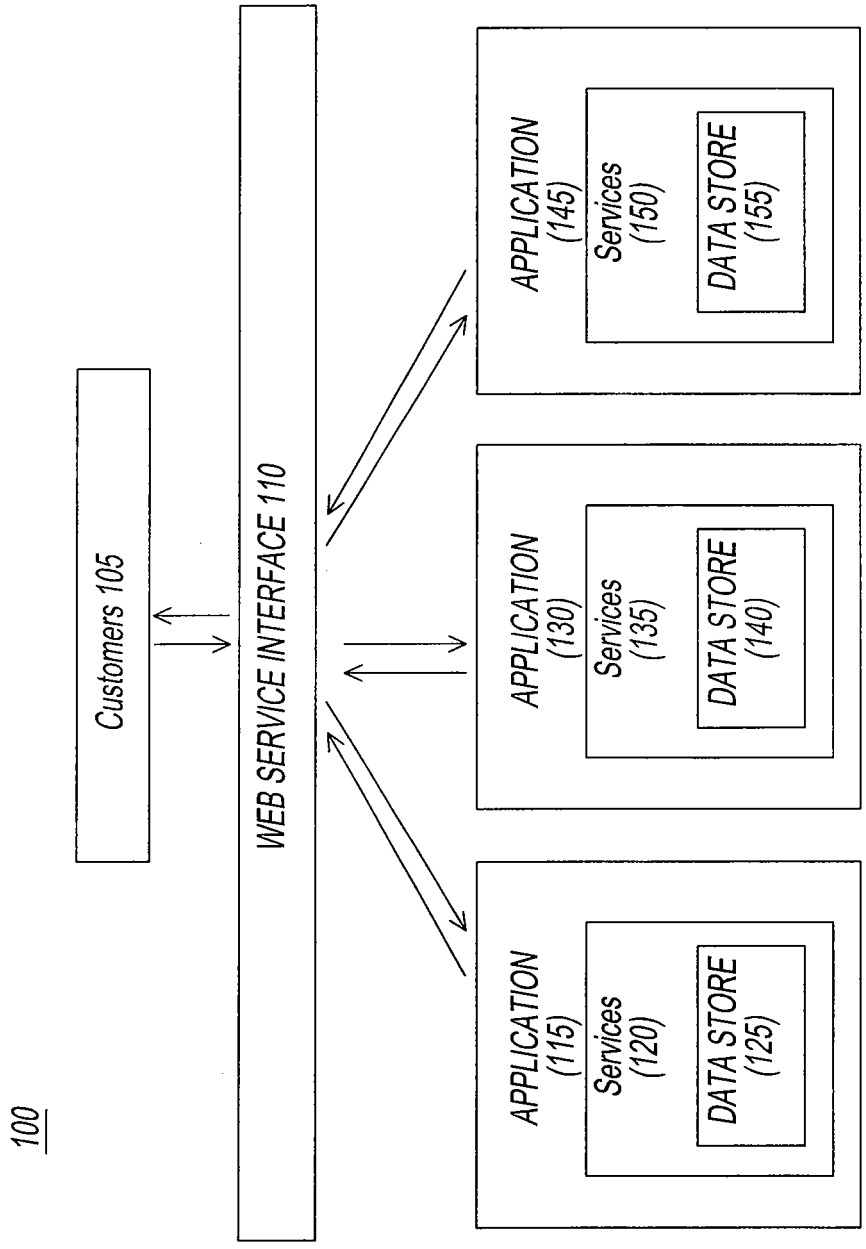


Fig. 1
(Prior Art)

