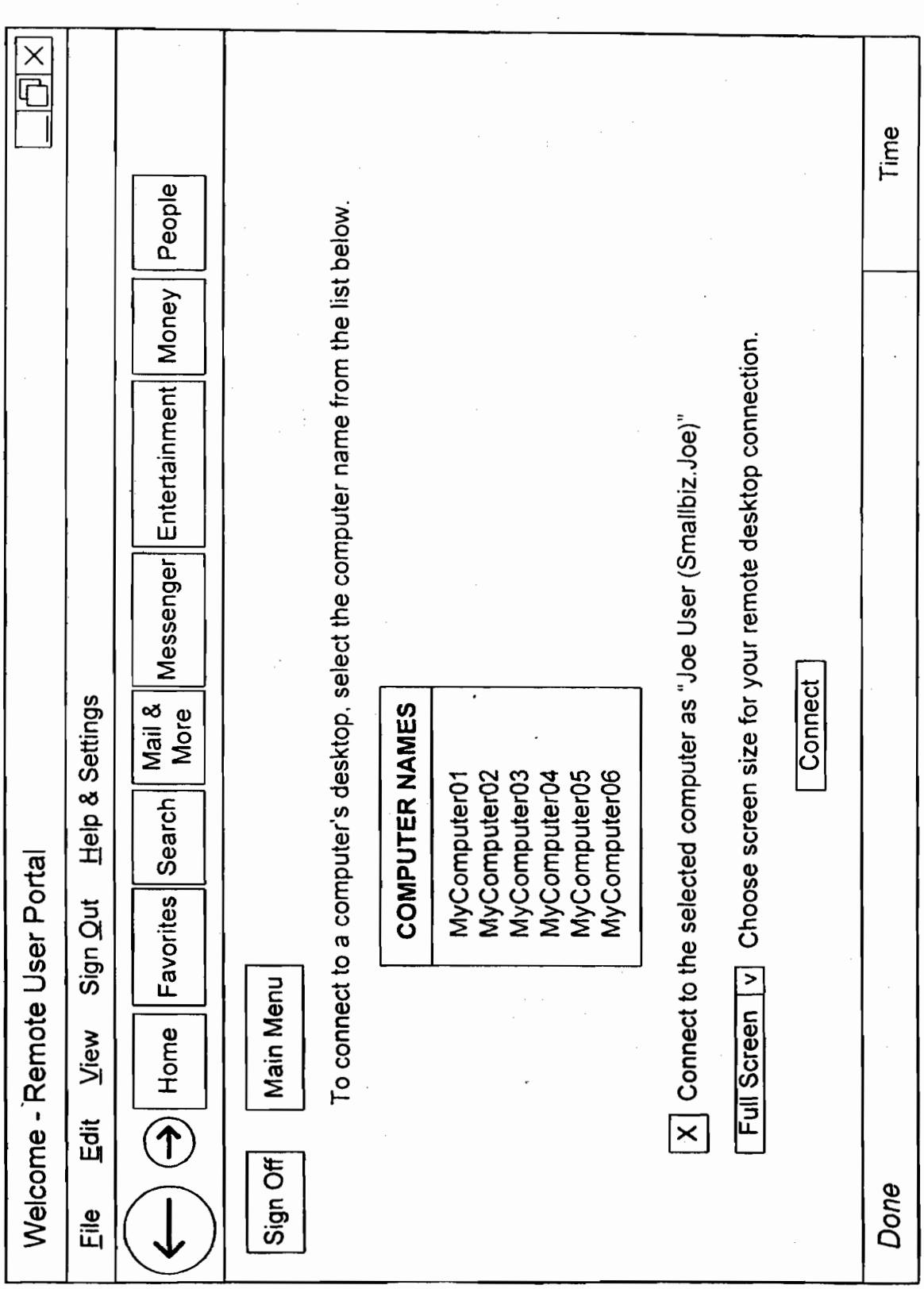

900
Welcome - Remote User Portal
File Edit View Sign Out Help & Settings
Home
Favorites
Search
Mail & More
Messenger
Entertainment
Money
People
Sign Off
Main Menu
To connect to a computer's desktop, select the computer name from the list below.
COMPUTER NAMES
MyComputer01
MyComputer02
MyComputer03
MyComputer04
MyComputer05
MyComputer06
X Connect to the selected computer as "Joe User (Smallbiz.Joe)"
Full Screen v Choose screen size for your remote desktop connection.
Connect
Done
Time

