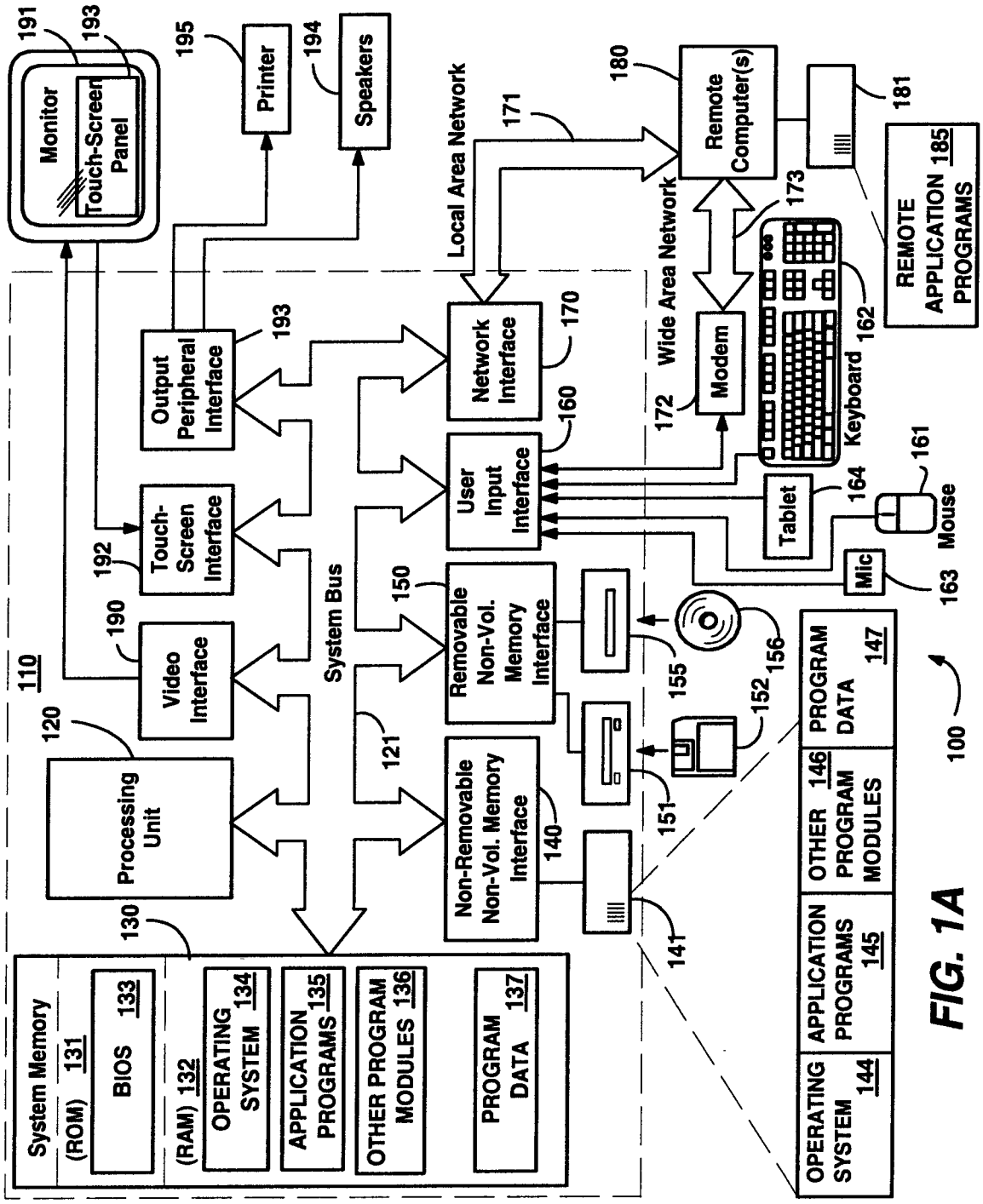

Monitor
Touch-Screen Panel
Printer
Speakers
Local Area Network
Remote Computer(s)
Wide Area Network
Modem
Keyboard
Tablet
Mouse
Mic
REMOTE APPLICATION PROGRAMS
Output Peripheral Interface
Network Interface
User Input Interface
Touch-Screen Interface
Video Interface
Removable Non-Vol. Memory Interface
Non-Removable Non-Vol. Memory Interface
Processing Unit
System Bus
System Memory
(ROM) 131
BIOS 133
(RAM) 132
OPERATING SYSTEM 134
APPLICATION PROGRAMS 135
OTHER PROGRAM MODULES 136
PROGRAM DATA 137
OPERATING SYSTEM 144
APPLICATION PROGRAMS 145
OTHER PROGRAM MODULES 146
PROGRAM DATA 147
110
120
121
130
140
141
150
151
152
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181
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190
191
192
193
194
195
100