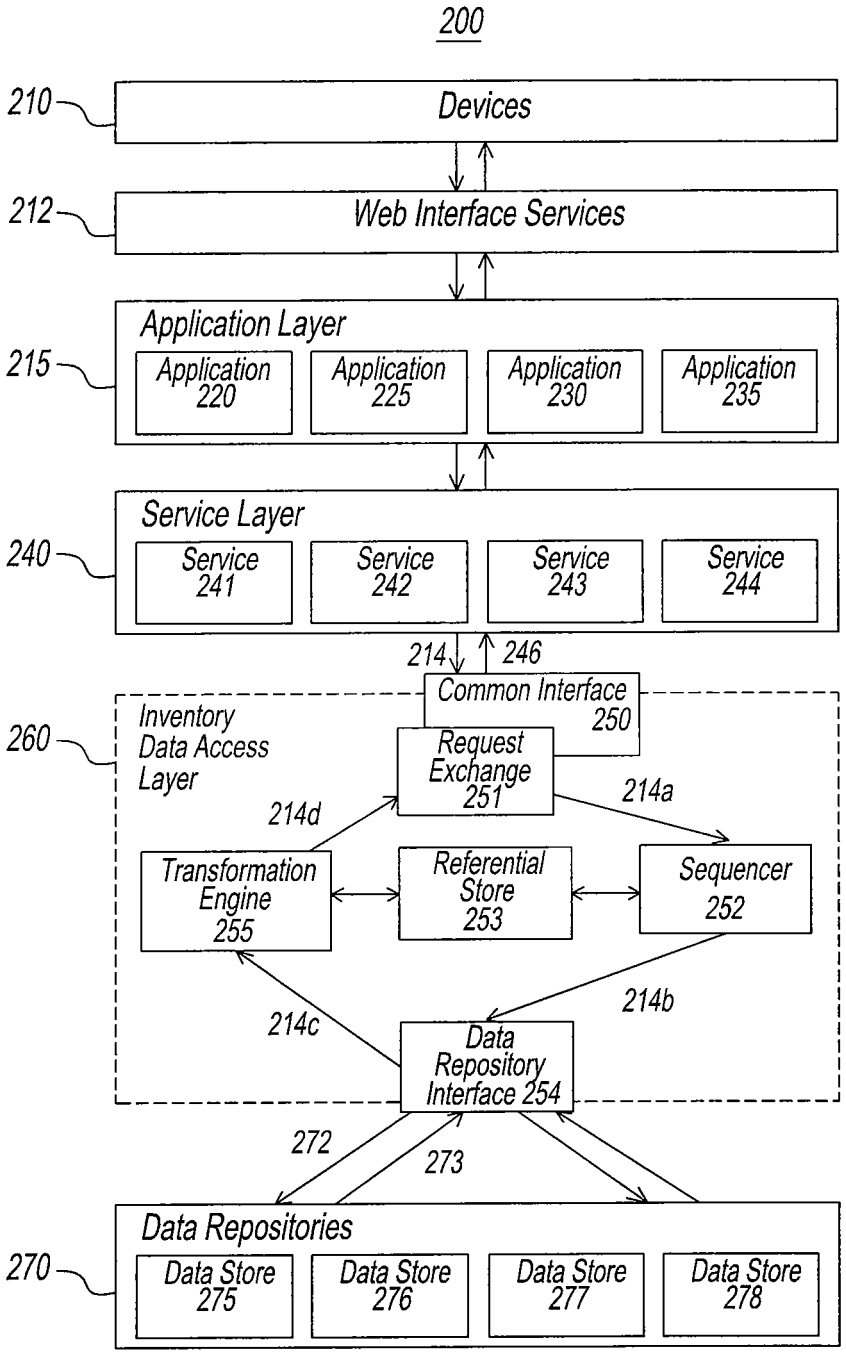

200
210
Devices
212
Web Interface Services
Application Layer
215
Application 220
Application 225
Application 230
Application 235
Service Layer
240
Service 241
Service 242
Service 243
Service 244
214
246
Common Interface 250
260
Inventory Data Access Layer
Request Exchange 251
214a
214d
Transformation Engine 255
Referential Store 253
Sequencer 252
214b
214c
Data Repository Interface 254
272
273
Data Repositories
270
Data Store 275
Data Store 276
Data Store 277
Data Store 278

