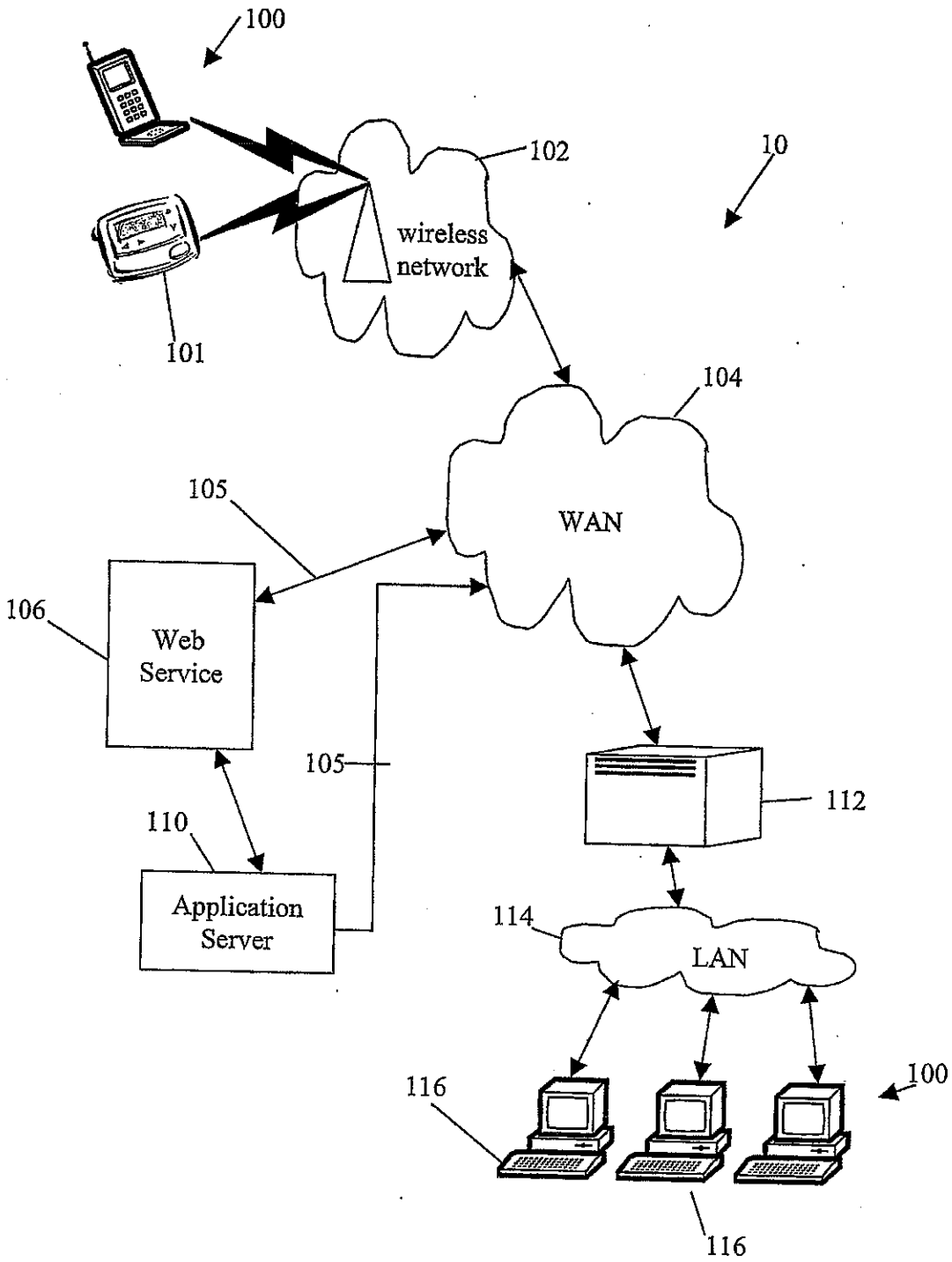

100
102
10
wireless
network
101
104
105
WAN
106
Web
Service
105
112
110
Application
Server
114
LAN
116
100
116