FIG. 1A

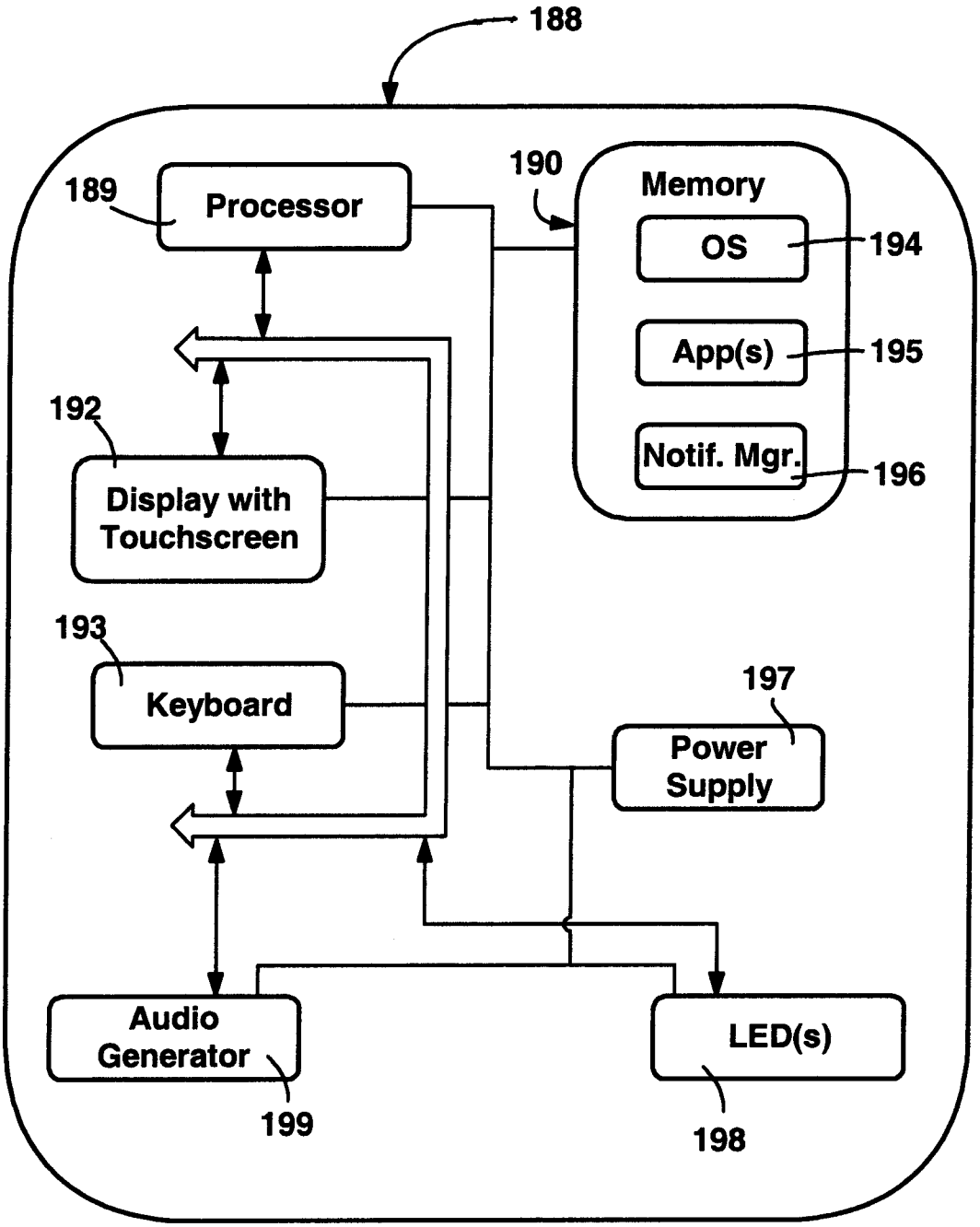

188
189
Processor
190
Memory
OS
194
App(s)
195
Notif. Mgr.
196
192
Display with Touchscreen
193
Keyboard
197
Power Supply
Audio Generator
199
LED(s)
198

