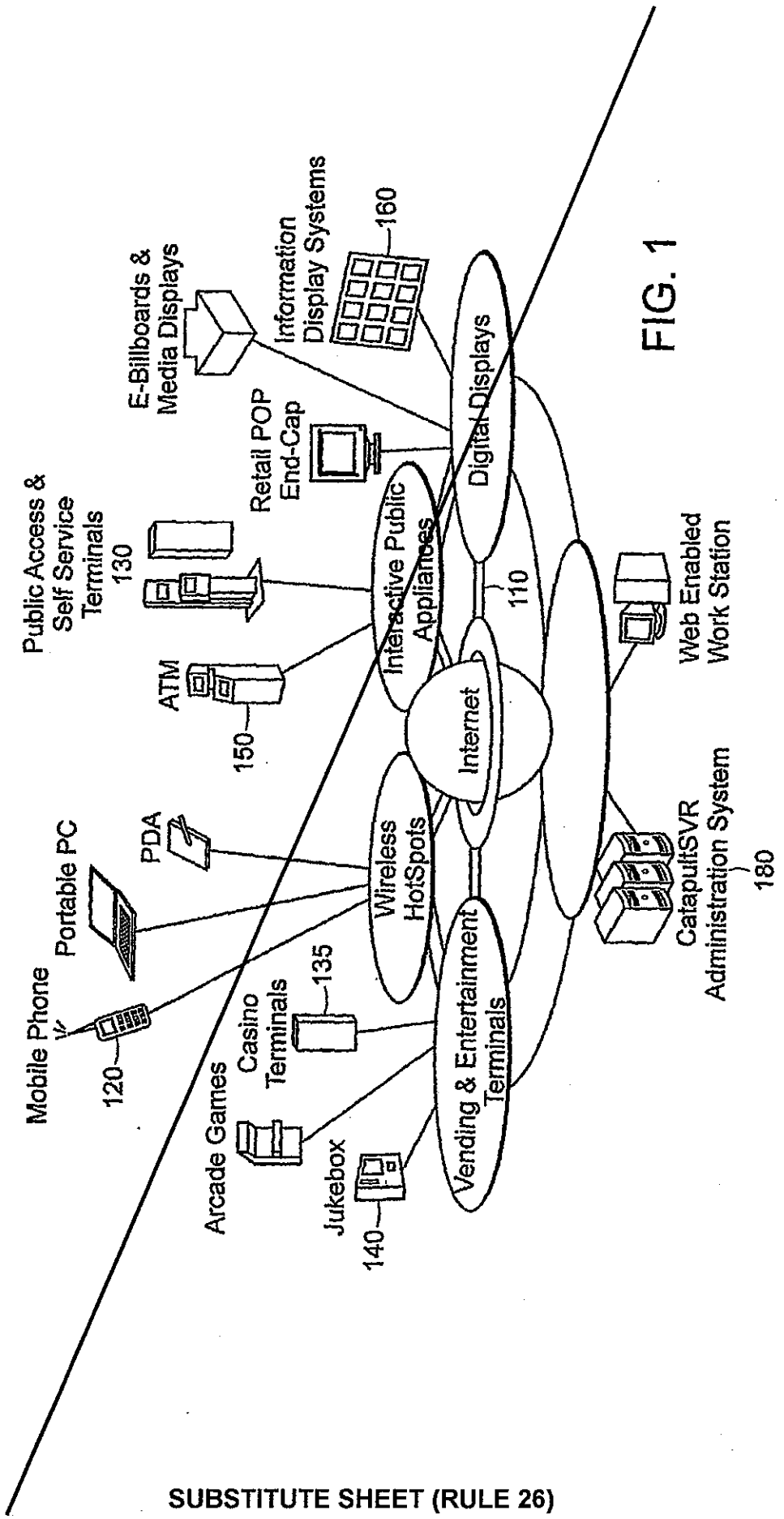

100
Public Access & Self Service Terminals 130
ATM
150
PDA
Portable PC
Mobile Phone
120
Arcade Games
Casino Terminals
135
Jukebox
140
E-Billboards & Media Displays
Information Display Systems
160
Retail POP End-Cap
Interactive Public Appliances
Digital Displays
110
Internet
Wireless HotSpots
Vending & Entertainment Terminals
Web Enabled Work Station
CataputSVR Administration System
180

FIG. 1

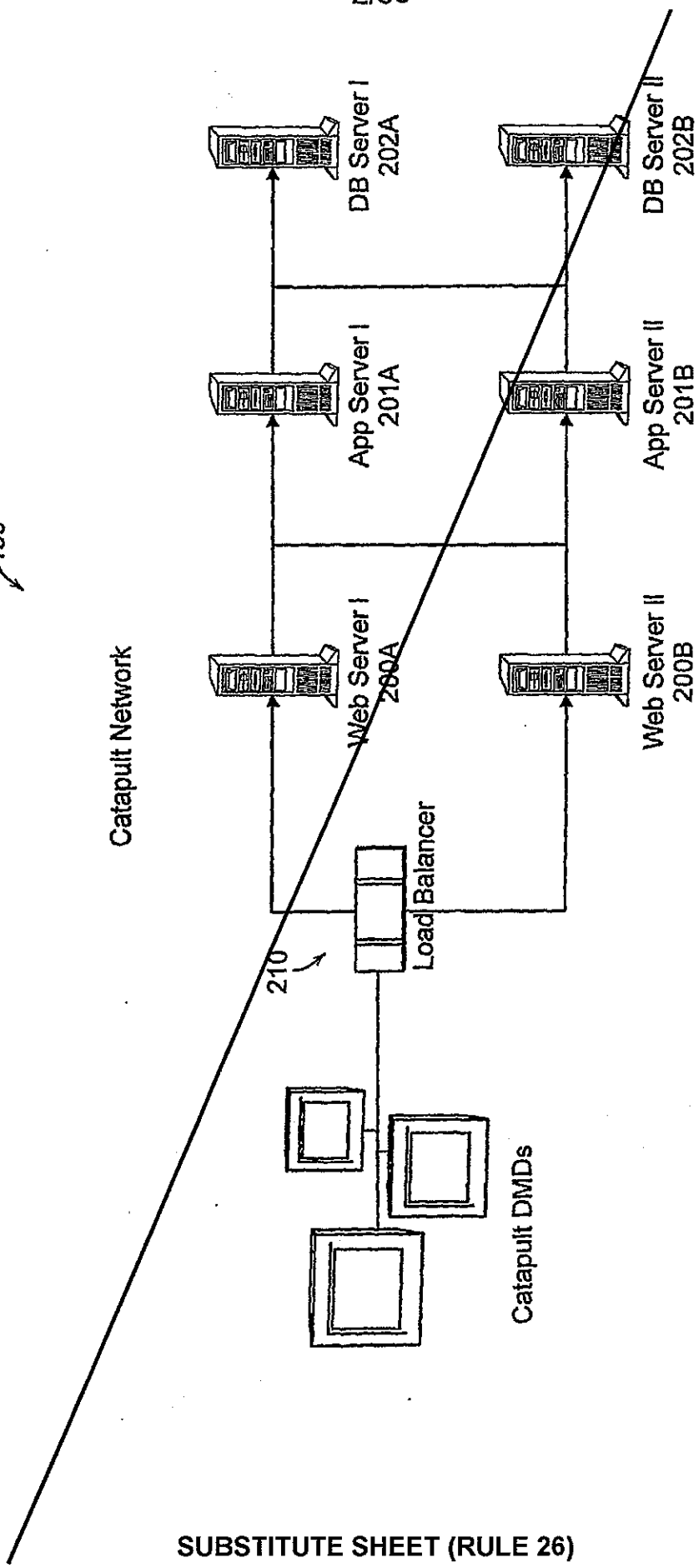

180
Catapult Network
DB Server I
202A
DB Server II
202B
App Server I
201A
App Server II
201B
Web Server I
200A
Web Server II
200B
Load Balancer
210
Catapult DMDs

FIG. 1A

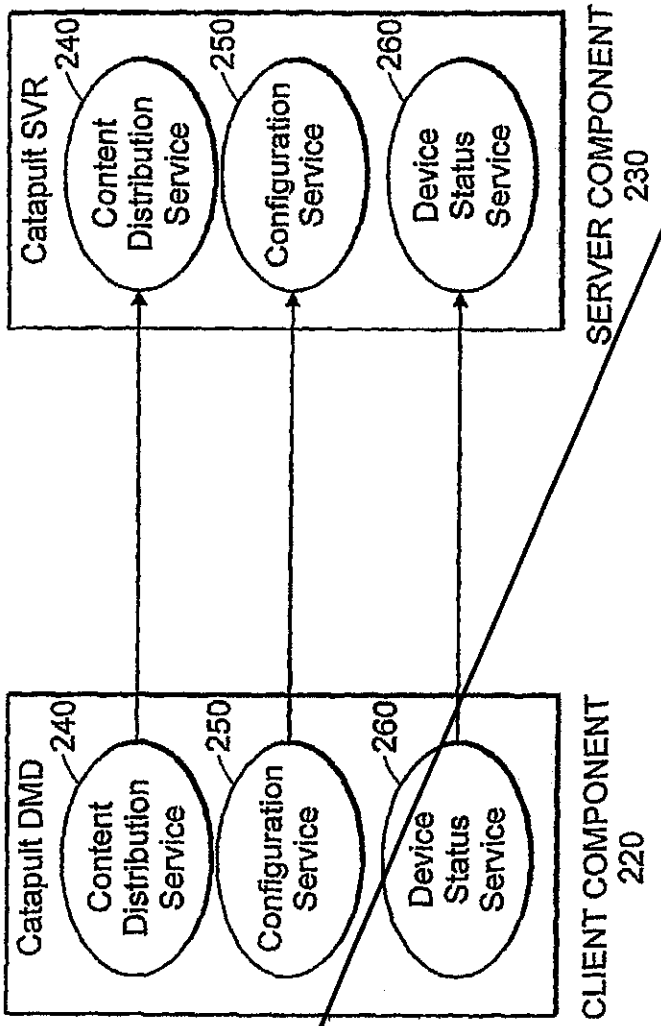

Catapult SVR
240
Content Distribution Service
250
Configuration Service
260
Device Status Service
SERVER COMPONENT
230
Catapult DMD
240
Content Distribution Service
250
Configuration Service
260
Device Status Service
CLIENT COMPONENT
220

FIG. 2

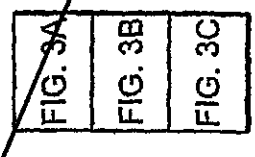

FIG. 3A
FIG. 3B
FIG. 3C

FIG. 3

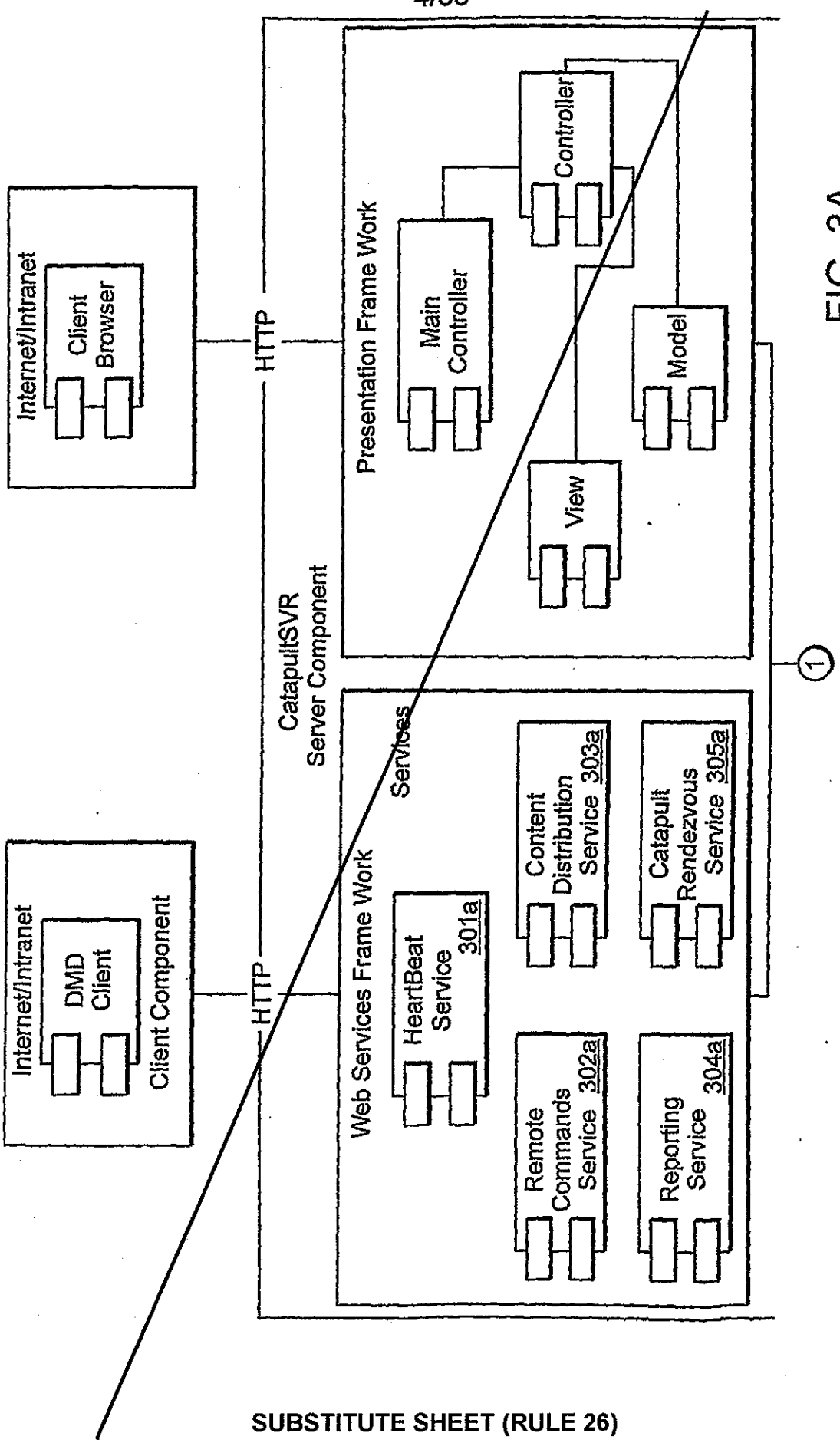

Internet/Intranet
Client Browser
HTTP
Presentation Frame Work
Controller
Main Controller
Model
View
CatapultSVR Server Component
Services
Web Services Frame Work
HeartBeat Service 301a
Content Distribution Service 303a
Catapult Rendezvous Service 305a
Remote Commands Service 302a
Reporting Service 304a
HTTP
Internet/Intranet
DMD Client
Client Component
1

FIG. 3A

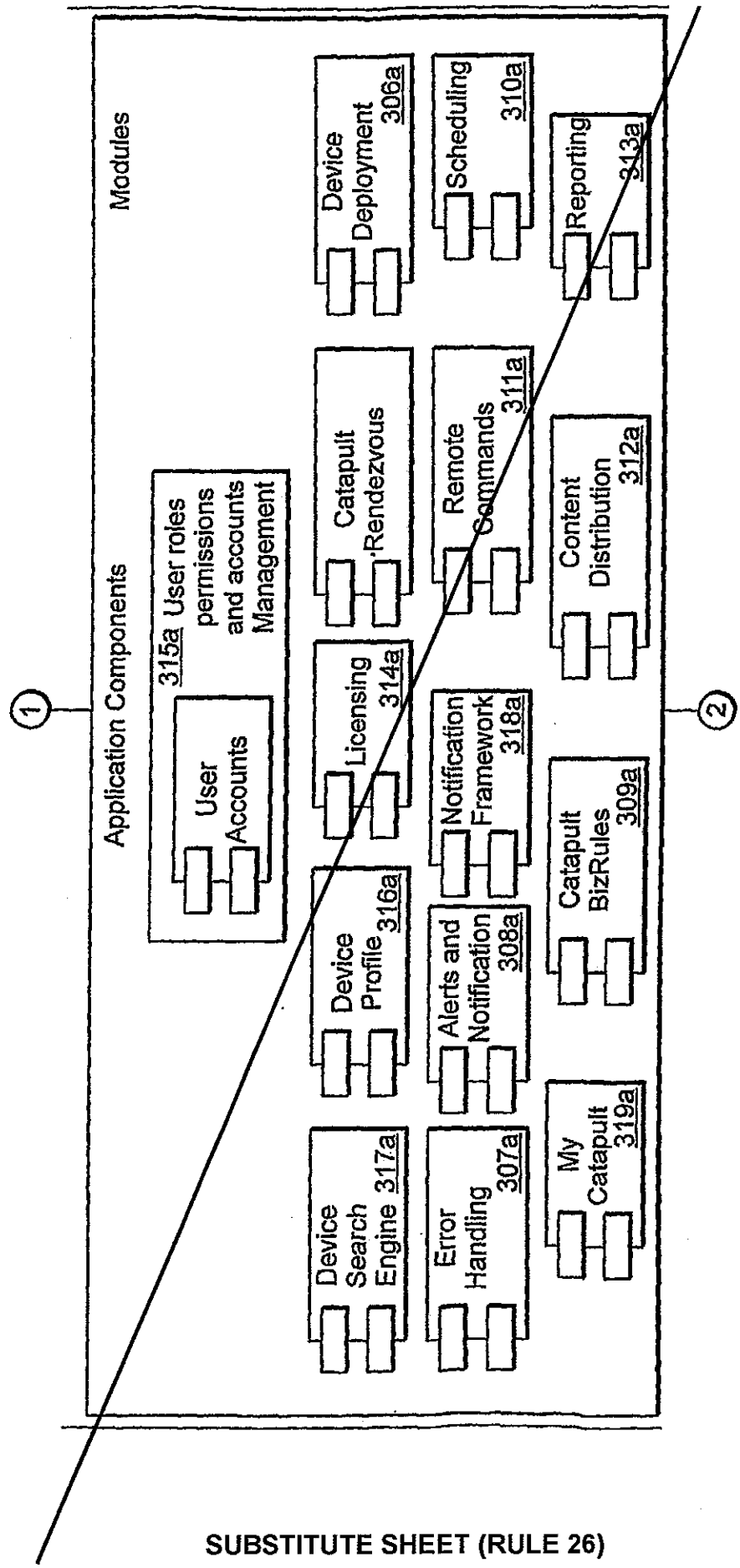

Modules
Application Components
1
2
User Accounts
315a User roles permissions and accounts Management
Licensing 314a
Device Profile 316a
Device Search Engine 317a
Catapult 'Rendezvous
Notification Framework 318a
Alerts and Notification 308a
Error Handling 307a
Remote Commands 311a
Catapult BizRules 309a
My Catapult 319a
Device Deployment 306a
Content Distribution 312a
Scheduling 310a
Reporting 313a

FIG. 3B

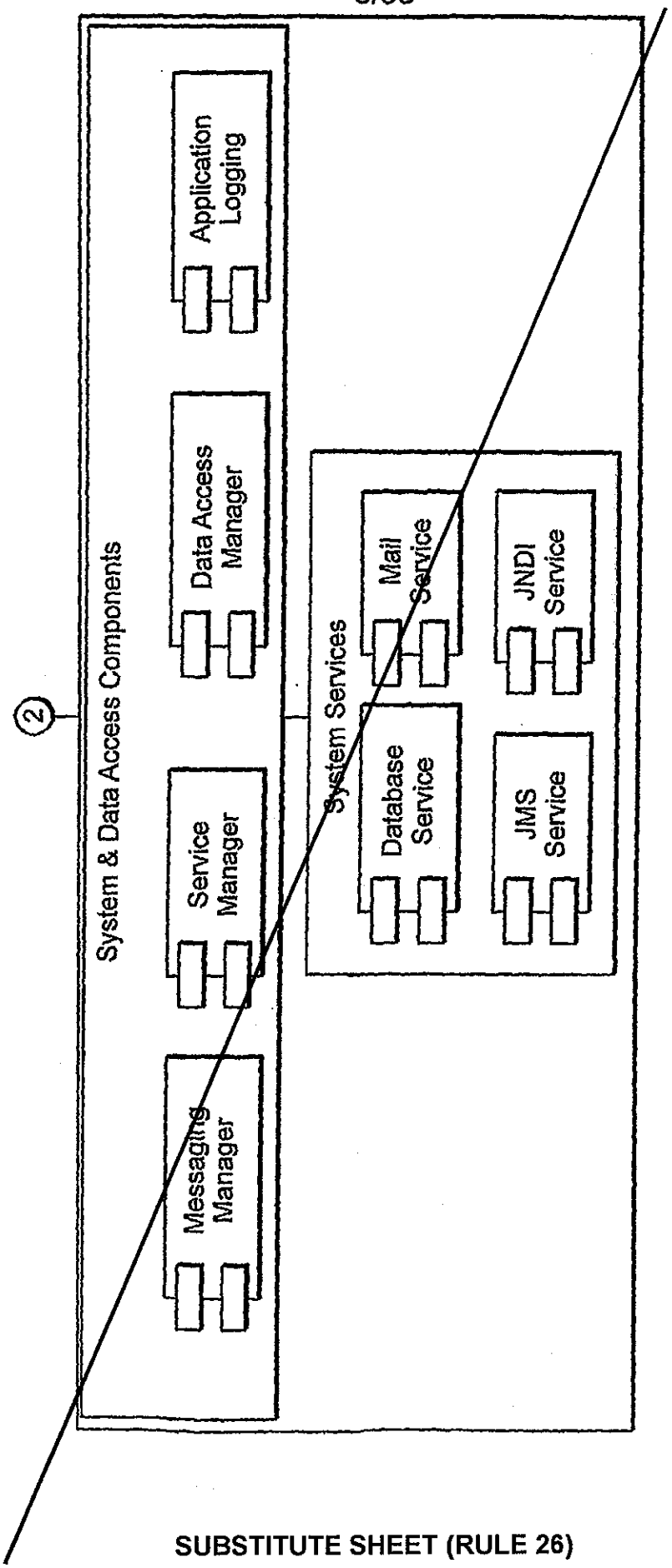

System & Data Access Components
Application Logging
Data Access Manager
Service Manager
Messaging Manager
System Services
Mail Service
JNDI Service
Database Service
JMS Service
2

FIG. 3C

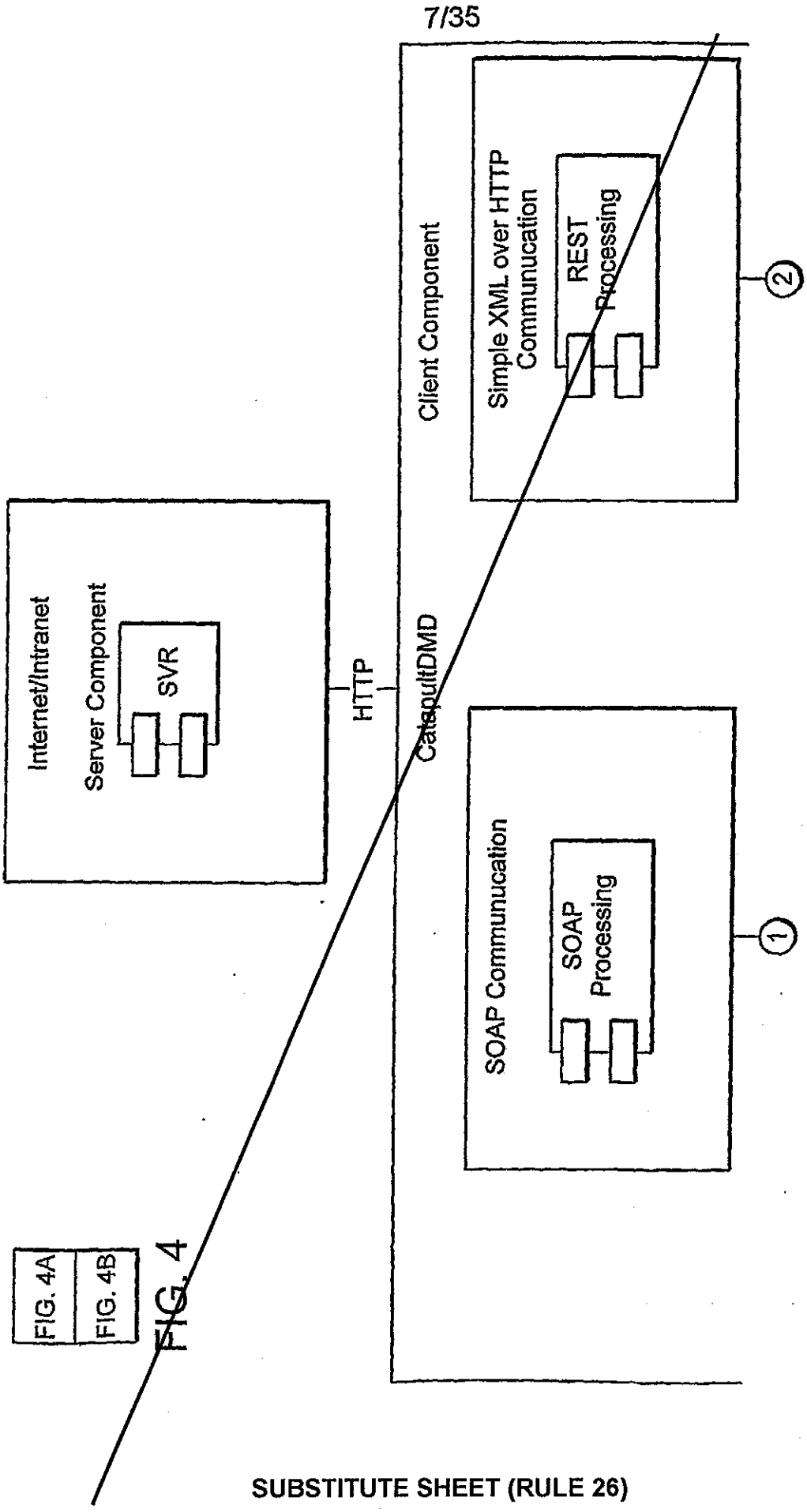


FIG. 4A

FIG. 4A | FIG. 4B

FIG. 4

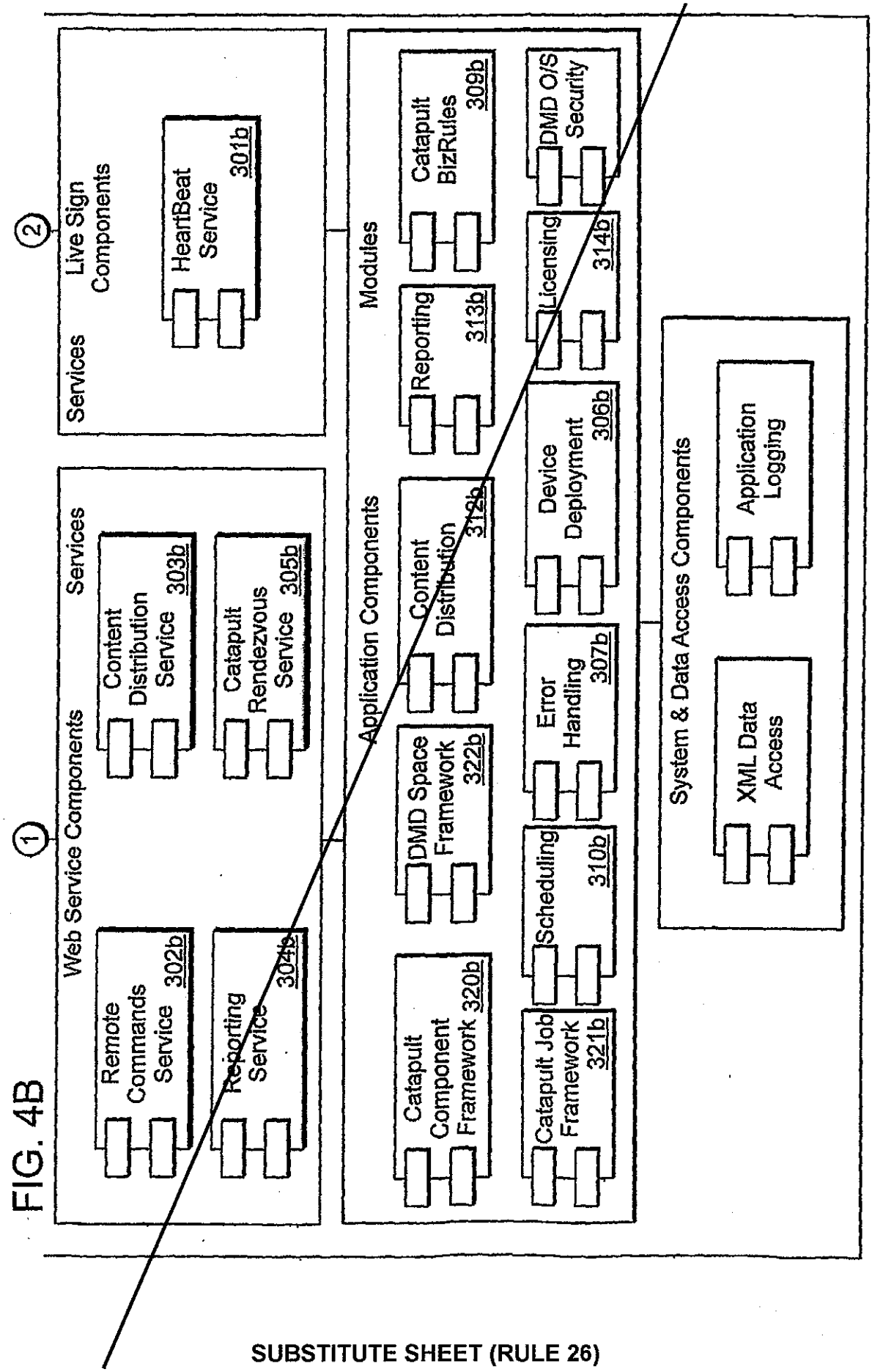

Web Service Components
Services
Content Distribution Service 303b
Catapult Rendezvous Service 305b
Remote Commands Service 302b
Reporting Service 304b
Services
Live Sign Components
HeartBeat Service 301b
Application Components
Modules
Catapult BizRules 309b
DMD O/S Security
Reporting 313b
Licensing 314b
Content Distribution 312b
Device Deployment 306b
DMD Space Framework 322b
Error Handling 307b
Scheduling 310b
Catapult Component Framework 320b
Catapult Job Framework 321b
System & Data Access Components
Application Logging
XML Data Access
1
2

FIG. 4B

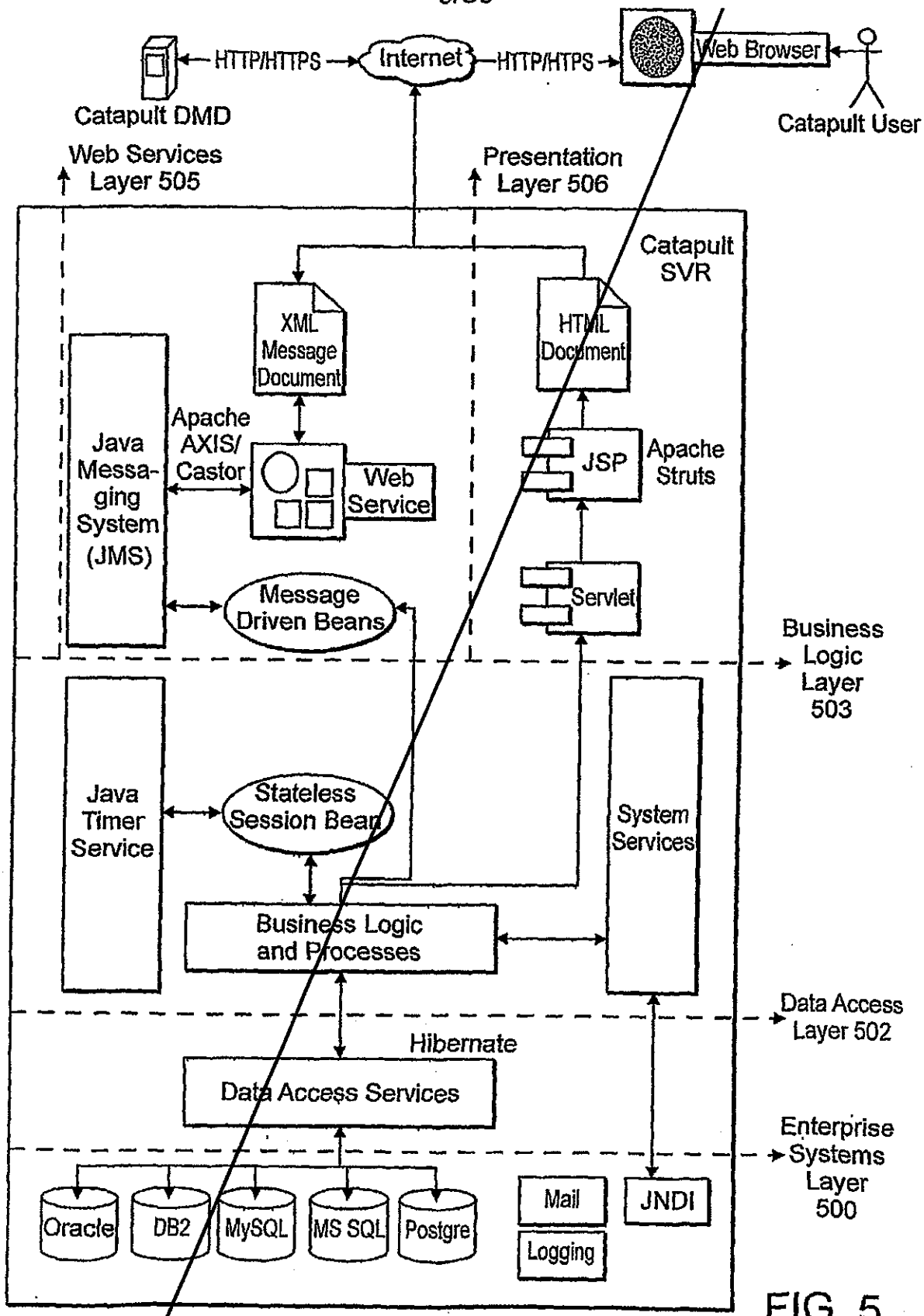

HTTP/HTTPS
Internet
HTTP/HTTPS
Web Browser
Catapult DMD
Catapult User
Web Services Layer 505
Presentation Layer 506
Catapult SVR
XML Message Document
HTML Document
Java Messa-ging System (JMS)
Apache AXIS/ Castor
Web Service
JSP
Apache Struts
Servlet
Message Driven Beans
Business Logic Layer 503
Java Timer Service
Stateless Session Bean
System Services
Business Logic and Processes
Data Access Layer 502
Hibernate
Data Access Services
Enterprise Systems Layer 500
Oracle
DB2
MySQL
MS SQL
Postgre
Mail
Logging
JNDI

FIG. 5

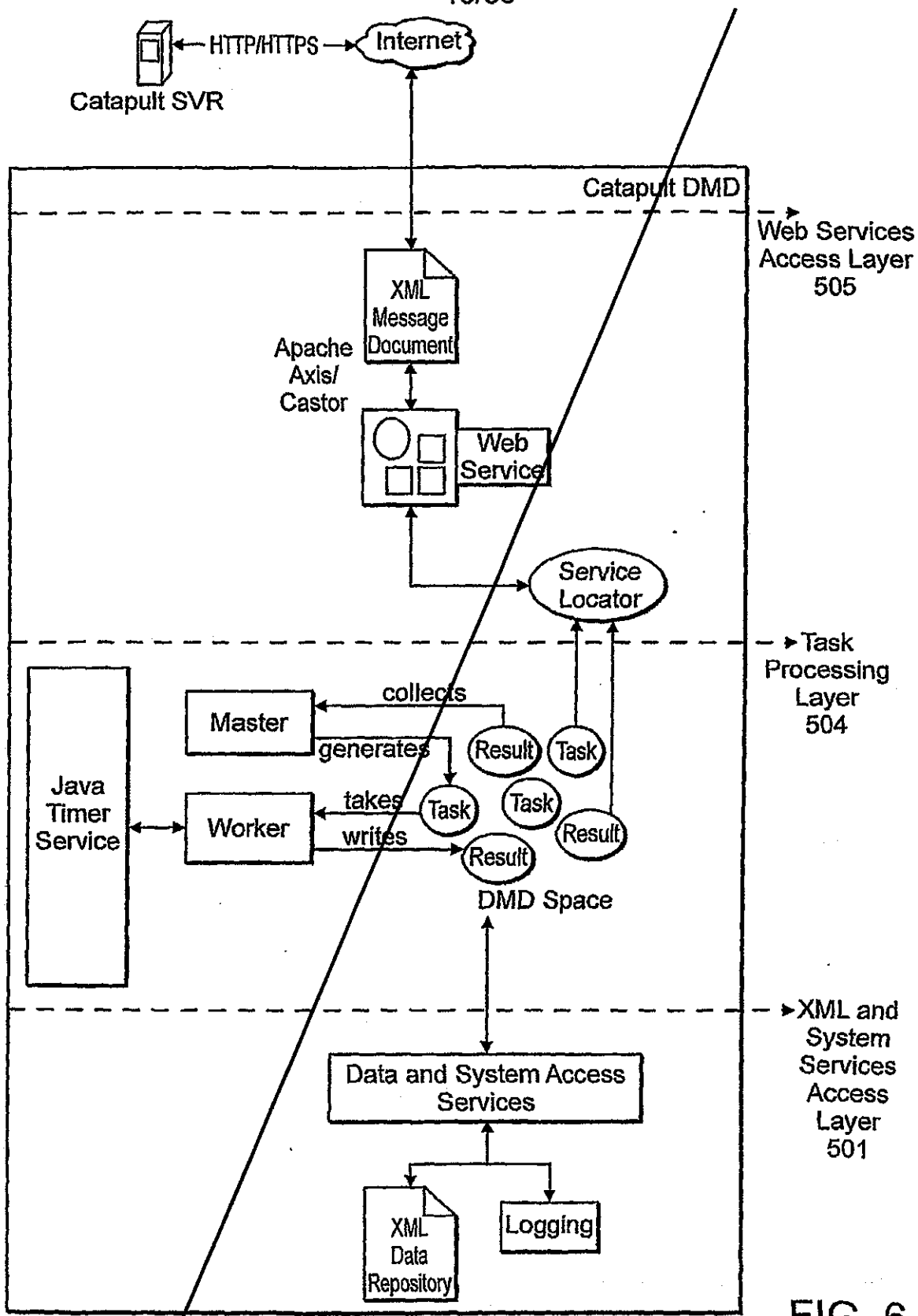

HTTP/HTTPS
Internet
Catapult SVR
Catapult DMD
Web Services Access Layer 505
XML Message Document
Apache Axis/ Castor
Web Service
Service Locator
Task Processing Layer 504
Java Timer Service
Master
collects
generates
Result
Task
Worker
takes
writes
Task
Task
Result
Result
DMD Space
XML and System Services Access Layer 501
Data and System Access Services
XML Data Repository
Logging