Fig. 2

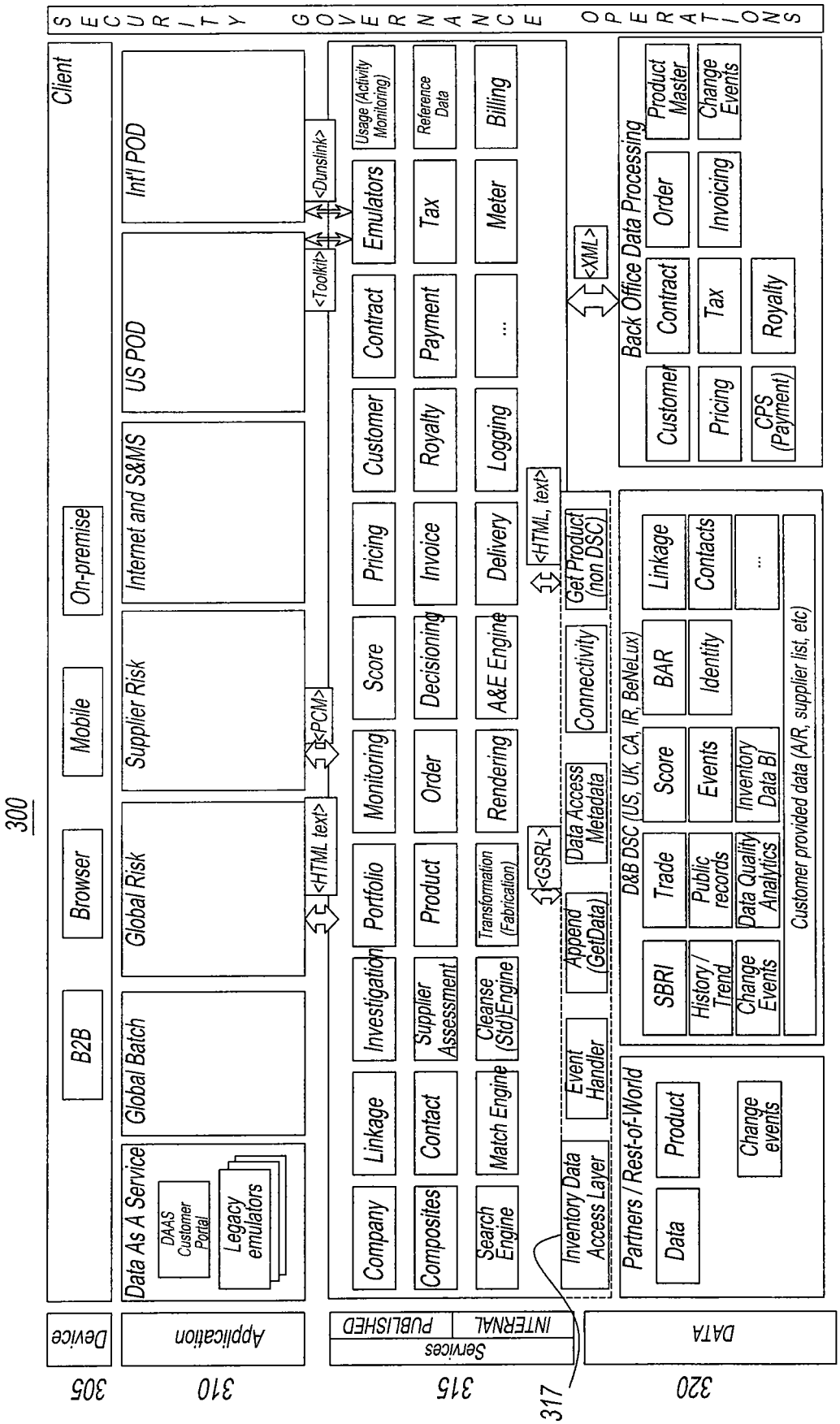

300
SECURITY
GOVERNANCE
OPERATIONS
Client
B2B
Browser
Mobile
On-premise
Data As A Service
DAAS Customer Portal
Legacy emulators
Global Batch
Global Risk
Supplier Risk
Internet and S&MS
US POD
Int'l POD
<Toolkit>
<Dunslink>
<HTML text>
<PCM>
Company
Linkage
Investigation
Portfolio
Monitoring
Score
Pricing
Customer
Contract
Emulators
Usage (Activity Monitoring)
Composites
Contact
Supplier Assessment
Product
Order
Decisioning
Invoice
Royalty
Payment
Tax
Reference Data
Search Engine
Match Engine
Cleanse (Std)Engine
Transformation (Fabrication)
Rendering
A&E Engine
Delivery
Logging
...
Meter
Billing
Inventory Data Access Layer
Event Handler
Append (GetData)
<GSRL>
Data Access Metadata
Connectivity
<HTML, text>
Get Product (non DSC)
<XML>
Back Office Data Processing
Customer
Contract
Order
Product Master
Pricing
Tax
Invoicing
Change Events
CPS (Payment)
Royalty
Partners / Rest-of-World
Data
Product
Change events
D&B DSC (US, UK, CA, IR, BeNeLux)
SBRI
History / Trend
Change Events
Trade
Public records
Data Quality Analytics
Score
Events
Inventory Data BI
BAR
Identity
Linkage
Contacts
...
Customer provided data (A/R, supplier list, etc)
Device
Application
Services
INTERNAL
PUBLISHED
DATA
305
310
315
317
320