FIG. 9

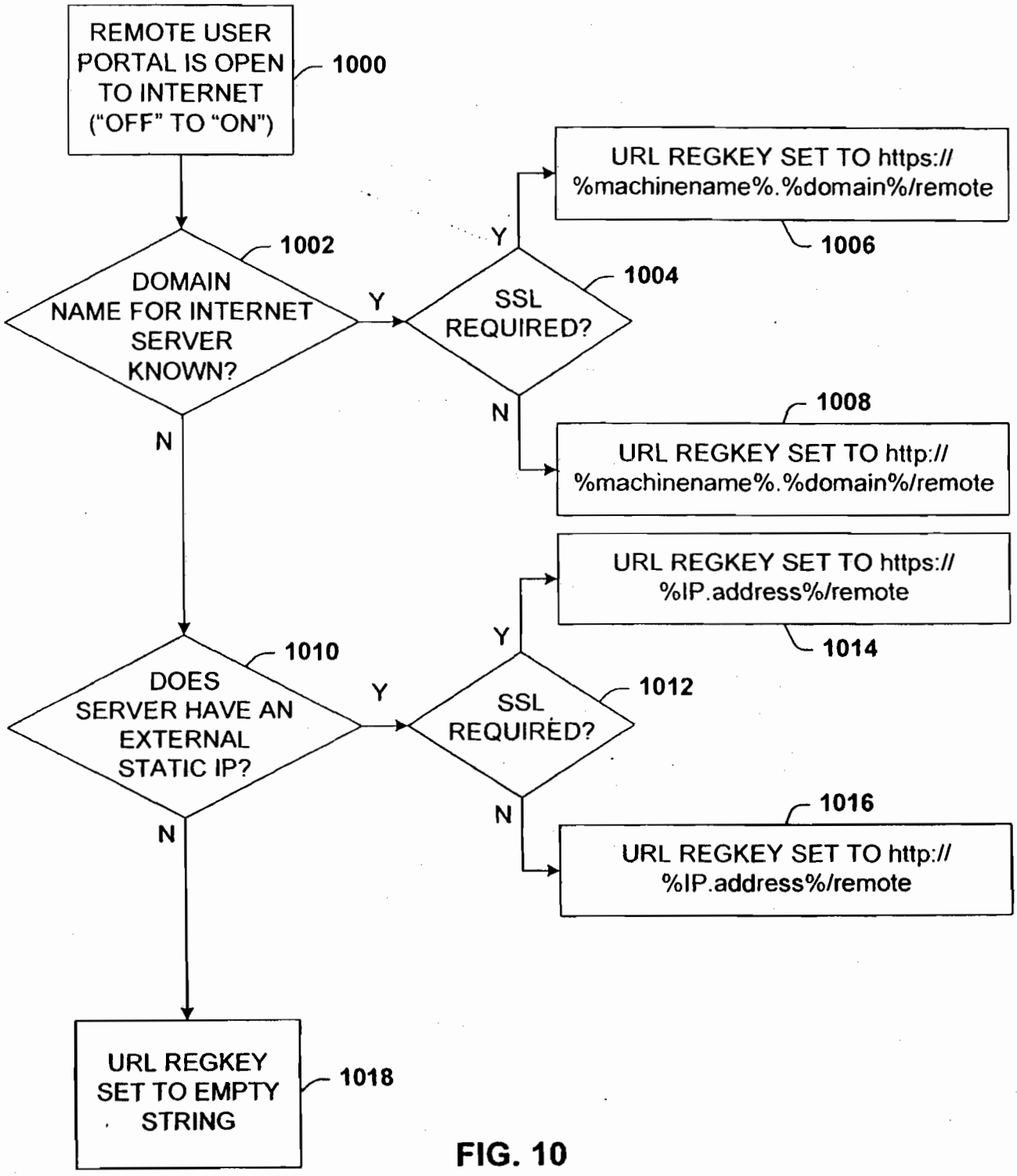

REMOTE USER PORTAL IS OPEN TO INTERNET ("OFF" TO "ON")
1000
DOMAIN NAME FOR INTERNET SERVER KNOWN?
1002
Y
SSL REQUIRED?
1004
Y
URL REGKEY SET TO https://%machinename%.%domain%/remote
1006
N
URL REGKEY SET TO http://%machinename%.%domain%/remote
1008
N
DOES SERVER HAVE AN EXTERNAL STATIC IP?
1010
Y
SSL REQUIRED?
1012
Y
URL REGKEY SET TO https://%IP.address%/remote
1014
N
URL REGKEY SET TO http://%IP.address%/remote
1016
N
URL REGKEY SET TO EMPTY STRING
1018