FIG. 6

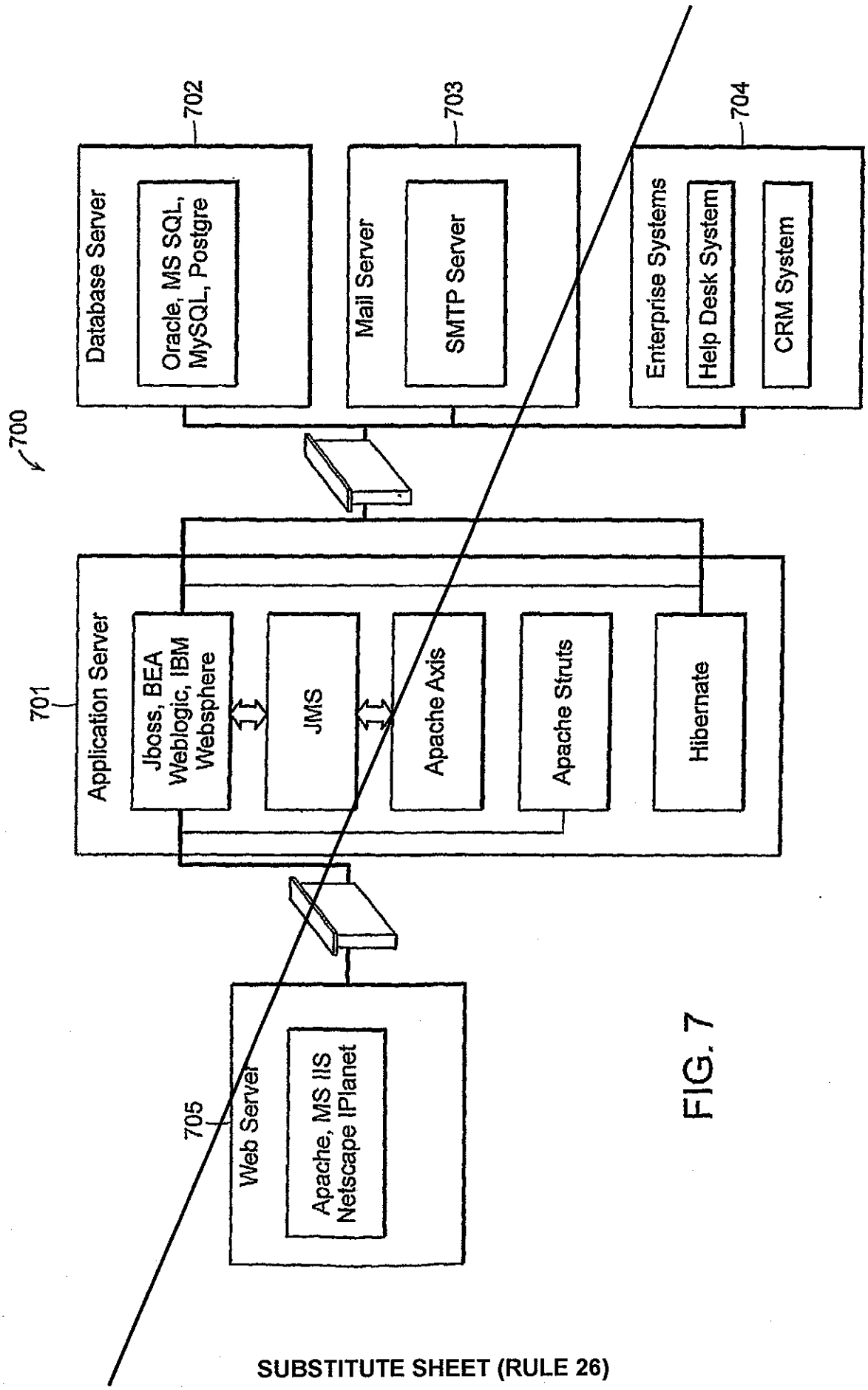

700
701
Application Server
Jboss, BEA Weblogic, IBM Websphere
JMS
Apache Axis
Apache Struts
Hibernate
702
Database Server
Oracle, MS SQL, MySQL, Postgre
703
Mail Server
SMTP Server
704
Enterprise Systems
Help Desk System
CRM System
705
Web Server
Apache, MS IIS Netscape IPlanet

FIG. 7

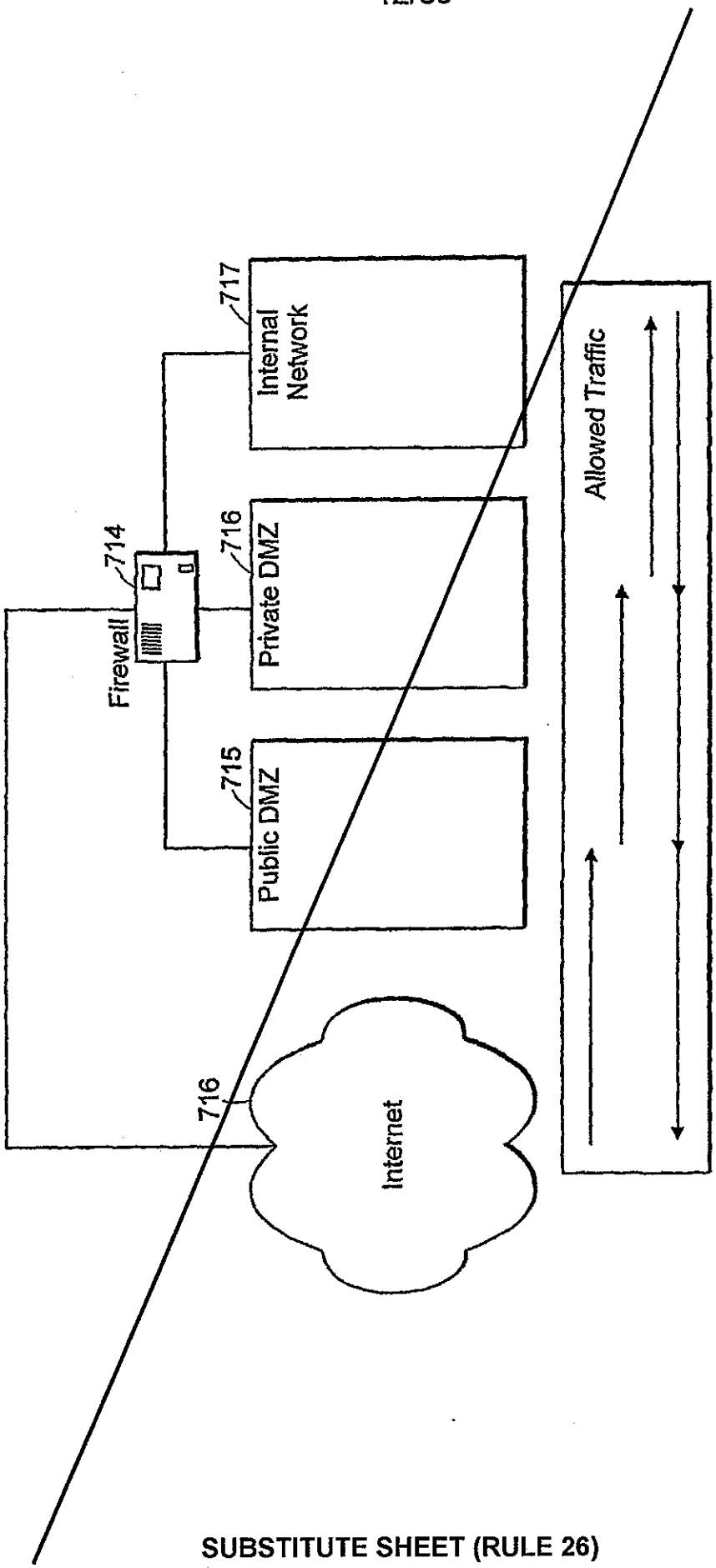

717
Internal Network
716
Private DMZ
714
Firewall
715
Public DMZ
716
Internet
Allowed Traffic

FIG. 7A

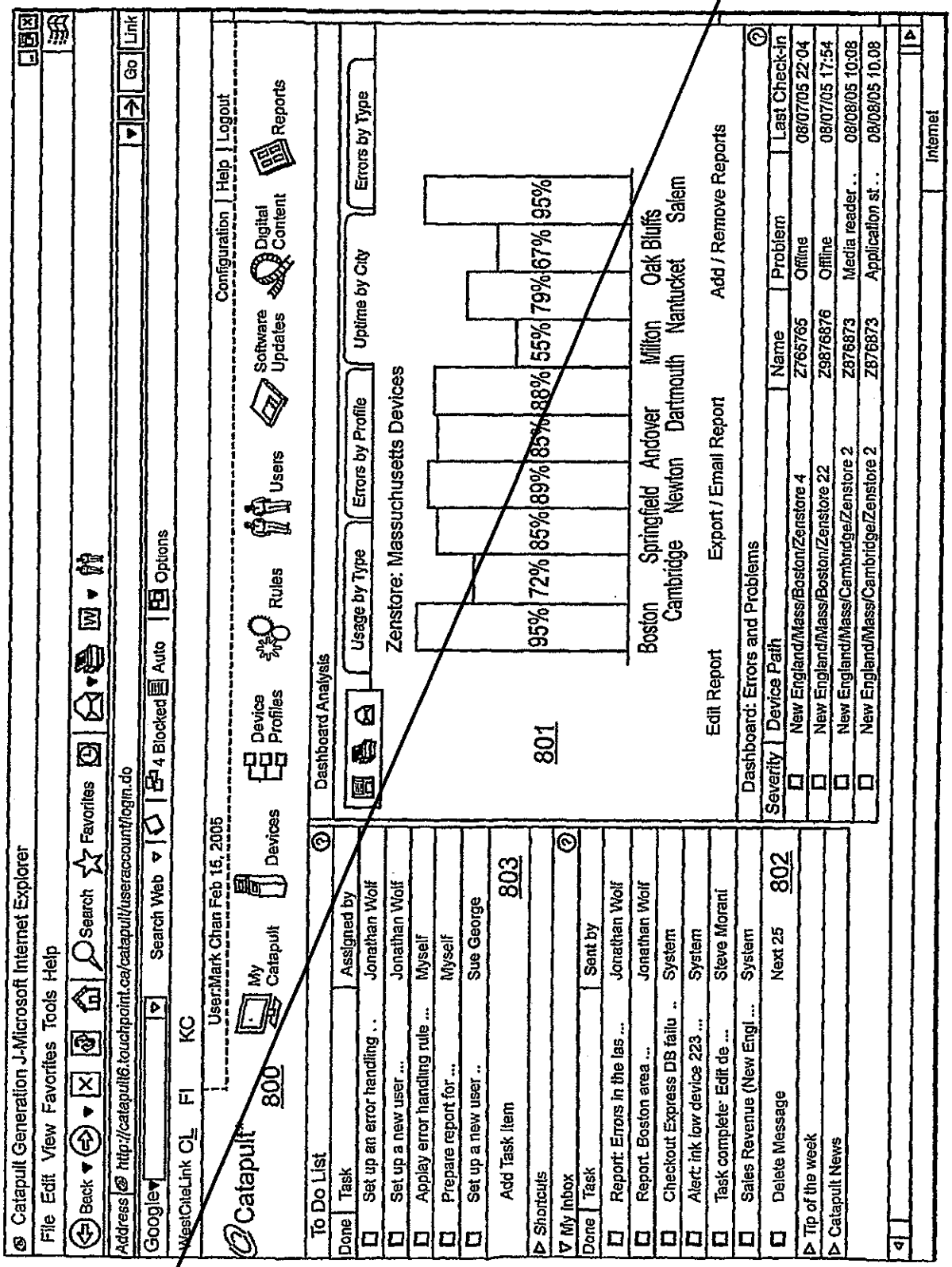

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://catapult6.touchpoint.ca/catapult/useraccount/login.do
Google Search Web 4 Blocked Auto Options
WestCityLink CL FI KC
Catapult
800
User:Mark Chan Feb 15, 2005
Configuration | Help | Logout
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
To Do List
Done Task
Assigned by
Set up an error handling . . Jonathan Wolf
Set up a new user ... Jonathan Wolf
Applay error handling rule ... Myself
Prepare report for ... Myself
Set up a new user .. Sue George
Add Task Item
803
Shortcuts
My Inbox
Done Task
Sent by
Report: Errors in the las ... Jonathan Wolf
Report: Boston area ... Jonathan Wolf
Checkout Express DB failu .. System
Alert: ink low device 223 ... System
Task complete: Edit de ... Steve Morani
Sales Revenue (New Engl ... System
Delete Message
Next 25
802
Tip of the week
Catapult News
Dashboard Analysis
Usage by Type
Errors by Profile
Uptime by City
Errors by Type
Zenstore: Massuchusetts Devices
95% 72% 85% 89% 85% 88% 55% 79% 67% 95%
801
Boston Springfield Andover Milton Oak Bluffs
Cambridge Newton Dartmouth Nantucket Salem
Edit Report
Export / Email Report
Add / Remove Reports
Dashboard: Errors and Problems
Severity Device Path
Name
Problem
Last Check-in
New England/Mass/Boston/Zenstore 4 Z765765 Offline 08/07/05 22:04
New England/Mass/Boston/Zenstore 22 Z9876876 Offline 08/07/05 17:54
New England/Mass/Cambridge/Zenstore 2 Z876873 Media reader ... 08/08/05 10:08
New England/Mass/Cambridge/Zenstore 2 Z876873 Application st ... 08/08/05 10:08
Internet

FIG. 8

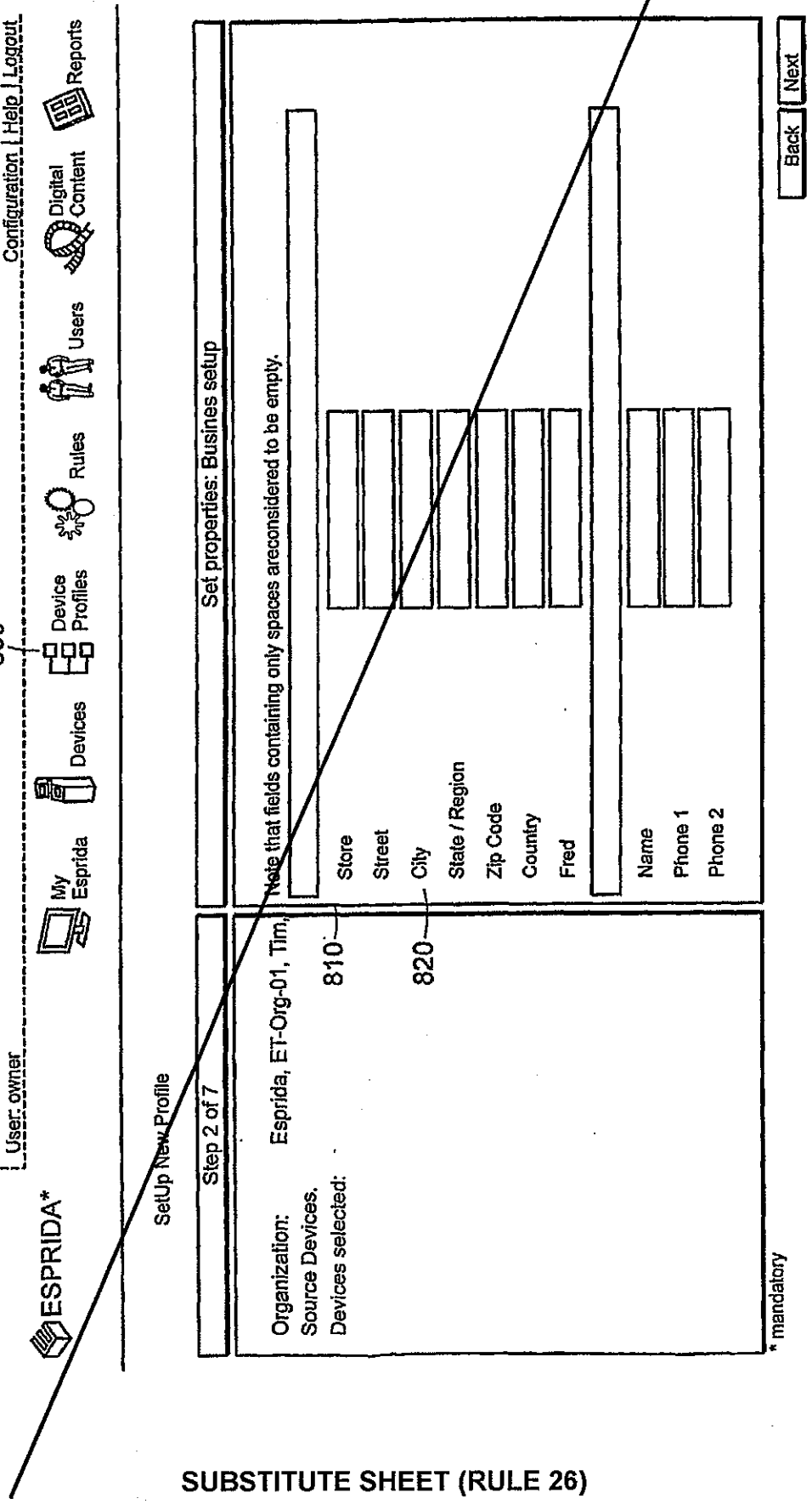

800
ESPRIDA*
User: owner
Configuration | Help | Logout
My Esprida
Devices
Device Profiles
Rules
Users
Digital Content
Reports
SetUp New Profile
Step 2 of 7
Set properties: Busines setup
Organization: Esprida, ET-Org-01, Tim,
Source Devices.
Devices selected:
Note that fields containing only spaces areconsidered to be empty.
Store
Street
City
State / Region
Zip Code
Country
Fred
Name
Phone 1
Phone 2
810
820
Back
Next
* mandatory

FIG. 8A

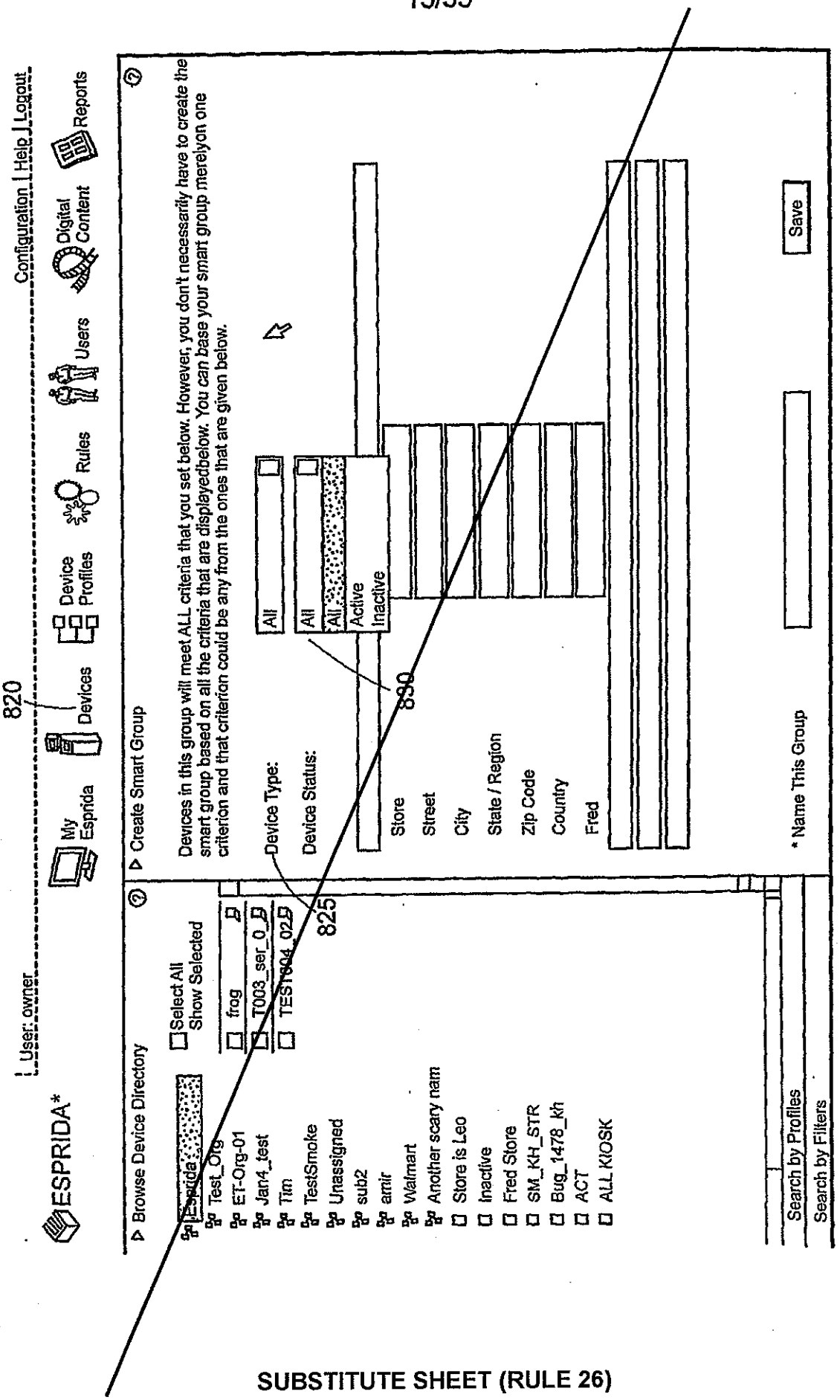

820
Configuration | Help | Logout
User: owner
ESPRIDA*
My Esprida
Devices
Device Profiles
Rules
Users
Digital Content
Reports
Browse Device Directory
Select All
Show Selected
Esprida
Test_Org
ET-Org-01
Jan4_test
Tim
TestSmoke
Unassigned
sub2
amir
Walmart
Another scary nam
Store is Leo
Inactive
Fred Store
SM_KH_STR
Bug_1478_kh
ACT
ALL KIOSK
frog
T003_ser_0
TEST804_02
825
Search by Profiles
Search by Filters
Create Smart Group
Devices in this group will meet ALL criteria that you set below. However, you don't necessarily have to create the smart group based on all the criteria that are displayedbelow. You can base your smart group merelyon one criterion and that criterion could be any from the ones that are given below.
Device Type:
Device Status:
All
All
All
Active
Inactive
830
Store
Street
City
State / Region
Zip Code
Country
Fred
* Name This Group
Save

FIG. 8B

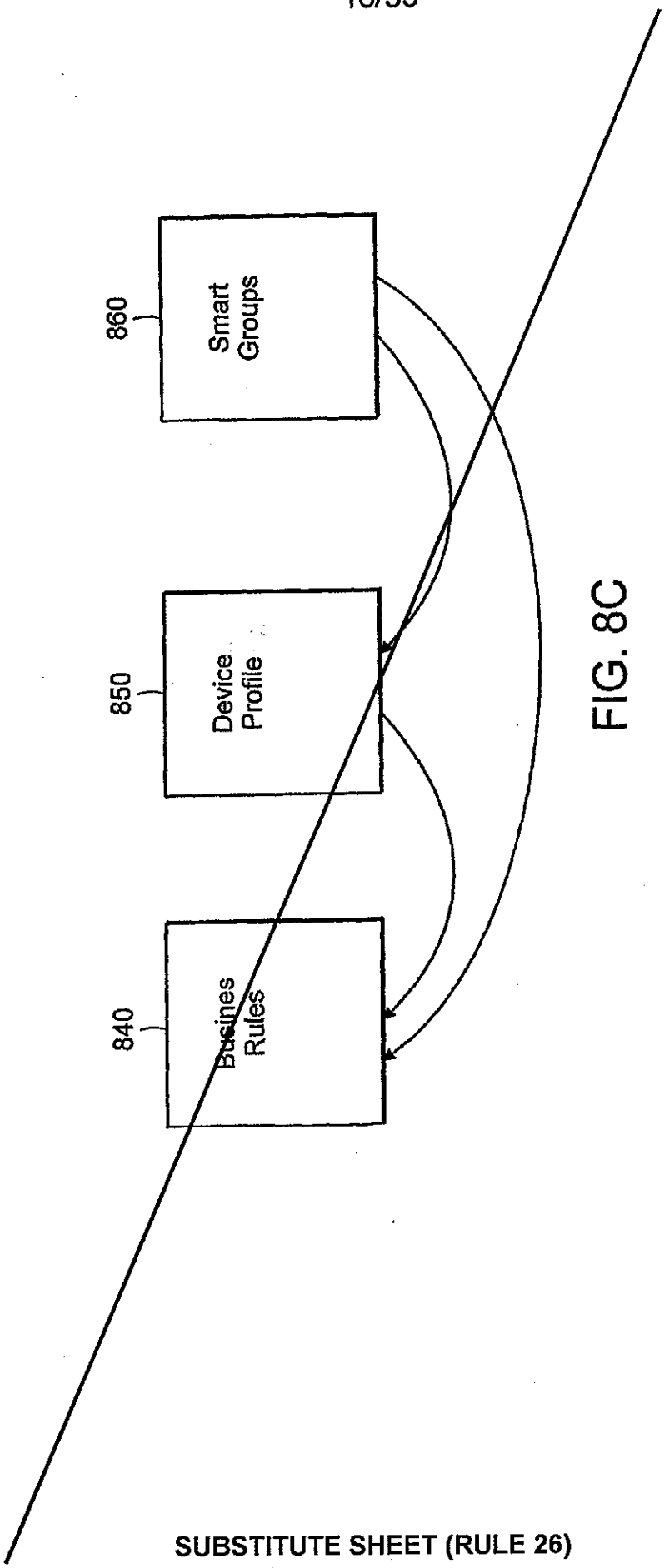


FIG. 8C

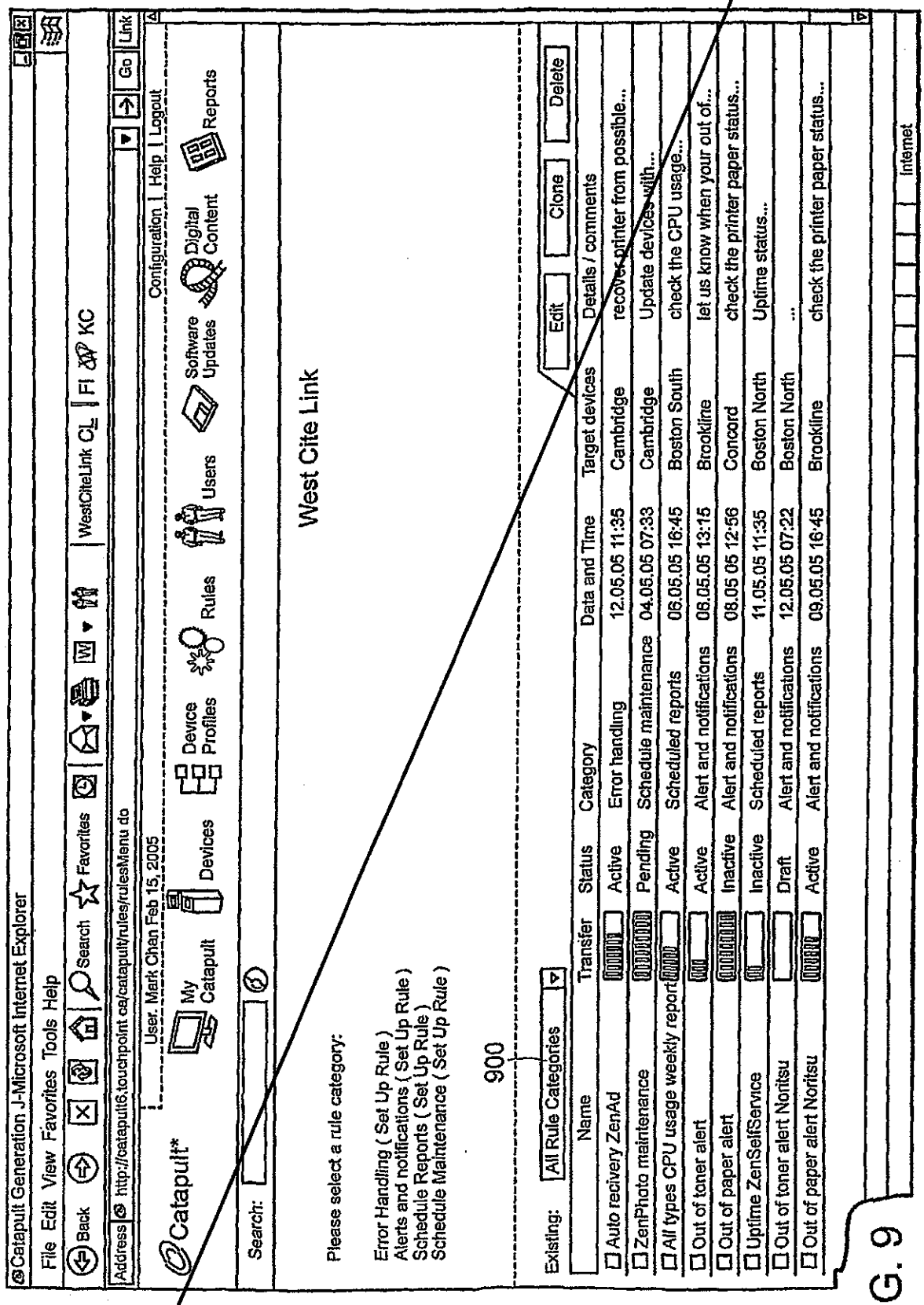

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL
FI
KC
Address
http://catapult6.touchpoint.ca/catapult/rules/rulesMenu.do
Go
Link
Configuration | Help | Logout
User. Mark Chan Feb 15, 2005
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Search:
West Cite Link
Please select a rule category:
Error Handling (Set Up Rule)
Alerts and notifications (Set Up Rule)
Schedule Reports (Set Up Rule)
Schedule Maintenance (Set Up Rule)
900
Existing:
All Rule Categories
Edit
Clone
Delete
Name
Transfer
Status
Category
Data and Time
Target devices
Details / comments
Auto recivery ZenAd
Active
Error handling
12.05.05 11:35
Cambridge
recovers printer from possible...
ZenPhoto maintenance
Pending
Schedule maintenance
04.05.05 07:33
Cambridge
Update devices with...
All types CPU usage weekly report
Active
Scheduled reports
06.05.05 16:45
Boston South
check the CPU usage...
Out of toner alert
Active
Alert and notifications
08.05.05 13:15
Brookline
let us know when your out of...
Out of paper alert
Inactive
Alert and notifications
08.05 05 12:56
Concord
check the printer paper status...
Uptime ZenSelfService
Inactive
Scheduled reports
11.05.05 11:35
Boston North
Uptime status...
Out of toner alert Noritsu
Draft
Alert and notifications
12.05.05 07:22
Boston North
...
Out of paper alert Noritsu
Active
Alert and notifications
09.05.05 16:45
Brookline
check the printer paper status...
Internet

FIG. 9

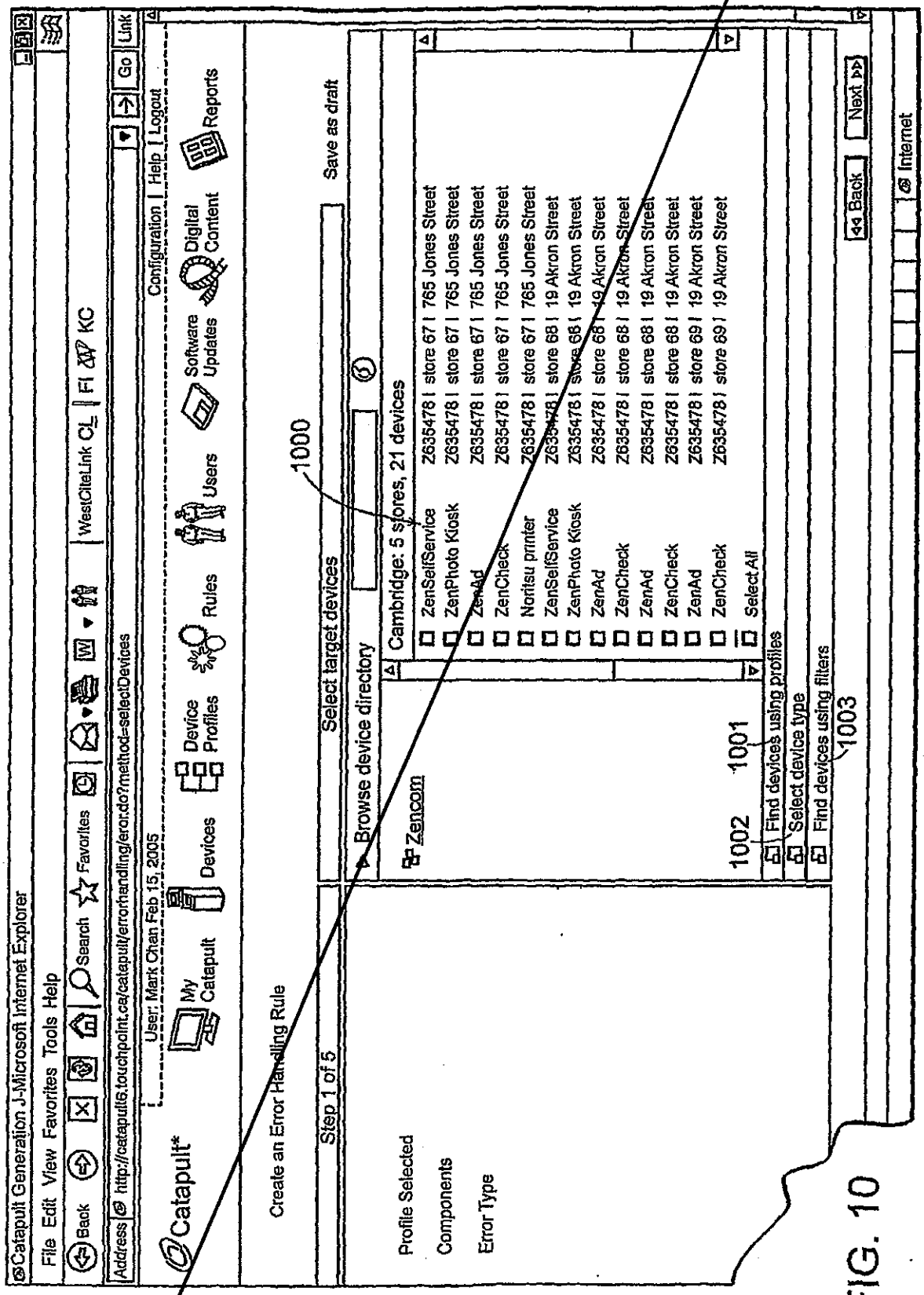

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites WestCiteLink CL FI KC
Address http://catapult6.touchpoint.ca/catapult/errorhandling/eran.do?method=selectDevices
Go Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Create an Error Handling Rule
Step 1 of 5
Select target devices
Save as draft
1000
Browse device directory
Zencom
Cambridge: 5 stores, 21 devices
ZenSelfService Z6354781 store 67 | 765 Jones Street
ZenPhoto Kiosk Z6354781 store 67 | 765 Jones Street
ZenAd Z6354781 store 67 | 765 Jones Street
ZenCheck Z6354781 store 67 | 765 Jones Street
Noritsu printer Z6354781 store 67 | 765 Jones Street
ZenSelfService Z6354781 store 68 | 19 Akron Street
ZenPhoto Kiosk Z6354781 store 68 | 19 Akron Street
ZenAd Z6354781 store 68 | 19 Akron Street
ZenCheck Z6354781 store 68 | 19 Akron Street
ZenAd Z6354781 store 68 | 19 Akron Street
ZenCheck Z6354781 store 68 | 19 Akron Street
ZenAd Z6354781 store 69 | 19 Akron Street
ZenCheck Z6354781 store 69 | 19 Akron Street
Select All
1002
1001
Find devices using profiles
Select device type
Find devices using filters
1003
Profile Selected
Components
Error Type
Back
Next
Internet