Fig. 3

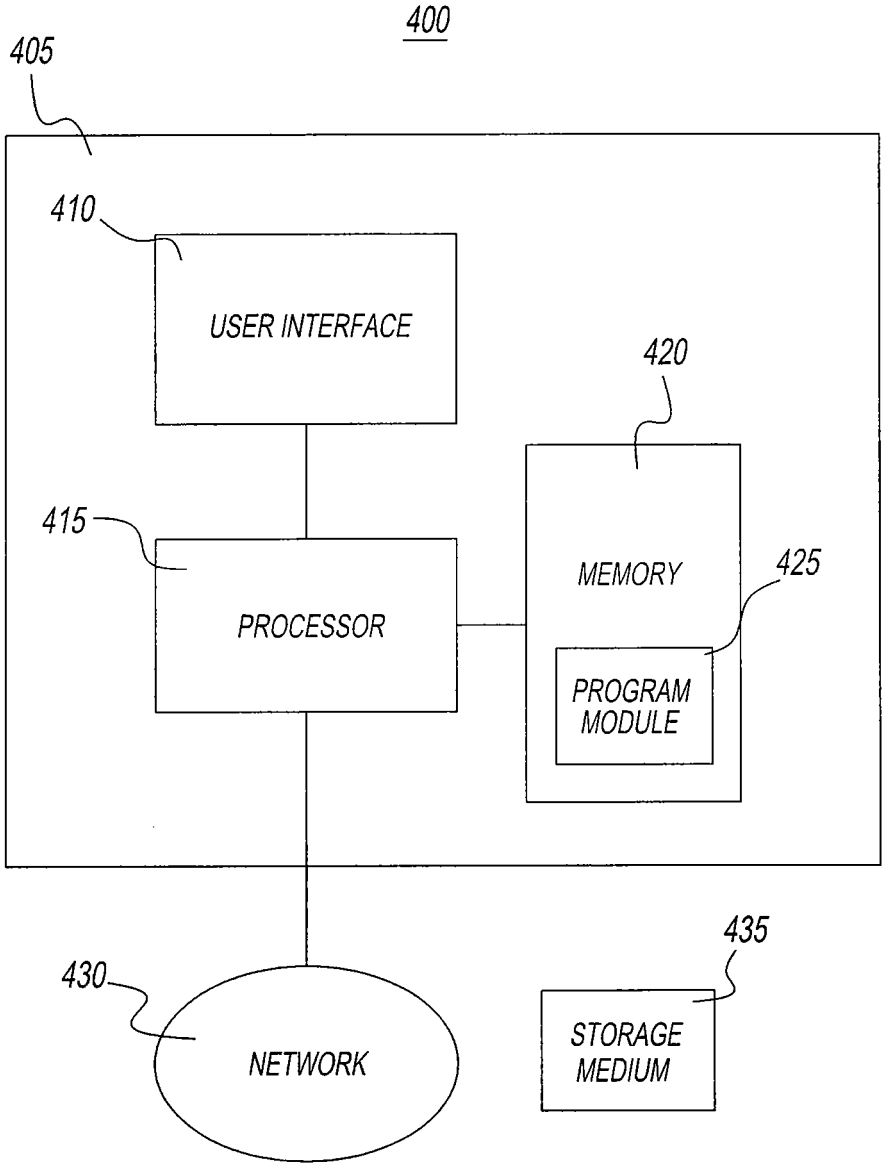
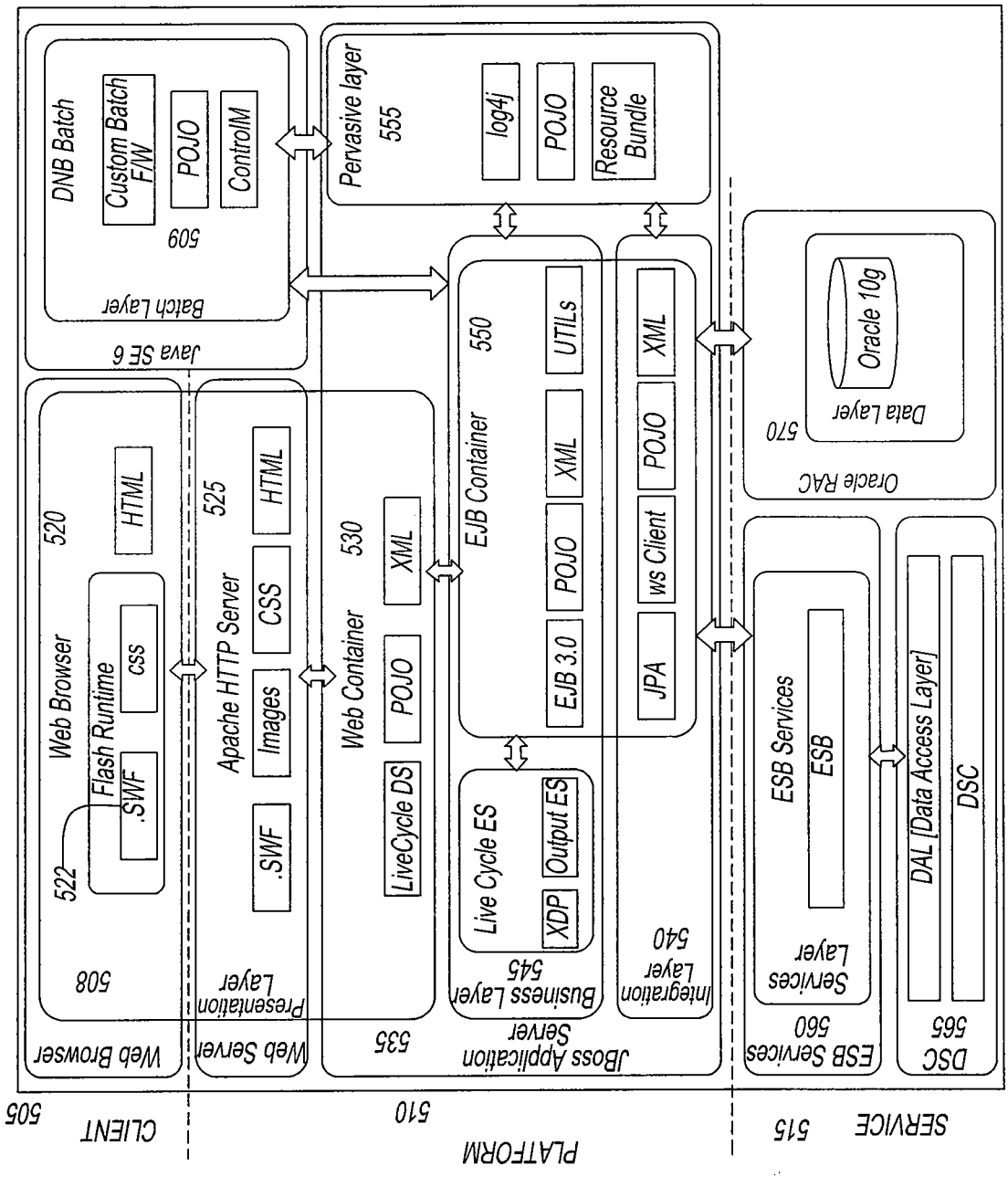