FIG. 10

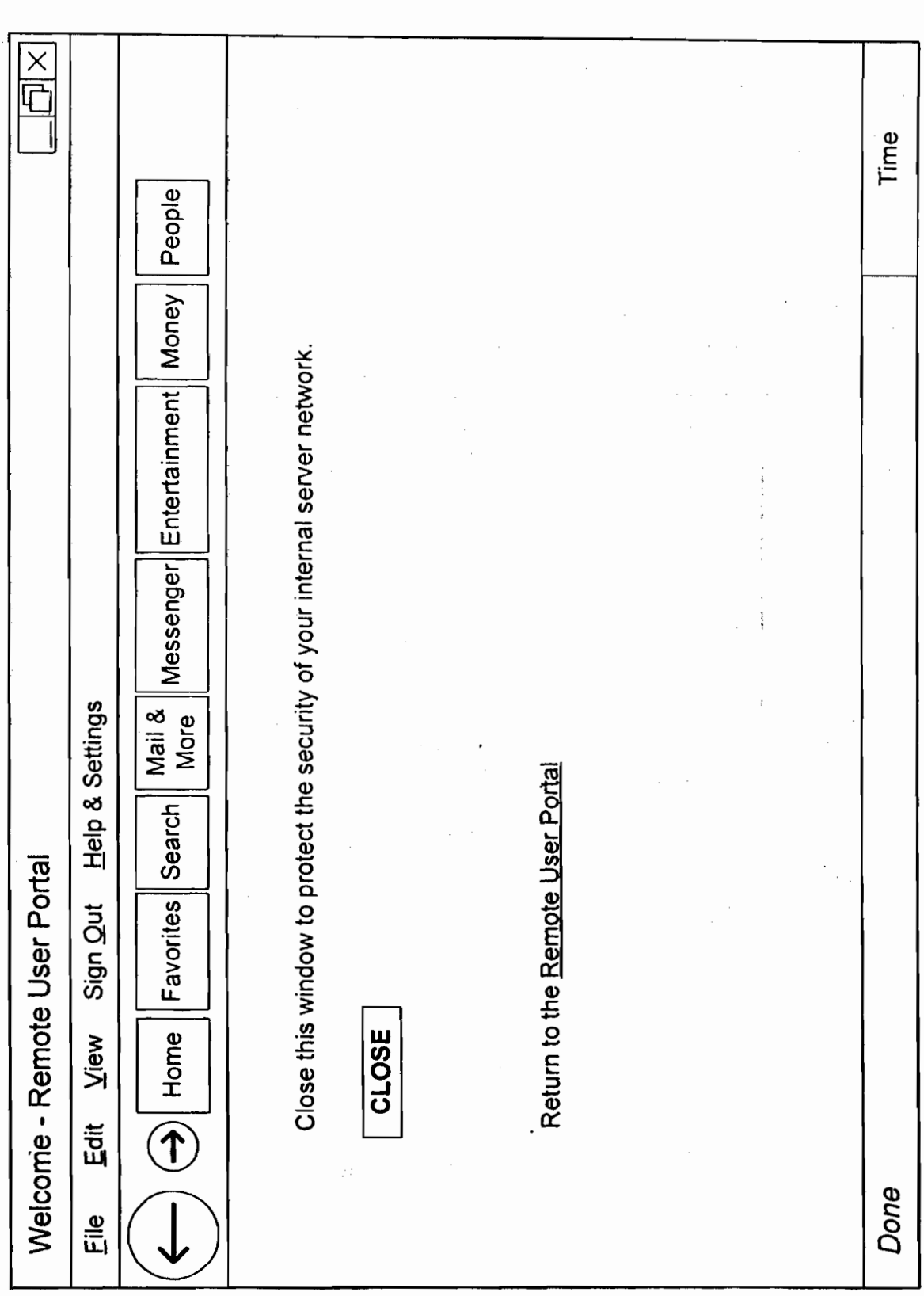

1100
Welcome - Remote User Portal
File Edit View Sign Out Help & Settings
Home
Favorites
Search
Mail & More
Messenger
Entertainment
Money
People
Close this window to protect the security of your internal server network.
CLOSE
Return to the Remote User Portal
Done
Time