FIG. 10

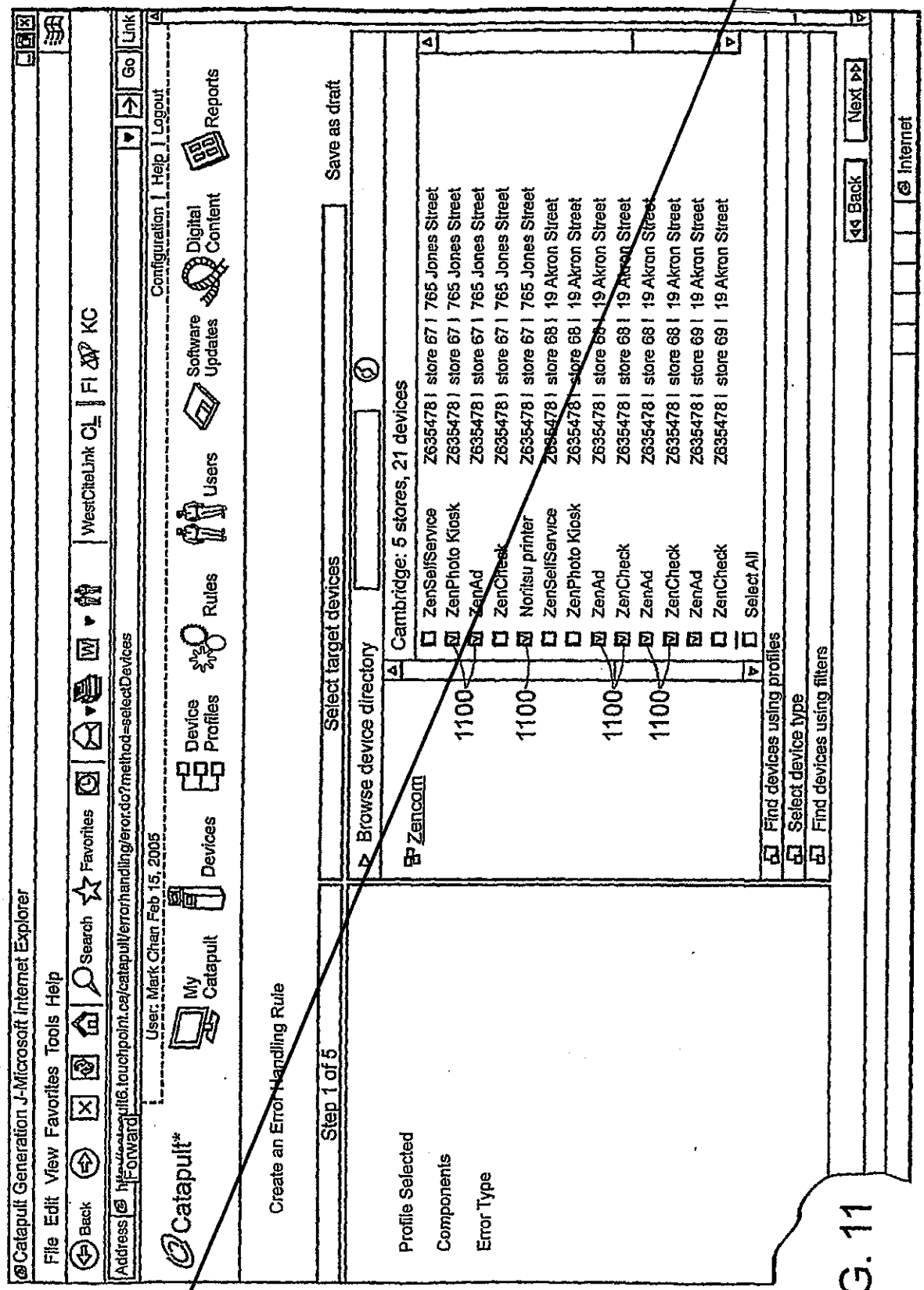

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
WestCiteLink CL FI KC
Address
Forward
Go Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Create an Error Handling Rule
Step 1 of 5
Select target devices
Save as draft
Browse device directory
Zencom
Cambridge: 5 stores, 21 devices
ZenSelfService Z635478 | store 67 | 765 Jones Street
ZenPhoto Kiosk Z635478 | store 67 | 765 Jones Street
ZenAd Z635478 | store 67 | 765 Jones Street
ZenCheck Z635478 | store 67 | 765 Jones Street
Noritsu printer Z635478 | store 67 | 765 Jones Street
ZenSelfService Z635478 | store 68 | 19 Akron Street
ZenPhoto Kiosk Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 68 | 19 Akron Street
ZenCheck Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 68 | 19 Akron Street
ZenCheck Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 69 | 19 Akron Street
ZenCheck Z635478 | store 69 | 19 Akron Street
Select All
1100
1100
1100
1100
Find devices using profiles
Select device type
Find devices using filters
Profile Selected
Components
Error Type
Back
Next
Internet

FIG. 11

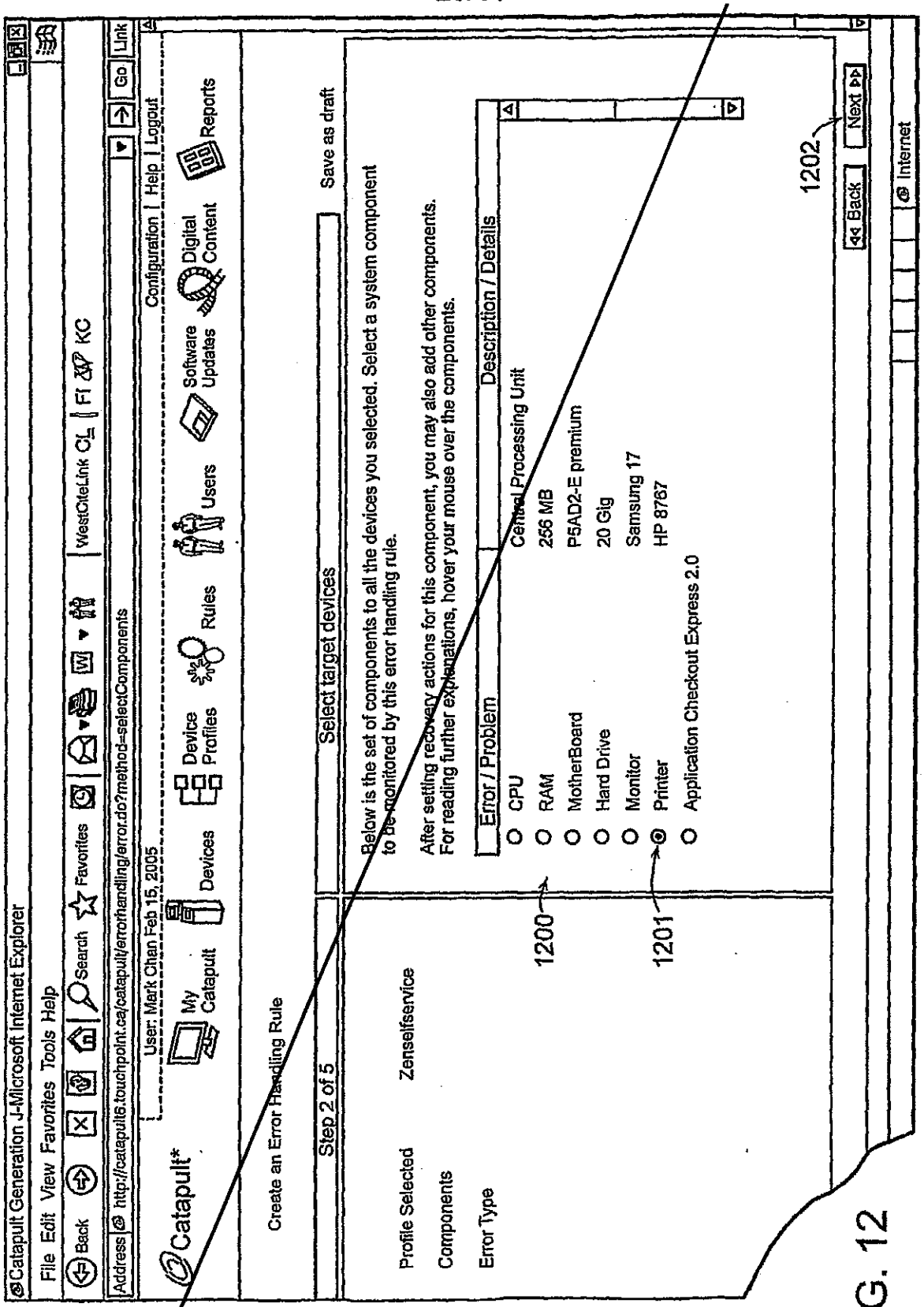

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://catapult6.touchpoint.ca/catapult/errorhandling/error.do?method=selectComponents
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Create an Error Handling Rule
Step 2 of 5
Select target devices
Save as draft
Profile Selected
Zenselfservice
Components
Error Type
Below is the set of components to all the devices you selected. Select a system component to be monitored by this error handling rule.
After setting recovery actions for this component, you may also add other components.
For reading further explanations, hover your mouse over the components.
Error / Problem
Description / Details
CPU
Central Processing Unit
RAM
256 MB
MotherBoard
P5AD2-E premium
Hard Drive
20 Gig
Monitor
Samsung 17
Printer
HP 8767
Application Checkout Express 2.0
1200
1201
1202
Back
Next
Internet

FIG. 12

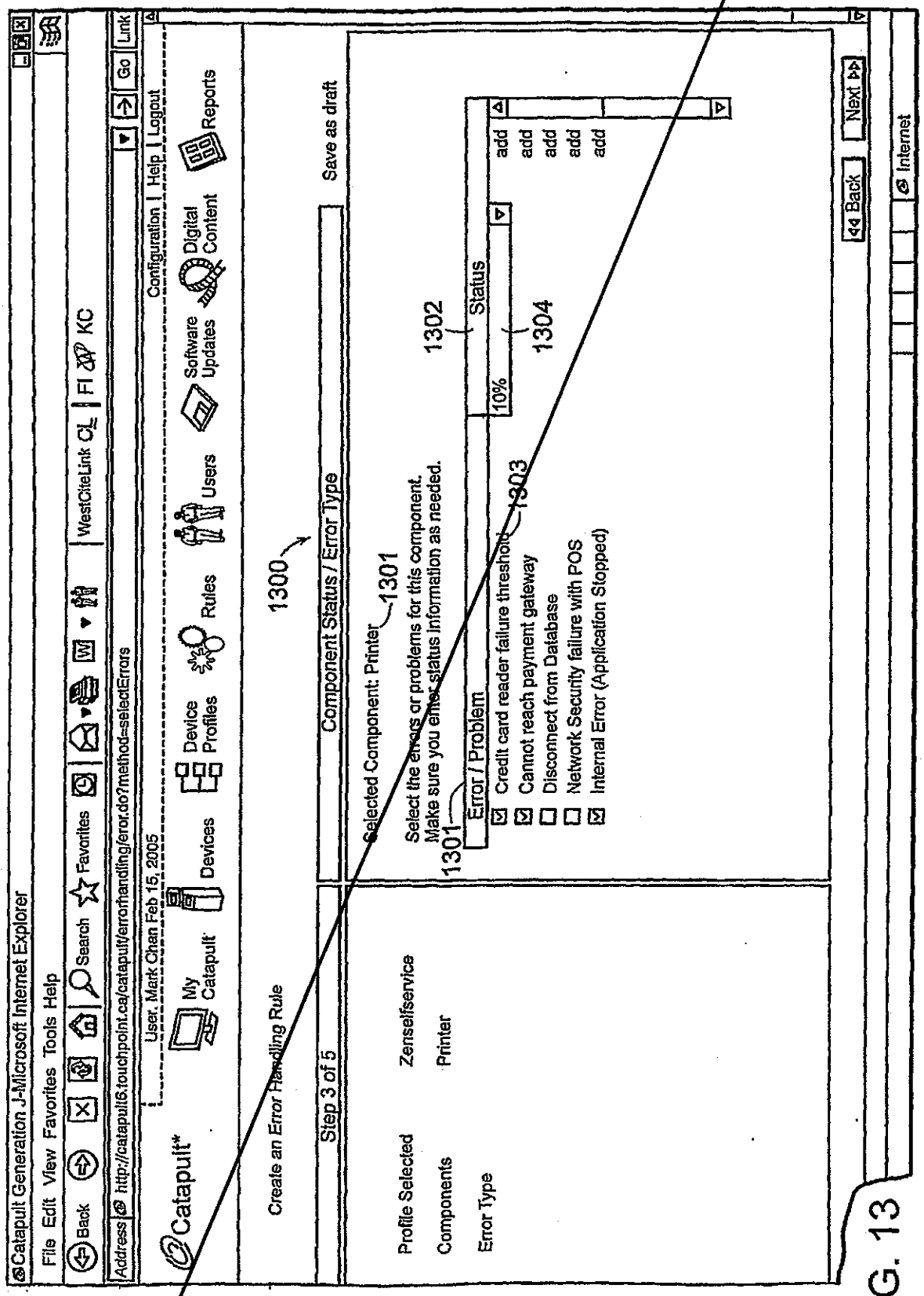

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites WestCiteLink FI KC
Address http://catapult6.touchpoint.ca/catapult/errorhandling/error.do?method=selectErrors
Go Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Create an Error Handling Rule
1300
Step 3 of 5
Component Status / Error Type
Save as draft
Profile Selected Zenselfservice
Components Printer
Error Type
Selected Component: Printer
1301
Select the errors or problems for this component.
Make sure you enter status information as needed.
1302
1304
1303
1301
Error / Problem
Status
10%
Credit card reader failure threshold
Cannot reach payment gateway
Disconnect from Database
Network Security failure with POS
Internal Error (Application Stopped)
add
Back
Next
Internet

FIG. 13

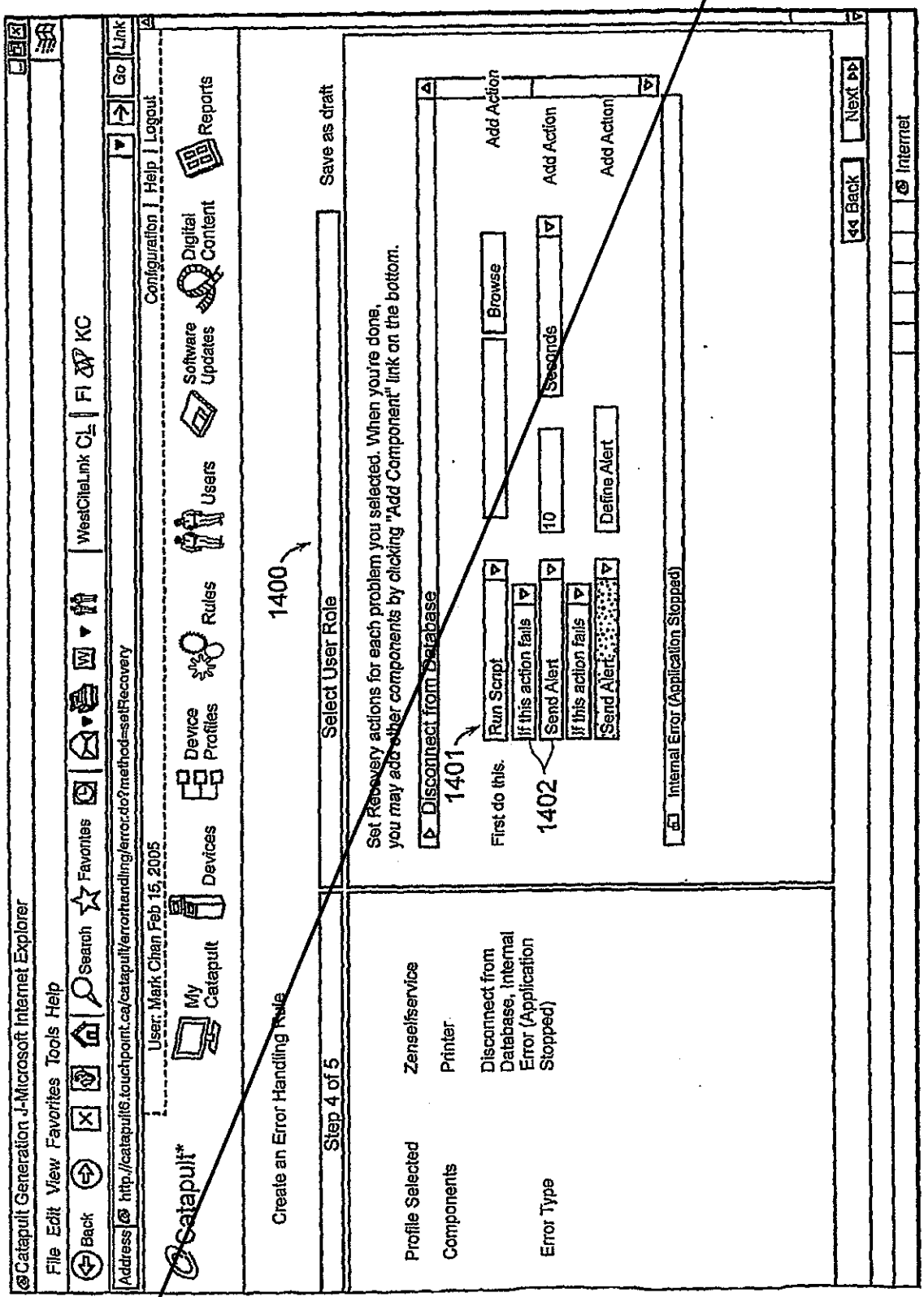

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites WestCliteLink CL FI KC
Address http://catapult6.touchpoint.ca/catapult/errorhandling/error.do?method=setRecovery
Go Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Create an Error Handling Rule
1400
Step 4 of 5
Select User Role
Save as draft
Profile Selected
Zenselfservice
Components
Printer
Error Type
Disconnect from Database, Internal Error (Application Stopped)
Set Recovery actions for each problem you selected. When you're done, you may add other components by clicking "Add Component" link on the bottom.
Disconnect from Database
1401
First do this.
Run Script
If this action fails
Send Alert
If this action fails
Send Alert
1402
Browse
10
Seconds
Define Alert
Add Action
Add Action
Add Action
Internal Error (Application Stopped)
Back
Next
Internet

FIG. 14

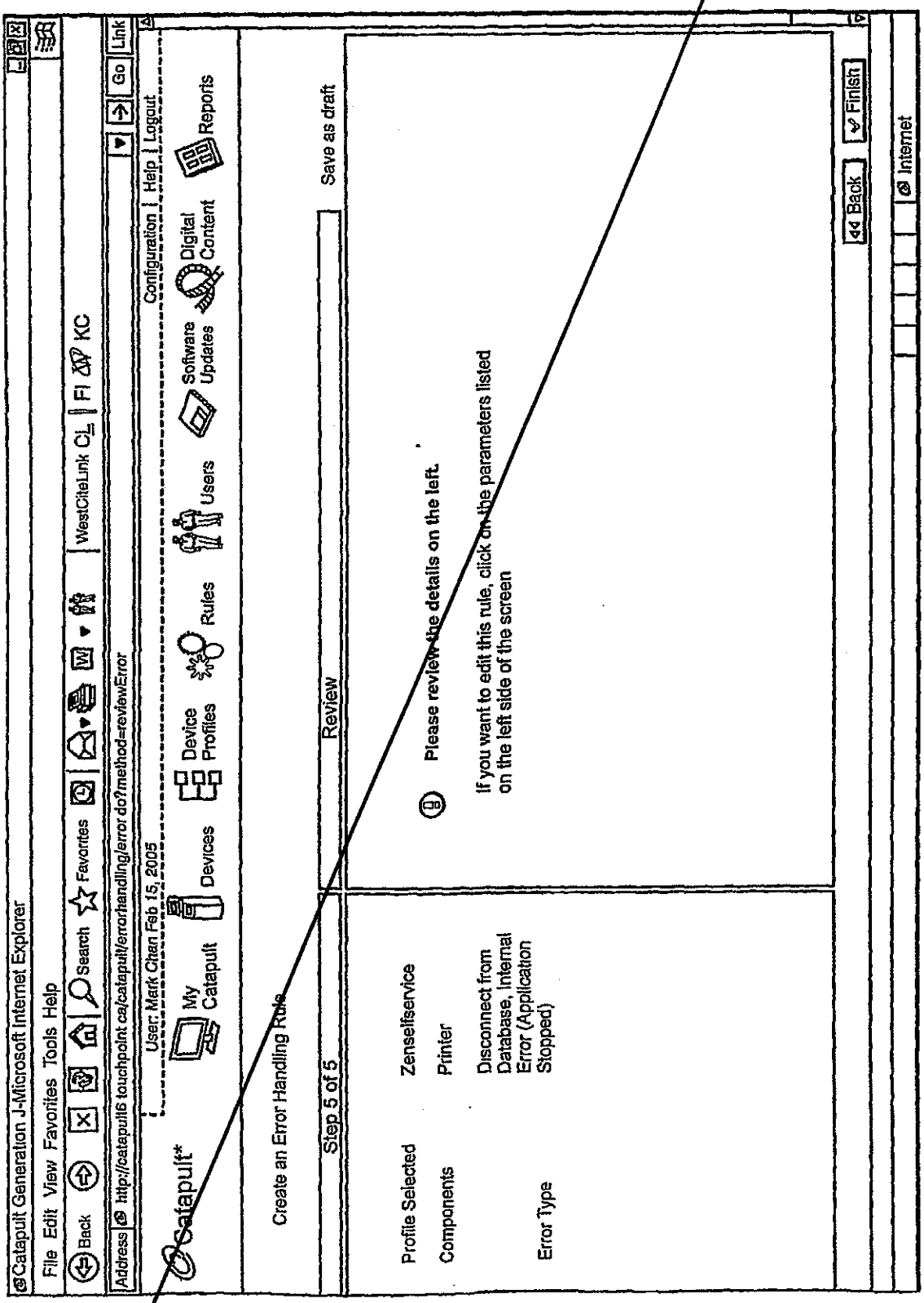

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL
FI
KC
Address
http://catapult6 touchpoint ca/catapult/errorhandling/error do?method=reviewError
Go
Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Create an Error Handling Rule
Step 5 of 5
Review
Save as draft
Please review the details on the left.
If you want to edit this rule, click on the parameters listed on the left side of the screen
Profile Selected
Zenselfservice
Components
Printer
Error Type
Disconnect from Database, Internal Error (Application Stopped)
Back
Finish
Internet

FIG. 15

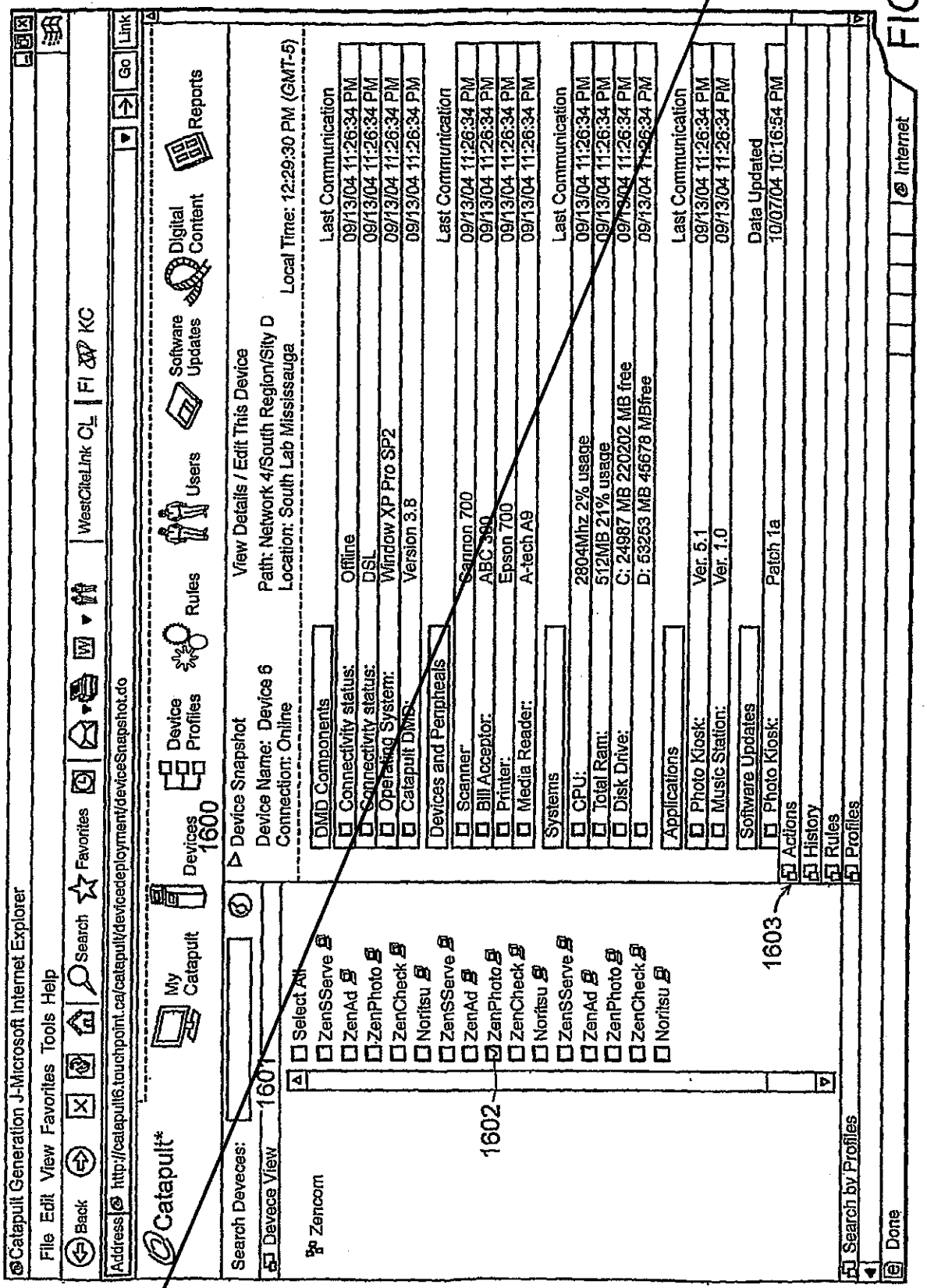

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
WestOkeLink CL FI KC
Address http://catapult6.touchpoint.ca/catapult/devicedeployment/deviceSnapshot.do
Go Link
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
1600
Search Devices:
Device View
1601
Select All
Zencom
ZenSServe
ZenAd
ZenPhoto
ZenCheck
Noritsu
1602
Device Snapshot
View Details / Edit This Device
Device Name: Device 6
Connection: Online
Path: Network 4/South Region/Sity D
Location: South Lab Mississauga
Local Time: 12:29:30 PM (GMT-5)
DMD Components
Last Communication
Connectivity status: Offline 09/13/04 11:26:34 PM
Connectivity status: DSL 09/13/04 11:26:34 PM
Operating System: Window XP Pro SP2 09/13/04 11:26:34 PM
Catapult DMD: Version 3.8 09/13/04 11:26:34 PM
Devices and Peripheals
Last Communication
Scanner: Sanmon 700 09/13/04 11:26:34 PM
Bill Acceptor: ABC 390 09/13/04 11:26:34 PM
Printer: Epson 700 09/13/04 11:26:34 PM
Media Reader: A-tech A9 09/13/04 11:26:34 PM
Systems
Last Communication
CPU: 2804Mhz 2% usage 09/13/04 11:26:34 PM
Total Ram: 512MB 21% usage 09/13/04 11:26:34 PM
Disk Drive: C: 24987 MB 220202 MB free 09/13/04 11:26:34 PM
D: 53253 MB 45678 MB free 09/13/04 11:26:34 PM
Applications
Last Communication
Photo Kiosk: Ver. 5.1 09/13/04 11:26:34 PM
Music Station: Ver. 1.0 09/13/04 11:26:34 PM
Software Updates
Data Updated
Photo Kiosk: Patch 1a 10/07/04 10:16:54 PM
1603
Actions
History
Rules
Profiles
Search by Profiles
Done
Internet

FIG. 16

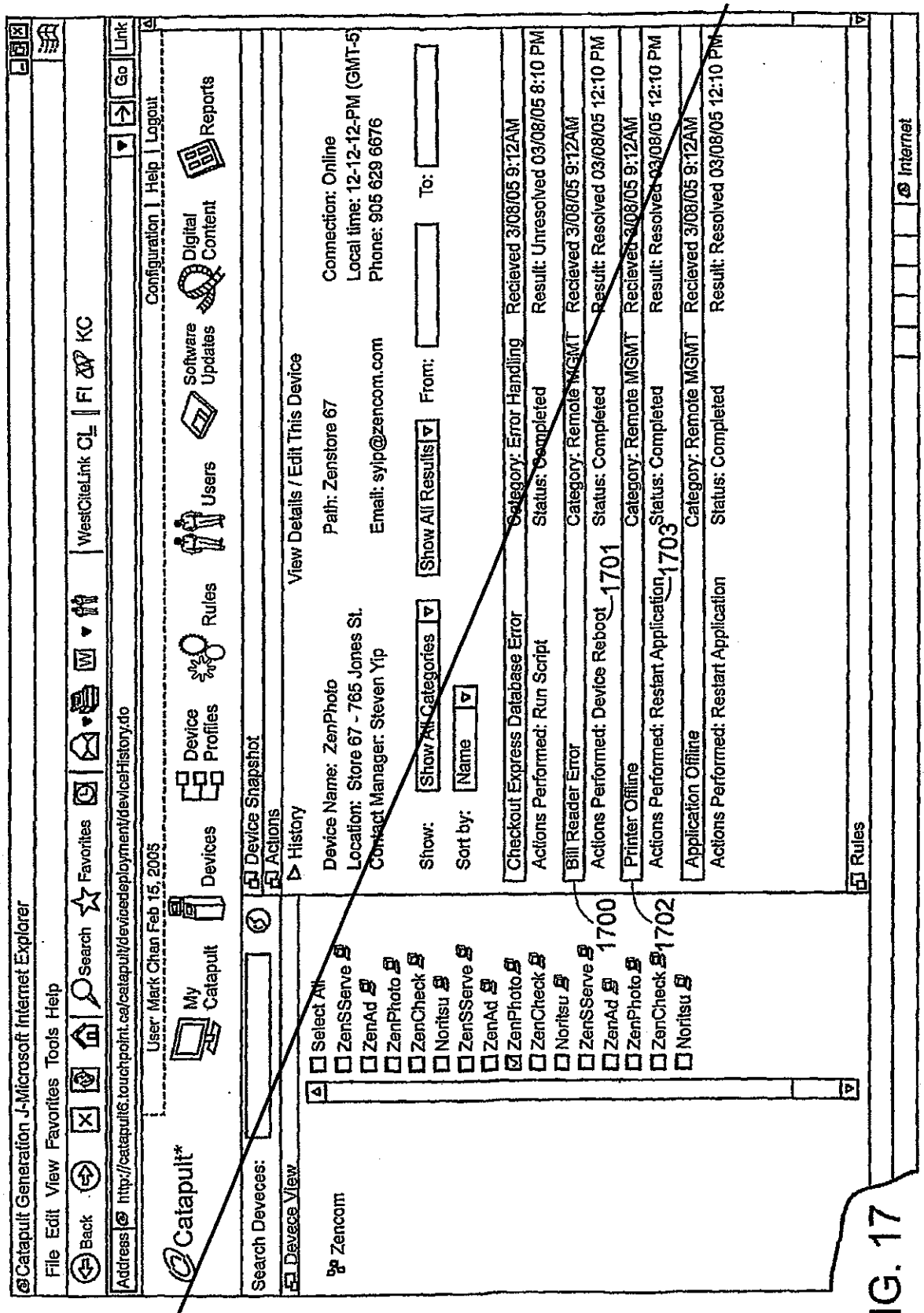

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
WestCiteLink CL FI KC
Address http://catapult6.touchpoint.ca/catapult/devicedeployment/deviceHistory.do
Go Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Search Devices:
Device Snapshot
Actions
Device View
Zencom
Select All
ZenSServe
ZenAd
ZenPhoto
ZenCheck
Noritsu
ZenSServe
ZenAd
ZenPhoto
ZenCheck
Noritsu
ZenSServe
ZenAd
ZenPhoto
ZenCheck
Noritsu
History
View Details / Edit This Device
Device Name: ZenPhoto
Location: Store 67 - 765 Jones St.
Contact Manager: Steven Yip
Path: Zenstore 67
Email: sylp@zencom.com
Connection: Online
Local time: 12-12-12-PM (GMT-5)
Phone: 905 629 6676
Show: Show All Categories
Show All Results
From:
To:
Sort by: Name
Checkout Express Database Error
Category: Error Handling
Recieved 3/08/05 9:12AM
Actions Performed: Run Script
Status: Completed
Result: Unresolved 03/08/05 8:10 PM
Bill Reader Error
Category: Remote MGMT
Recieved 3/08/05 9:12AM
Actions Performed: Device Reboot
Status: Completed
Result: Resolved 03/08/05 12:10 PM
Printer Offline
Category: Remote MGMT
Recieved 3/08/05 9:12AM
Actions Performed: Restart Application
Status: Completed
Result: Resolved 03/08/05 12:10 PM
Application Offline
Category: Remote MGMT
Recieved 3/08/05 9:12AM
Actions Performed: Restart Application
Status: Completed
Result: Resolved 03/08/05 12:10 PM
Rules
1700
1701
1702
1703
Internet

FIG. 17

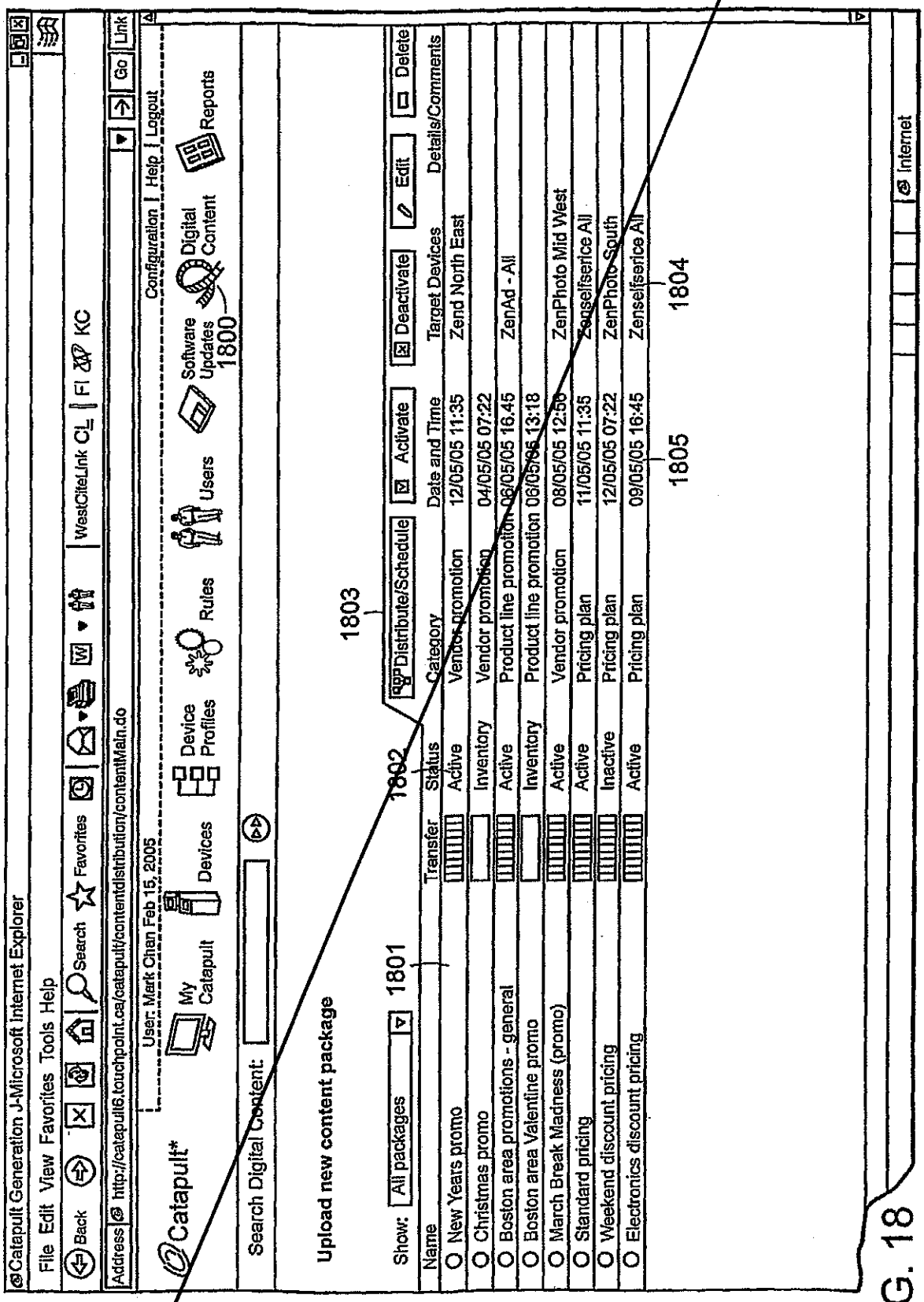

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
WestCiteLink CL FI KC
Address http://catapult6.touchpoint.ca/catapult/contentdistribution/contentMain.do
Go Link
Configuration | Help | Logout
User: Mark Chan Feb 15, 2005
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
1800
Search Digital Content:
Upload new content package
1803
Distribute/Schedule
Activate
Deactivate
Edit
Delete
Show: All packages
1801
1802
Name
Transfer
Status
Category
Date and Time
Target Devices
Details/Comments
New Years promo
Active
Vendor promotion
12/05/05 11:35
Zend North East
Christmas promo
Inventory
Vendor promotion
04/05/05 07:22
Boston area promotions - general
Active
Product line promotion
06/05/05 16:45
ZenAd - All
Boston area Valentine promo
Inventory
Product line promotion
06/05/06 13:18
March Break Madness (promo)
Active
Vendor promotion
08/05/05 12:56
ZenPhoto Mid West
Standard pricing
Active
Pricing plan
11/05/05 11:35
Zenselfserice All
Weekend discount pricing
Inactive
Pricing plan
12/05/05 07:22
ZenPhoto South
Electronics discount pricing
Active
Pricing plan
09/05/05 16:45
Zenselfserice All
1805
1804
Internet