Figure 1

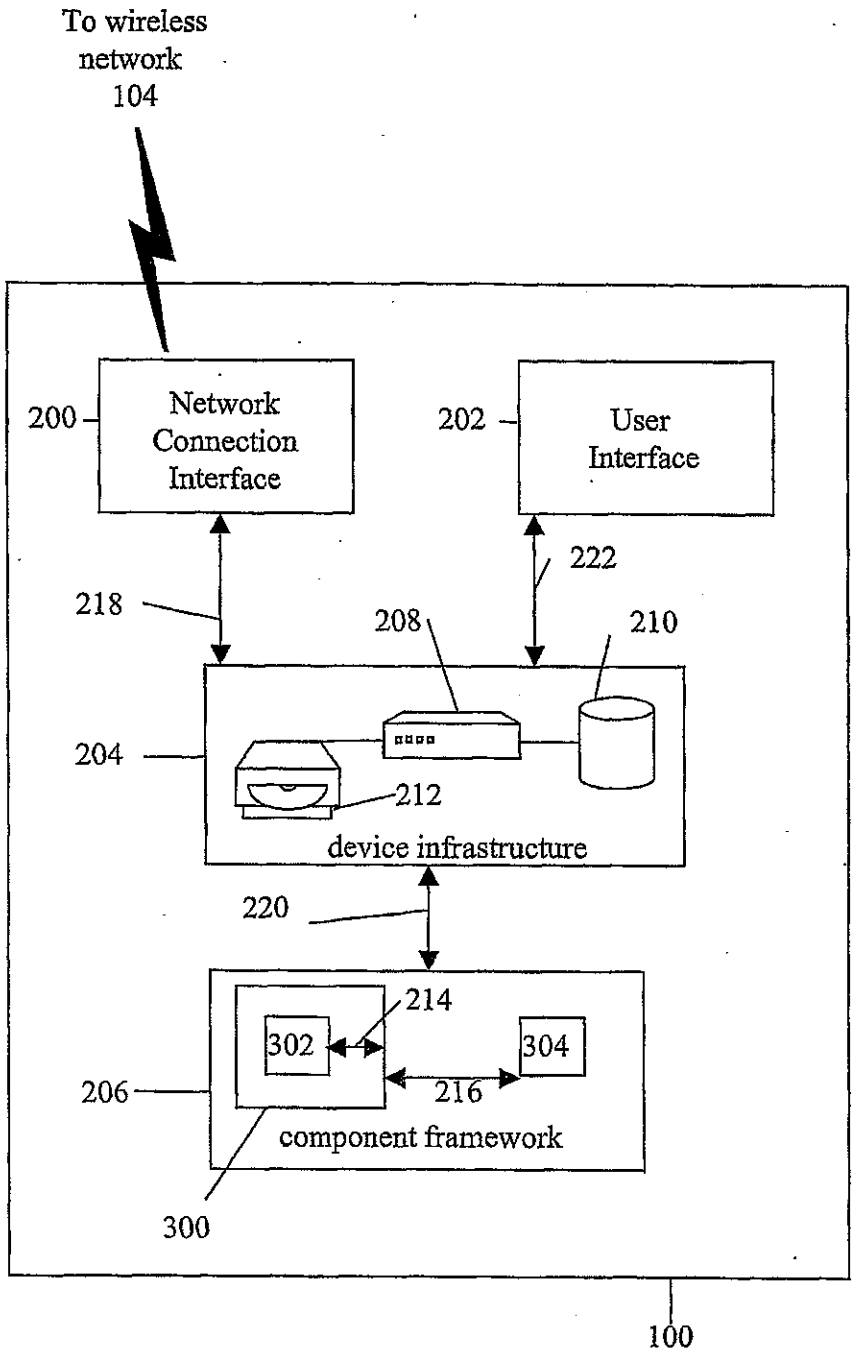

To wireless network 104
200
Network Connection Interface
202
User Interface
222
218
208
210
204
212
device infrastructure
220
214
302
304
216
206
component framework
300
100