400
405
410
USER INTERFACE
420
415
MEMORY
425
PROCESSOR
PROGRAM MODULE
435
430
NETWORK
STORAGE MEDIUM

Fig. 4

FIG. 5


CLIENT
505
PLATFORM
510
SERVICE
515
Web Browser
508
Web Browser
520
Flash Runtime
.SWF
522
css
HTML
Presentation Layer
Web Server
525
Apache HTTP Server
.SWF
Images
CSS
HTML
535
Web Container
LiveCycle DS
POJO
XML
JBoss Application Server
Business Layer
545
Live Cycle ES
XDP
Output ES
EJB Container
550
EJB 3.0
POJO
XML
UTILs
Integration Layer
540
JPA
ws Client
POJO
XML
Pervasive layer
555
log4j
POJO
Resource Bundle
Batch Layer
Java SE 6
DNB Batch
Custom Batch F/W
POJO
ControlM
509
Oracle RAC
570
Data Layer
Oracle 10g
ESB Services
560
Services Layer
ESB
DSC
565
DAL [Data Access Layer]
DSC

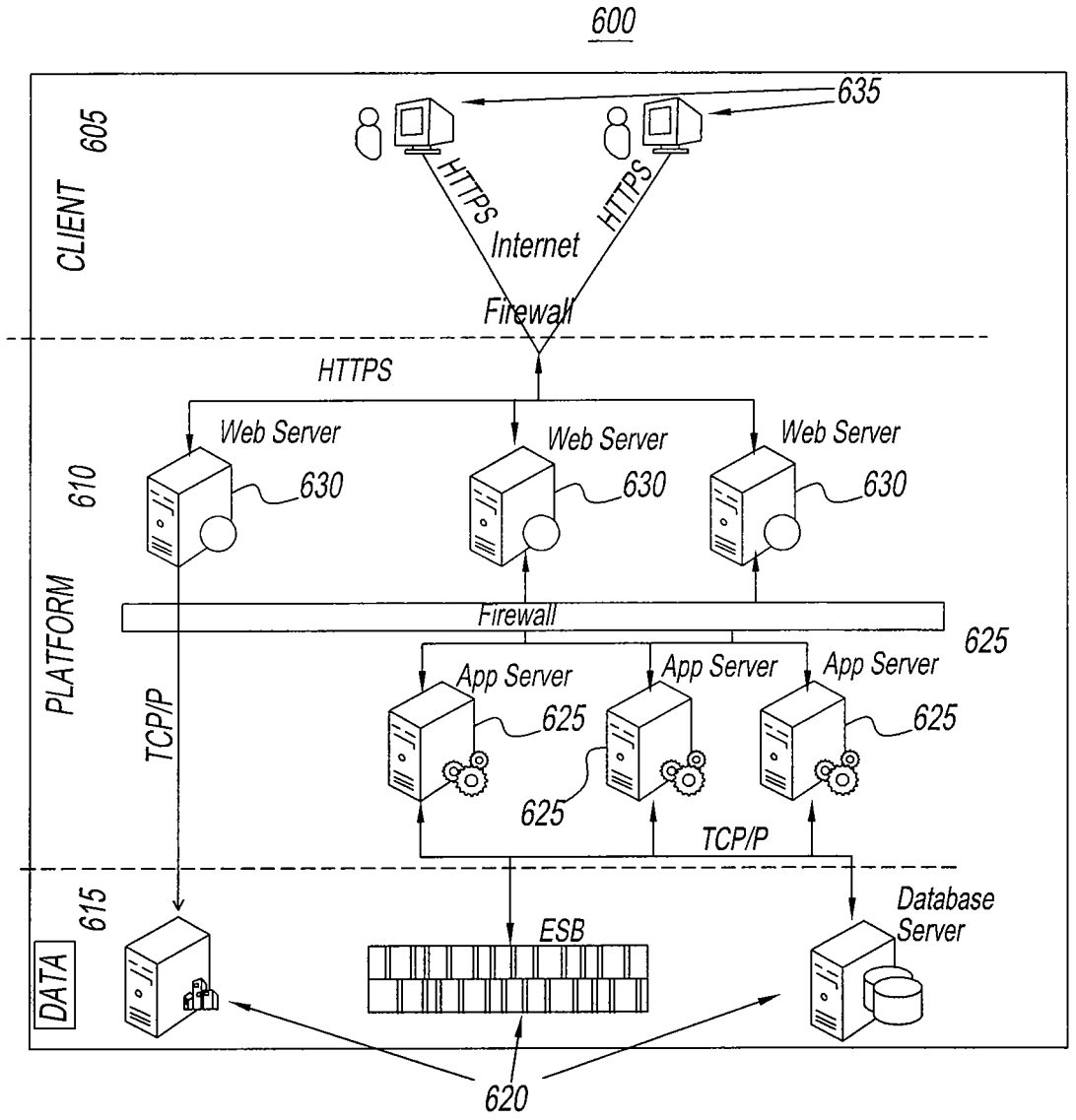

600
635
605
CLIENT
HTTPS
Internet
HTTPS
Firewall
HTTPS
Web Server
630
Web Server
630
Web Server
630
610
PLATFORM
Firewall
625
App Server
625
App Server
625
App Server
625
625
TCP/P
TCP/P
615
DATA
ESB
Database
Server
620