FIG. 1B

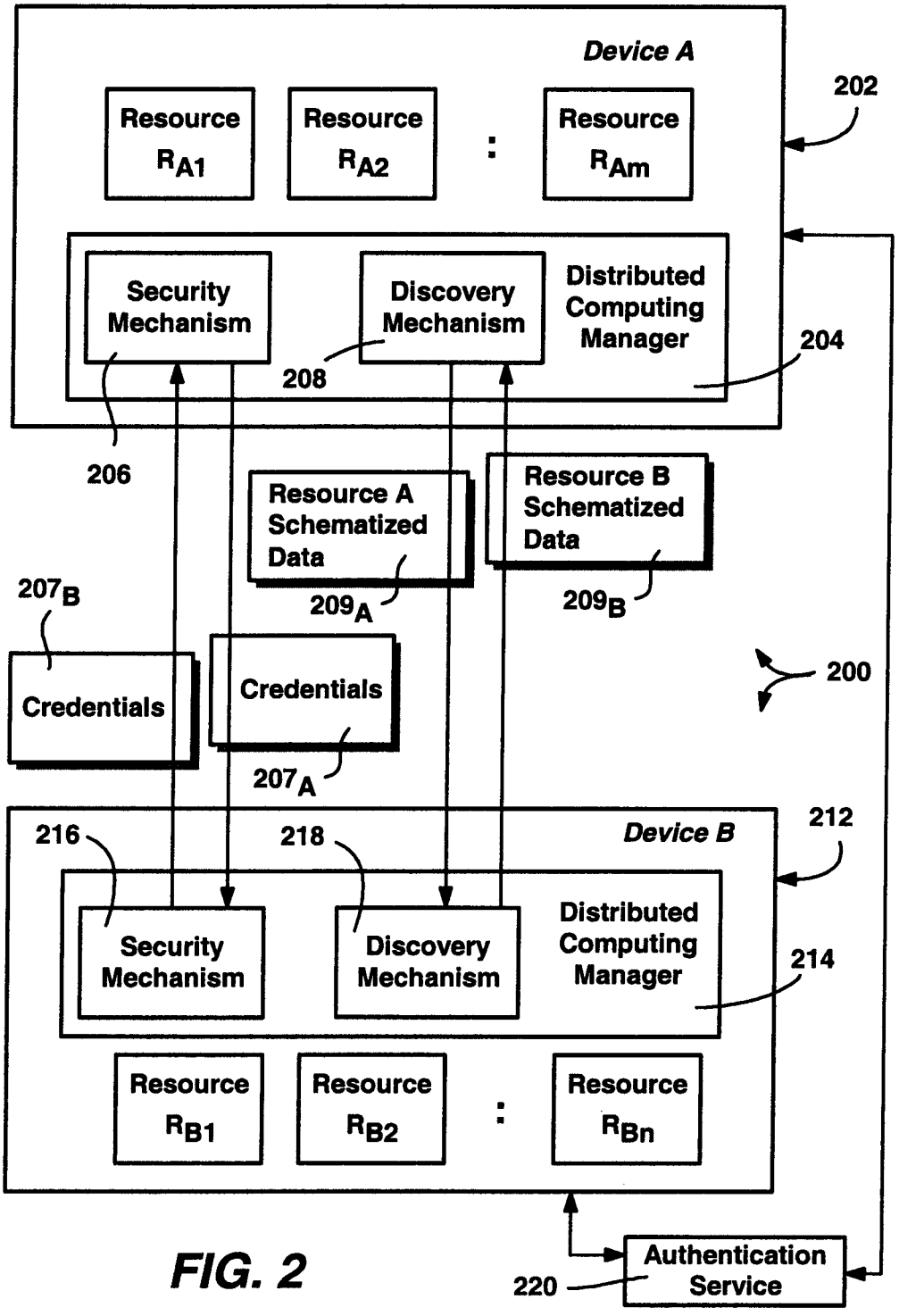

Device A
202
Resource R_{A1}
Resource R_{A2}
Resource R_{Am}
Security Mechanism
Discovery Mechanism
Distributed Computing Manager
204
208
206
Resource A Schematized Data
Resource B Schematized Data
209_A
209_B
207_B
Credentials
Credentials
207_A
200
Device B
212
216
218
Security Mechanism
Discovery Mechanism
Distributed Computing Manager
214
Resource R_{B1}
Resource R_{B2}
Resource R_{Bn}
Authentication Service
220