Figure 2

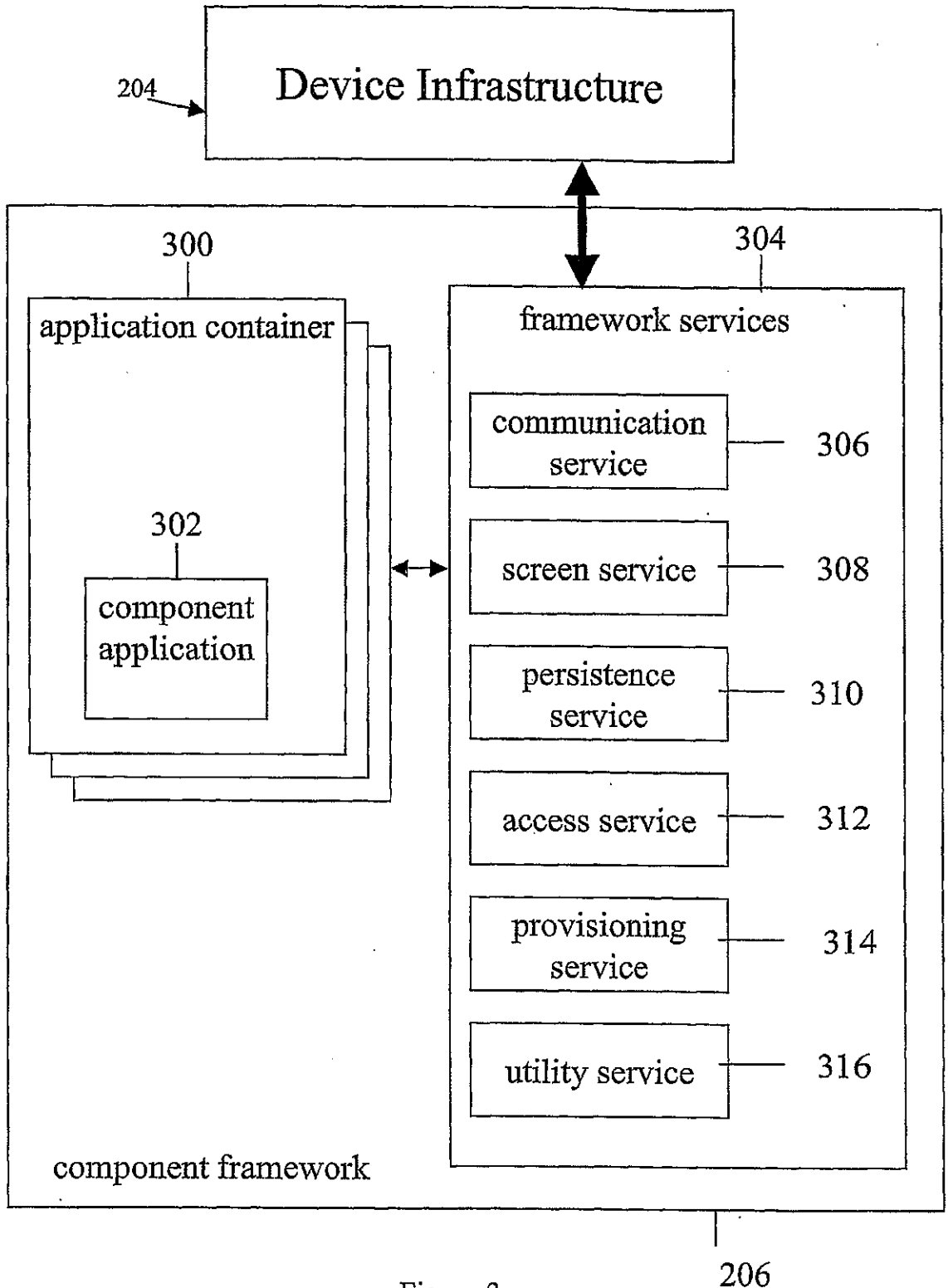

Device Infrastructure
204
300
304
application container
framework services
communication service
306
302
component application
screen service
308
persistence service
310
access service
312
provisioning service
314
utility service
316
component framework
206