FIG. 18

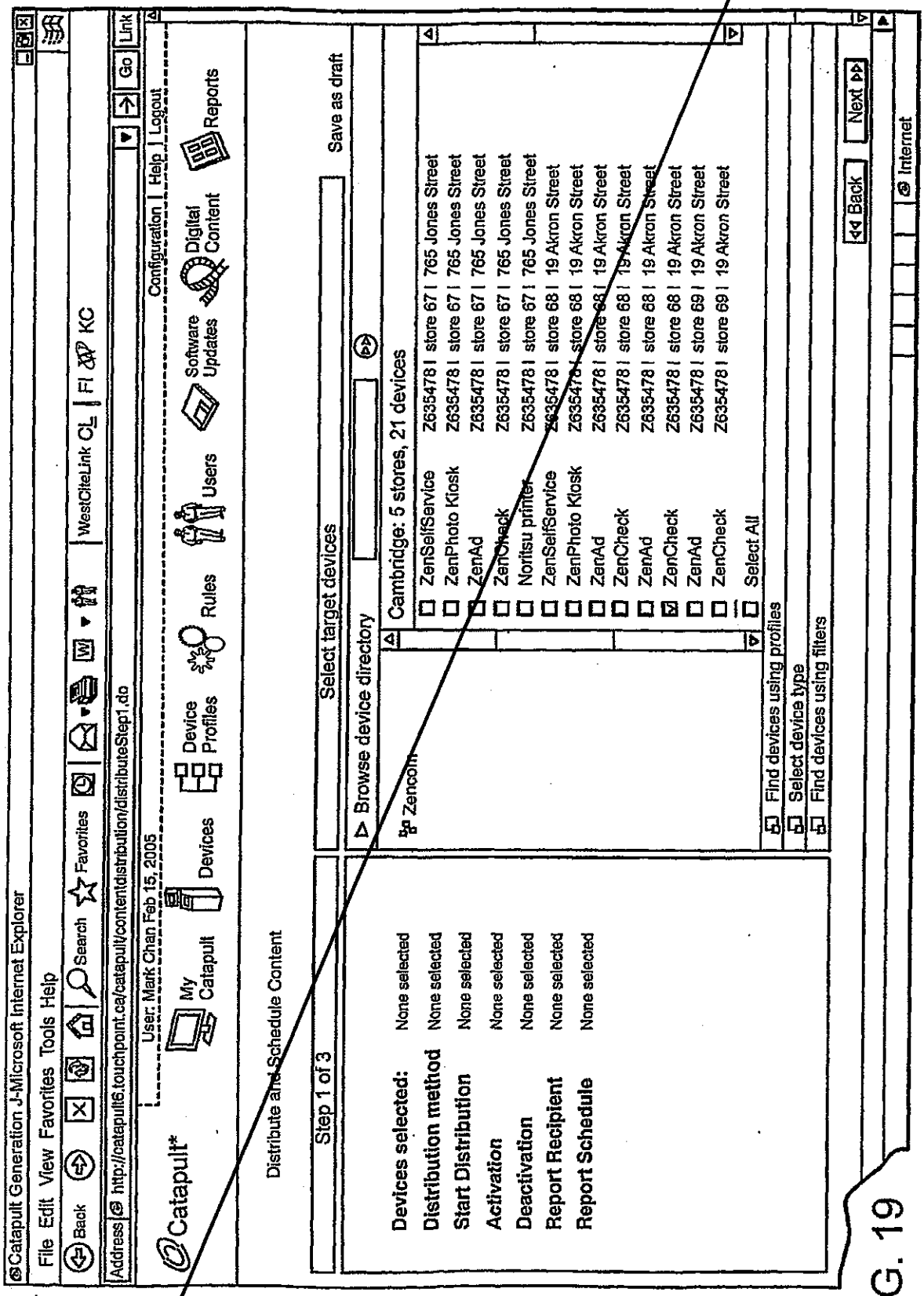

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites WestCiteLink CL FI KC
Address http://catapult6.touchpoint.ca/catapult/content/distribution/distributeStep1.do
Go Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Distribute and Schedule Content
Step 1 of 3
Select target devices
Save as draft
Devices selected: None selected
Distribution method None selected
Start Distribution None selected
Activation None selected
Deactivation None selected
Report Recipient None selected
Report Schedule None selected
Browse device directory
Zencom
Cambridge: 5 stores, 21 devices
ZenSelfService Z635478 | store 67 | 765 Jones Street
ZenPhoto Kiosk Z635478 | store 67 | 765 Jones Street
ZenAd Z635478 | store 67 | 765 Jones Street
ZenCheck Z635478 | store 67 | 765 Jones Street
Noritsu printer Z635478 | store 67 | 765 Jones Street
ZenSelfService Z635478 | store 68 | 19 Akron Street
ZenPhoto Kiosk Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 68 | 19 Akron Street
ZenCheck Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 68 | 19 Akron Street
ZenCheck Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 69 | 19 Akron Street
ZenCheck Z635478 | store 69 | 19 Akron Street
Select All
Find devices using profiles
Select device type
Find devices using filters
Back
Next
Internet

FIG. 19

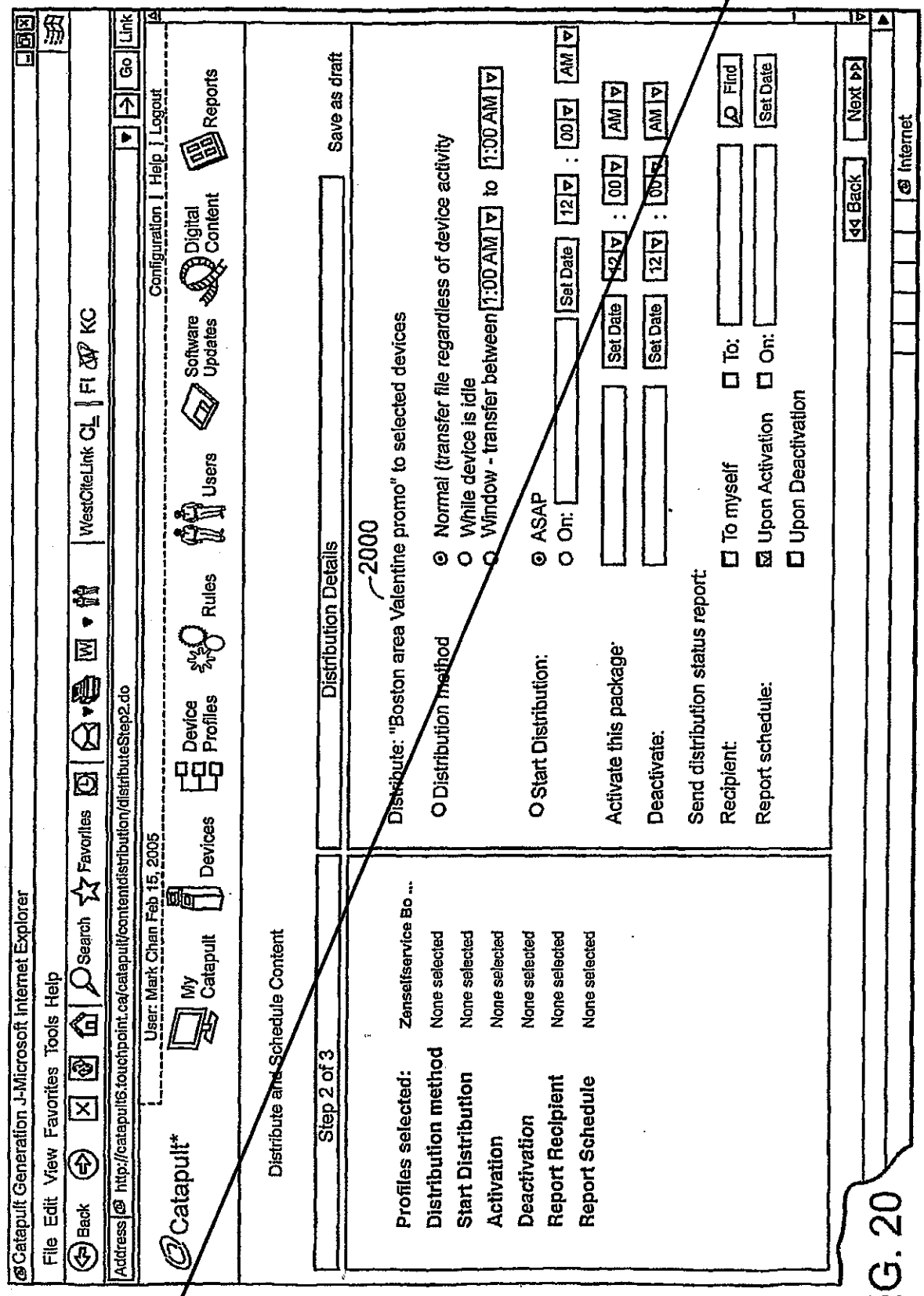

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL
FI
KC
Address
http://catapult6.touchpoint.ca/catapult/contentdistribution/distributeStep2.do
Go
Link
Configuration | Help | Logout
User: Mark Chan Feb 15, 2005
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Distribute and Schedule Content
Step 2 of 3
Distribution Details
Save as draft
2000
Distribute: "Boston area Valentine promo" to selected devices
Profiles selected:
Zenselfservice Bo ...
Distribution method
None selected
Distribution method
Normal (transfer file regardless of device activity
While device is idle
Window - transfer between 1:00 AM to 1:00 AM
Start Distribution
None selected
Start Distribution:
ASAP
On:
Set Date
12 : 00 AM
Activation
None selected
Activate this package:
Set Date
12 : 00 AM
Deactivation
None selected
Deactivate:
Set Date
12 : 00 AM
Report Recipient
None selected
Send distribution status report:
Recipient:
To myself
To:
Find
Report Schedule
None selected
Report schedule:
Upon Activation
On:
Set Date
Upon Deactivation
Back
Next
Internet

FIG. 20

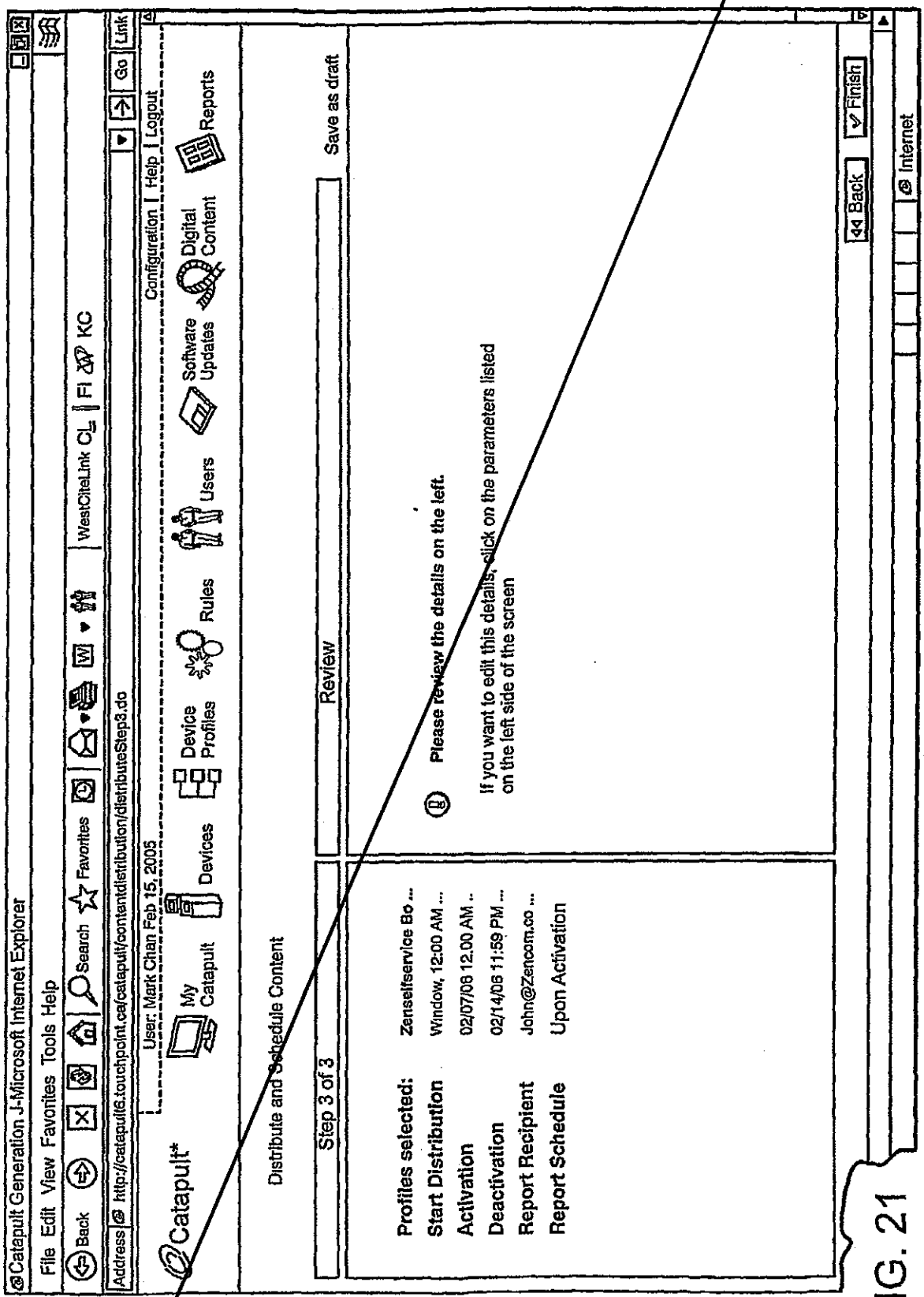

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCliteLink
FI
KC
Address
http://catapult6.touchpoint.ca/catapult/contentdistribution/distributeStep3.do
Go
Link
Catapult*
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Distribute and Schedule Content
Step 3 of 3
Review
Save as draft
Profiles selected:
Zenselfservice Bo ...
Start Distribution
Window, 12:00 AM ...
Activation
02/07/06 12.00 AM ..
Deactivation
02/14/06 11:59 PM ...
Report Recipient
John@Zencom.co ...
Report Schedule
Upon Activation
Please review the details on the left.
If you want to edit this details, click on the parameters listed on the left side of the screen
Back
Finish
Internet

FIG. 21

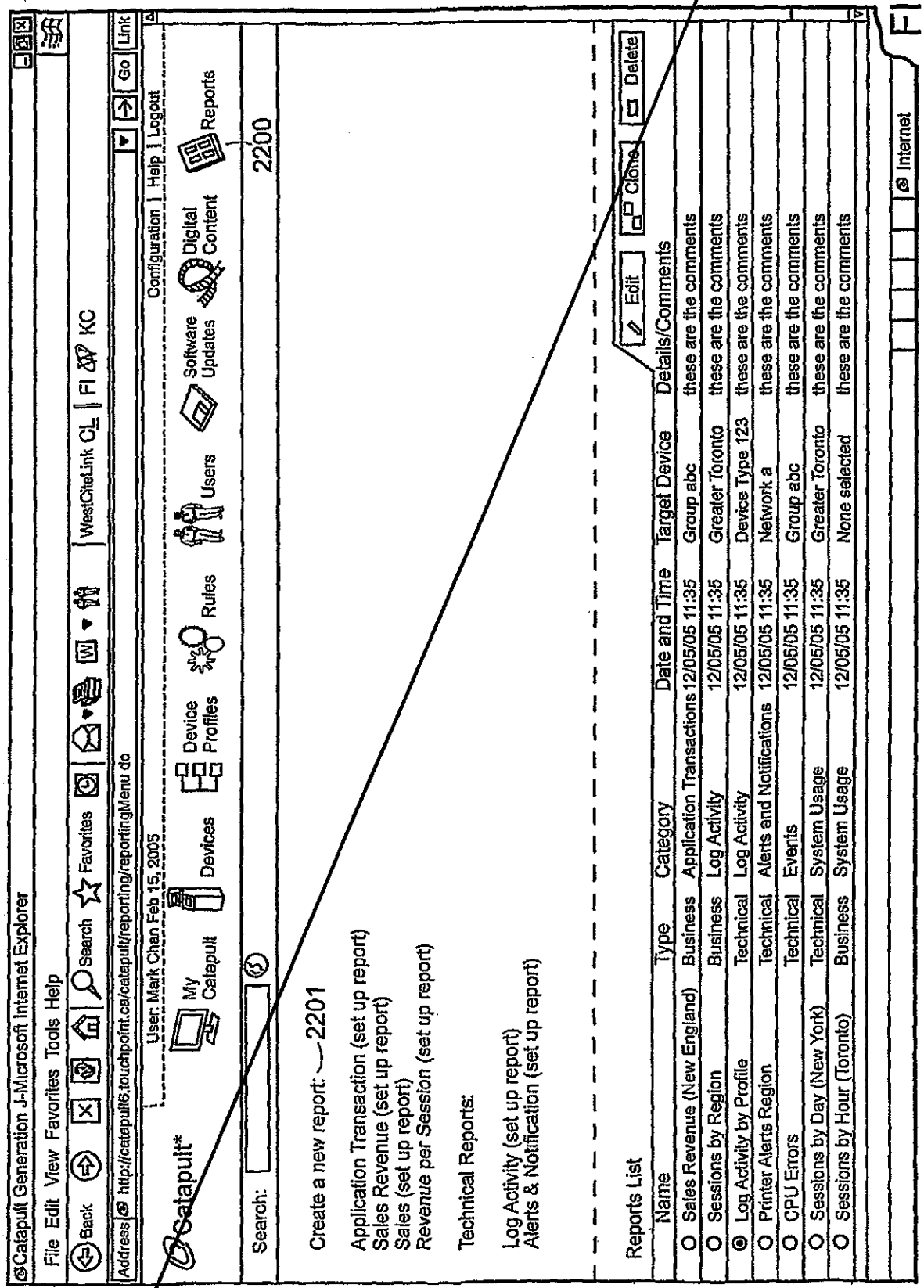

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites WestCiteLink CL FI KC
Address http://catapult6.touchpoint.ca/catapult/reporting/reportingMenu.do
Go Link
Catapult*
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
2200
Search:
Create a new report: 2201
Application Transaction (set up report)
Sales Revenue (set up report)
Sales (set up report)
Revenue per Session (set up report)
Technical Reports:
Log Activity (set up report)
Alerts & Notification (set up report)
Reports List
Edit
Clone
Delete
Name
Type
Category
Date and Time
Target Device
Details/Comments
Sales Revenue (New England) Business Application Transactions 12/05/05 11:35 Group abc these are the comments
Sessions by Region Business Log Activity 12/05/05 11:35 Greater Toronto these are the comments
Log Activity by Profile Technical Log Activity 12/05/05 11:35 Device Type 123 these are the comments
Printer Alerts Region Technical Alerts and Notifications 12/05/05 11:35 Network a these are the comments
CPU Errors Technical Events 12/05/05 11:35 Group abc these are the comments
Sessions by Day (New York) Technical System Usage 12/05/05 11:35 Greater Toronto these are the comments
Sessions by Hour (Toronto) Business System Usage 12/05/05 11:35 None selected these are the comments
Internet

FIG. 22

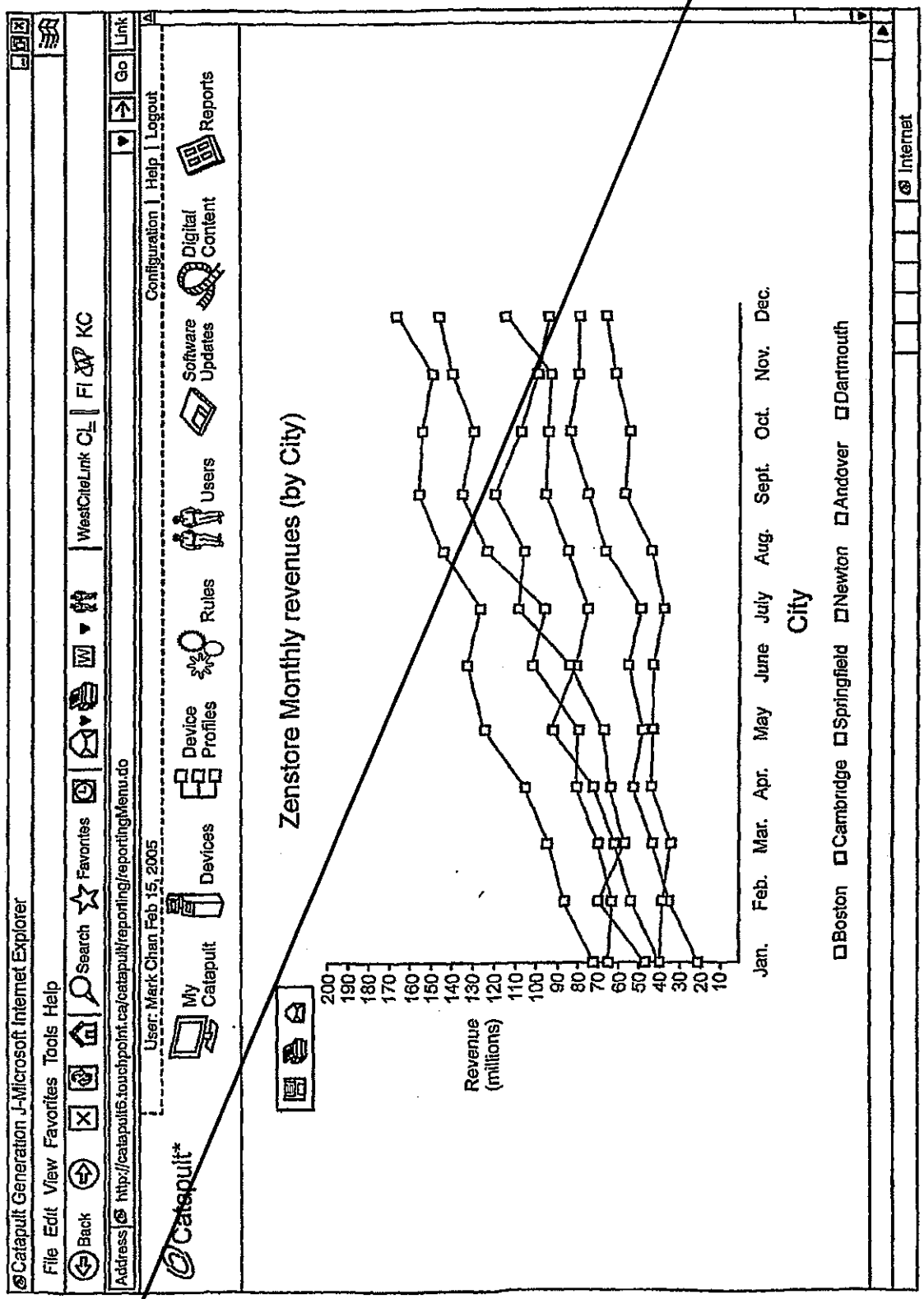
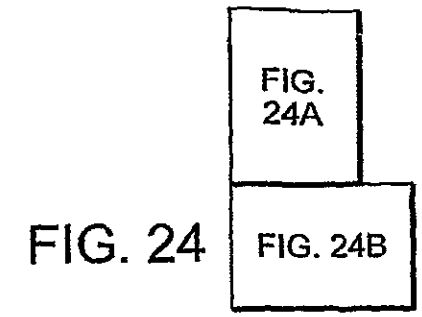

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://catapult6.touchpoint.ca/catapult/reporting/reportingMenu.do
Catapult*
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Zenstore Monthly revenues (by City)
Revenue (millions)
200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.
City
Boston Cambridge Springfield Newton Andover Dartmouth
Internet

FIG. 23

FIG. 24



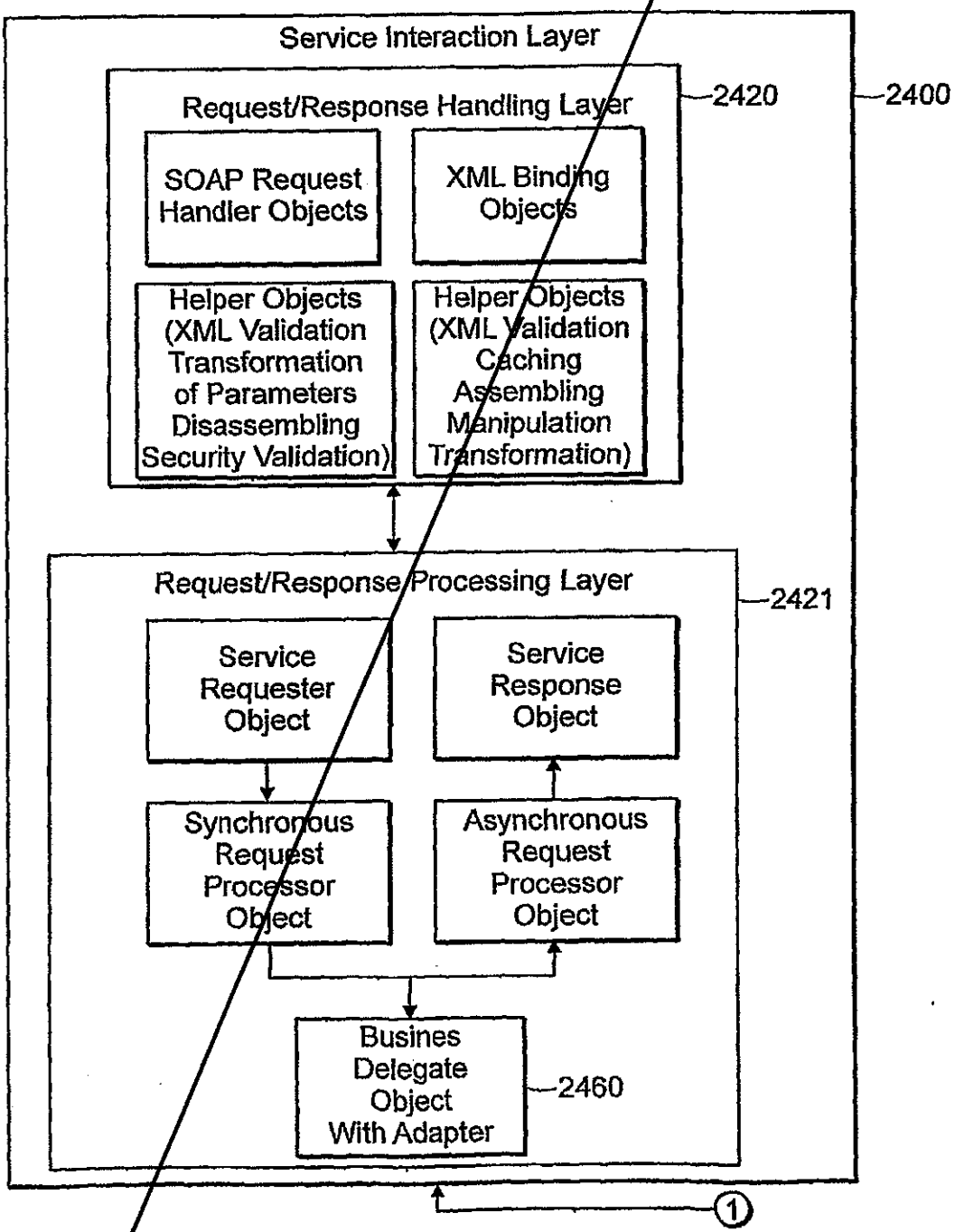


FIG. 24A

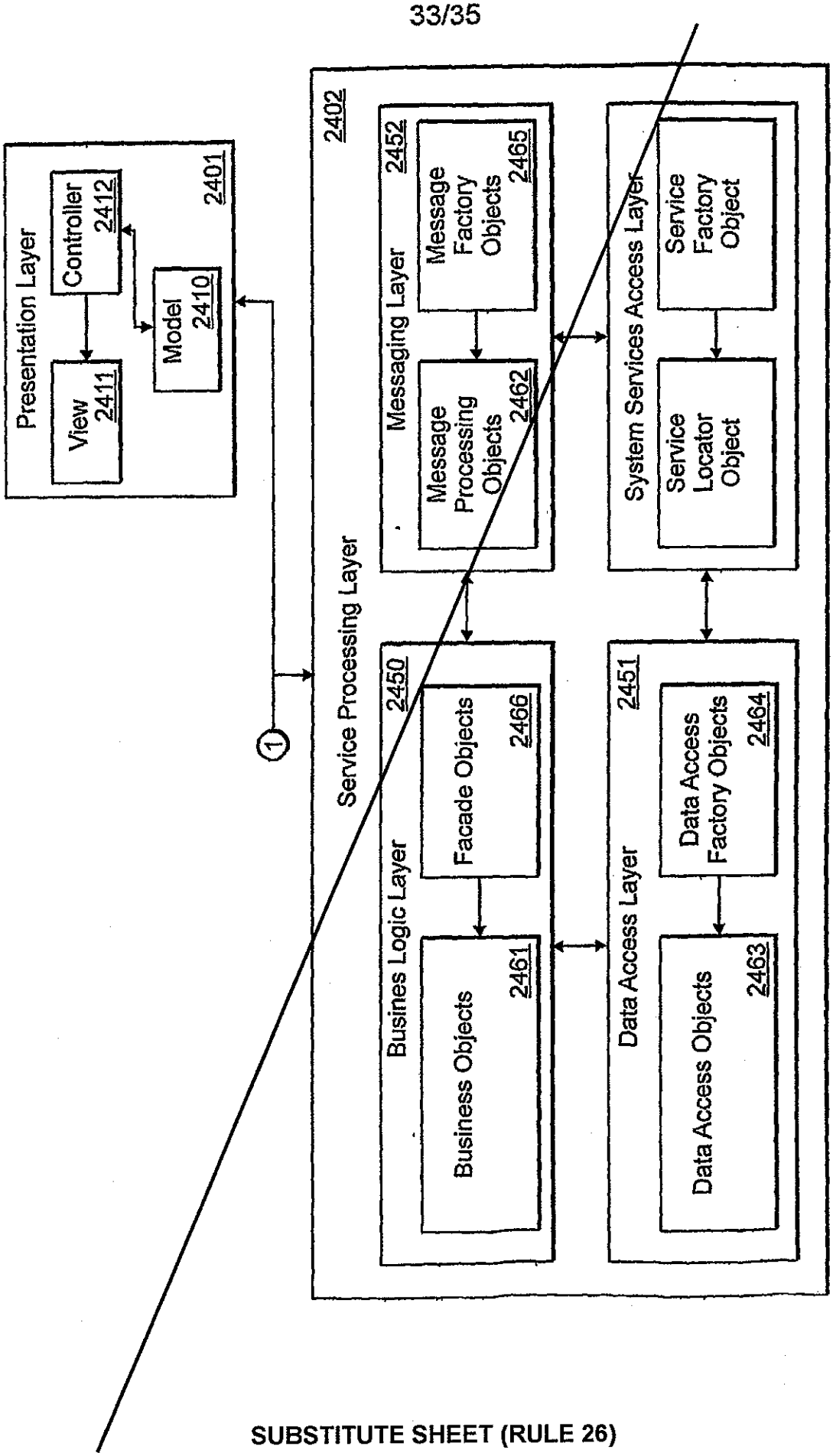

Presentation Layer
2401
Controller
2412
View
2411
Model
2410
1
2402
Service Processing Layer
Messaging Layer
2452
Message Factory Objects
2465
Message Processing Objects
2462
System Services Access Layer
Service Factory Object
Service Locator Object
Busines Logic Layer
2450
Facade Objects
2466
Business Objects
2461
Data Access Layer
2451
Data Access Factory Objects
2464
Data Access Objects
2463

FIG. 24B

FIG. 25

FIG. 25A	FIG. 25B

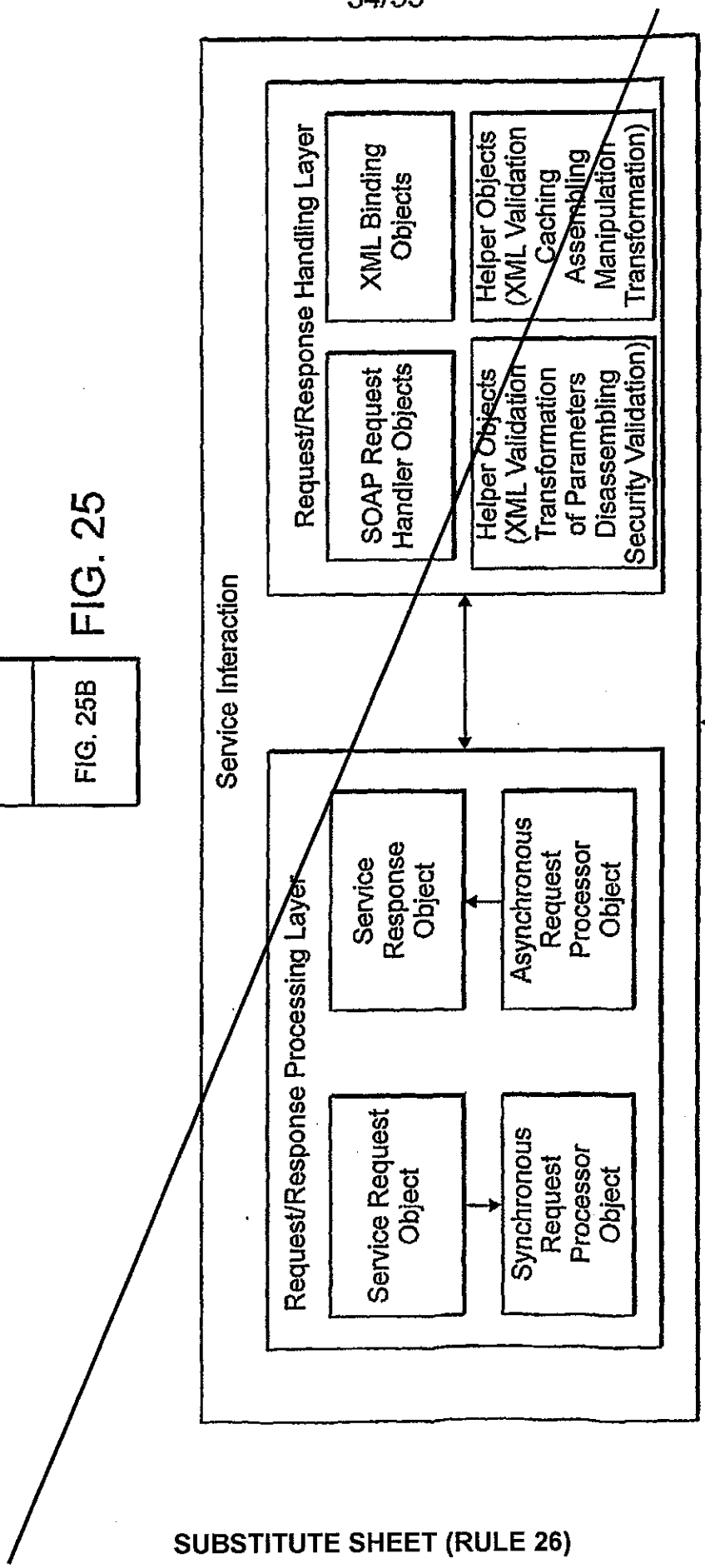


FIG. 25A

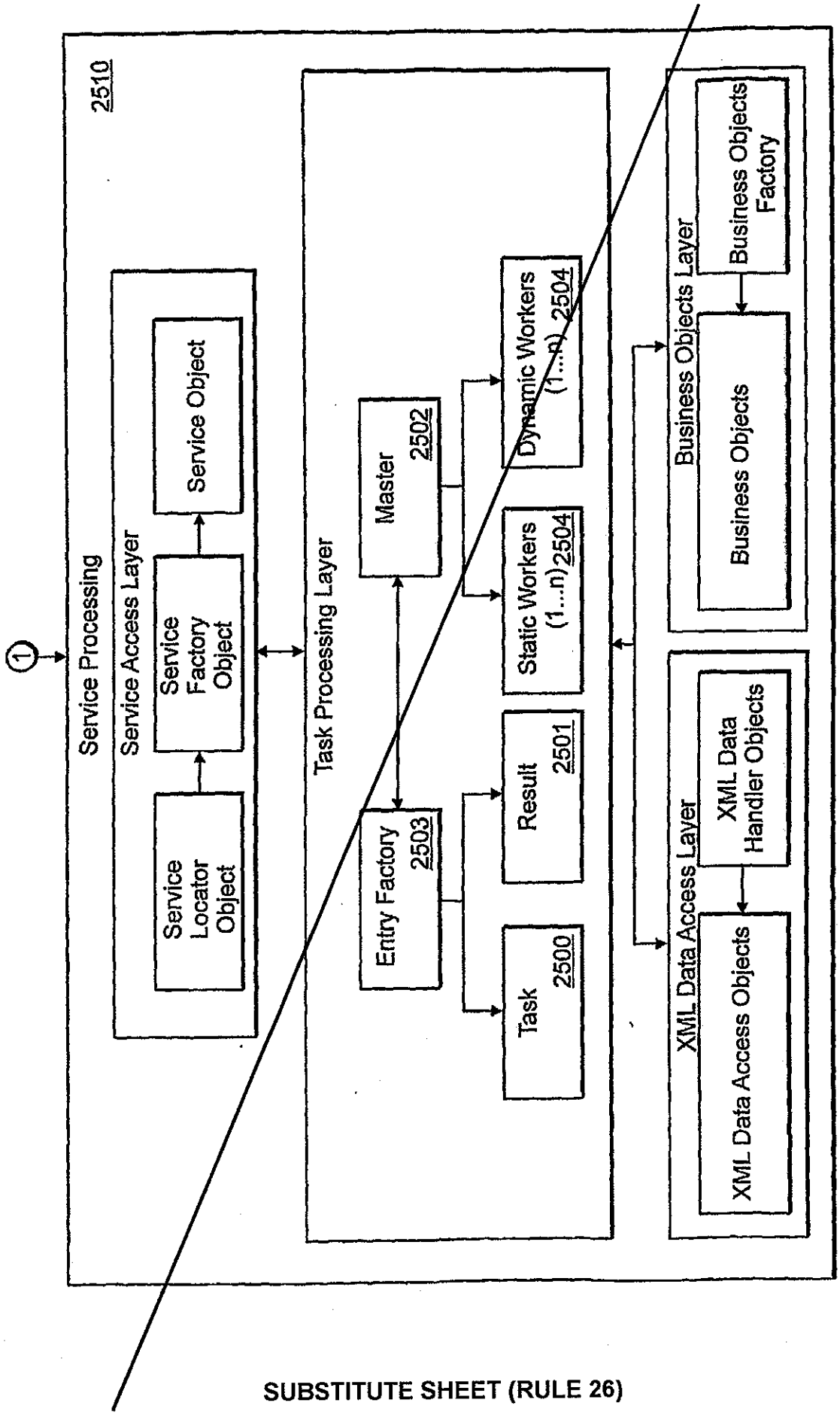

1
Service Processing
2510
Service Access Layer
Service Locator Object
Service Factory Object
Service Object
Task Processing Layer
Entry Factory 2503
Master 2502
Task 2500
Result 2501
Static Workers (1...n) 2504
Dynamic Workers (1...n) 2504
Business Objects Layer
Business Objects
Business Objects Factory
XML Data Access Layer
XML Data Access Objects
XML Data Handler Objects