FIG. 11

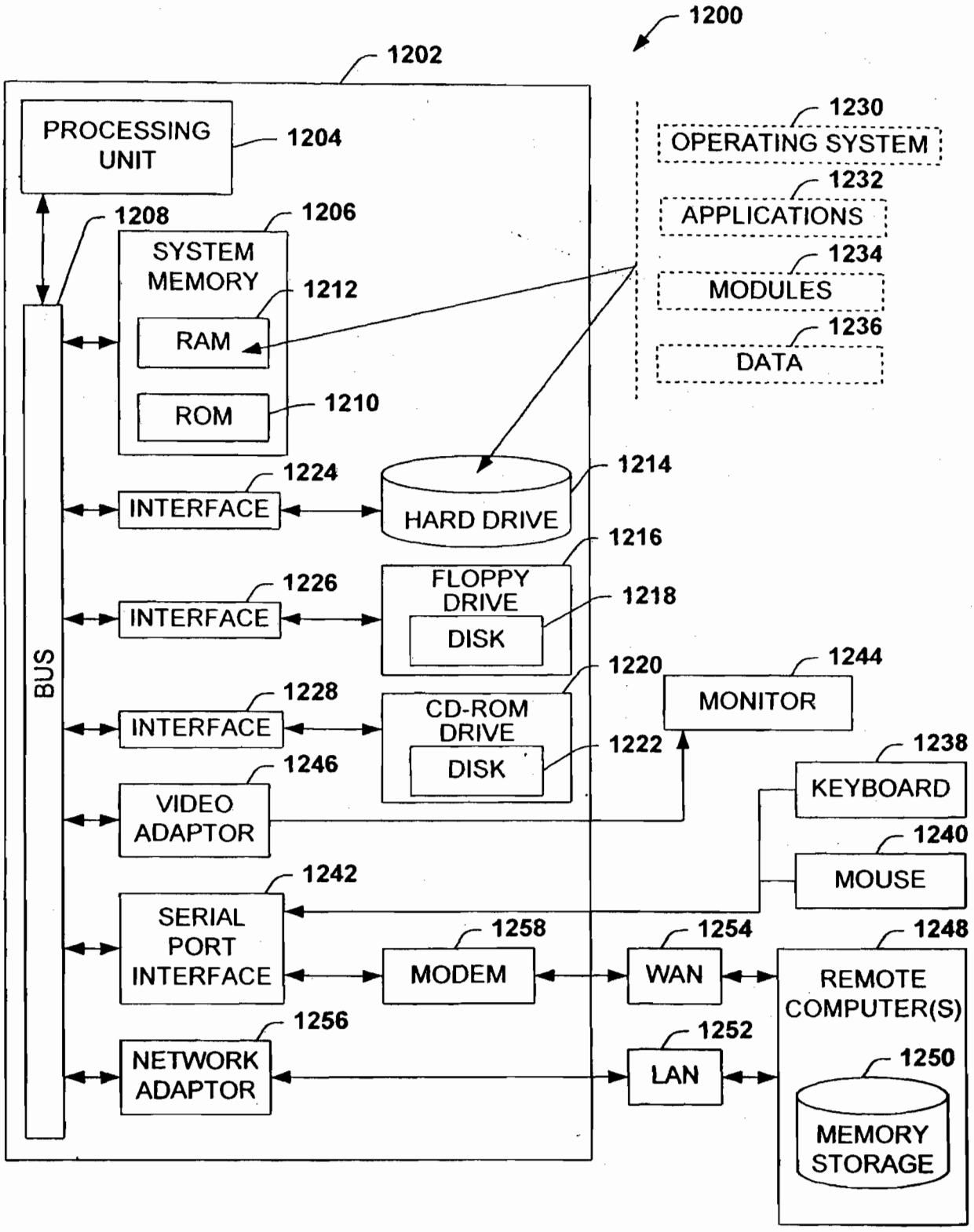

1200
1202
PROCESSING UNIT
1204
1208
1206
SYSTEM MEMORY
1212
RAM
ROM
1210
BUS
1230
OPERATING SYSTEM
1232
APPLICATIONS
1234
MODULES
1236
DATA
1224
INTERFACE
1214
HARD DRIVE
1216
1226
INTERFACE
FLOPPY DRIVE
1218
DISK
1220
1228
INTERFACE
CD-ROM DRIVE
1222
DISK
1244
MONITOR
1246
VIDEO ADAPTOR
1238
KEYBOARD
1240
MOUSE
1242
SERIAL PORT INTERFACE
1258
MODEM
1254
WAN
1248
REMOTE COMPUTER(S)
1256
NETWORK ADAPTOR
1252
LAN
1250
MEMORY STORAGE