Fig. 6

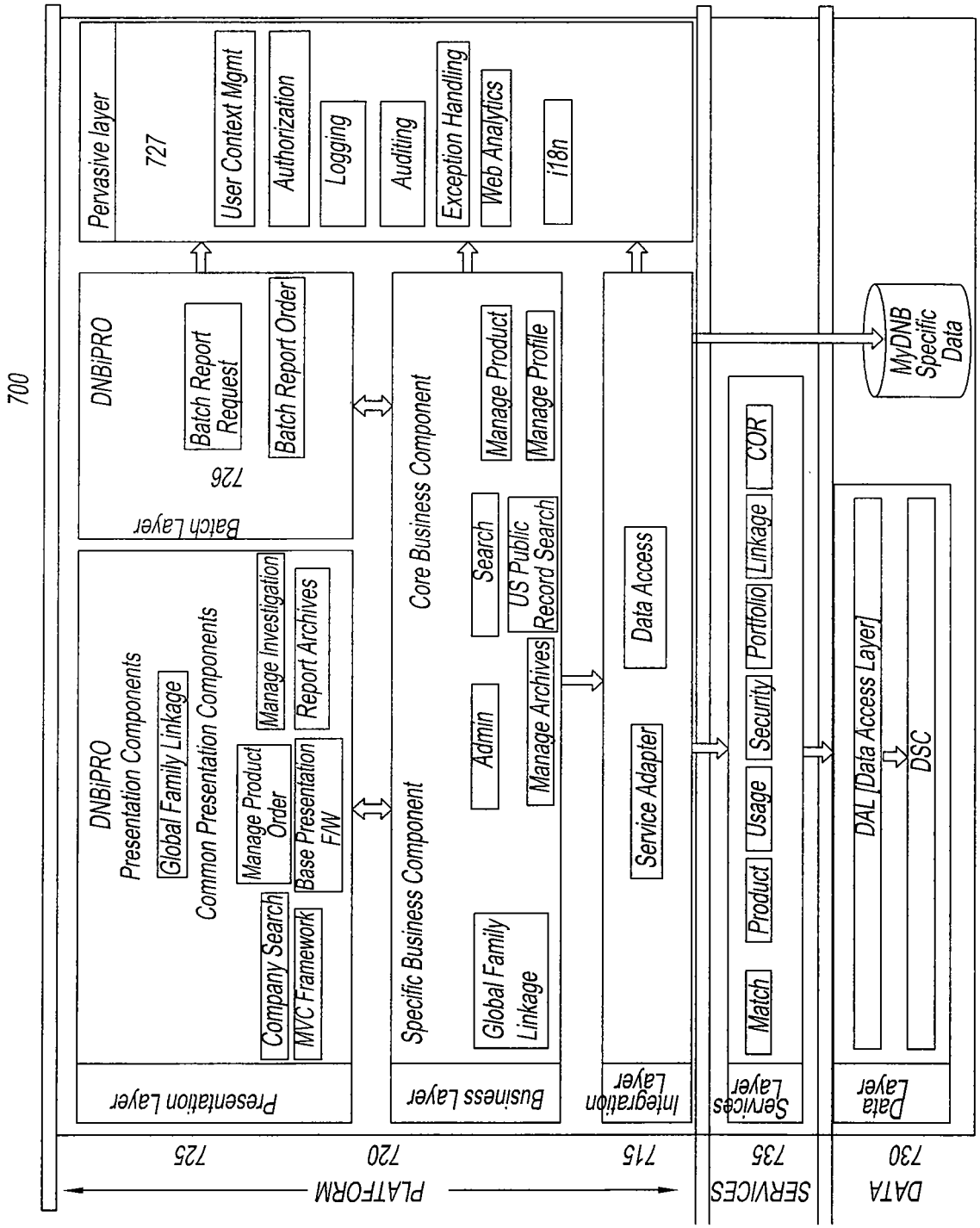

700
PLATFORM
725
720
715
SERVICES
735
DATA
730
Presentation Layer
DNBiPRO
Presentation Components
Global Family Linkage
Common Presentation Components
Company Search
MVC Framework
Manage Product Order
Base Presentation F/W
Manage Investigation
Report Archives
Batch Layer
DNBiPRO
Batch Report Request
726
Batch Report Order
Business Layer
Specific Business Component
Global Family Linkage
Admin
Manage Archives
Search
US Public Record Search
Core Business Component
Manage Product
Manage Profile
Integration Layer
Service Adapter
Data Access
Services Layer
Match
Product
Usage
Security
Portfolio
Linkage
COR
Data Layer
DAL [Data Access Layer]
DSC
MyDNB Specific Data
Pervasive layer
727
User Context Mgmt
Authorization
Logging
Auditing
Exception Handling
Web Analytics
i18n