FIG. 25B

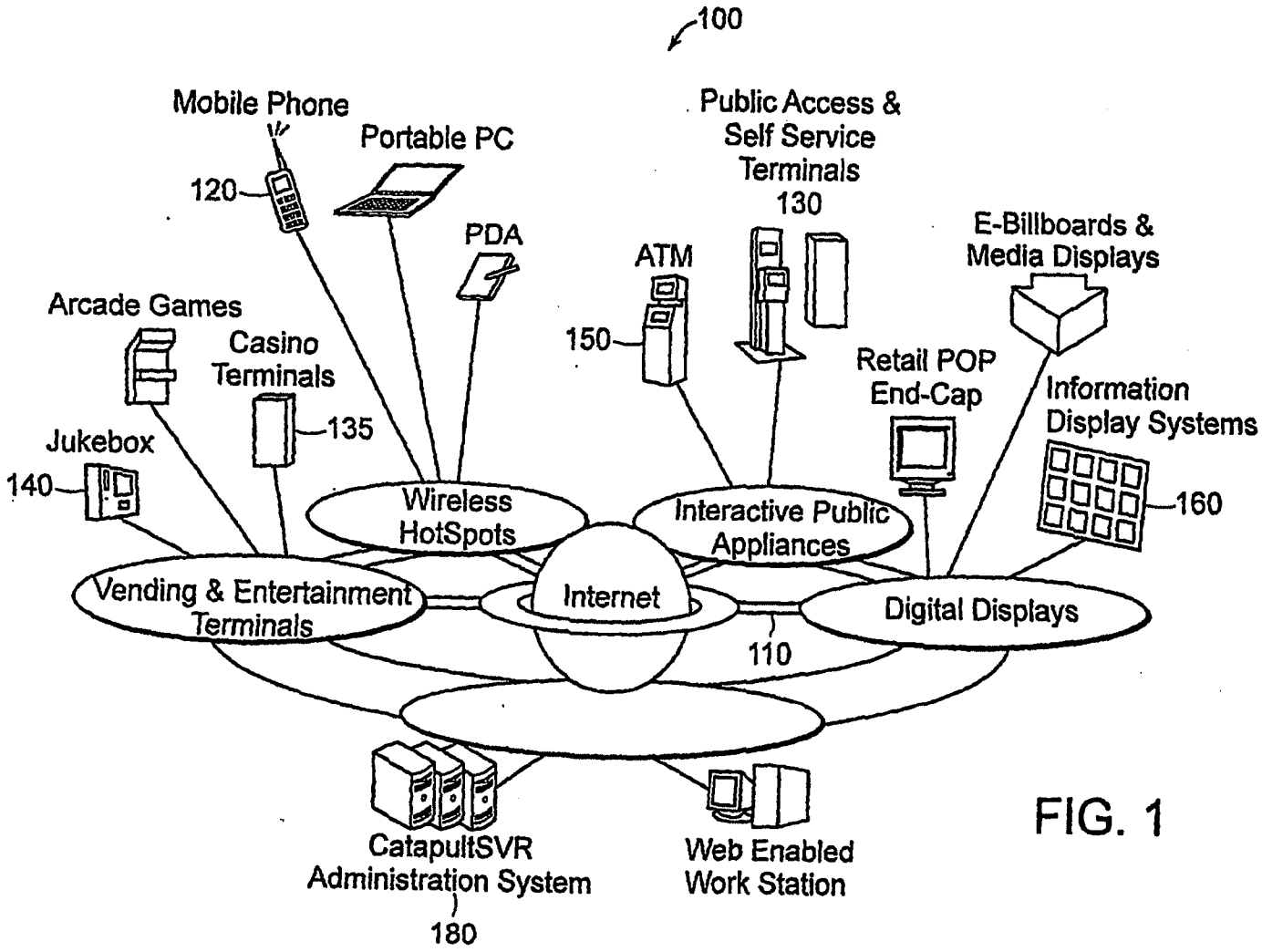

100
Mobile Phone
Portable PC
120
PDA
Public Access &
Self Service
Terminals
130
E-Billboards &
Media Displays
ATM
150
Arcade Games
Casino
Terminals
135
Retail POP
End-Cap
Information
Display Systems
Jukebox
140
Wireless
HotSpots
Interactive Public
Appliances
160
Vending & Entertainment
Terminals
Internet
Digital Displays
110
CatapultSVR
Administration System
180
Web Enabled
Work Station

FIG. 1

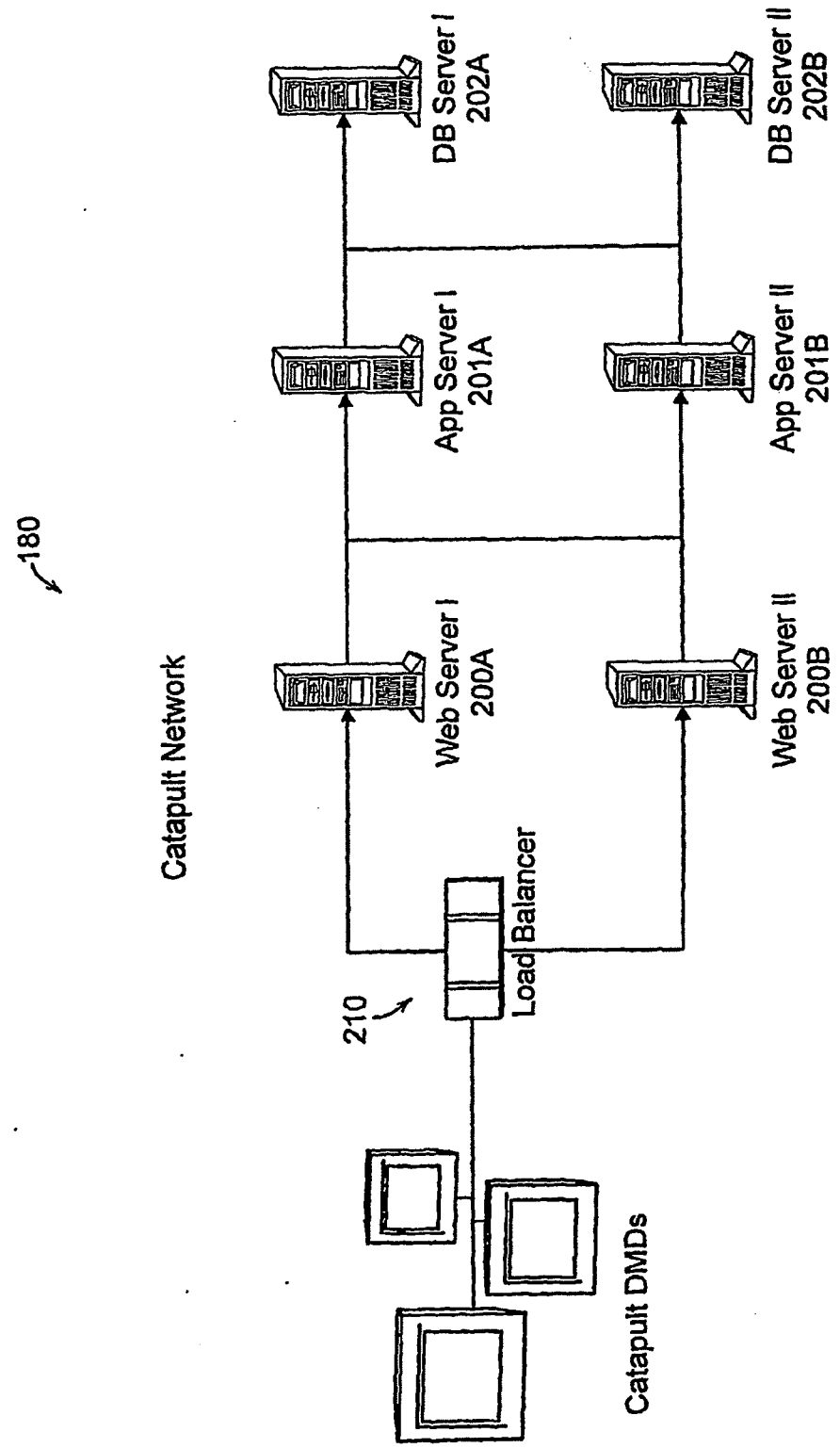

180
Catapult Network
Web Server I
200A
Web Server II
200B
App Server I
201A
App Server II
201B
DB Server I
202A
DB Server II
202B
Load Balancer
210
Catapult DMDs

FIG. 1A

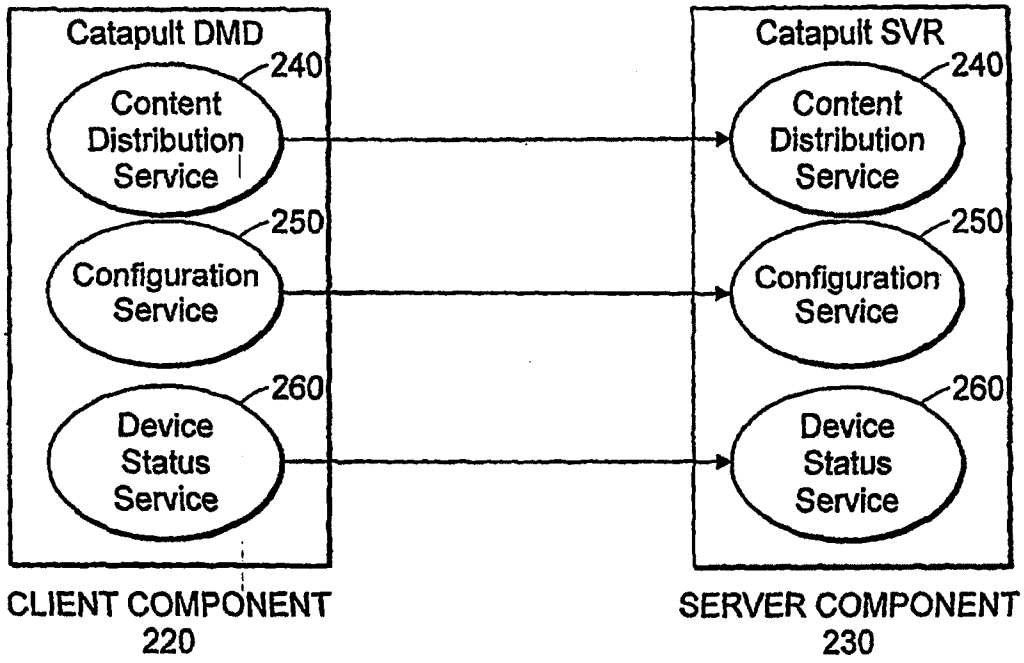

Catapult DMD
240
Content Distribution Service
250
Configuration Service
260
Device Status Service
CLIENT COMPONENT 220
Catapult SVR
240
Content Distribution Service
250
Configuration Service
260
Device Status Service
SERVER COMPONENT 230

FIG. 2

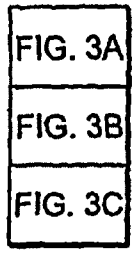

FIG. 3A
FIG. 3B
FIG. 3C

FIG. 3

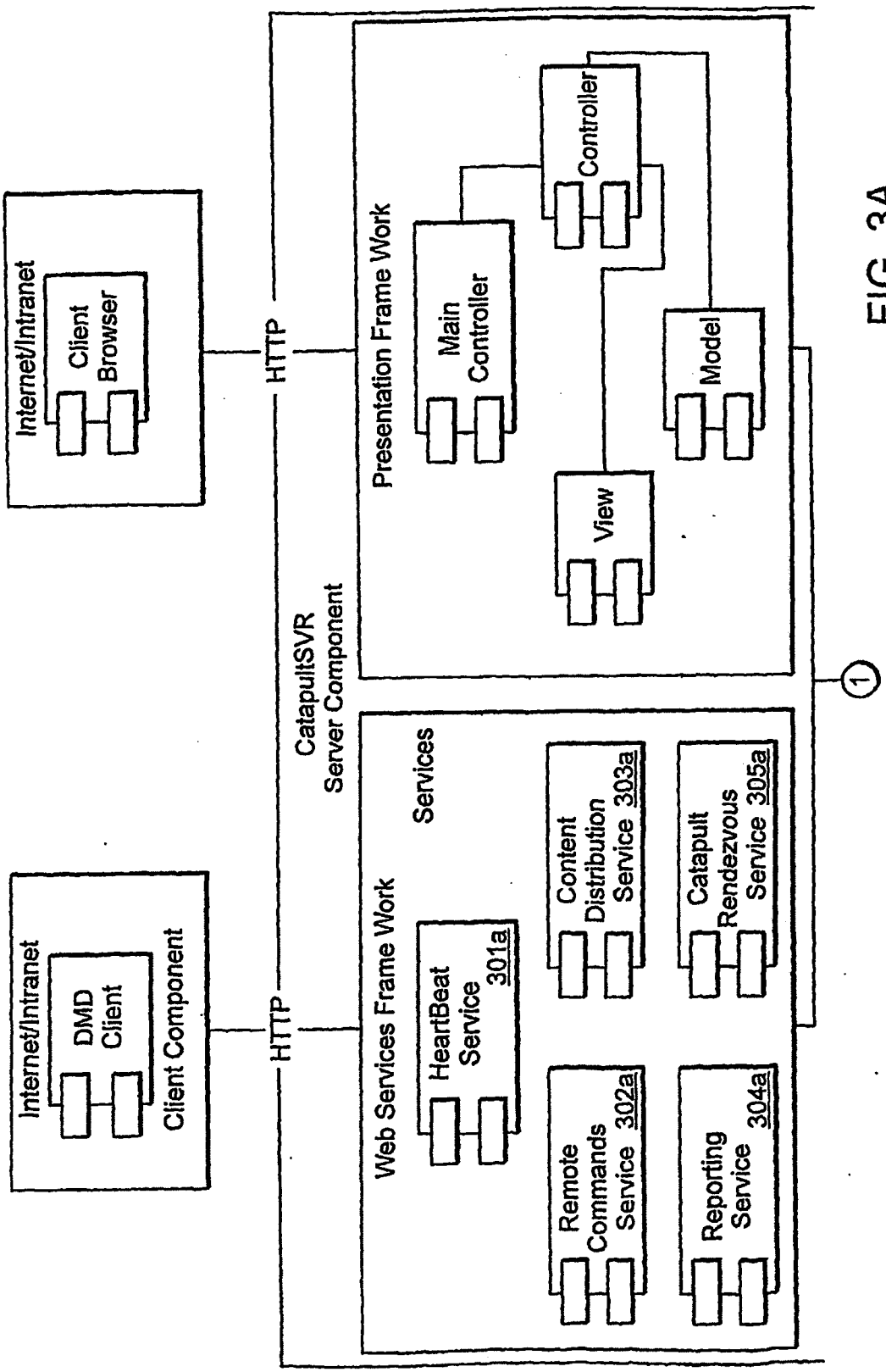

Internet/Intranet
Client Browser
HTTP
Presentation Frame Work
Main Controller
Controller
View
Model
CatapultSVR Server Component
Internet/Intranet
DMD Client
Client Component
HTTP
Web Services Frame Work
Services
HeartBeat Service 301a
Content Distribution Service 303a
Catapult Rendezvous Service 305a
Remote Commands Service 302a
Reporting Service 304a
1

FIG. 3A

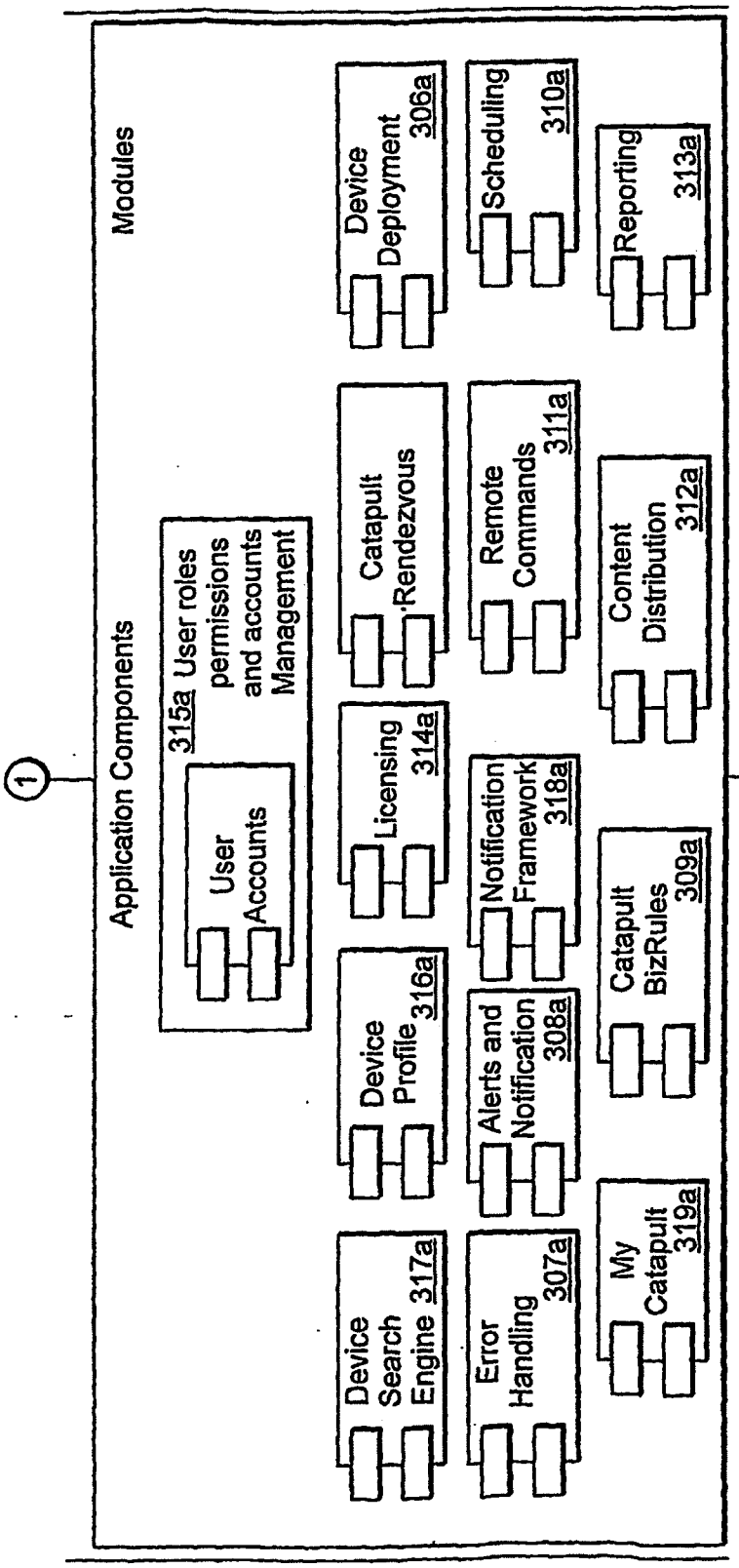

Application Components
Modules
1
2
User Accounts
315a User roles permissions and accounts Management
Device Search Engine 317a
Device Profile 316a
Licensing 314a
Catapult Rendezvous
Device Deployment 306a
Error Handling 307a
Alerts and Notification 308a
Notification Framework 318a
Remote Commands 311a
Scheduling 310a
My Catapult 319a
Catapult BizRules 309a
Content Distribution 312a
Reporting 313a

FIG. 3B

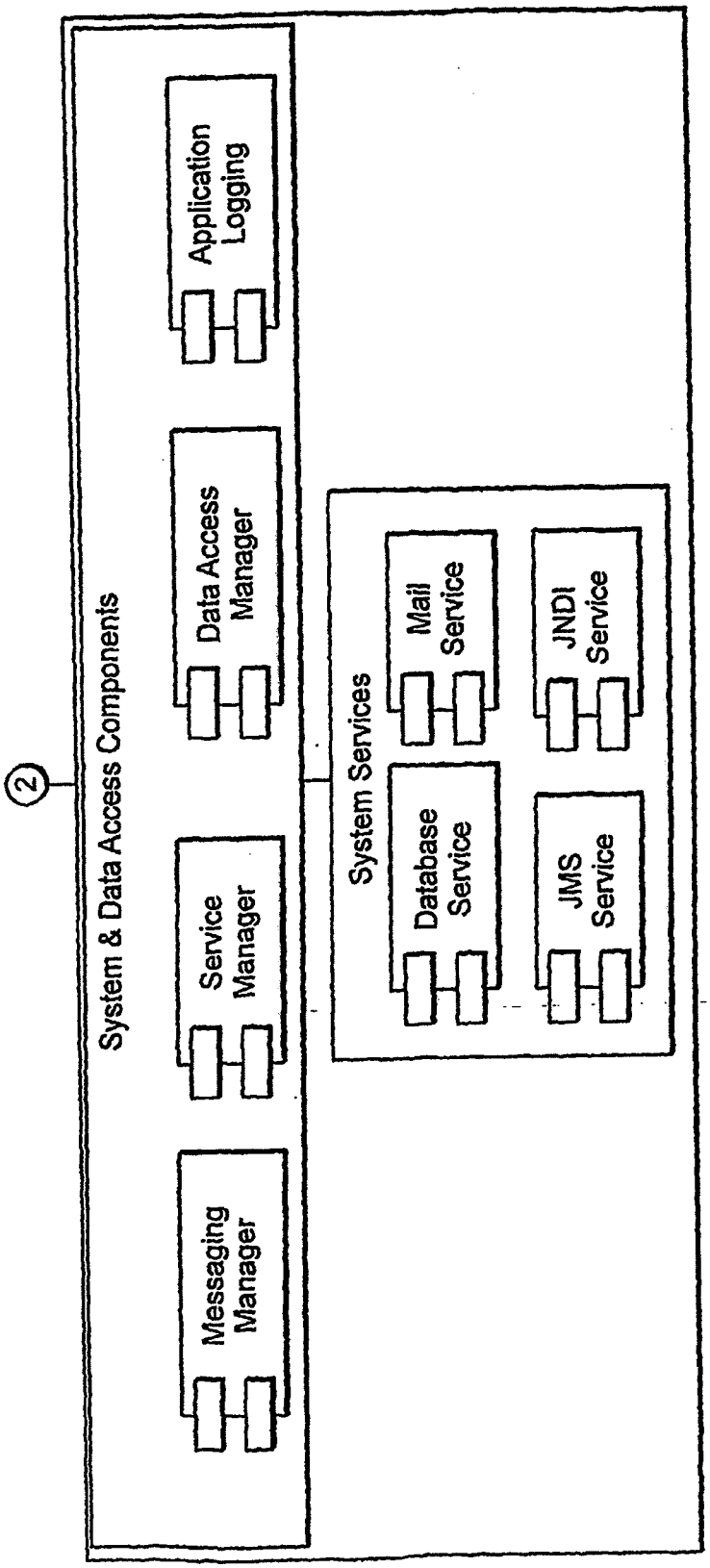

System & Data Access Components
Application Logging
Data Access Manager
Service Manager
Messaging Manager
System Services
Mail Service
JNDI Service
Database Service
JMS Service
2

FIG. 3C

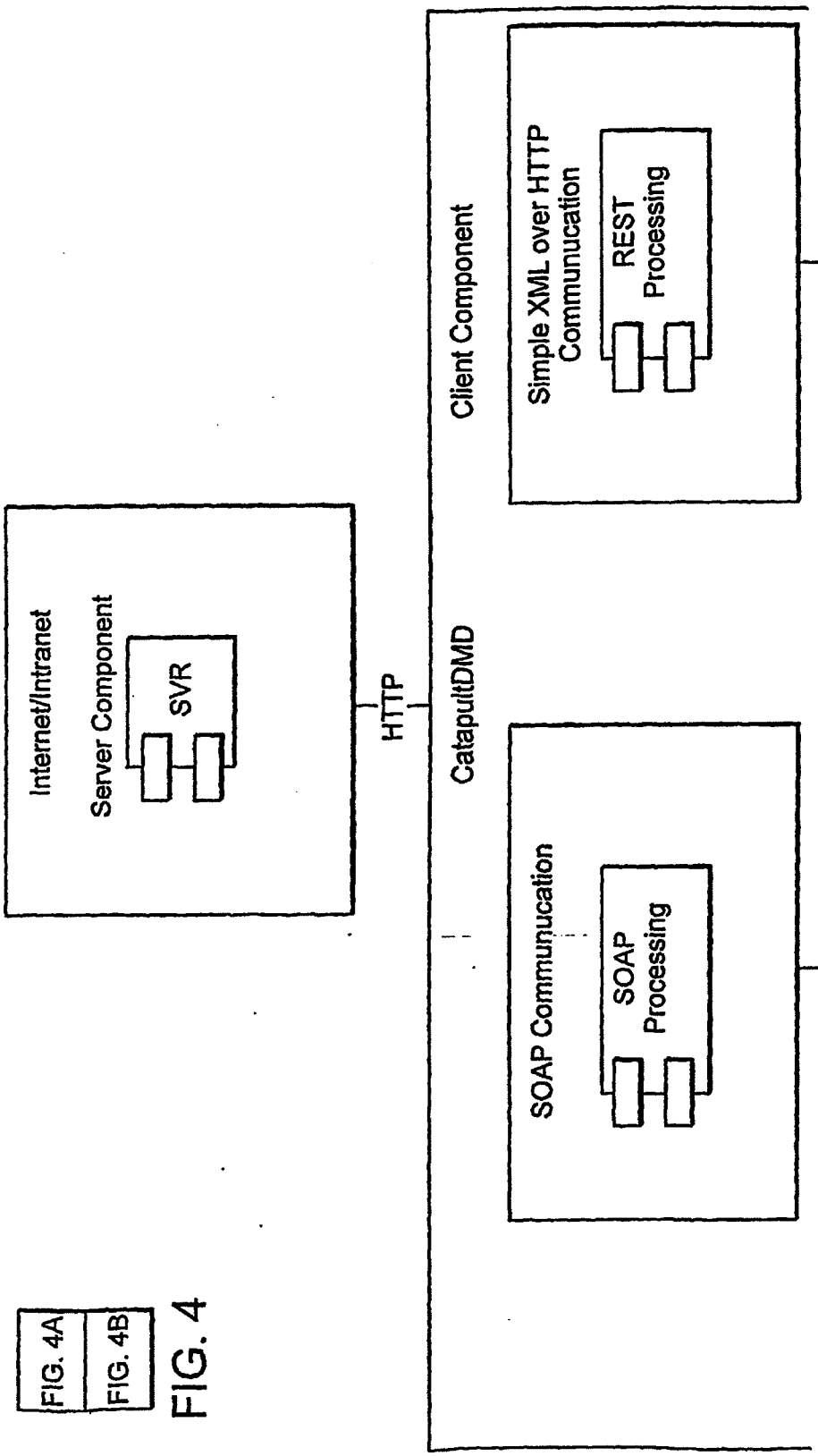
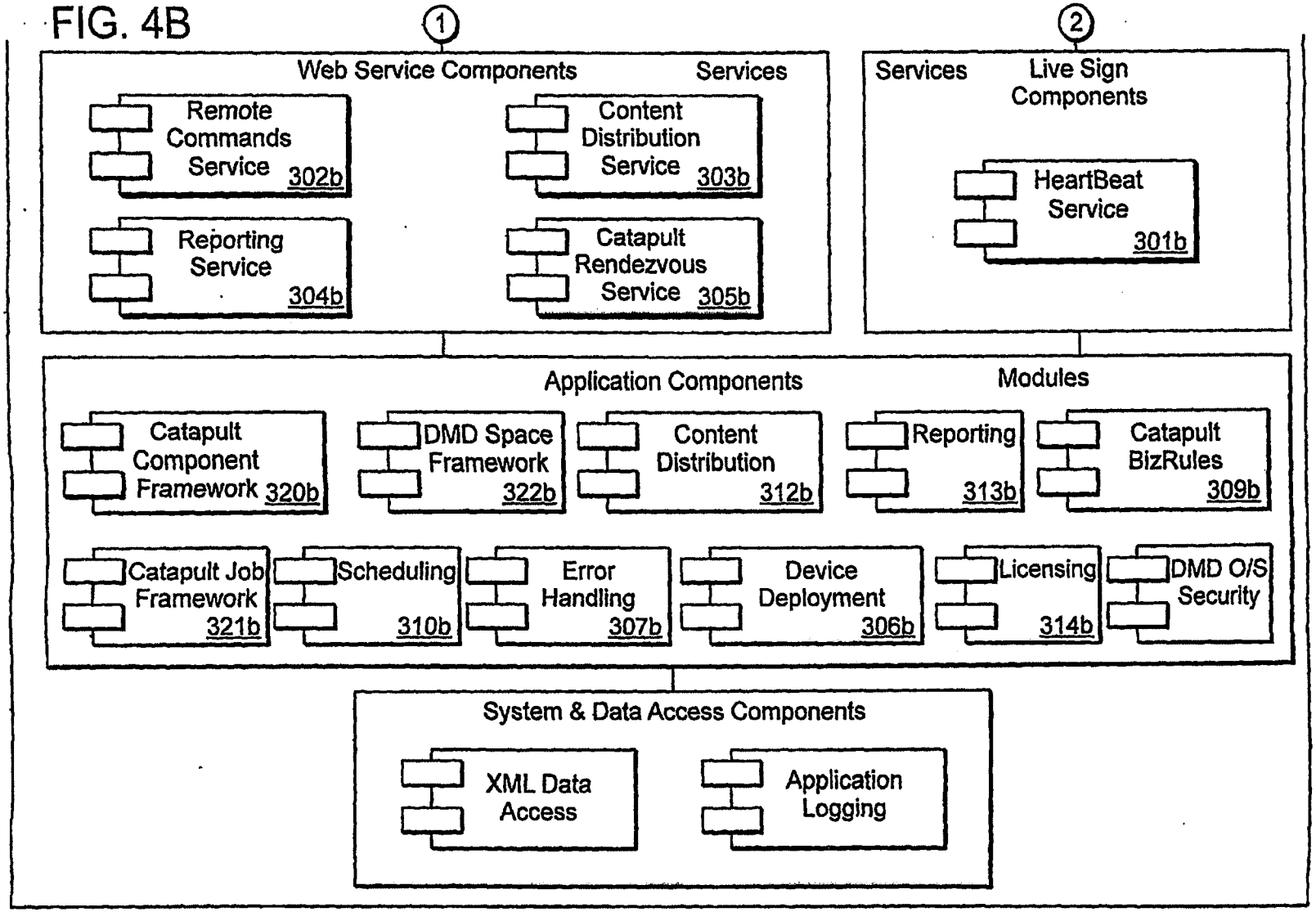


FIG. 4A

FIG. 4

FIG. 4A
FIG. 4B

FIG. 4B


1
2
Web Service Components
Services
Remote Commands Service 302b
Content Distribution Service 303b
Reporting Service 304b
Catapult Rendezvous Service 305b
Services
Live Sign Components
HeartBeat Service 301b
Application Components
Modules
Catapult Component Framework 320b
DMD Space Framework 322b
Content Distribution 312b
Reporting 313b
Catapult BizRules 309b
Catapult Job Framework 321b
Scheduling 310b
Error Handling 307b
Device Deployment 306b
Licensing 314b
DMD O/S Security
System & Data Access Components
XML Data Access
Application Logging

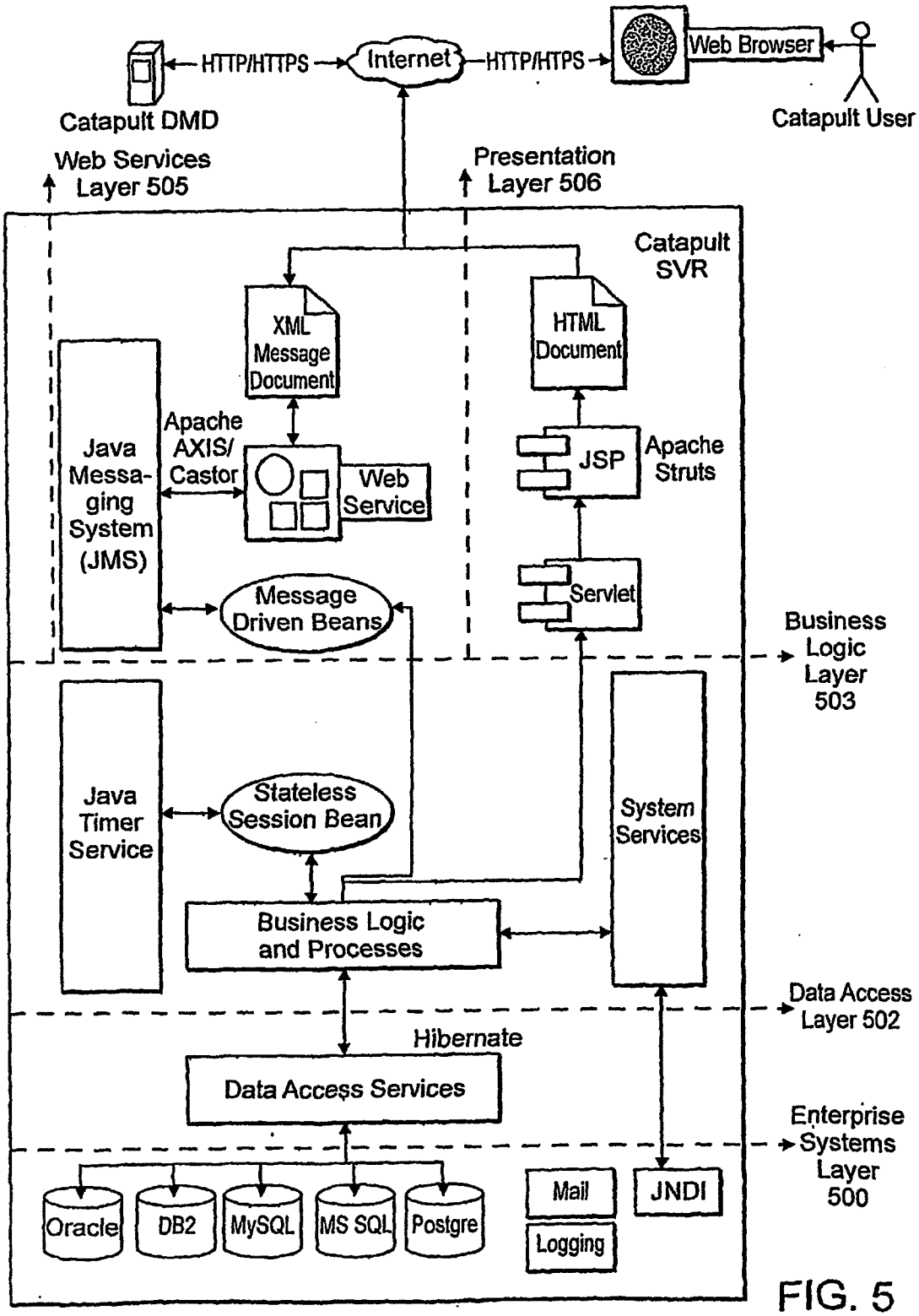

HTTP/HTTPS
Internet
HTTP/HTTPS
Web Browser
Catapult DMD
Catapult User
Web Services Layer 505
Presentation Layer 506
Catapult SVR
XML Message Document
HTML Document
Java Messa-ging System (JMS)
Apache AXIS/ Castor
Web Service
JSP
Apache Struts
Servlet
Message Driven Beans
Business Logic Layer 503
Java Timer Service
Stateless Session Bean
System Services
Business Logic and Processes
Data Access Layer 502
Hibernate
Data Access Services
Enterprise Systems Layer 500
Oracle
DB2
MySQL
MS SQL
Postgre
Mail
Logging
JNDI

FIG. 5

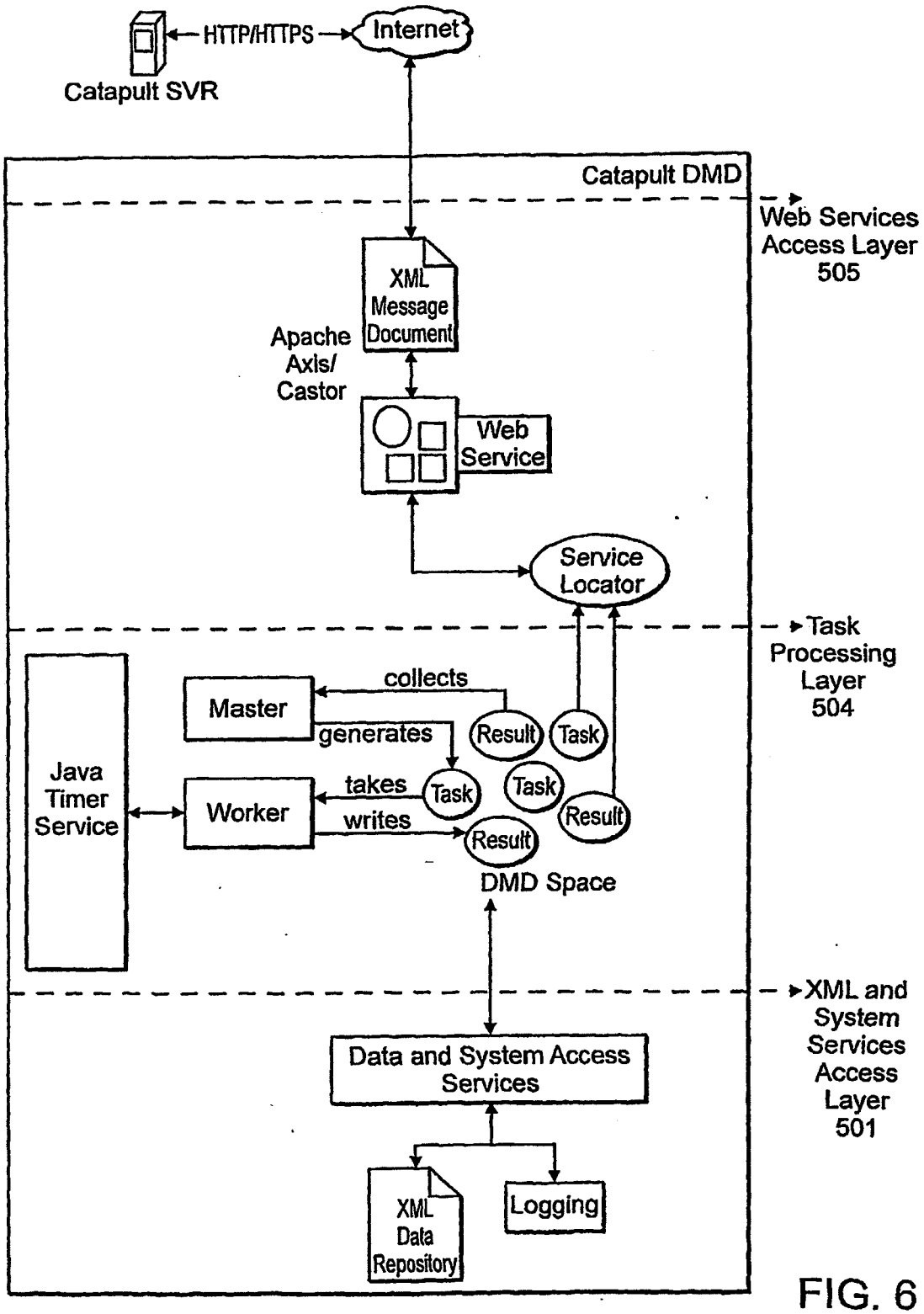

HTTP/HTTPS
Internet
Catapult SVR
Catapult DMD
Web Services Access Layer 505
XML Message Document
Apache Axis/ Castor
Web Service
Service Locator
Task Processing Layer 504
Java Timer Service
Master
collects
generates
Result
Task
Worker
takes
writes
Task
Task
Result
Result
DMD Space
XML and System Services Access Layer 501
Data and System Access Services
XML Data Repository
Logging