Figure 3

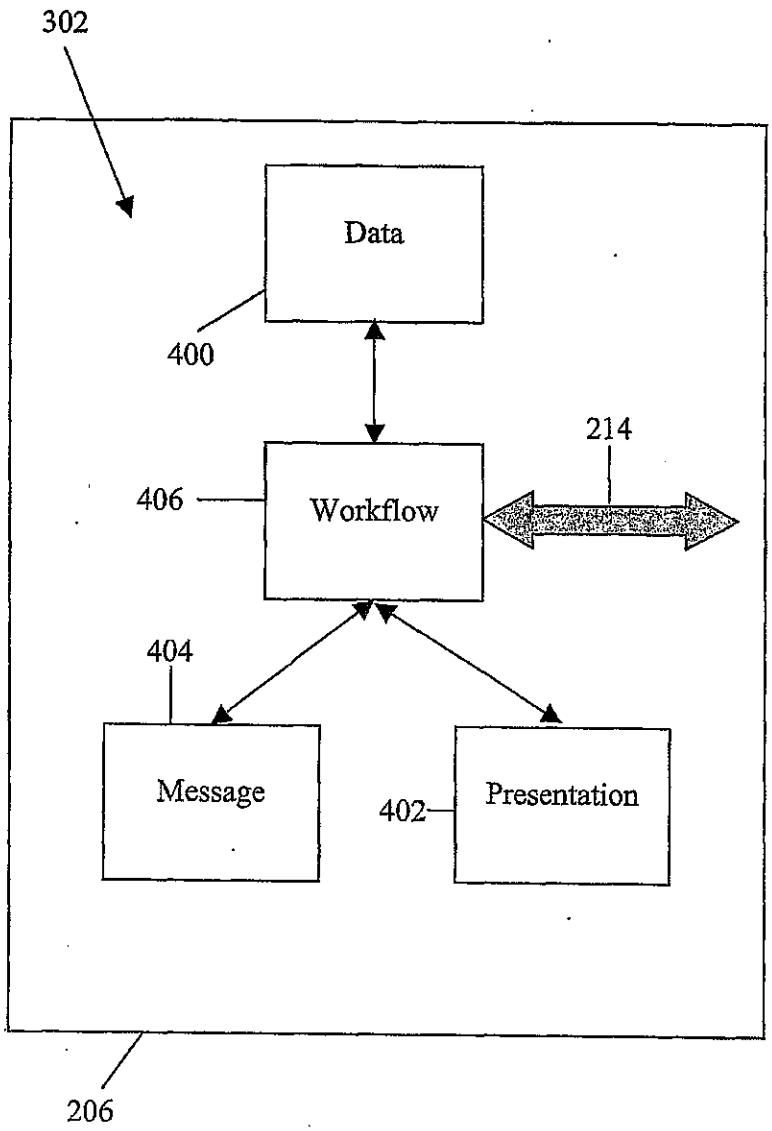

302
Data
400
214
406
Workflow
404
Message
402
Presentation
206

Figure 4

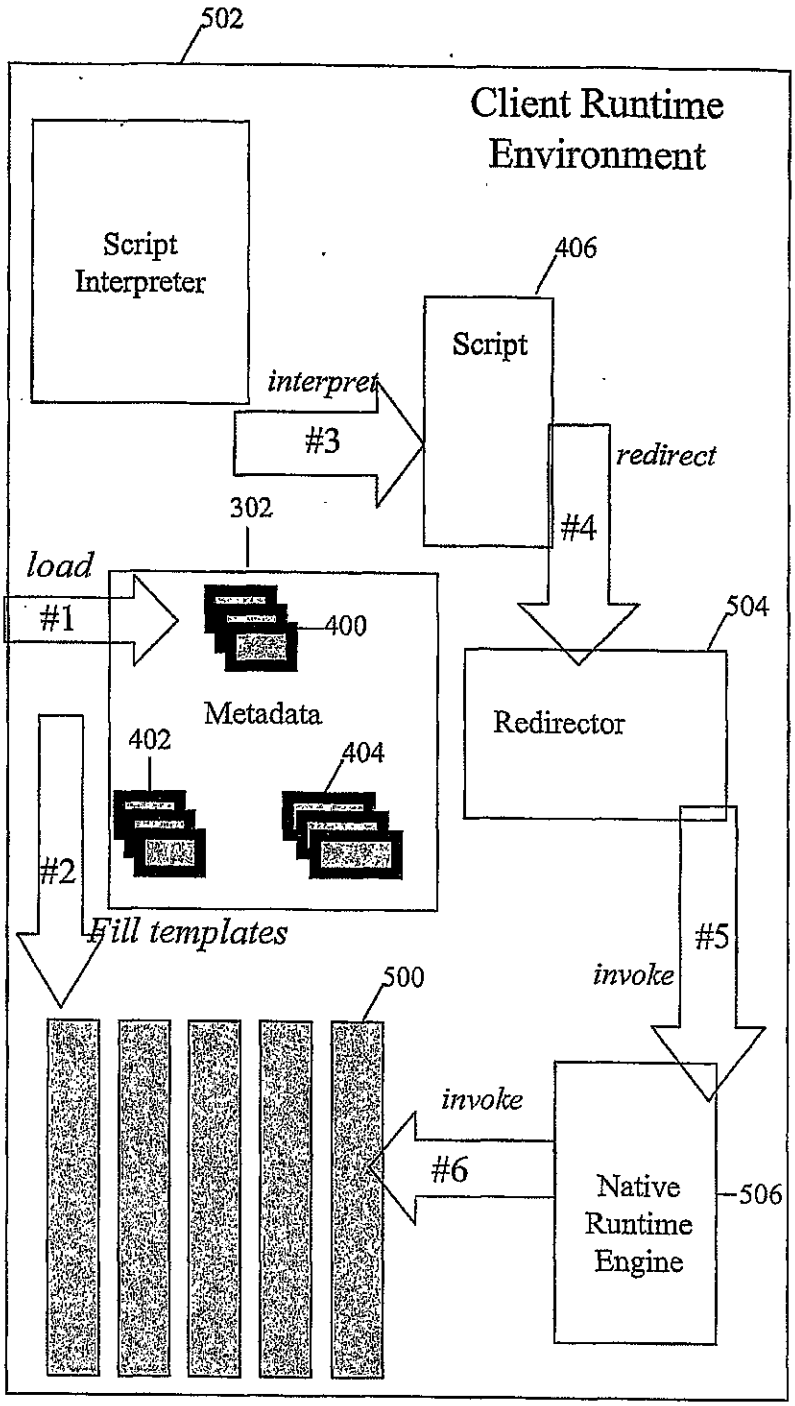

502
Client Runtime Environment
Script Interpreter
406
Script
interpret
#3
redirect
#4
302
load
#1
400
Metadata
402
404
504
Redirector
#2
Fill templates
#5
invoke
500
invoke
#6
Native Runtime Engine
506