Fig. 7

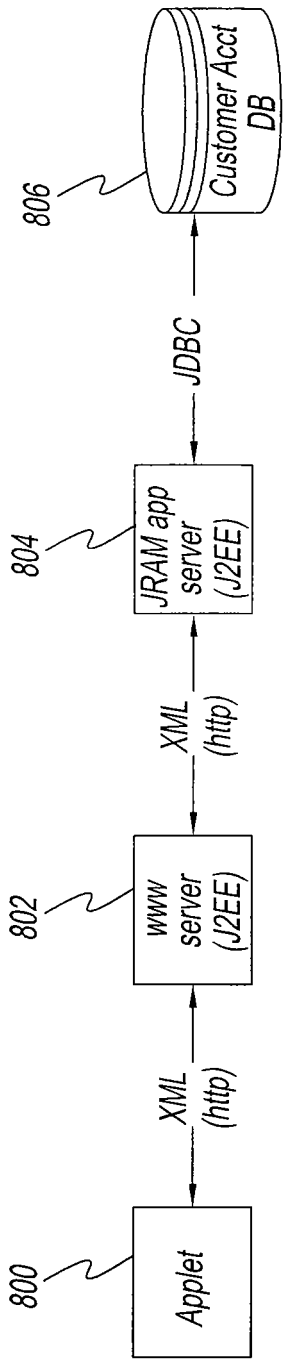

806
Customer Acct DB
JDBC
804
JRAM app server (J2EE)
XML (http)
802
www server (J2EE)
XML (http)
800
Applet

Fig. 8

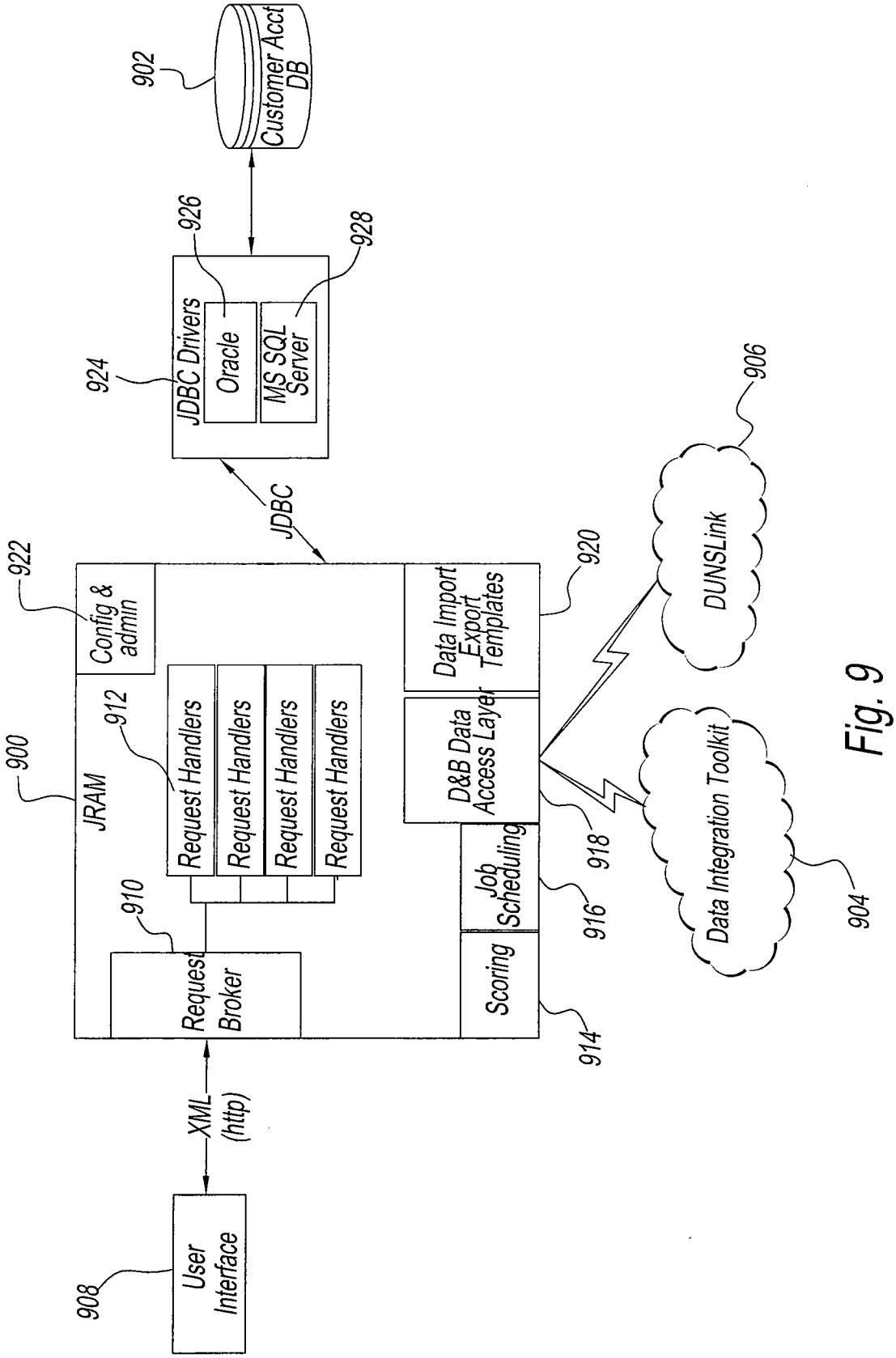

902
Customer Acct DB
926
928
JDBC Drivers
Oracle
MS SQL Server
924
JDBC
922
Config & admin
900
JRAM
912
Request Handlers
Request Handlers
Request Handlers
Request Handlers
910
Request Broker
Data Import Export Templates
920