FIG. 2

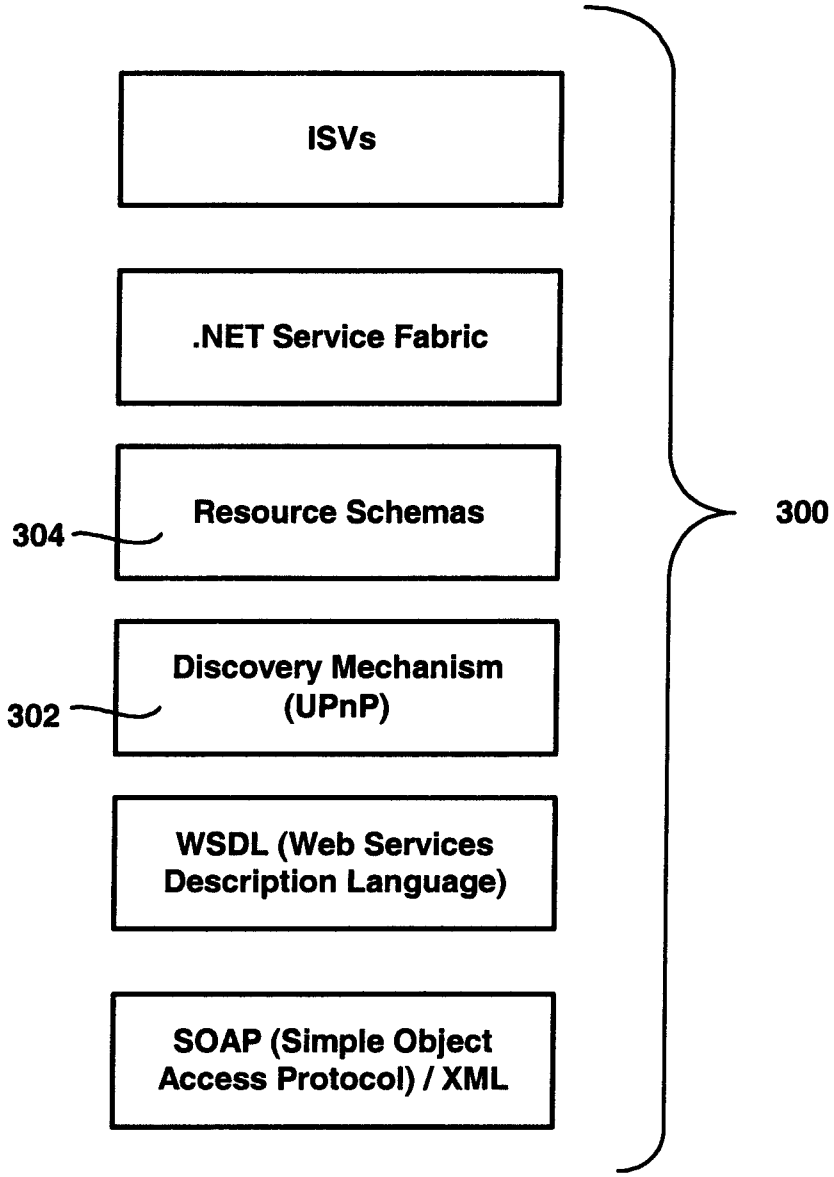

ISVs
.NET Service Fabric
Resource Schemas
304
Discovery Mechanism
(UPnP)
302
WSDL (Web Services
Description Language)
SOAP (Simple Object
Access Protocol) / XML
300

FIG. 3

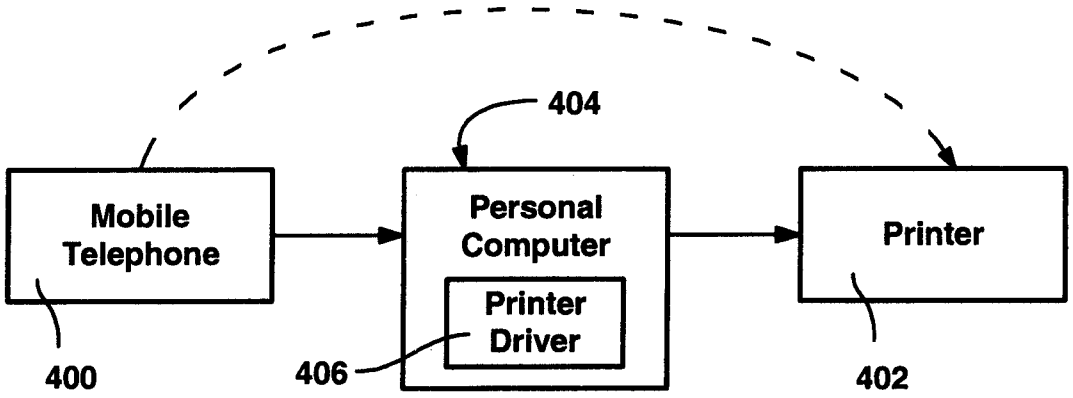