Figure 4a

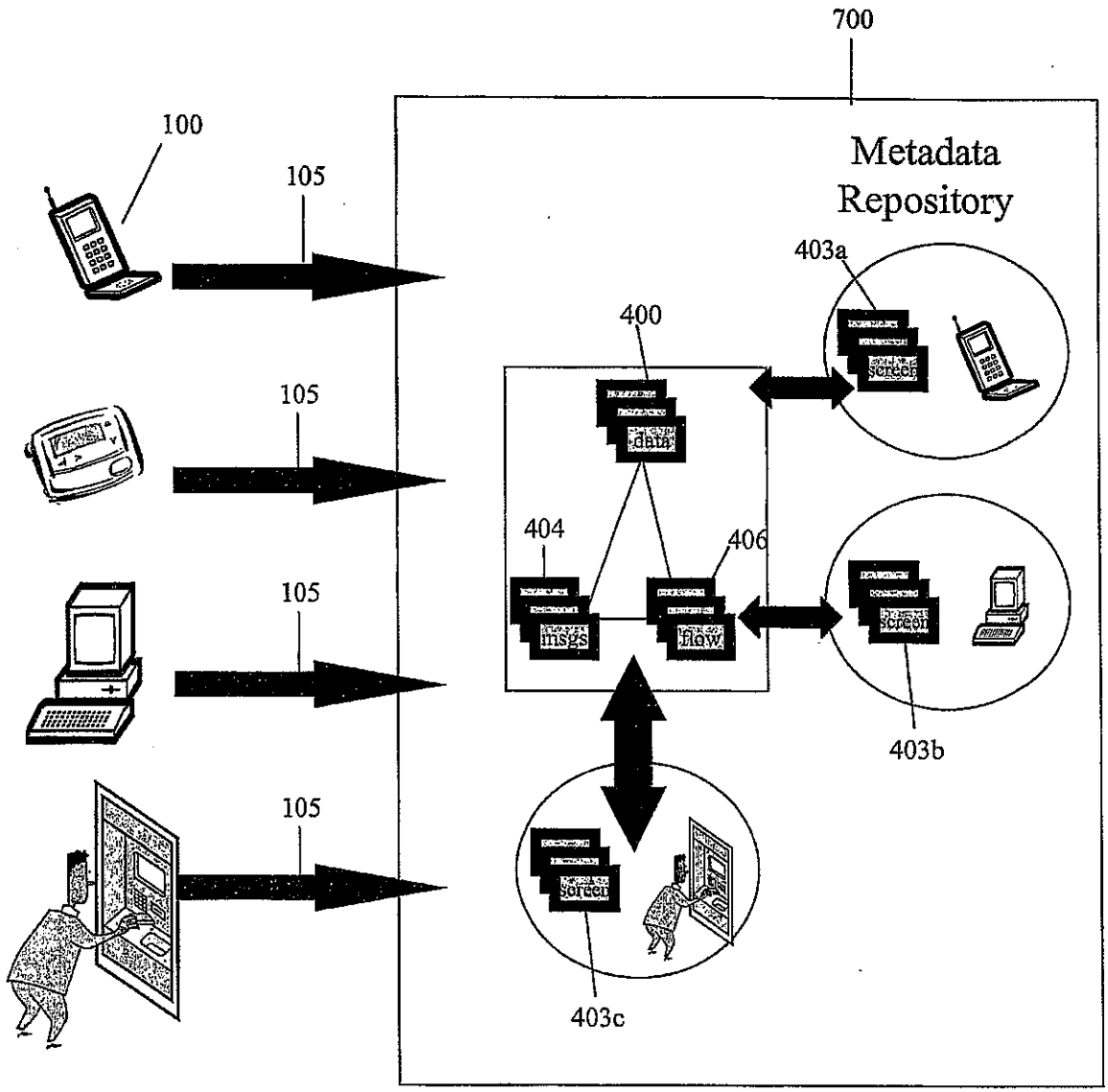

700
Metadata
Repository
100
105
105
105
105
403a
400
404
406
403b
403c
data
msgs
flow
screen
screen
screen

Figure 4b

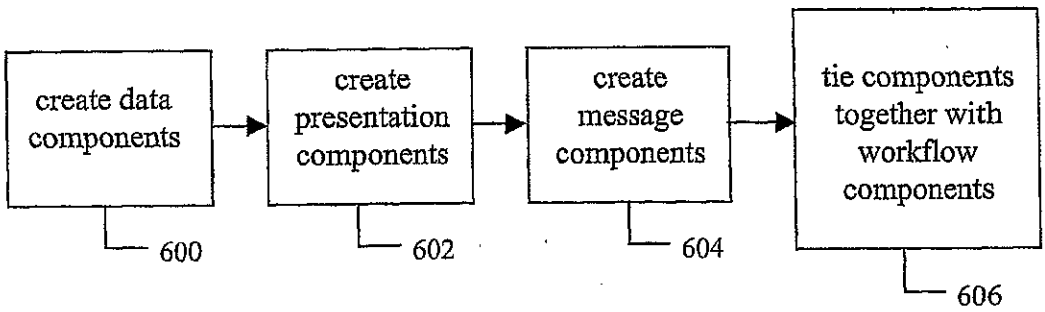

create data components
600
create presentation components
602
create message components
604
tie components together with workflow components
606