FIG. 6

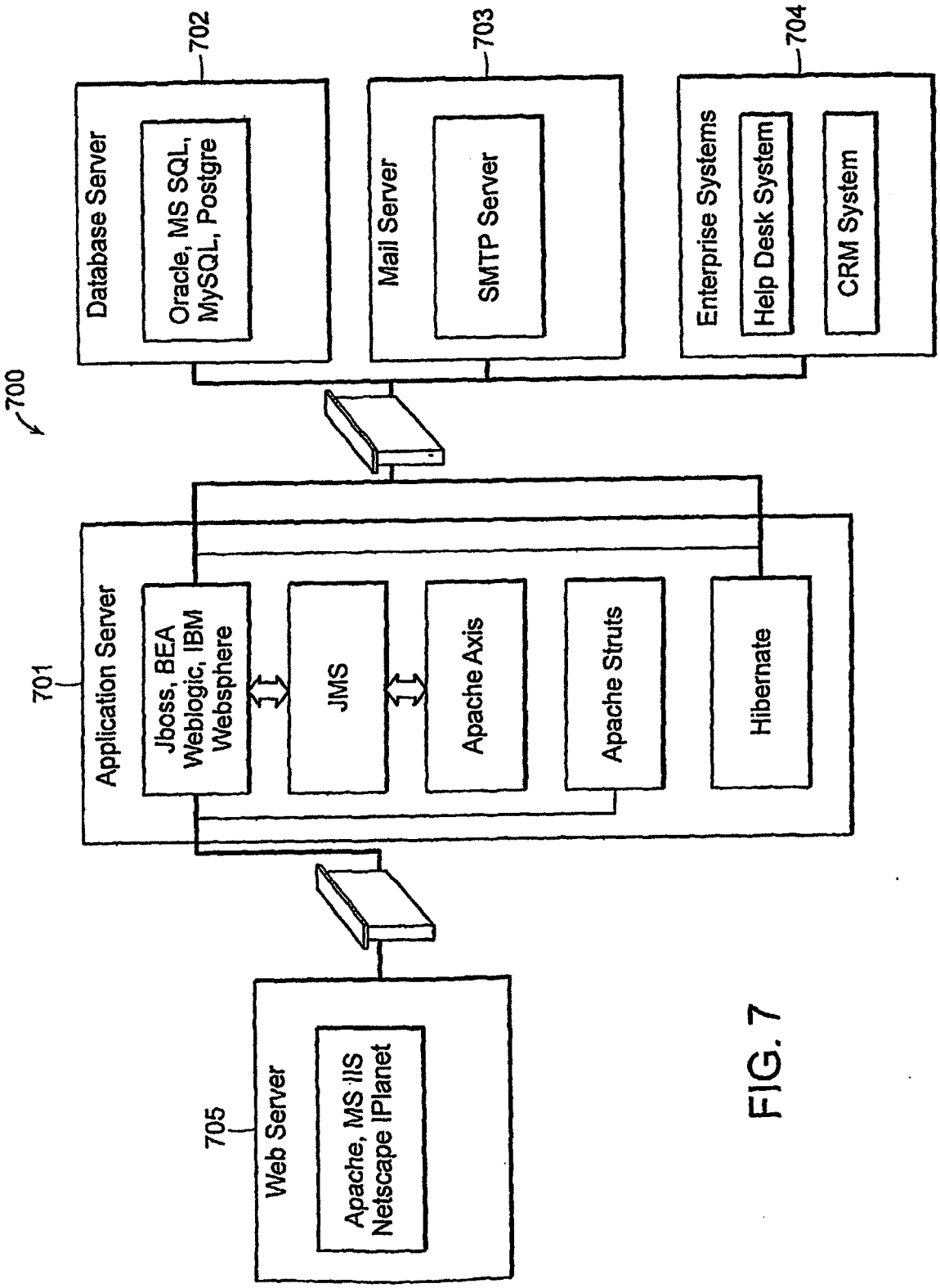

700
Database Server
Oracle, MS SQL, MySQL, Postgre
702
Mail Server
SMTP Server
703
Enterprise Systems
Help Desk System
CRM System
704
701
Application Server
Jboss, BEA Weblogic, IBM Websphere
JMS
Apache Axis
Apache Struts
Hibernate
705
Web Server
Apache, MS IIS Netscape IPlanet

FIG. 7

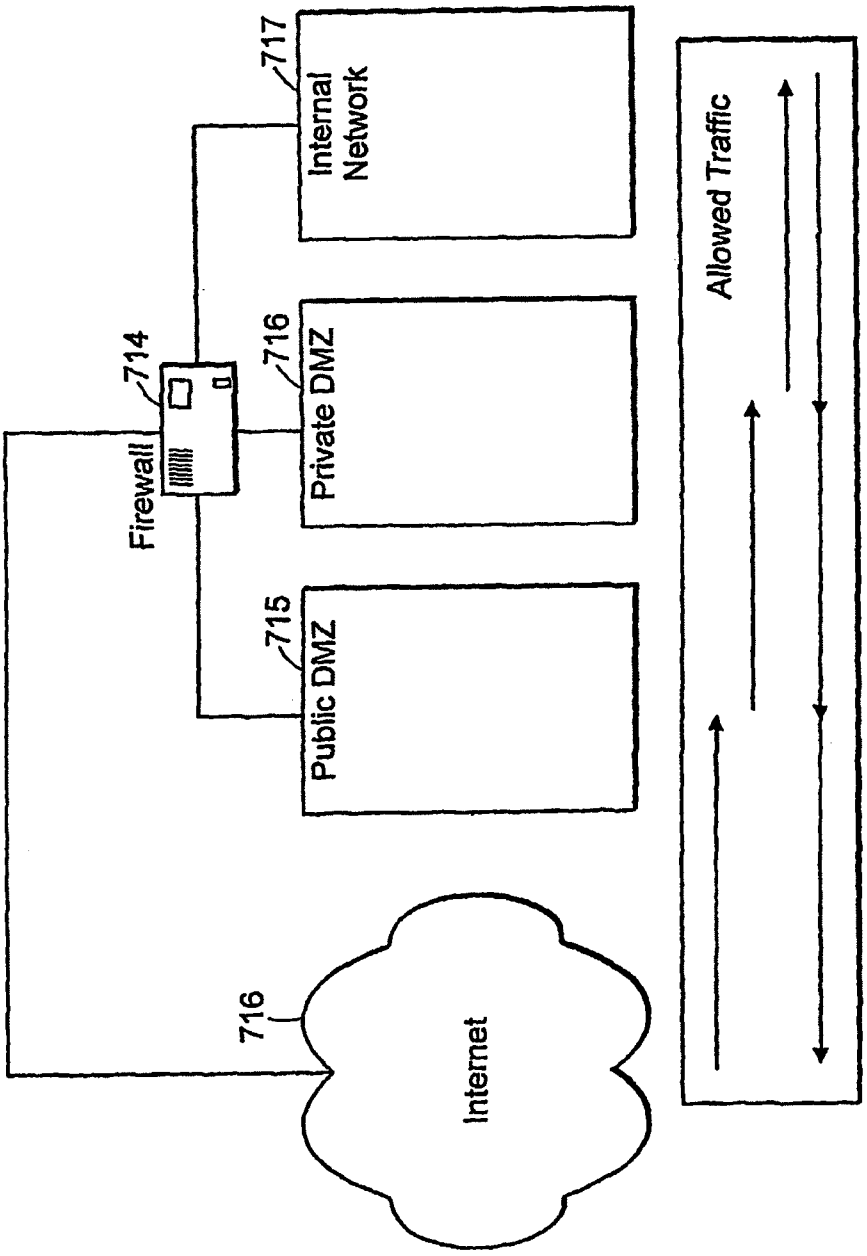

Internal Network
717
Private DMZ
716
Public DMZ
715
Firewall
714
716
Internet
Allowed Traffic

FIG. 7A

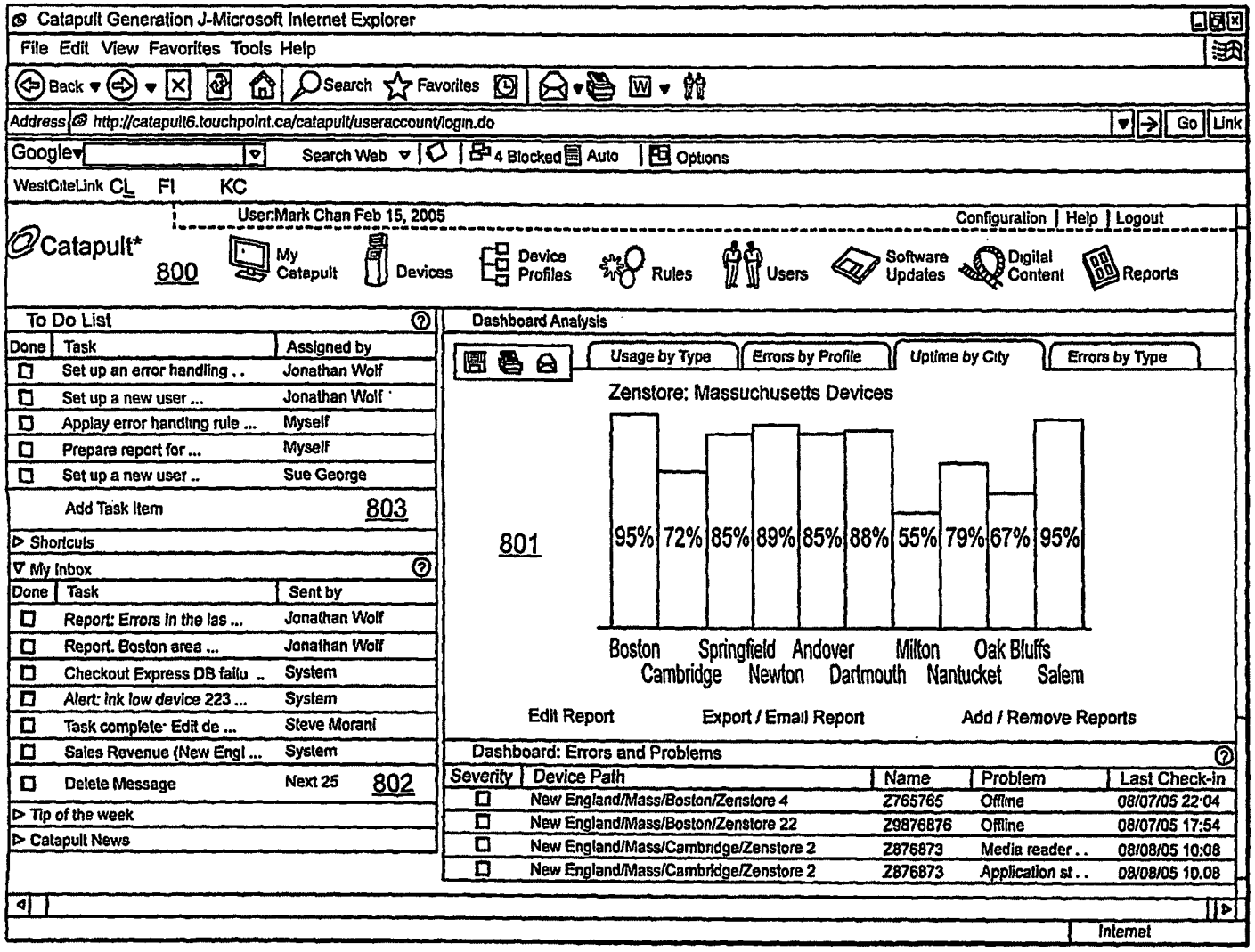

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://catapult6.touchpoint.ca/catapult/useraccount/login.do
Go Link
Google Search Web 4 Blocked Auto Options
WestCiteLink CL FI KC
User:Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
800
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
To Do List
Done Task Assigned by
Set up an error handling . . Jonathan Wolf
Set up a new user ... Jonathan Wolf
Applay error handling rule ... Myself
Prepare report for ... Myself
Set up a new user .. Sue George
Add Task Item
803
Shortcuts
My Inbox
Done Task Sent by
Report: Errors in the las ... Jonathan Wolf
Report. Boston area ... Jonathan Wolf
Checkout Express DB failu .. System
Alert: ink low device 223 ... System
Task complete· Edit de ... Steve Morani
Sales Revenue (New Engl ... System
Delete Message
Next 25
802
Tip of the week
Catapult News
Dashboard Analysis
Usage by Type
Errors by Profile
Uptime by City
Errors by Type
Zenstore: Massuchusetts Devices
801
95% 72% 85% 89% 85% 88% 55% 79% 67% 95%
Boston Springfield Andover Milton Oak Bluffs
Cambridge Newton Dartmouth Nantucket Salem
Edit Report
Export / Email Report
Add / Remove Reports
Dashboard: Errors and Problems
Severity Device Path Name Problem Last Check-in
New England/Mass/Boston/Zenstore 4 Z765765 Offline 08/07/05 22:04
New England/Mass/Boston/Zenstore 22 Z9876876 Offline 08/07/05 17:54
New England/Mass/Cambridge/Zenstore 2 Z876873 Media reader . . 08/08/05 10:08
New England/Mass/Cambridge/Zenstore 2 Z876873 Application st . . 08/08/05 10.08
Internet

FIG. 8

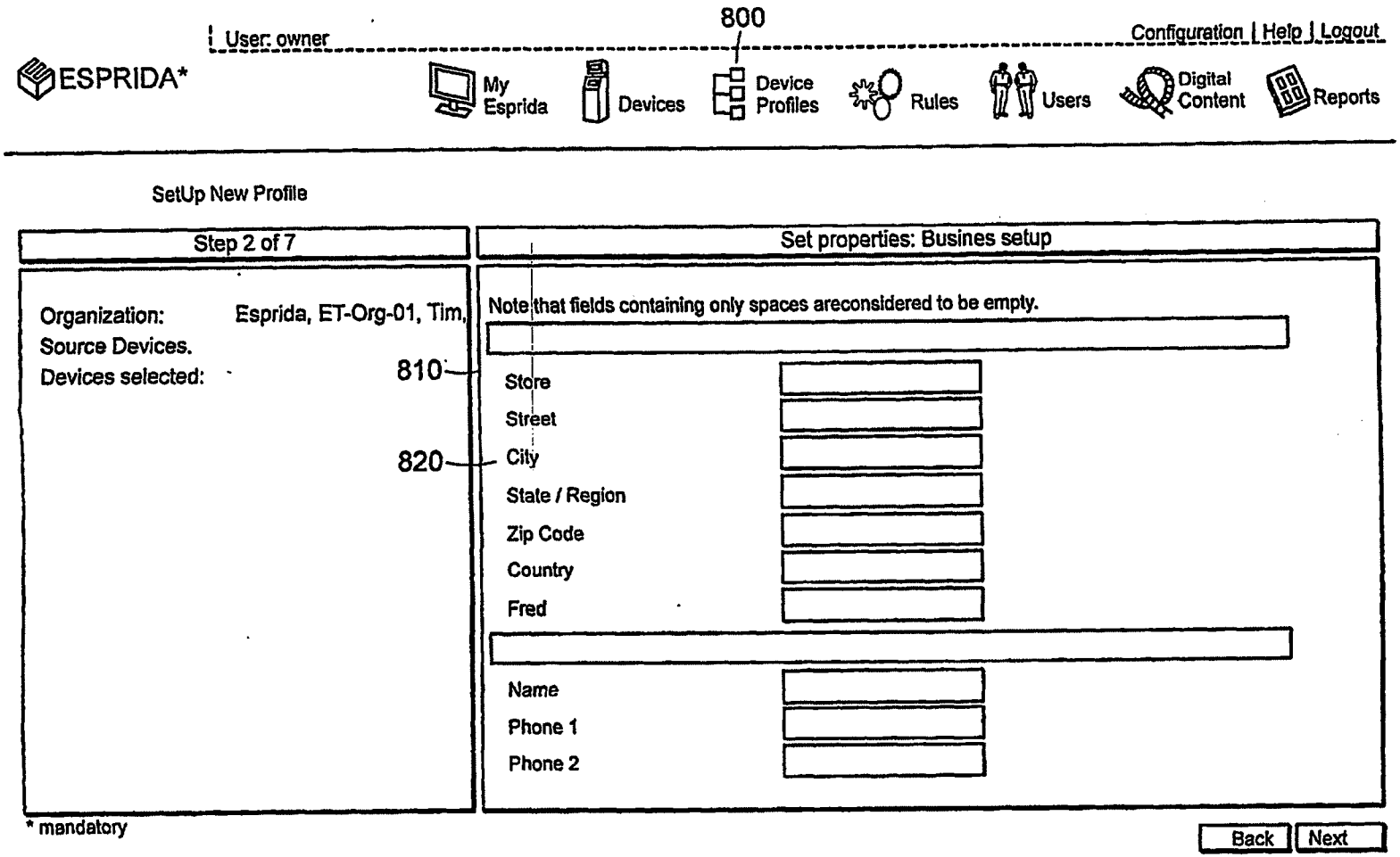

800
User: owner
Configuration | Help | Logout
ESPRIDA*
My Esprida
Devices
Device Profiles
Rules
Users
Digital Content
Reports
SetUp New Profile
Step 2 of 7
Set properties: Busines setup
Organization: Esprida, ET-Org-01, Tim,
Source Devices.
Devices selected:
810
820
Note that fields containing only spaces areconsidered to be empty.
Store
Street
City
State / Region
Zip Code
Country
Fred
Name
Phone 1
Phone 2
* mandatory
Back
Next

FIG. 8A

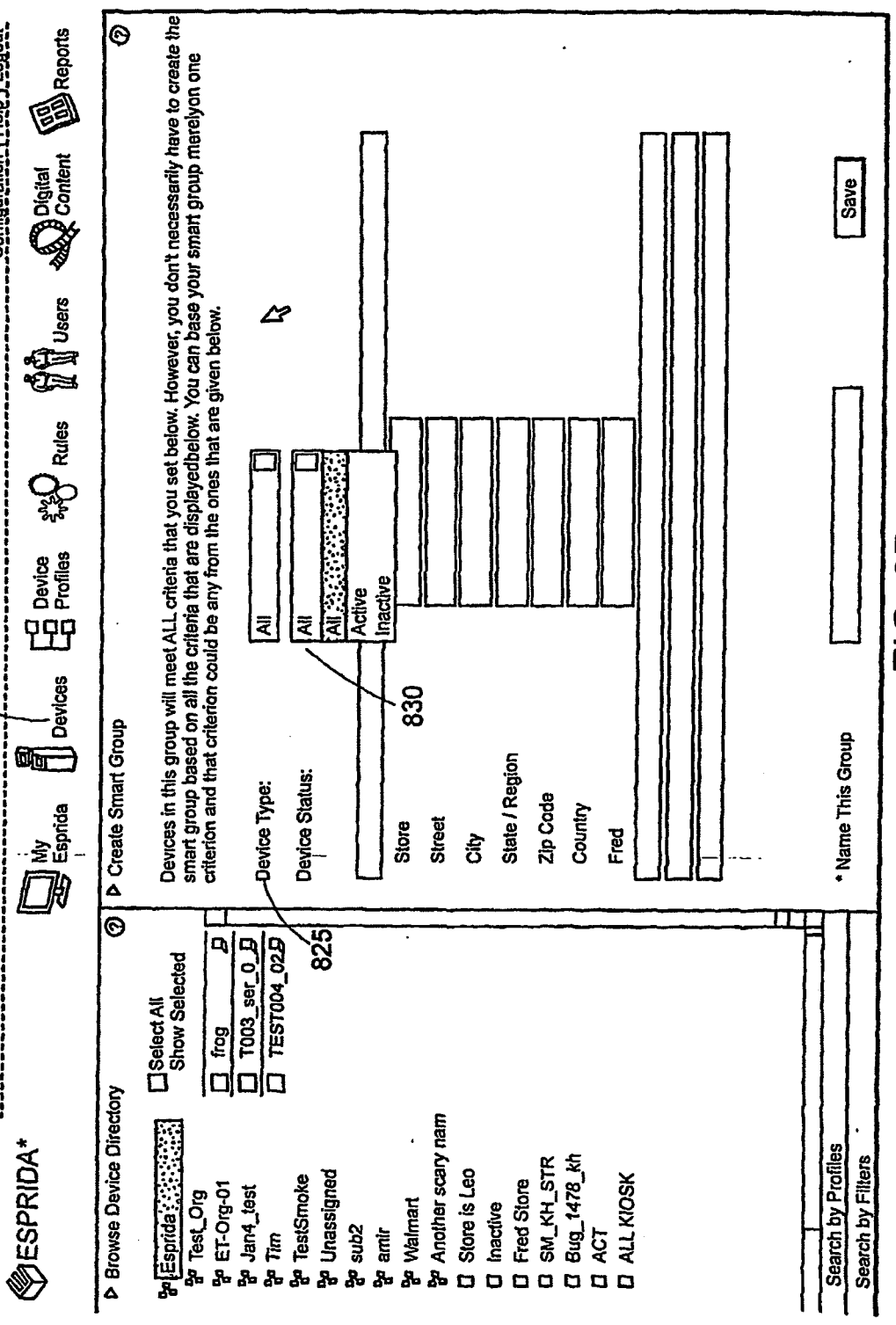

ESPRIDA*
User: owner
Configuration | Help | Logout
My Esprida
Devices
Device Profiles
Rules
Users
Digital Content
Reports
820
Browse Device Directory
Select All
Show Selected
Esprida
Test_Org
ET-Org-01
Jan4_test
Tim
TestSmoke
Unassigned
sub2
amir
Walmart
Another scary nam
Store is Leo
Inactive
Fred Store
SM_KH_STR
Bug_1478_kh
ACT
ALL KIOSK
frog
T003_ser_0_0
TEST004_025
825
Search by Profiles
Search by Filters
Create Smart Group
Devices in this group will meet ALL criteria that you set below. However, you don't necessarily have to create the smart group based on all the criteria that are displayedbelow. You can base your smart group merelyon one criterion and that criterion could be any from the ones that are given below.
Device Type:
All
Device Status:
All
Active
Inactive
830
Store
Street
City
State / Region
Zip Code
Country
Fred
* Name This Group
Save

FIG. 8B

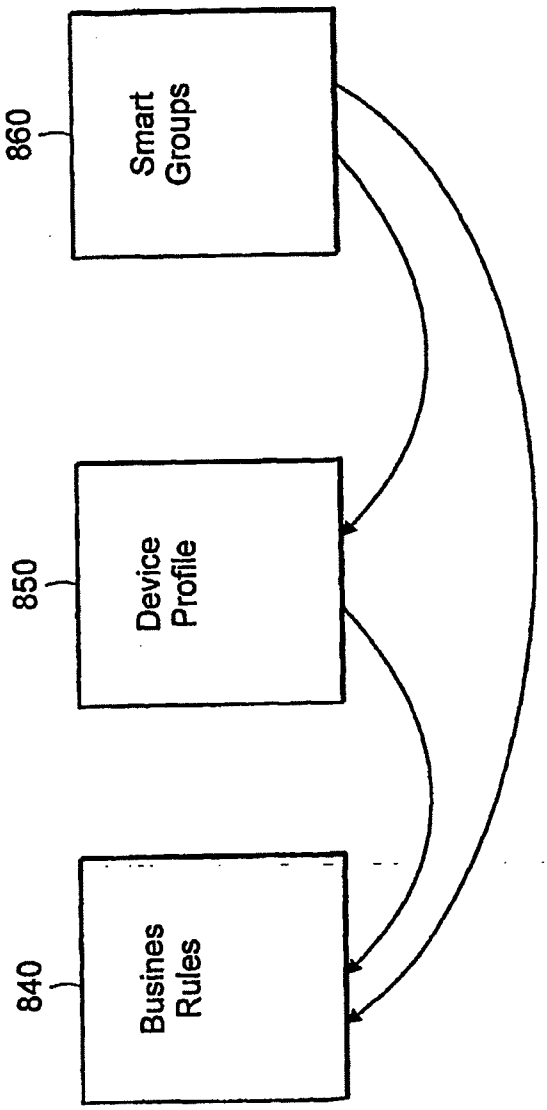


FIG. 8C

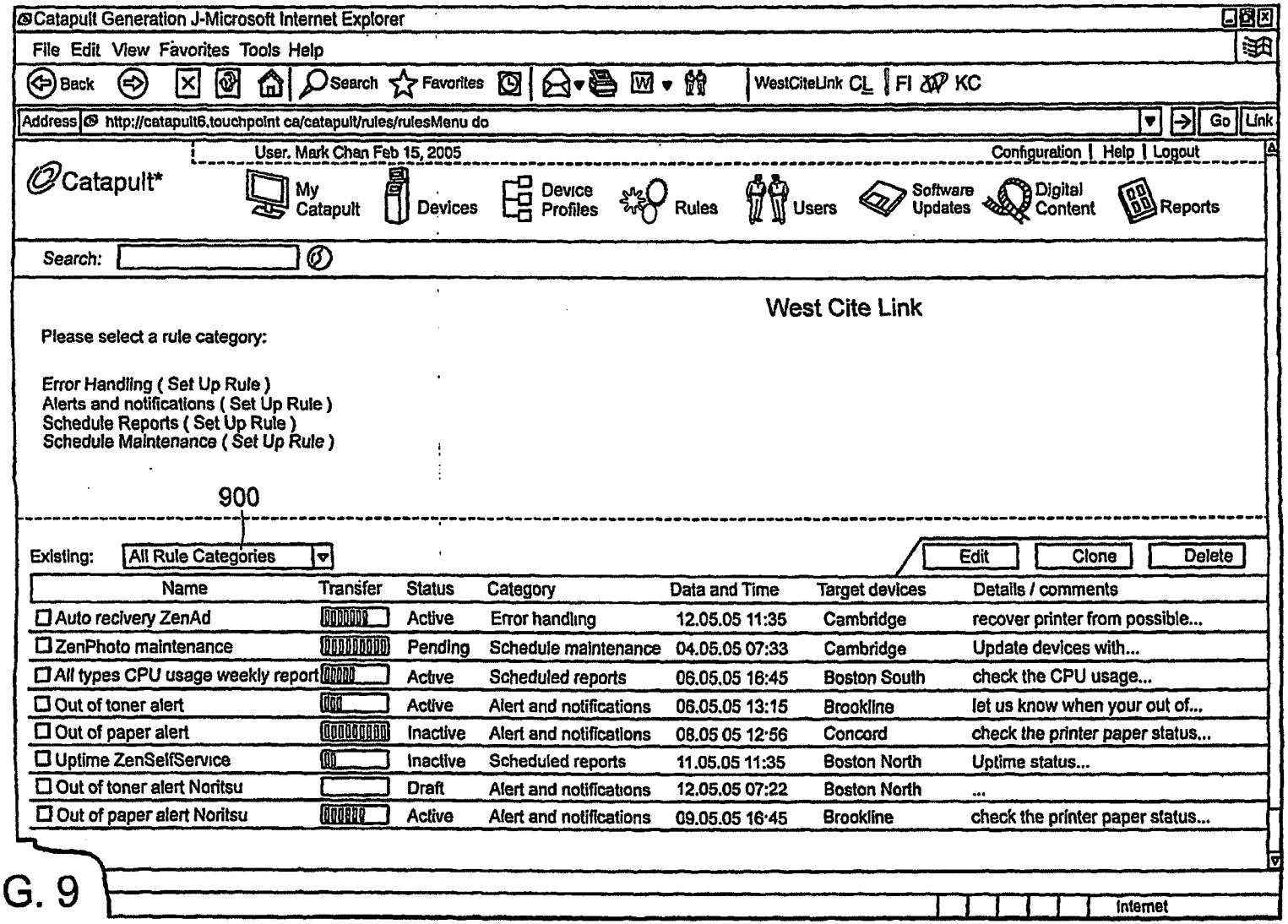

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL
FI
KC
Address
http://catapult6.touchpoint.ca/catapult/rules/rulesMenu.do
Go
Link
User. Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Search:
West Cite Link
Please select a rule category:
Error Handling (Set Up Rule)
Alerts and notifications (Set Up Rule)
Schedule Reports (Set Up Rule)
Schedule Maintenance (Set Up Rule)
900
Existing:
All Rule Categories
Edit
Clone
Delete
Name
Transfer
Status
Category
Data and Time
Target devices
Details / comments
Auto recivery ZenAd
Active
Error handling
12.05.05 11:35
Cambridge
recover printer from possible...
ZenPhoto maintenance
Pending
Schedule maintenance
04.05.05 07:33
Cambridge
Update devices with...
All types CPU usage weekly report
Active
Scheduled reports
06.05.05 16:45
Boston South
check the CPU usage...
Out of toner alert
Active
Alert and notifications
06.05.05 13:15
Brookline
let us know when your out of...
Out of paper alert
Inactive
Alert and notifications
08.05.05 12:56
Concord
check the printer paper status...
Uptime ZenSelfService
Inactive
Scheduled reports
11.05.05 11:35
Boston North
Uptime status...
Out of toner alert Noritsu
Draft
Alert and notifications
12.05.05 07:22
Boston North
...
Out of paper alert Noritsu
Active
Alert and notifications
09.05.05 16:45
Brookline
check the printer paper status...
Internet

FIG. 9

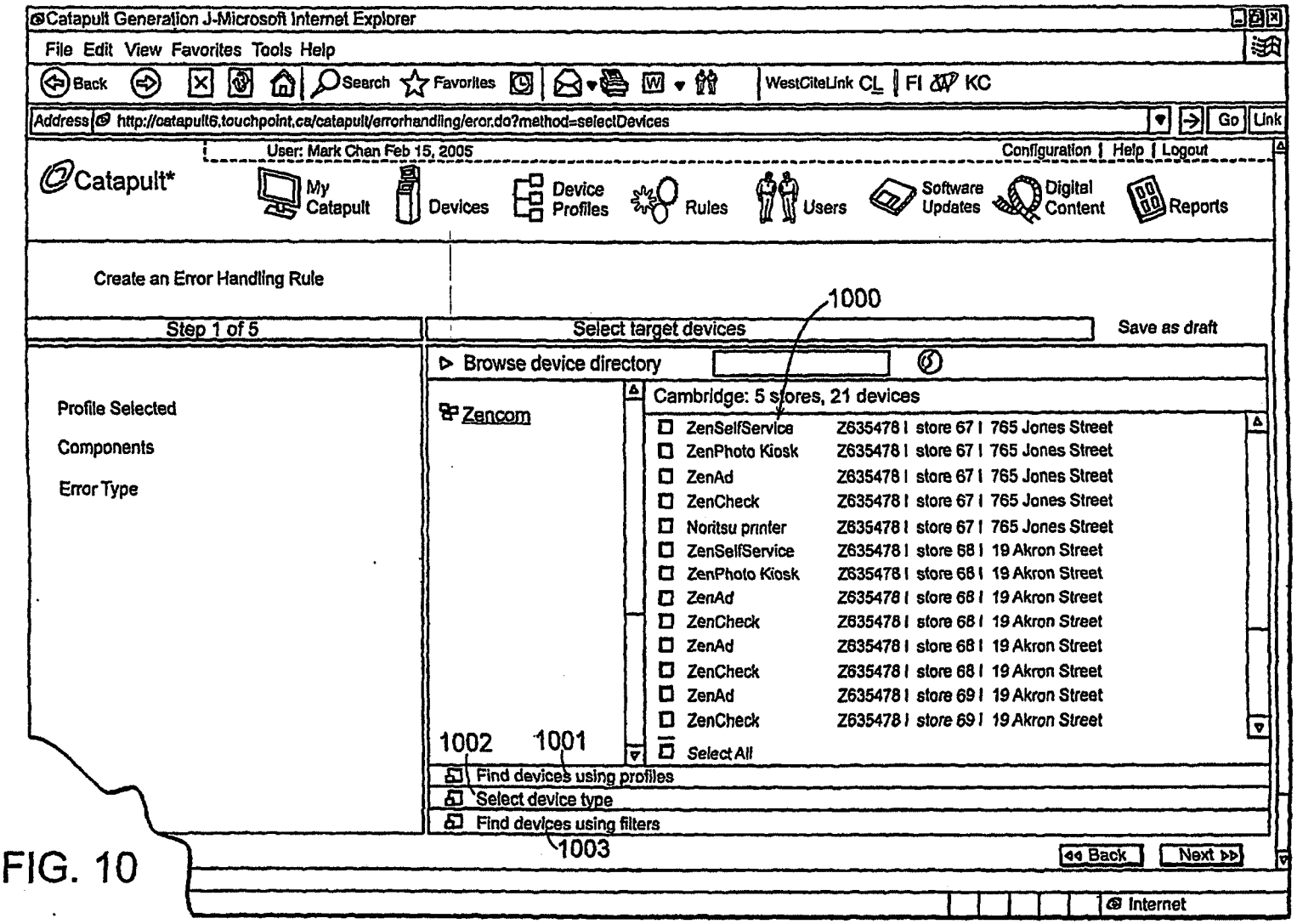

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL | FI KC
Address http://catapult6.touchpoint.ca/catapult/errorhandling/eror.do?method=selectDevices
Go
Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Create an Error Handling Rule
1000
Step 1 of 5
Select target devices
Save as draft
Browse device directory
Profile Selected
Components
Error Type
Zencom
Cambridge: 5 stores, 21 devices
ZenSelfService Z635478 | store 67 | 765 Jones Street
ZenPhoto Kiosk Z635478 | store 67 | 765 Jones Street
ZenAd Z635478 | store 67 | 765 Jones Street
ZenCheck Z635478 | store 67 | 765 Jones Street
Noritsu printer Z635478 | store 67 | 765 Jones Street
ZenSelfService Z635478 | store 68 | 19 Akron Street
ZenPhoto Kiosk Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 68 | 19 Akron Street
ZenCheck Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 68 | 19 Akron Street
ZenCheck Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 69 | 19 Akron Street
ZenCheck Z635478 | store 69 | 19 Akron Street
Select All
1002
1001
Find devices using profiles
Select device type
Find devices using filters
1003
Back
Next
Internet