D&B Data Access Layer
Job Scheduling
916
Scoring
914
918
DUNSLink
906
Data Integration Toolkit
904
XML (http)
908
User Interface

Fig. 9

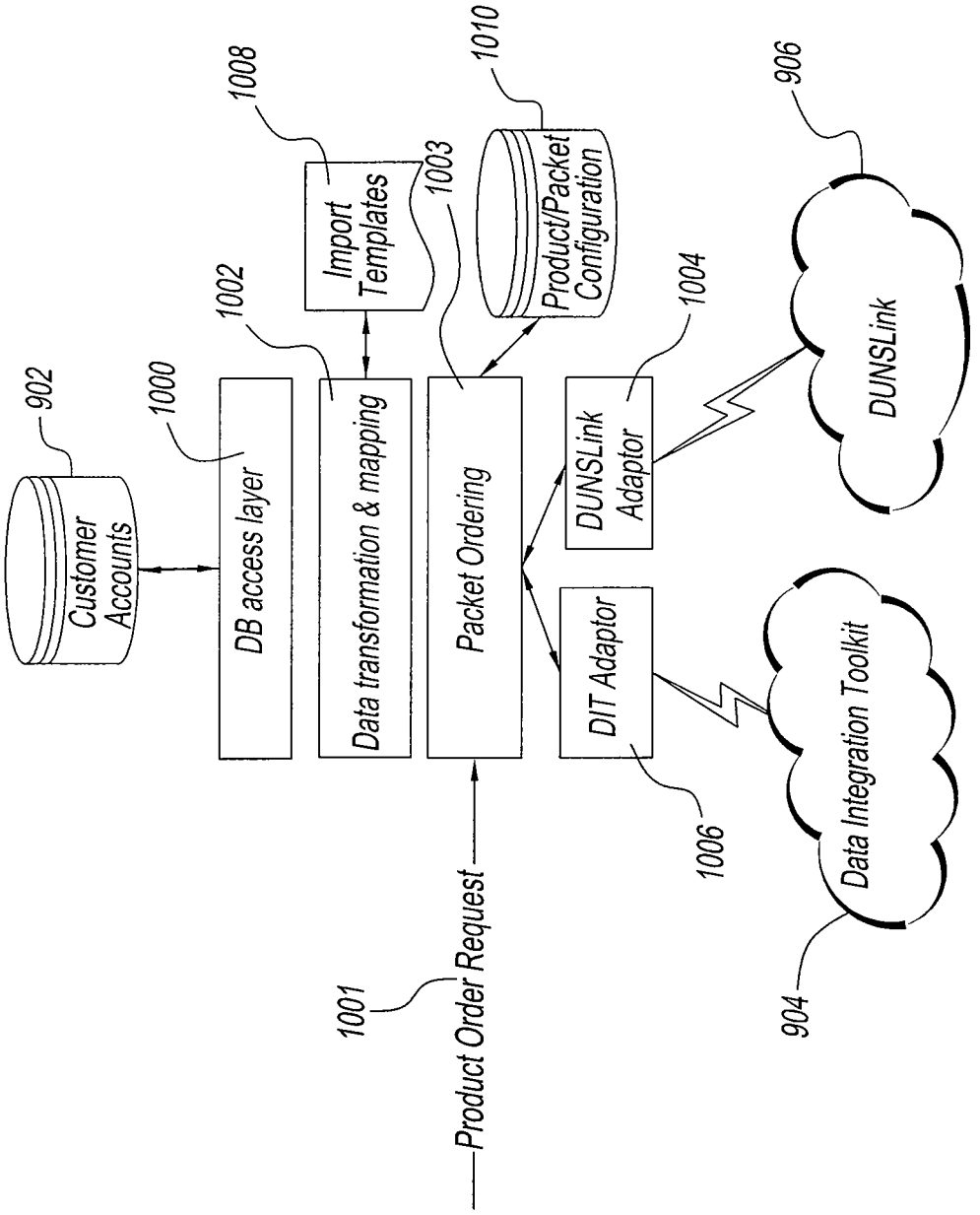

902
Customer Accounts
1000
DB access layer
1002
Data transformation & mapping
1008
Import Templates
1003
Packet Ordering
1010
Product/Packet Configuration
1004
DUNSLink Adaptor
906
DUNSLink
1006
DIT Adaptor
Data Integration Toolkit
904
1001
Product Order Request

Fig. 10