Figure 5

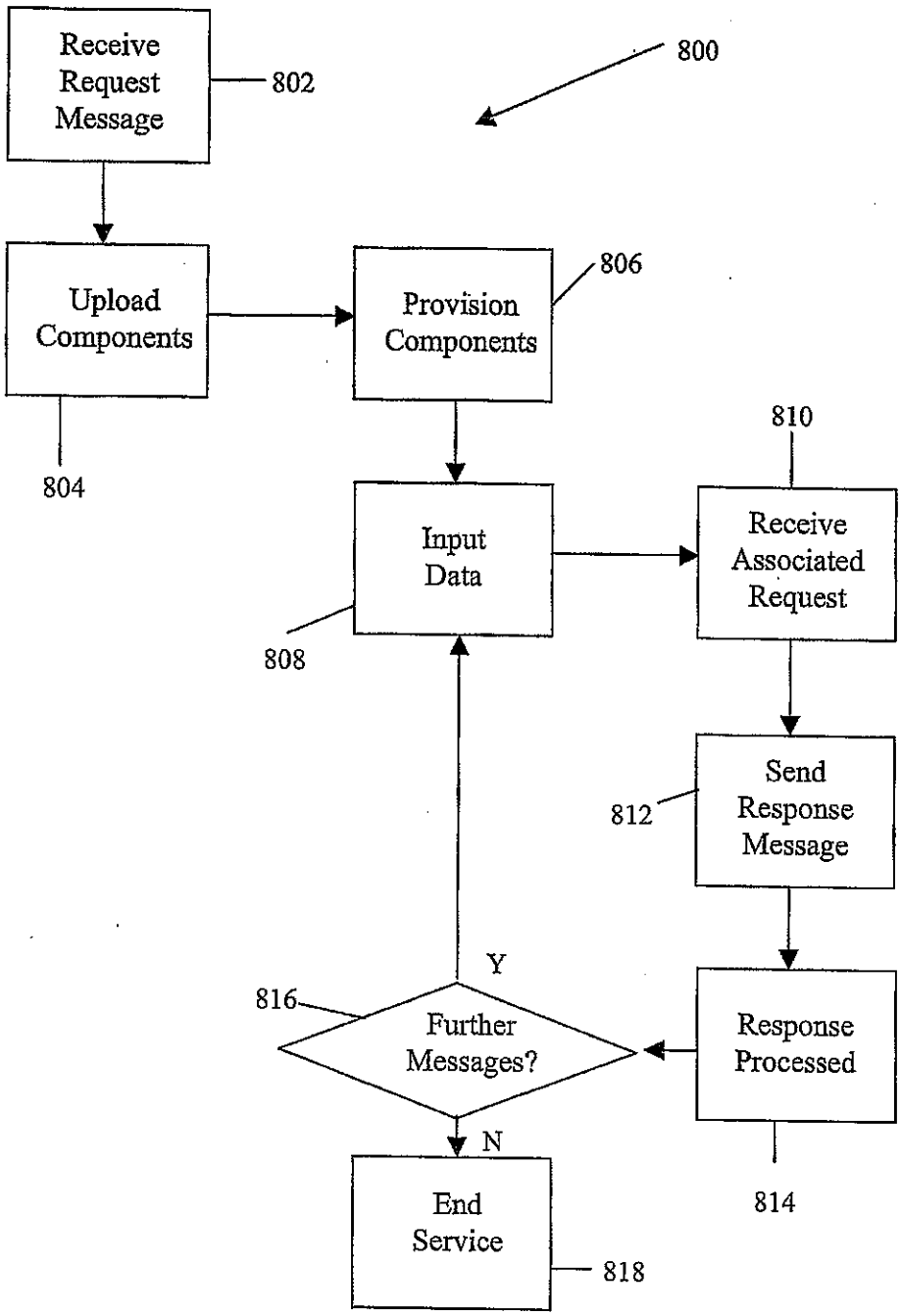

Receive Request Message
802
800
Upload Components
804
Provision Components
806
Input Data
808
810
Receive Associated Request
Send Response Message
812
Response Processed
814
Y
816
Further Messages?
N
End Service
818