FIG. 10

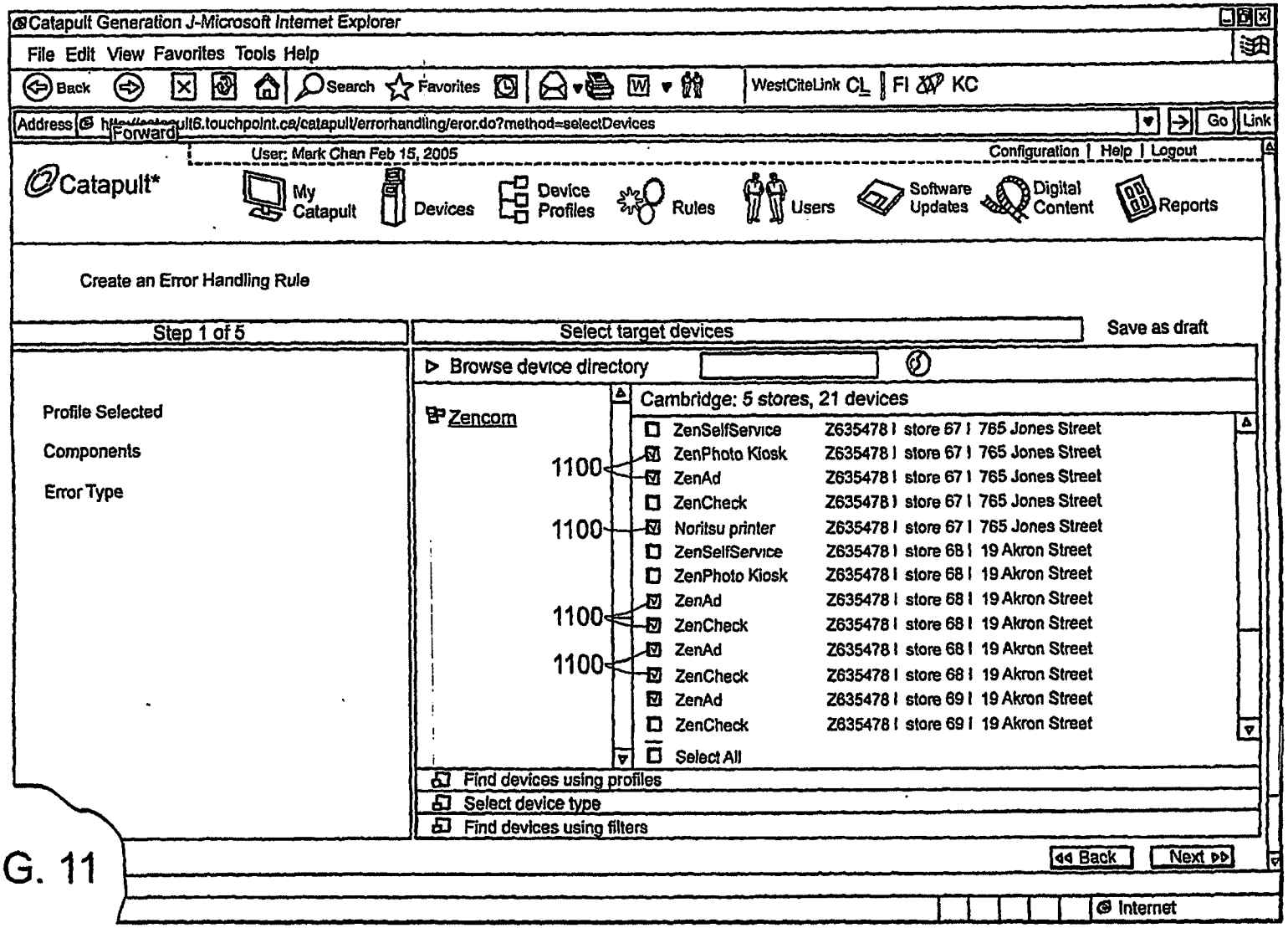

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL FI KC
Address
Forward
ult6.touchpoint.ca/catapult/errorhandling/eror.do?method=selectDevices
Go
Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Create an Error Handling Rule
Step 1 of 5
Select target devices
Save as draft
Profile Selected
Components
Error Type
Browse device directory
Zencom
Cambridge: 5 stores, 21 devices
1100
1100
1100
1100
ZenSelfService Z635478 | store 67 | 765 Jones Street
ZenPhoto Kiosk Z635478 | store 67 | 765 Jones Street
ZenAd Z635478 | store 67 | 765 Jones Street
ZenCheck Z635478 | store 67 | 765 Jones Street
Noritsu printer Z635478 | store 67 | 765 Jones Street
ZenSelfService Z635478 | store 68 | 19 Akron Street
ZenPhoto Kiosk Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 68 | 19 Akron Street
ZenCheck Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 68 | 19 Akron Street
ZenCheck Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 69 | 19 Akron Street
ZenCheck Z635478 | store 69 | 19 Akron Street
Select All
Find devices using profiles
Select device type
Find devices using filters
Back
Next
Internet

FIG. 11

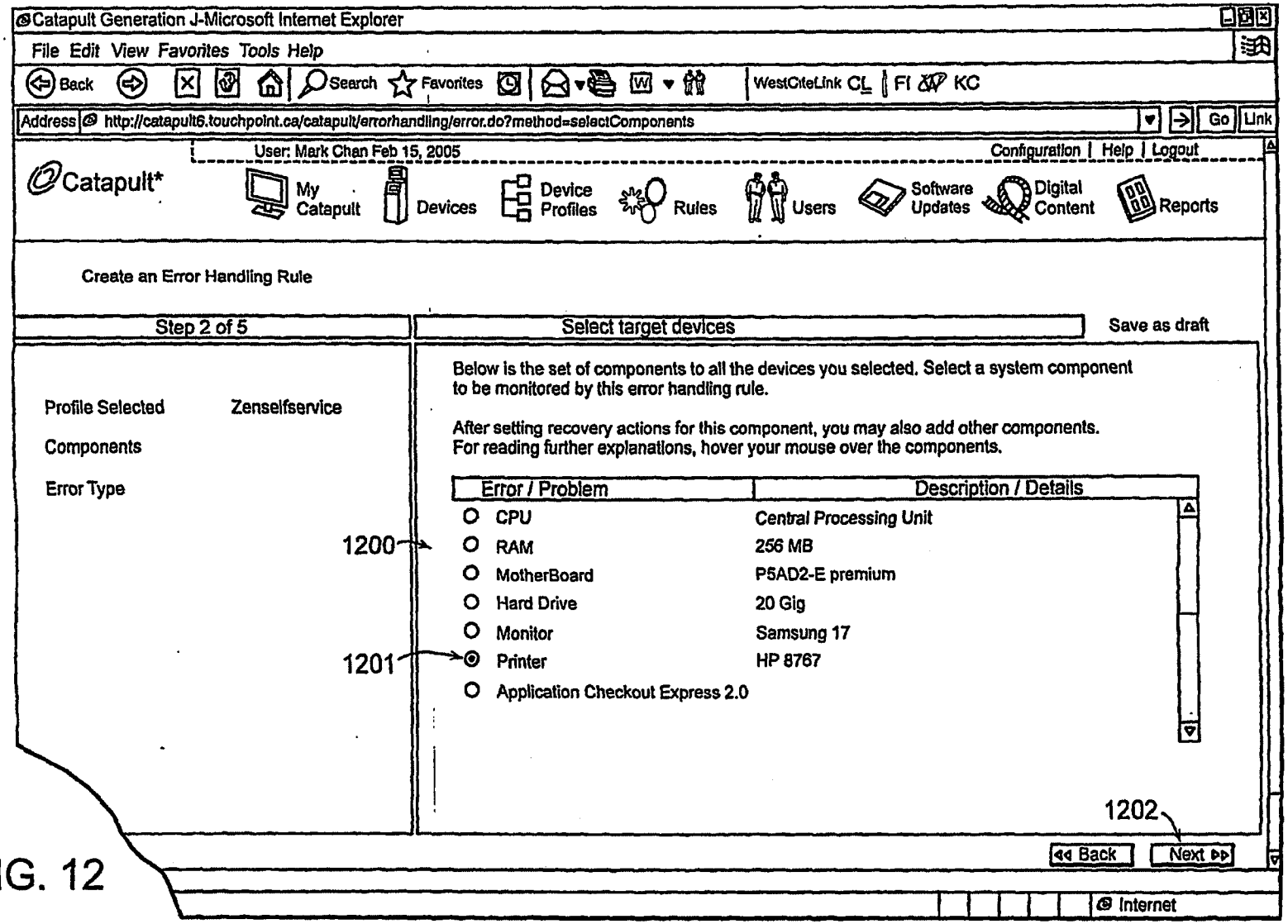

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL
FI
KC
Address
http://catapult6.touchpoint.ca/catapult/errorhandling/error.do?method=selectComponents
Go
Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Create an Error Handling Rule
Step 2 of 5
Select target devices
Save as draft
Profile Selected
Zenselfservice
Components
Error Type
Below is the set of components to all the devices you selected. Select a system component to be monitored by this error handling rule.
After setting recovery actions for this component, you may also add other components.
For reading further explanations, hover your mouse over the components.
Error / Problem
Description / Details
CPU
Central Processing Unit
RAM
256 MB
MotherBoard
P5AD2-E premium
Hard Drive
20 Gig
Monitor
Samsung 17
Printer
HP 8767
Application Checkout Express 2.0
1200
1201
1202
Back
Next
Internet

FIG. 12

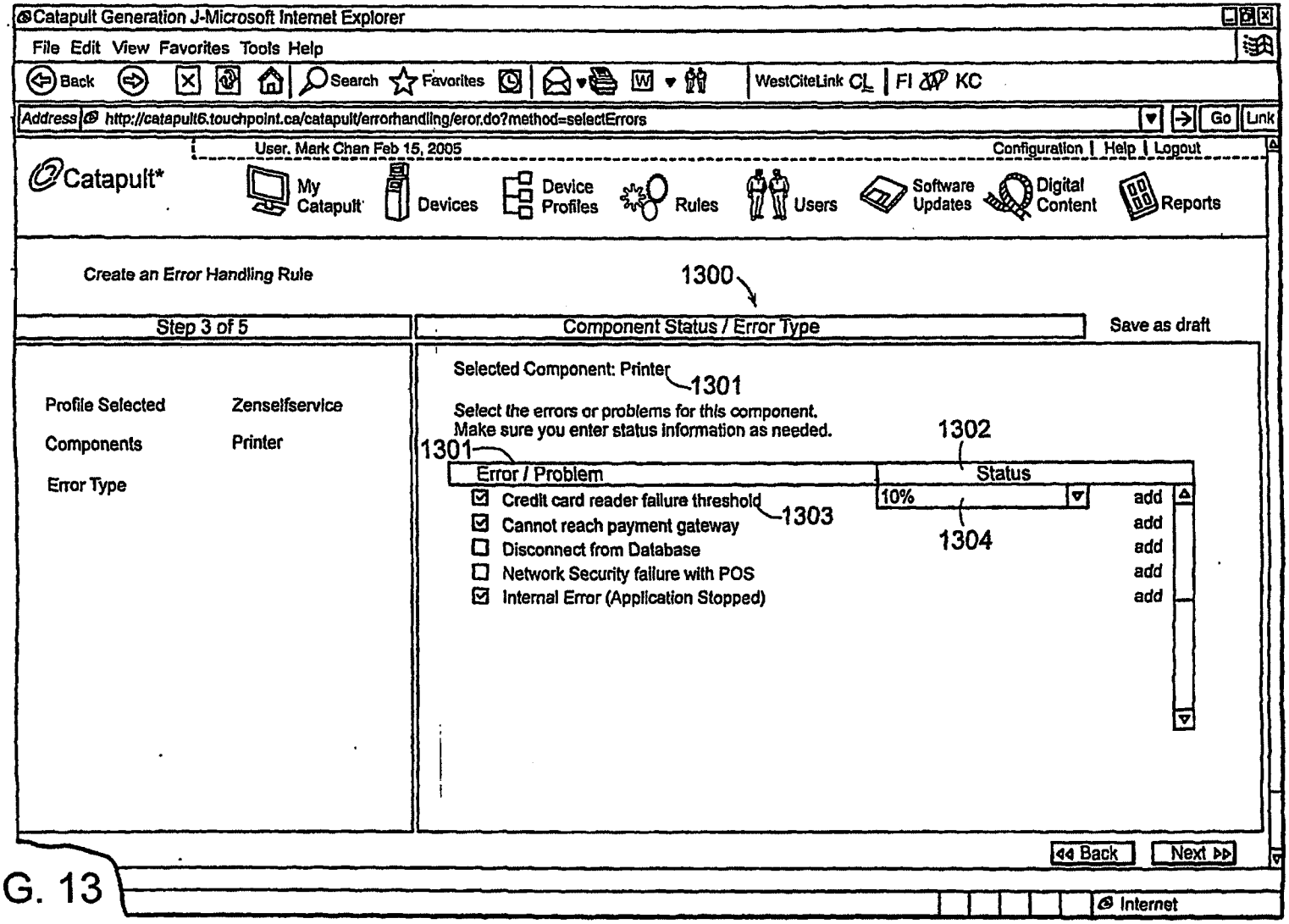

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL
FI KC
Address http://catapult6.touchpoint.ca/catapult/errorhandling/eror.do?method=selectErrors
Go
Link
User. Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Create an Error Handling Rule
1300
Step 3 of 5
Component Status / Error Type
Save as draft
Profile Selected
Zenselfservice
Components
Printer
Error Type
Selected Component: Printer
1301
Select the errors or problems for this component.
Make sure you enter status information as needed.
1302
1301
Error / Problem
Status
Credit card reader failure threshold
1303
10%
add
Cannot reach payment gateway
add
1304
Disconnect from Database
add
Network Security failure with POS
add
Internal Error (Application Stopped)
add
Back
Next
Internet

FIG. 13

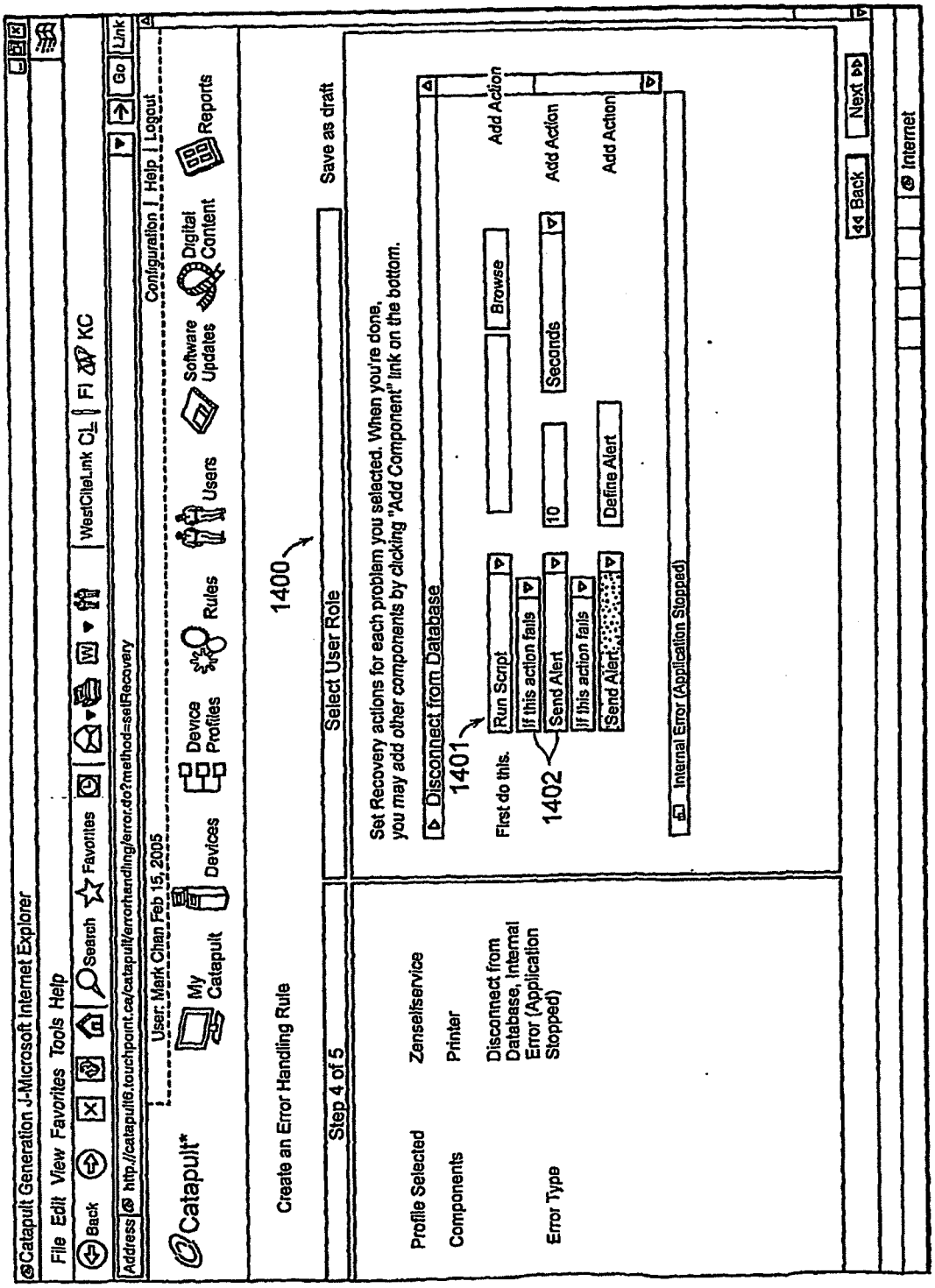

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCleLink CL
FI
KC
Address
http://catapult6.touchpoint.ca/catapult/errorhandling/error.do?method=setRecovery
Go
Link
Catapult*
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Create an Error Handling Rule
1400
Step 4 of 5
Select User Role
Save as draft
Profile Selected
Zenselfservice
Components
Printer
Disconnect from Database, Internal Error (Application Stopped)
Error Type
Set Recovery actions for each problem you selected. When you're done, you may add other components by clicking "Add Component" link on the bottom.
Disconnect from Database
1401
First do this.
Run Script
Browse
If this action fails
Send Alert
10
Seconds
Define Alert
1402
Add Action
Internal Error (Application Stopped)
Back
Next
Internet

FIG. 14

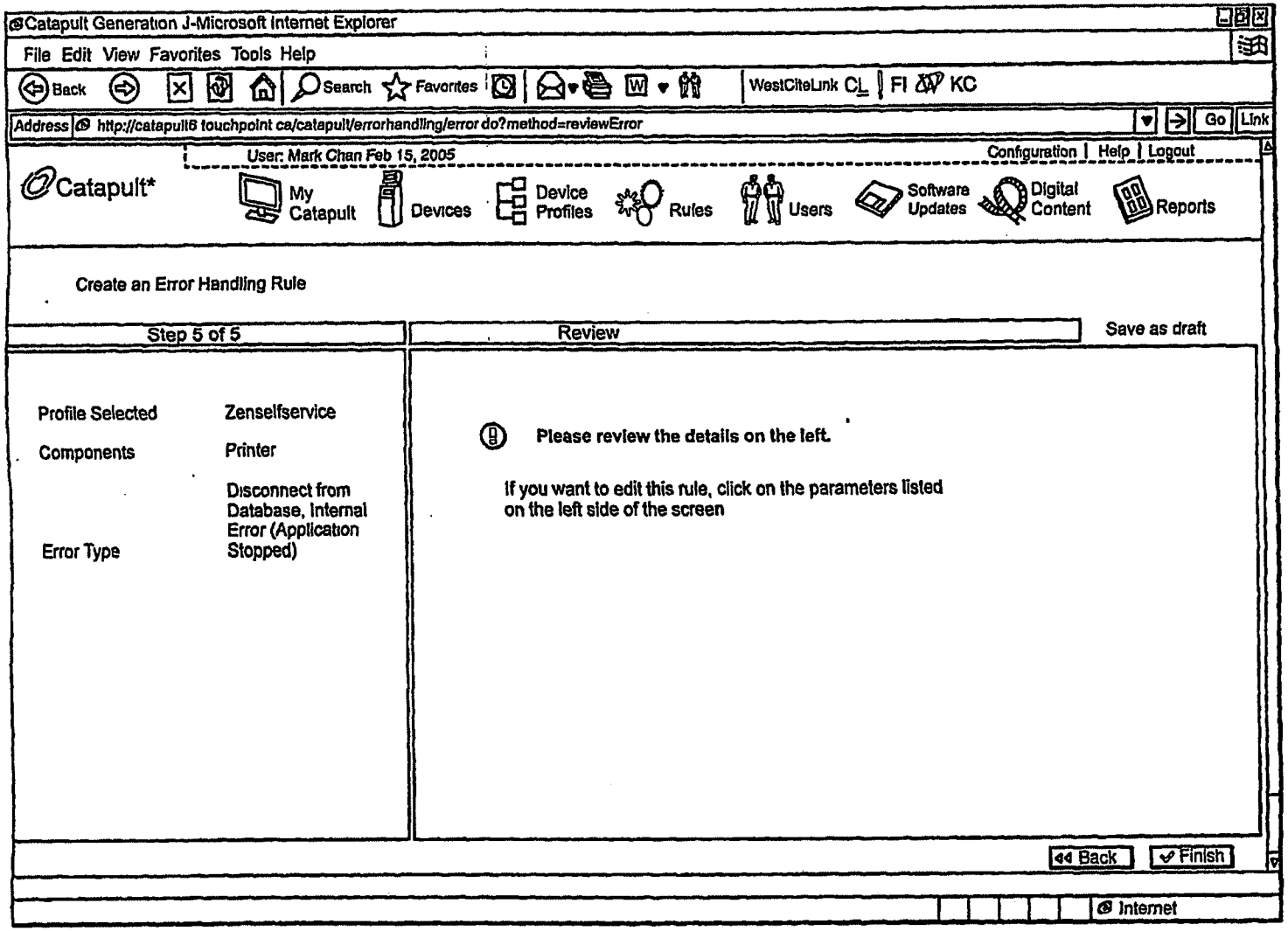

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL | FI KC
Address http://catapult6 touchpoint ca/catapult/errorhandling/error do?method=reviewError
Go
Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Create an Error Handling Rule
Step 5 of 5
Review
Save as draft
Profile Selected
Zenselfservice
Components
Printer
Error Type
Disconnect from Database, Internal Error (Application Stopped)
Please review the details on the left.
If you want to edit this rule, click on the parameters listed on the left side of the screen
Back
Finish
Internet

FIG. 15

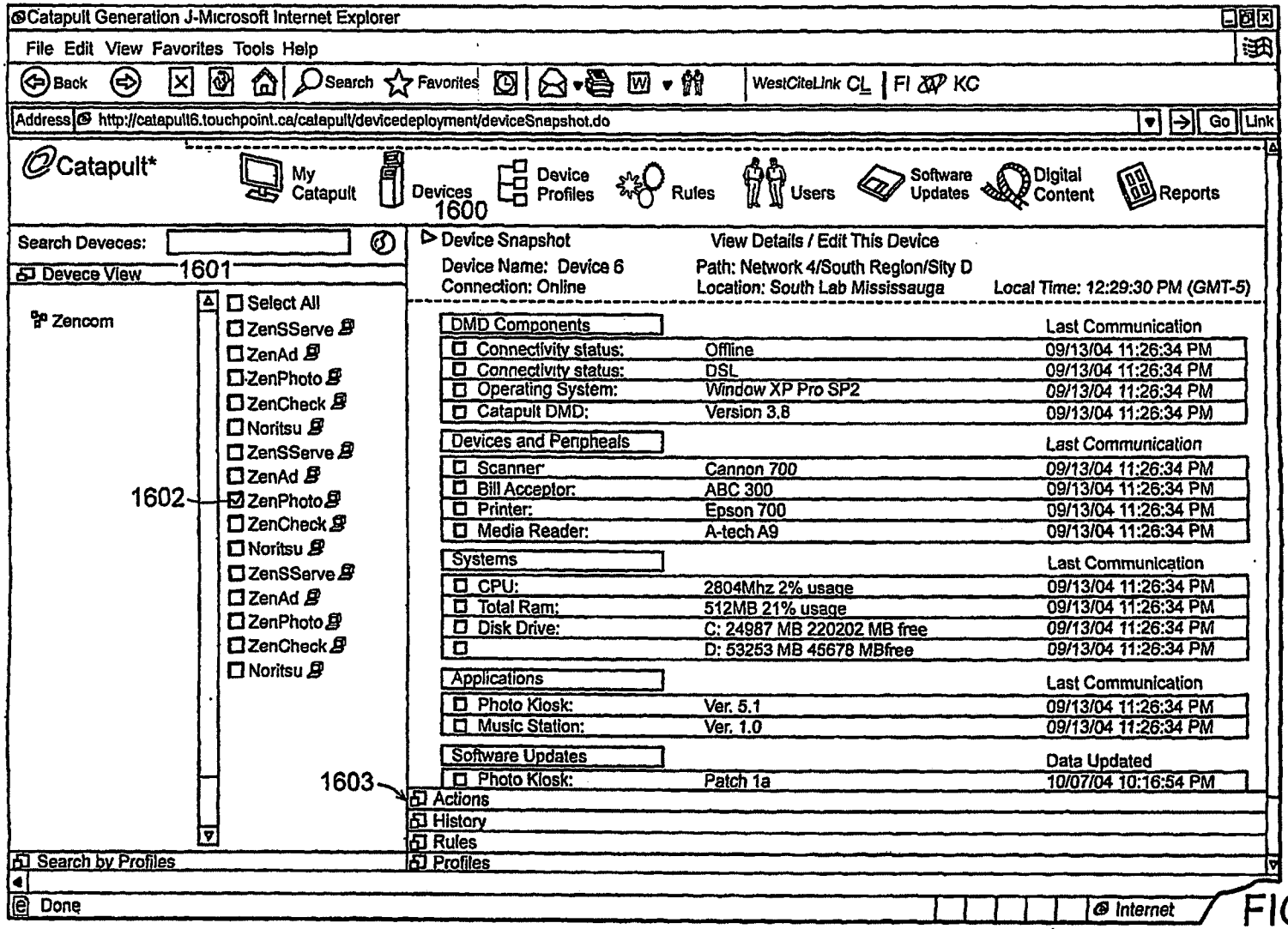

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL
FI KC
Address http://catapult6.touchpoint.ca/catapult/devicedeployment/deviceSnapshot.do
Go
Link
Catapult*
My Catapult
Devices
1600
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Search Deveces:
Devece View
1601
Zencom
Select All
ZenSServe
ZenAd
ZenPhoto
ZenCheck
Noritsu
ZenSServe
ZenAd
1602
ZenPhoto
ZenCheck
Noritsu
ZenSServe
ZenAd
ZenPhoto
ZenCheck
Noritsu
Search by Profiles
Device Snapshot
View Details / Edit This Device
Device Name: Device 6
Path: Network 4/South Region/Sity D
Connection: Online
Location: South Lab Mississauga
Local Time: 12:29:30 PM (GMT-5)
DMD Components
Last Communication
Connectivity status: Offline 09/13/04 11:26:34 PM
Connectivity status: DSL 09/13/04 11:26:34 PM
Operating System: Window XP Pro SP2 09/13/04 11:26:34 PM
Catapult DMD: Version 3.8 09/13/04 11:26:34 PM
Devices and Peripheals
Last Communication
Scanner Cannon 700 09/13/04 11:26:34 PM
Bill Acceptor: ABC 300 09/13/04 11:26:34 PM
Printer: Epson 700 09/13/04 11:26:34 PM
Media Reader: A-tech A9 09/13/04 11:26:34 PM
Systems
Last Communication
CPU: 2804Mhz 2% usage 09/13/04 11:26:34 PM
Total Ram: 512MB 21% usage 09/13/04 11:26:34 PM
Disk Drive: C: 24987 MB 220202 MB free 09/13/04 11:26:34 PM
D: 53253 MB 45678 MBfree 09/13/04 11:26:34 PM
Applications
Last Communication
Photo Kiosk: Ver. 5.1 09/13/04 11:26:34 PM
Music Station: Ver. 1.0 09/13/04 11:26:34 PM
Software Updates
Data Updated
Photo Kiosk: Patch 1a 10/07/04 10:16:54 PM
1603
Actions
History
Rules
Profiles
Done
Internet

FIG. 16

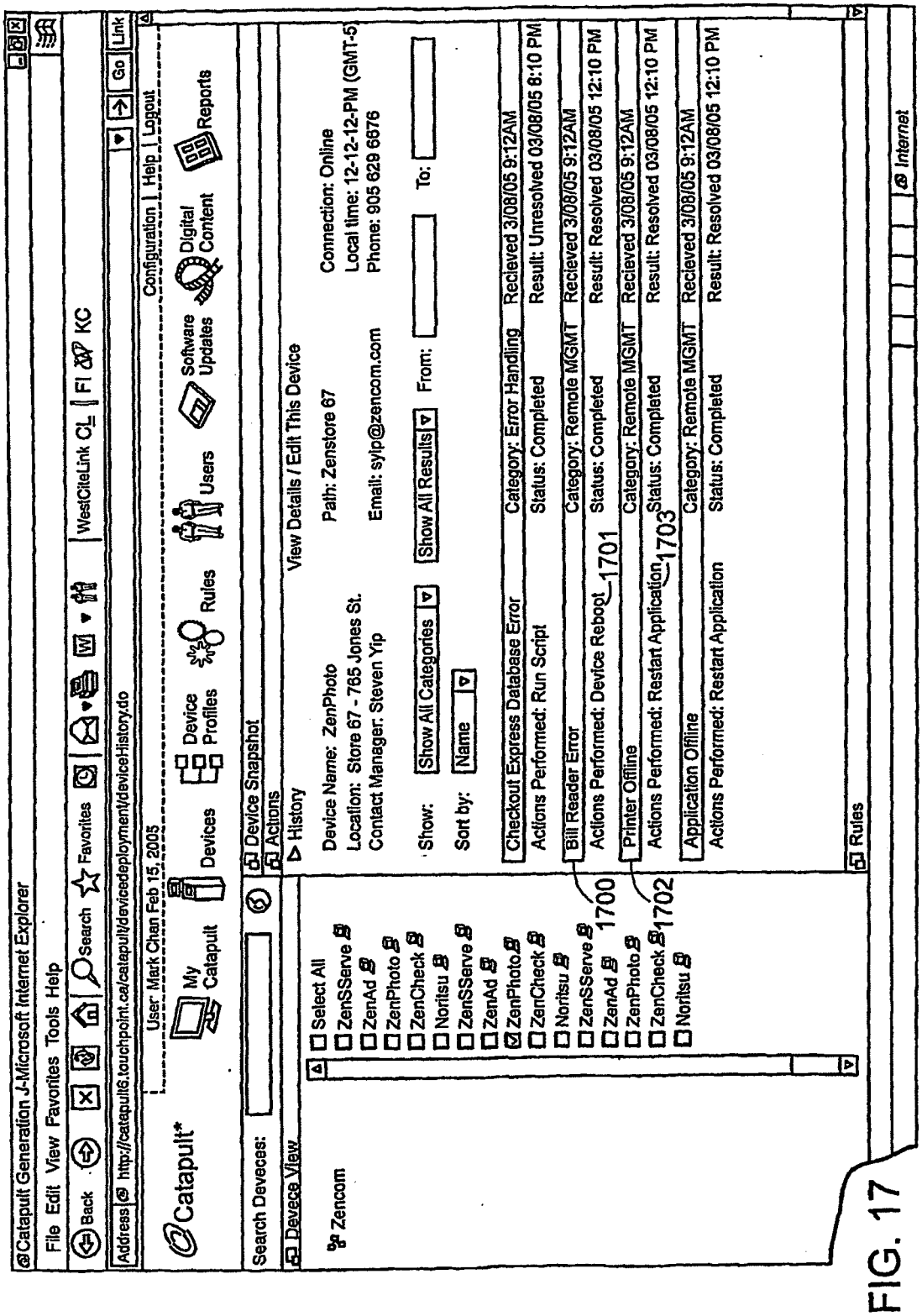

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites WestCliteLink CL FI KC
Address http://catapult6.touchpoint.ca/catapult/devicedeployment/deviceHistory.do
Go Link
Configuration | Help | Logout
User: Mark Chan Feb 15, 2005
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Search Devices:
Device Snapshot
Actions
Device View
Zencom
Select All
ZenSServe
ZenAd
ZenPhoto
ZenCheck
Noritsu
ZenSServe
ZenAd
ZenPhoto
ZenCheck
Noritsu
ZenSServe
ZenAd
ZenPhoto
ZenCheck
Noritsu
History
View Details / Edit This Device
Device Name: ZenPhoto
Location: Store 67 - 785 Jones St.
Contact Manager: Steven Yip
Path: Zenstore 67
Email: sylp@zencom.com
Connection: Online
Local time: 12-12-12-PM (GMT-5
Phone: 905 629 6676
Show: Show All Categories
Sort by: Name
Show All Results
From:
To:
Checkout Express Database Error
Category: Error Handling
Recieved 3/08/05 9:12AM
Actions Performed: Run Script
Status: Completed
Result: Unresolved 03/08/05 8:10 PM
Bill Reader Error
Category: Remote MGMT
Recieved 3/08/05 9:12AM
Actions Performed: Device Reboot
Status: Completed
Result: Resolved 03/08/05 12:10 PM
Printer Offline
Category: Remote MGMT
Recieved 3/08/05 9:12AM
Actions Performed: Restart Application
Status: Completed
Result: Resolved 03/08/05 12:10 PM
Application Offline
Category: Remote MGMT
Recieved 3/08/05 9:12AM
Actions Performed: Restart Application
Status: Completed
Result: Resolved 03/08/05 12:10 PM
Rules
1700
1701
1702
1703
Internet

FIG. 17

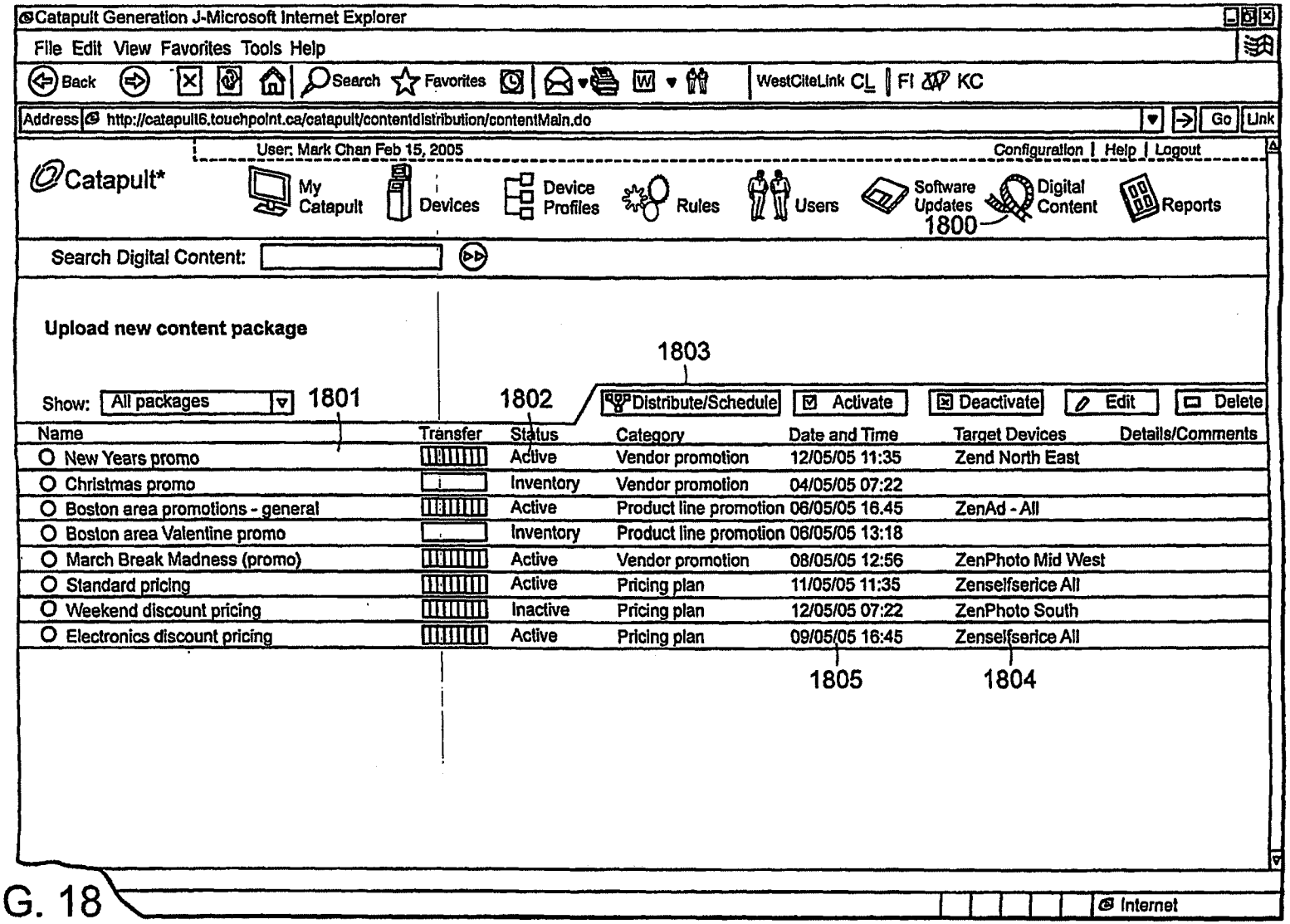

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL | FI KC
Address http://catapult6.touchpoint.ca/catapult/contentdistribution/contentMain.do
Go
Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
1800
Search Digital Content:
Upload new content package
1803
Show: All packages
1801
1802
Distribute/Schedule
Activate
Deactivate
Edit
Delete
Name
Transfer
Status
Category
Date and Time
Target Devices
Details/Comments
New Years promo
Active
Vendor promotion
12/05/05 11:35
Zend North East
Christmas promo
Inventory
Vendor promotion
04/05/05 07:22
Boston area promotions - general
Active
Product line promotion
06/05/05 16.45
ZenAd - All
Boston area Valentine promo
Inventory
Product line promotion
06/05/05 13:18
March Break Madness (promo)
Active
Vendor promotion
08/05/05 12:56
ZenPhoto Mid West
Standard pricing
Active
Pricing plan
11/05/05 11:35
Zenselfserice All
Weekend discount pricing
Inactive
Pricing plan
12/05/05 07:22
ZenPhoto South
Electronics discount pricing
Active
Pricing plan
09/05/05 16:45
Zenselfserice All
1805
1804
Internet