FIG. 12

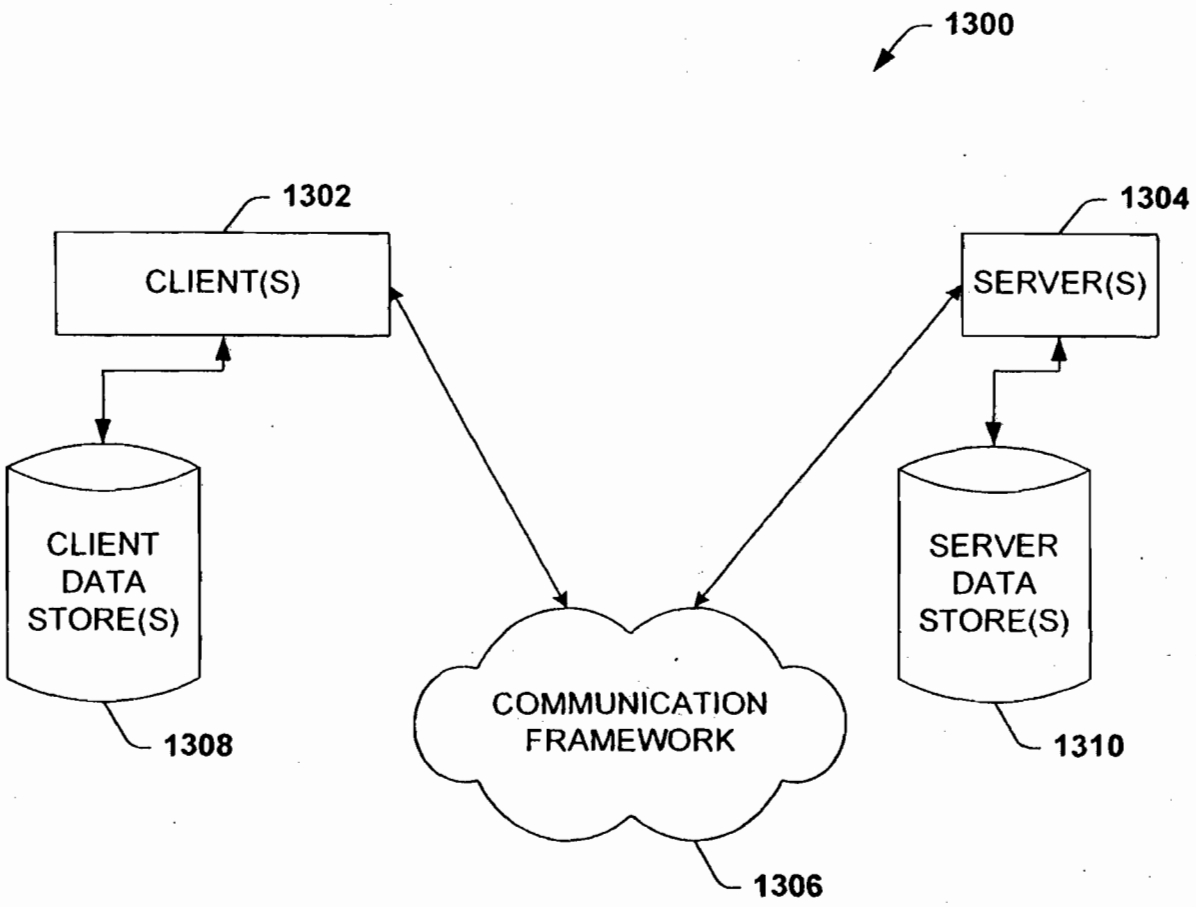

1300
1302
CLIENT(S)
1304
SERVER(S)
CLIENT DATA STORE(S)
1308
COMMUNICATION FRAMEWORK
1306
SERVER DATA STORE(S)
1310

FIG. 13