Figure 6

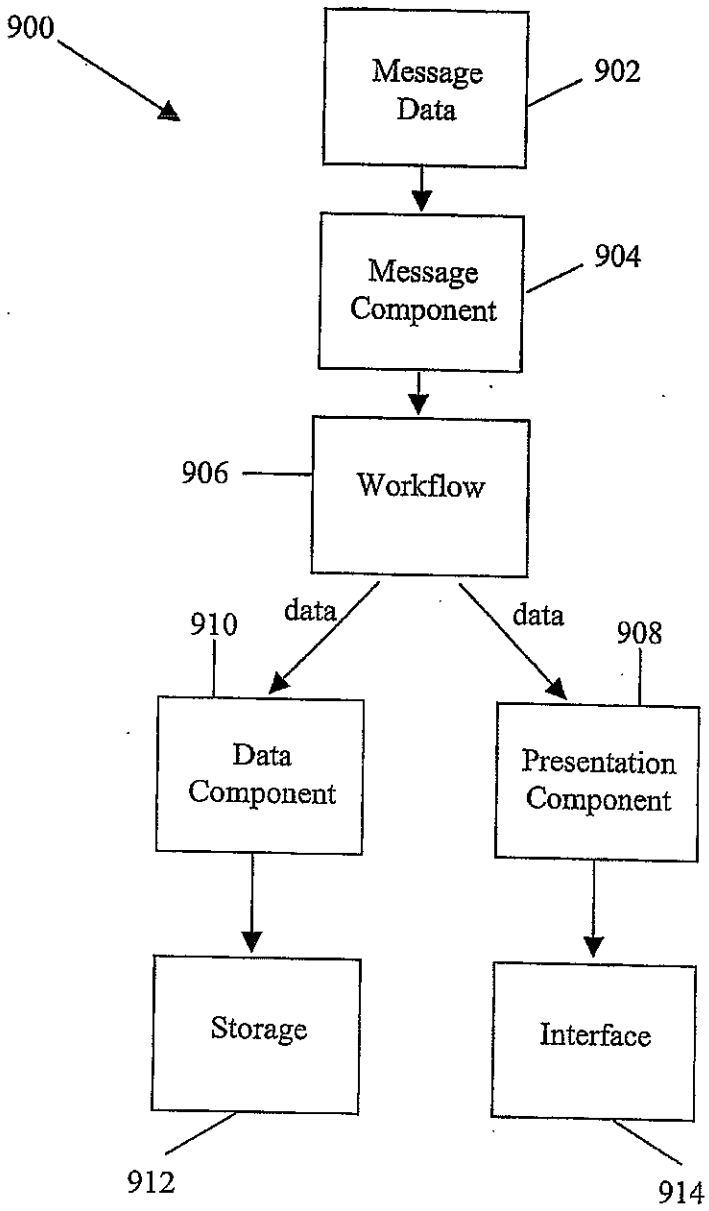

900
Message Data
902
Message Component
904
906
Workflow
910
data
data
908
Data Component
Presentation Component
Storage
Interface
912
914