FIG. 18

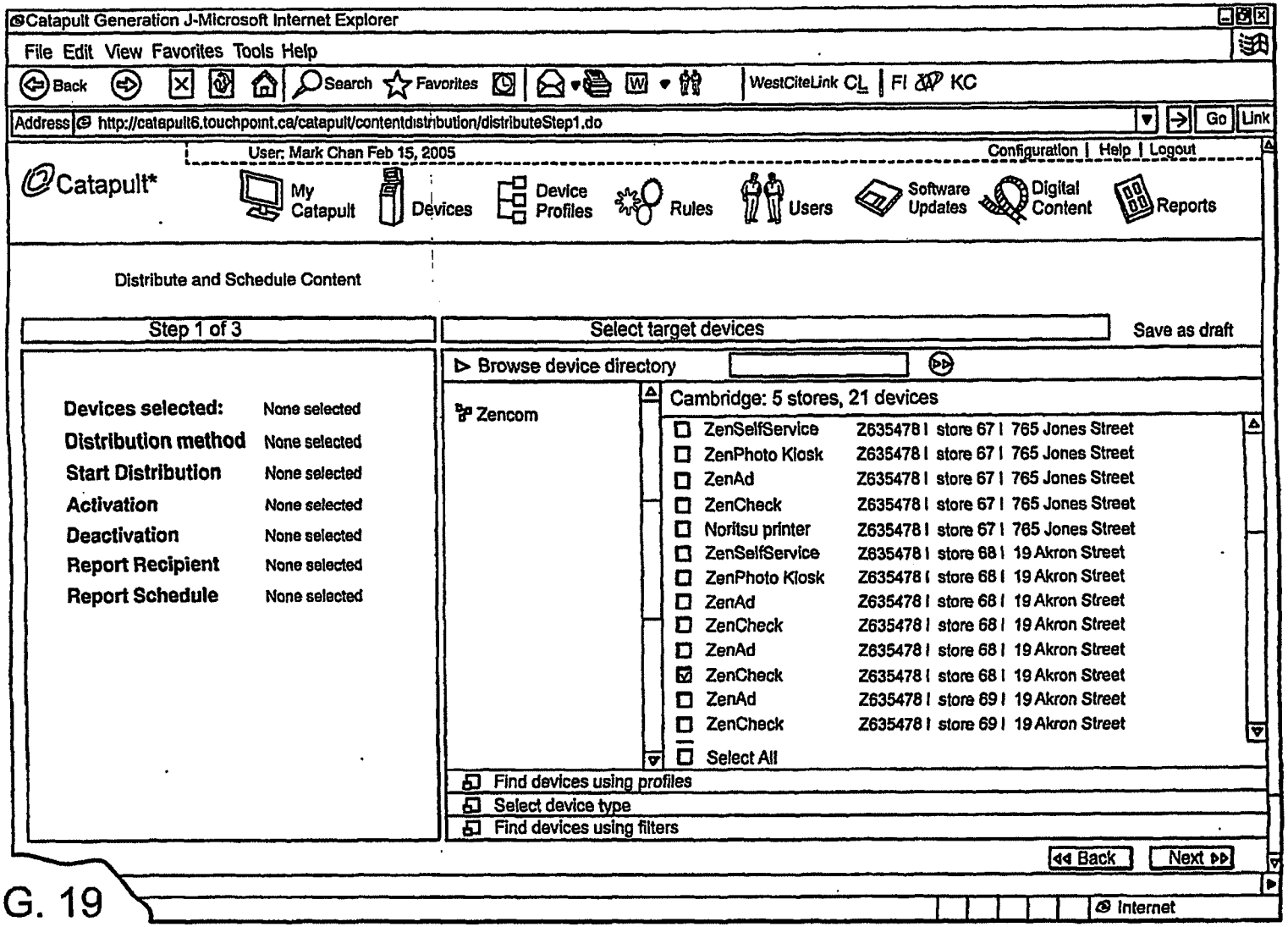

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL
FI KC
Address
http://catapult6.touchpoint.ca/catapult/contentdistribution/distributeStep1.do
Go
Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Distribute and Schedule Content
Step 1 of 3
Select target devices
Save as draft
Devices selected: None selected
Distribution method None selected
Start Distribution None selected
Activation None selected
Deactivation None selected
Report Recipient None selected
Report Schedule None selected
Browse device directory
Zencom
Cambridge: 5 stores, 21 devices
ZenSelfService Z635478 | store 67 | 765 Jones Street
ZenPhoto Kiosk Z635478 | store 67 | 765 Jones Street
ZenAd Z635478 | store 67 | 765 Jones Street
ZenCheck Z635478 | store 67 | 765 Jones Street
Noritsu printer Z635478 | store 67 | 765 Jones Street
ZenSelfService Z635478 | store 68 | 19 Akron Street
ZenPhoto Kiosk Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 68 | 19 Akron Street
ZenCheck Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 68 | 19 Akron Street
ZenCheck Z635478 | store 68 | 19 Akron Street
ZenAd Z635478 | store 69 | 19 Akron Street
ZenCheck Z635478 | store 69 | 19 Akron Street
Select All
Find devices using profiles
Select device type
Find devices using filters
Back
Next
Internet

FIG. 19

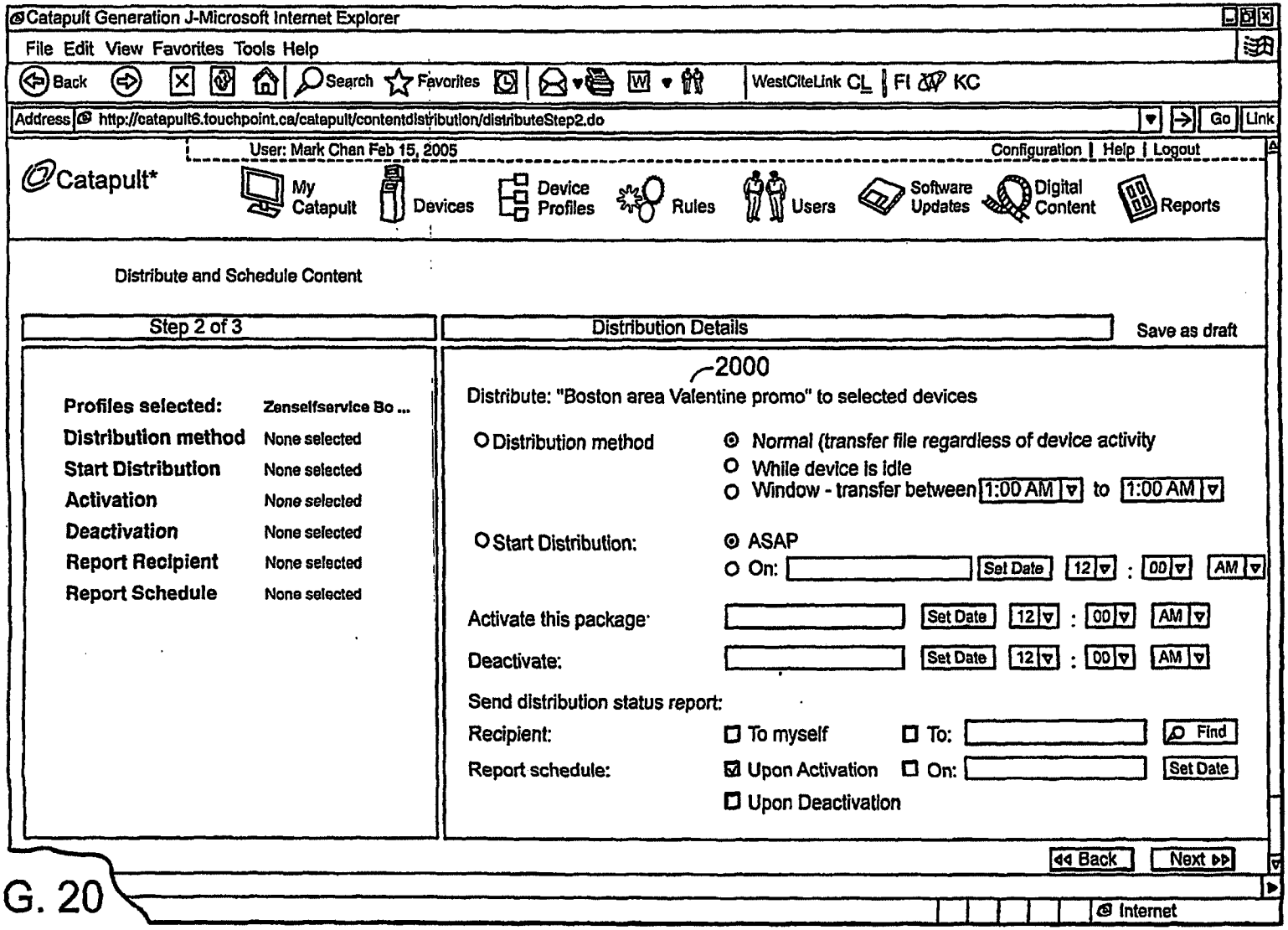

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL | FI KC
Address http://catapult6.touchpoint.ca/catapult/contentdistribution/distributeStep2.do
Go
Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Distribute and Schedule Content
Step 2 of 3
Distribution Details
Save as draft
2000
Profiles selected:
Zenselfservice Bo ...
Distribution method
None selected
Start Distribution
None selected
Activation
None selected
Deactivation
None selected
Report Recipient
None selected
Report Schedule
None selected
Distribute: "Boston area Valentine promo" to selected devices
Distribution method
Normal (transfer file regardless of device activity
While device is idle
Window - transfer between 1:00 AM to 1:00 AM
Start Distribution:
ASAP
On:
Set Date
12 : 00 AM
Activate this package:
Deactivate:
Send distribution status report:
Recipient:
To myself
To:
Find
Report schedule:
Upon Activation
On:
Upon Deactivation
Back
Next
Internet

FIG. 20

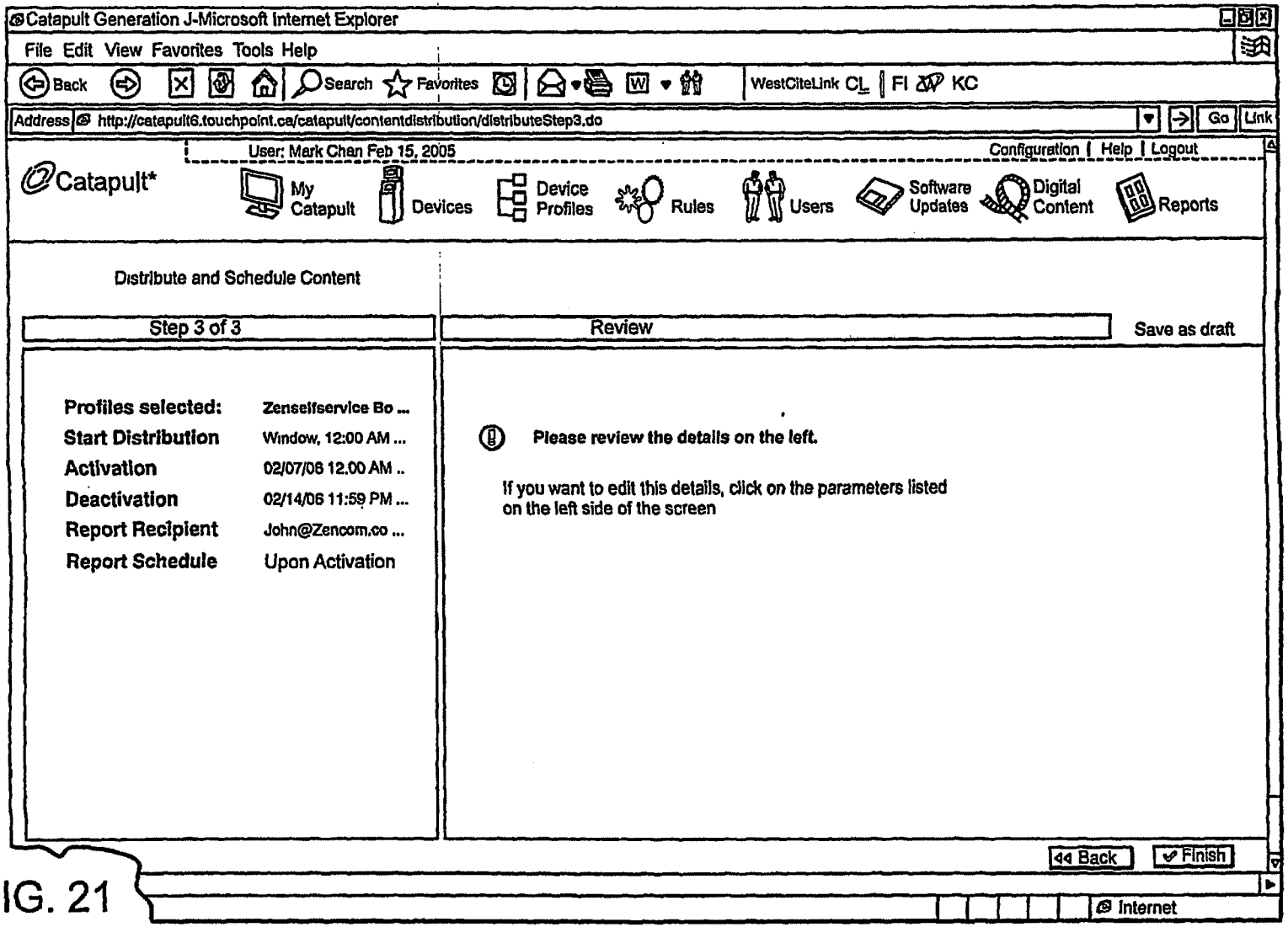

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL
FI
KC
Address
http://catapult6.touchpoint.ca/catapult/contentdistribution/distributeStep3.do
Go
Link
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Distribute and Schedule Content
Step 3 of 3
Review
Save as draft
Profiles selected:
Zenselfservice Bo ...
Start Distribution
Window, 12:00 AM ...
Activation
02/07/06 12.00 AM ..
Deactivation
02/14/06 11:59 PM ...
Report Recipient
John@Zencom.co ...
Report Schedule
Upon Activation
Please review the details on the left.
If you want to edit this details, click on the parameters listed on the left side of the screen
Back
Finish
Internet

FIG. 21

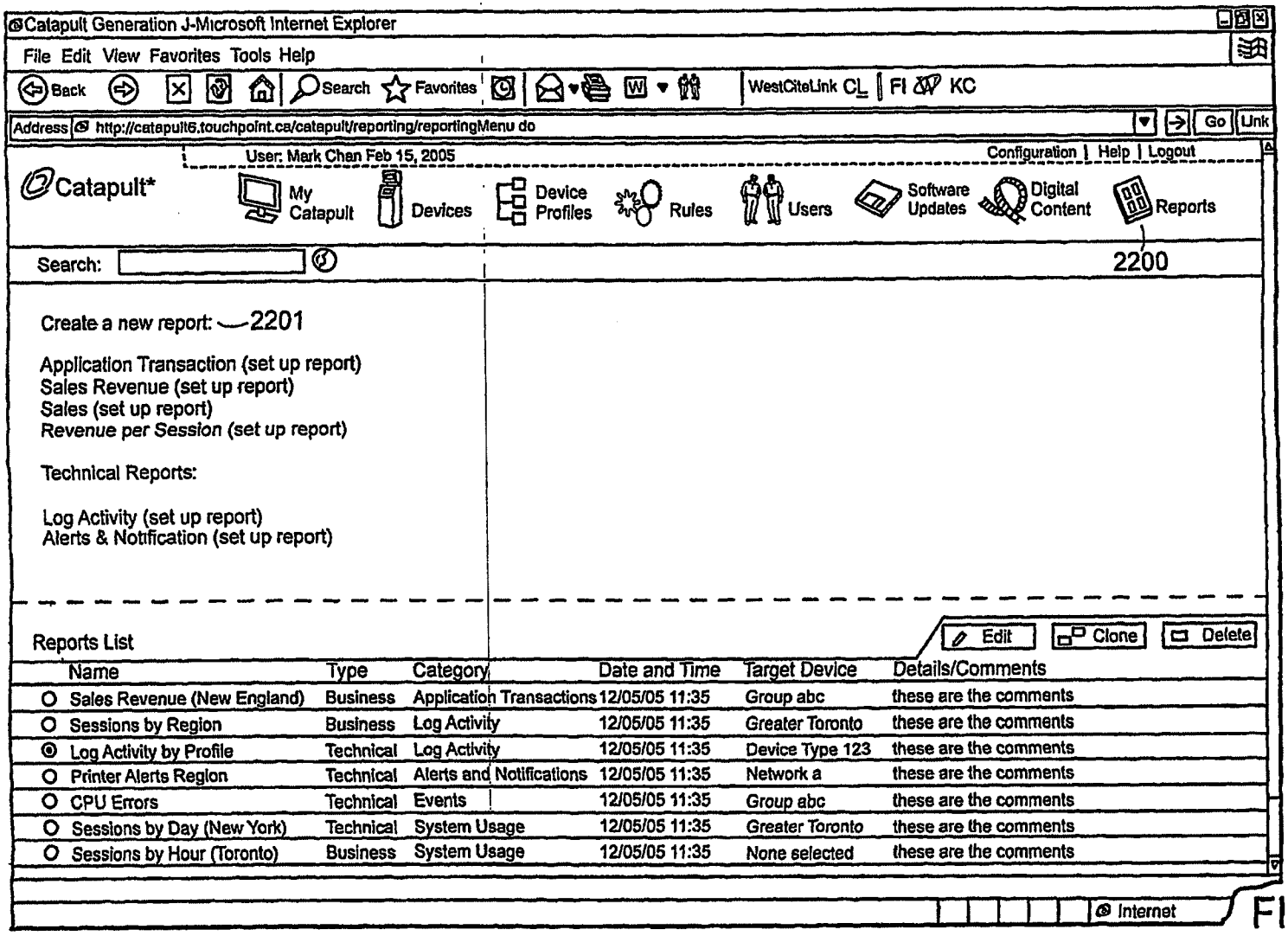

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
WestCiteLink CL
FI
KC
Address
http://catapult6.touchpoint.ca/catapult/reporting/reportingMenu.do
Go
Unk
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
Catapult*
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
2200
Search:
Create a new report: 2201
Application Transaction (set up report)
Sales Revenue (set up report)
Sales (set up report)
Revenue per Session (set up report)
Technical Reports:
Log Activity (set up report)
Alerts & Notification (set up report)
Reports List
Edit
Clone
Delete
Name
Type
Category
Date and Time
Target Device
Details/Comments
Sales Revenue (New England) Business Application Transactions 12/05/05 11:35 Group abc these are the comments
Sessions by Region Business Log Activity 12/05/05 11:35 Greater Toronto these are the comments
Log Activity by Profile Technical Log Activity 12/05/05 11:35 Device Type 123 these are the comments
Printer Alerts Region Technical Alerts and Notifications 12/05/05 11:35 Network a these are the comments
CPU Errors Technical Events 12/05/05 11:35 Group abc these are the comments
Sessions by Day (New York) Technical System Usage 12/05/05 11:35 Greater Toronto these are the comments
Sessions by Hour (Toronto) Business System Usage 12/05/05 11:35 None selected these are the comments
Internet

FIG. 22

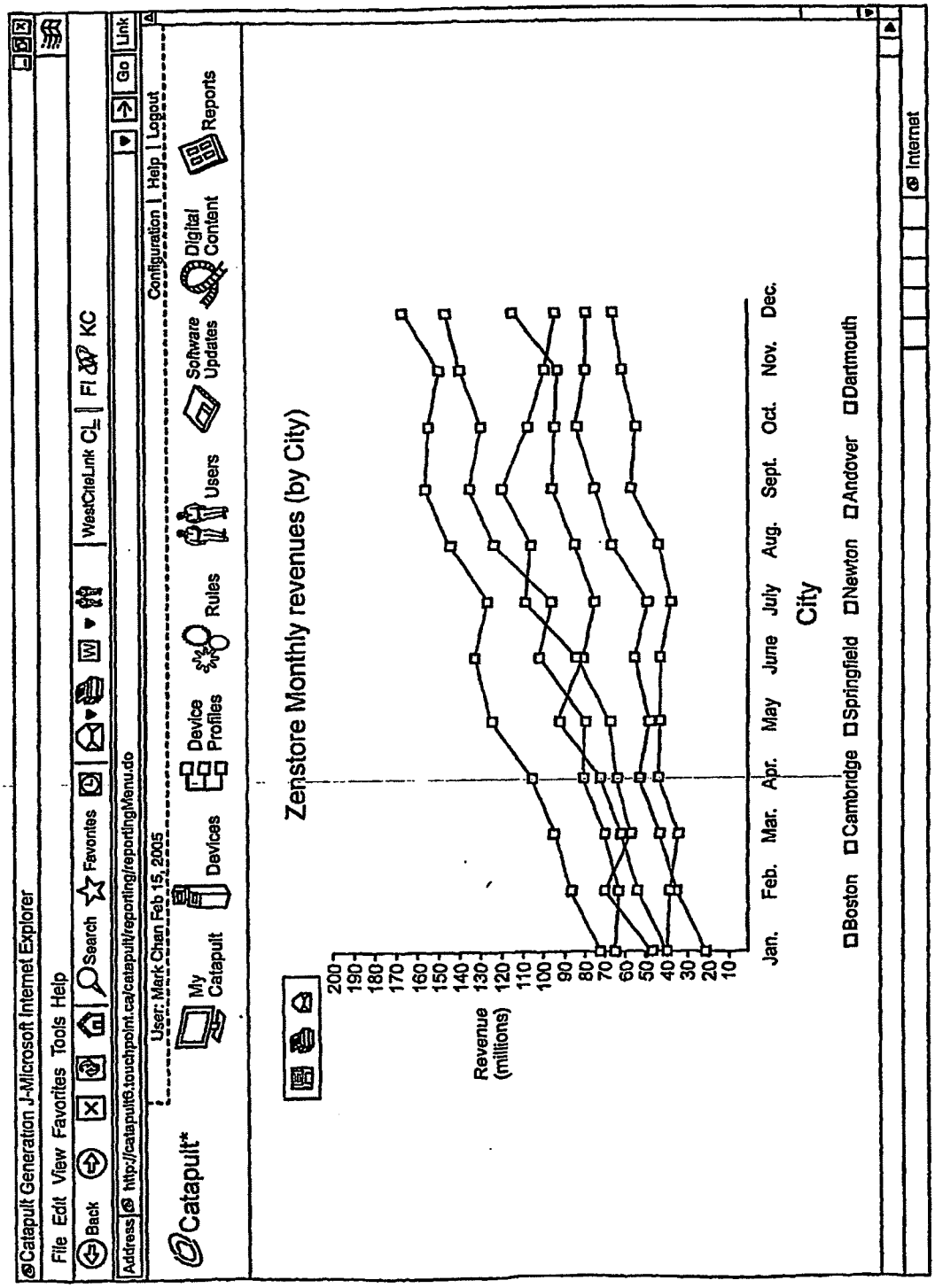
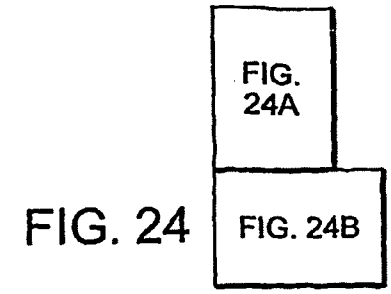

Catapult Generation J-Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
WestCtleLink CL FI KC
Address http://catapult6.touchpoint.ca/catapult/reporting/reportingMenu.do
Go Link
Catapult*
User: Mark Chan Feb 15, 2005
Configuration | Help | Logout
My Catapult
Devices
Device Profiles
Rules
Users
Software Updates
Digital Content
Reports
Zenstore Monthly revenues (by City)
Revenue (millions)
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.
City
Boston Cambridge Springfield Newton Andover Dartmouth
Internet

FIG. 23

FIG. 24



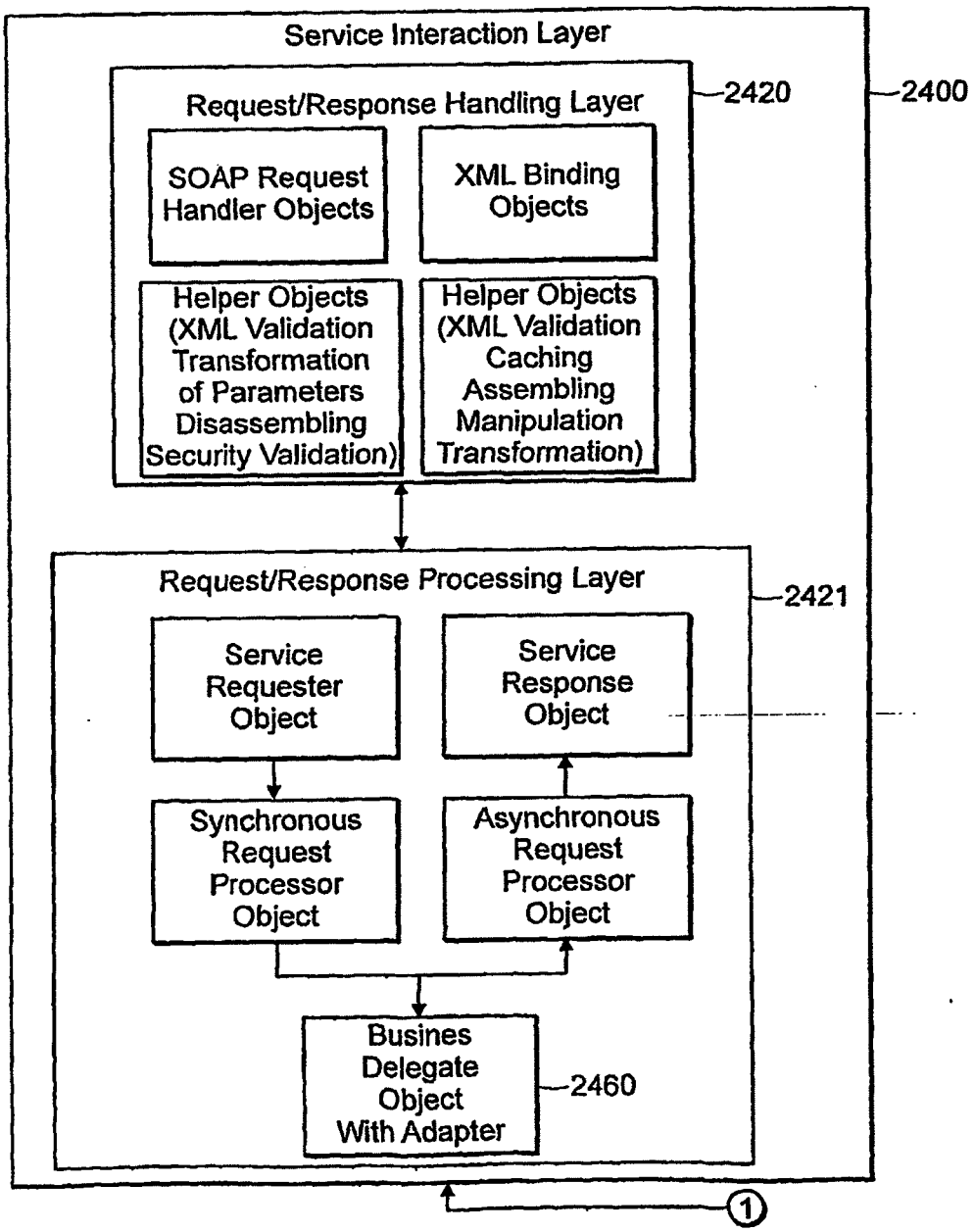


FIG. 24A

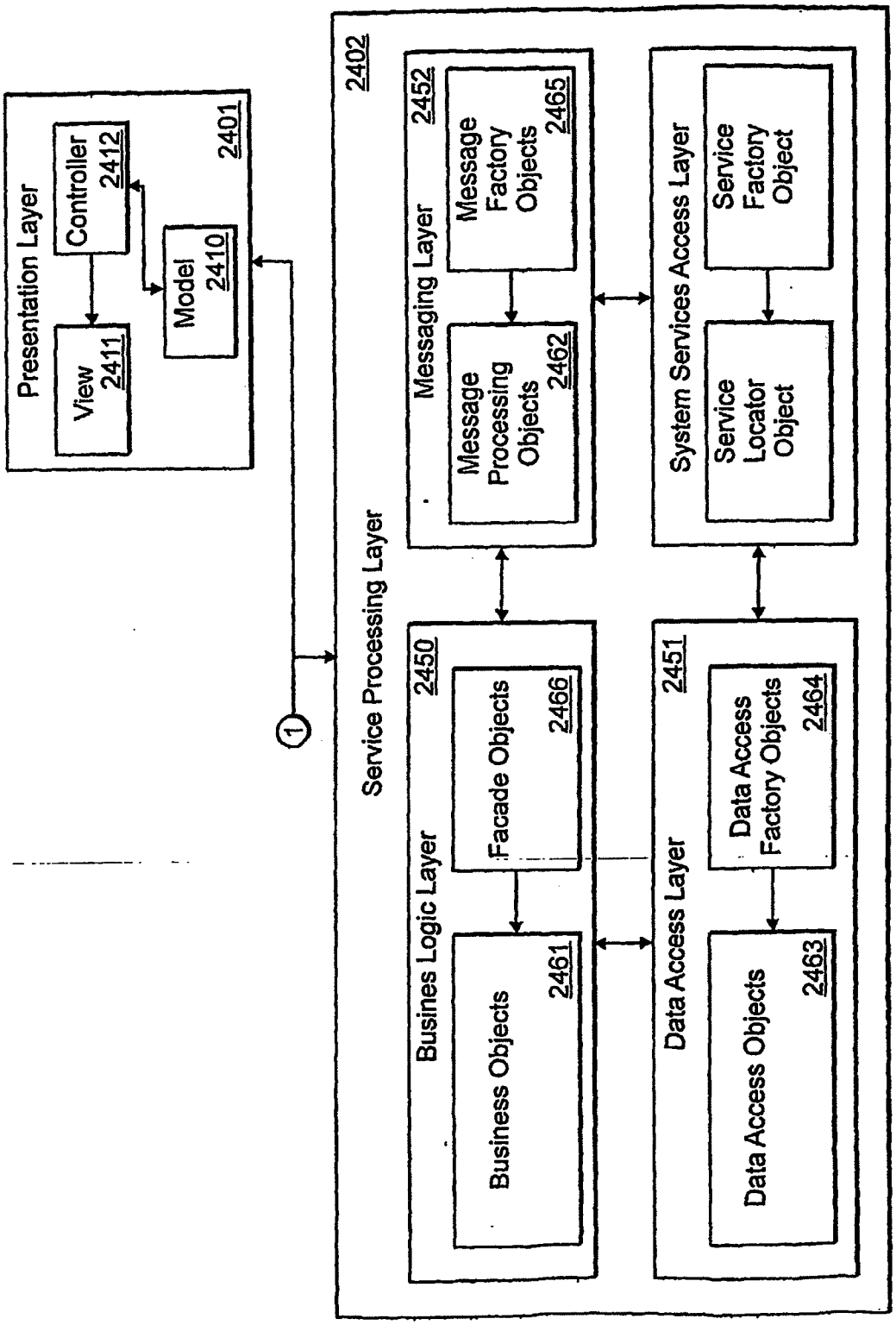

Presentation Layer
Controller 2412
View 2411
Model 2410
2401
1
2402
Service Processing Layer
Busines Logic Layer 2450
Business Objects 2461
Facade Objects 2466
Messaging Layer 2452
Message Processing Objects 2462
Message Factory Objects 2465
Data Access Layer 2451
Data Access Objects 2463
Data Access Factory Objects 2464
System Services Access Layer
Service Locator Object
Service Factory Object

FIG. 24B

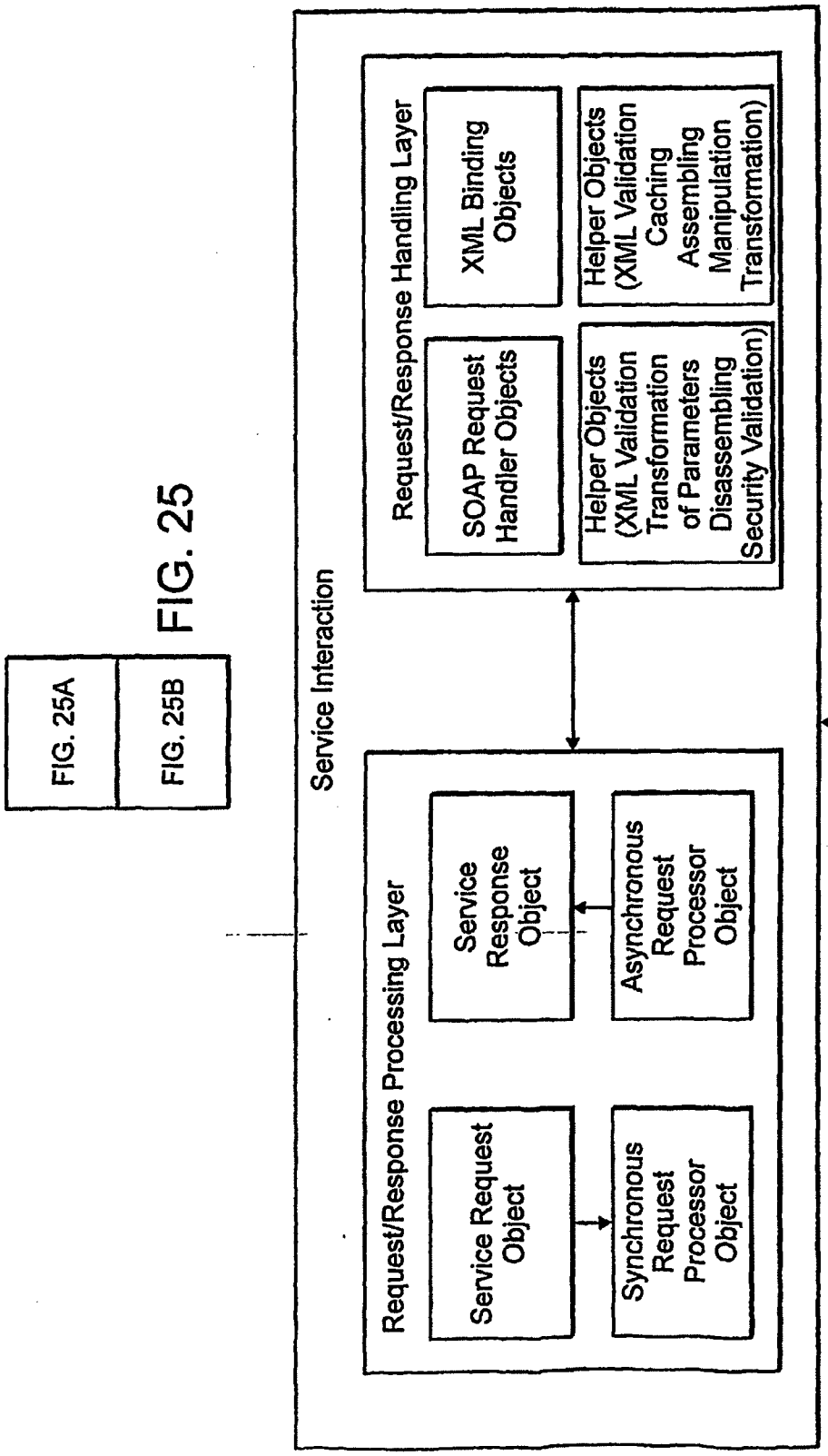


FIG. 25A

FIG. 25

FIG. 25A
FIG. 25B

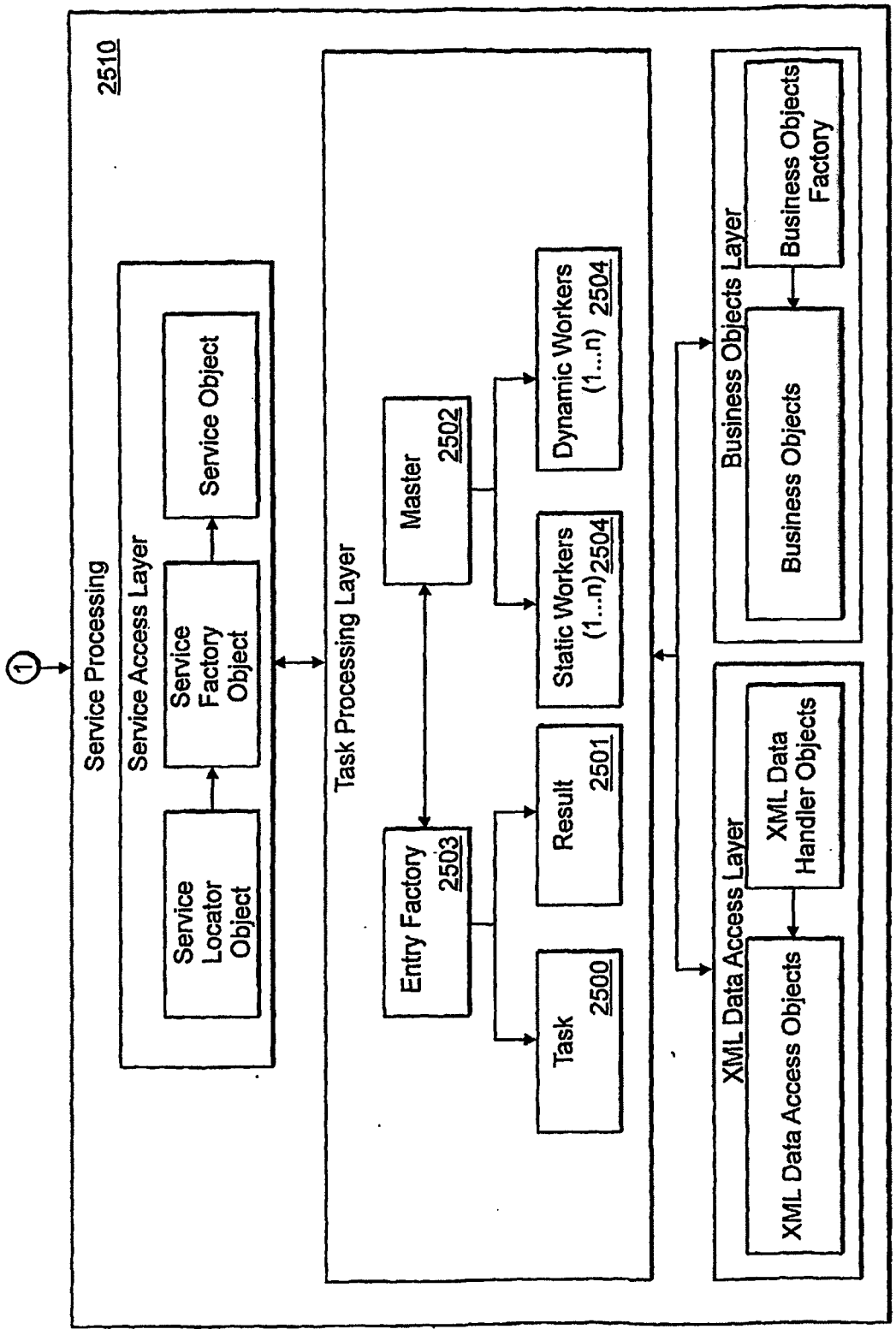

1
Service Processing
2510
Service Access Layer
Service Locator Object
Service Factory Object
Service Object
Task Processing Layer
Entry Factory 2503
Master 2502
Task 2500
Result 2501
Static Workers (1...n) 2504
Dynamic Workers (1...n) 2504
XML Data Access Layer
XML Data Access Objects
XML Data Handler Objects
Business Objects Layer
Business Objects
Business Objects Factory

FIG. 25B