Figure 7

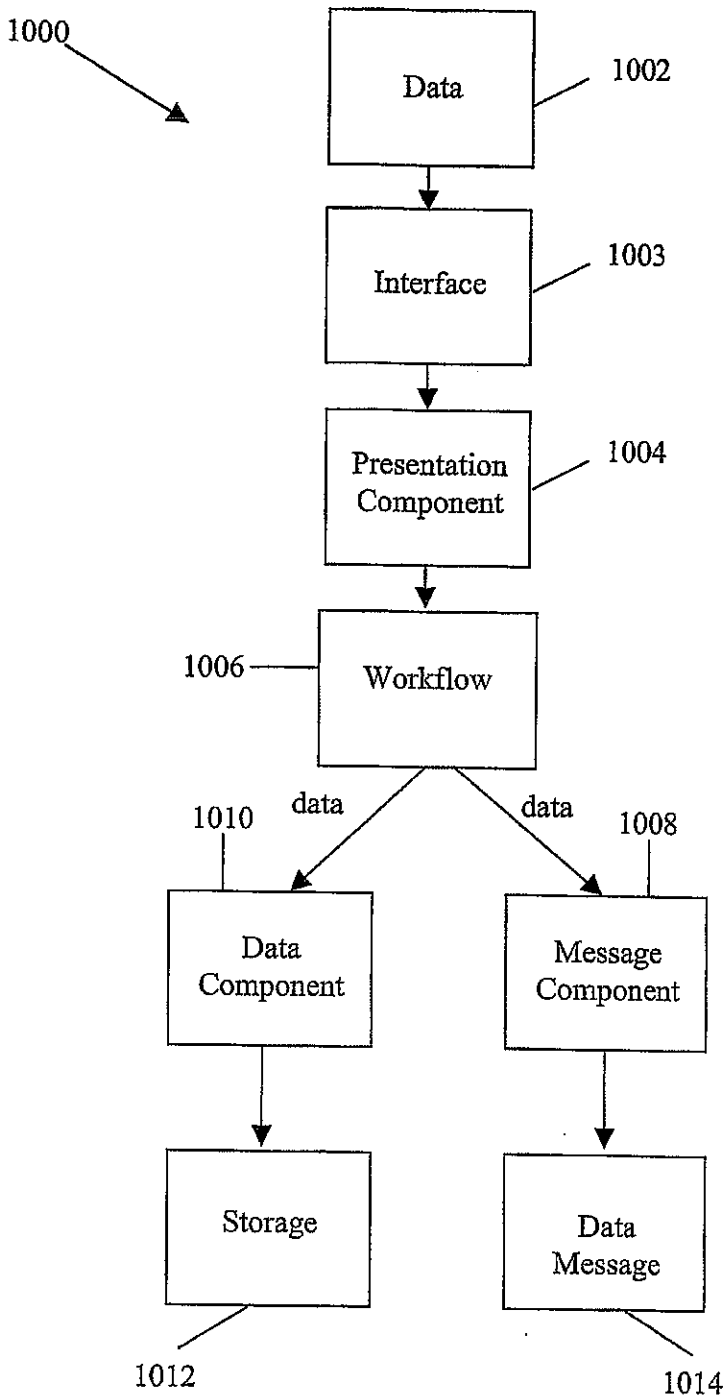

1000
Data
1002
Interface
1003
Presentation Component
1004
1006
Workflow
data
data
1010
1008
Data Component
Message Component
Storage
Data Message
1012
1014

Figure 8

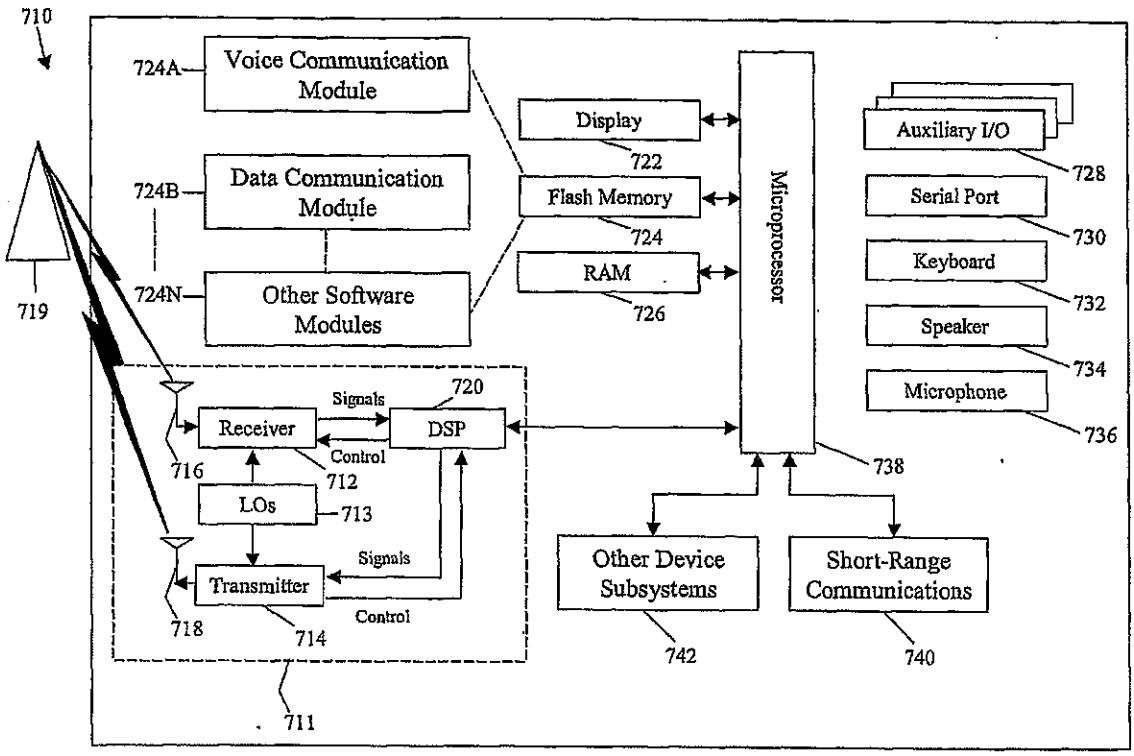

710
724A
Voice Communication Module
724B
Data Communication Module
724N
Other Software Modules
719
Display
722
Flash Memory
724
RAM
726
Microprocessor
738
Auxiliary I/O
728
Serial Port
730
Keyboard
732
Speaker
734
Microphone
736
Signals
720
Receiver
DSP
Control
712
716
LOs
713
Signals
Transmitter
Control
718
714
711
Other Device Subsystems
742
Short-Range Communications
740

Figure 9