404
Mobile Telephone
Personal Computer
Printer Driver
Printer
400
406
402

FIG. 4

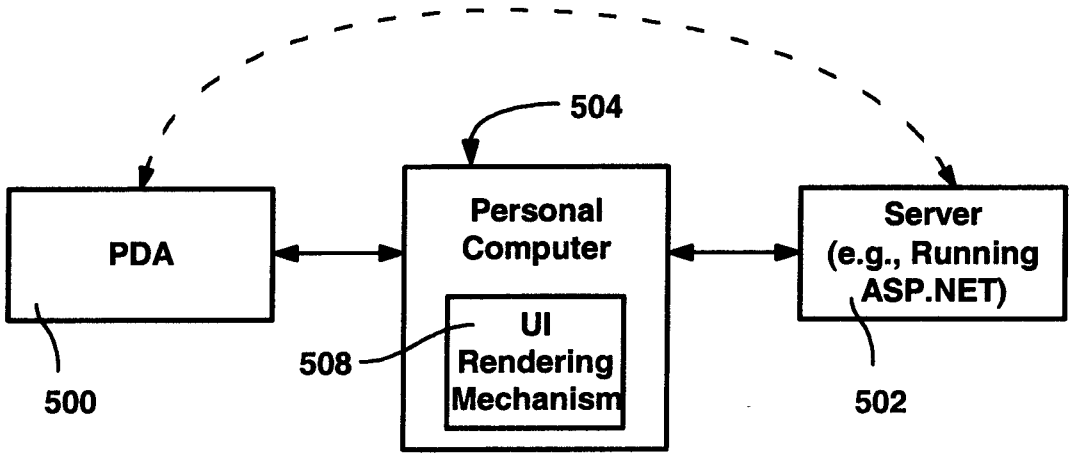

504
PDA
Personal Computer
UI Rendering Mechanism
Server (e.g., Running ASP.NET)
500
508
502

FIG. 5

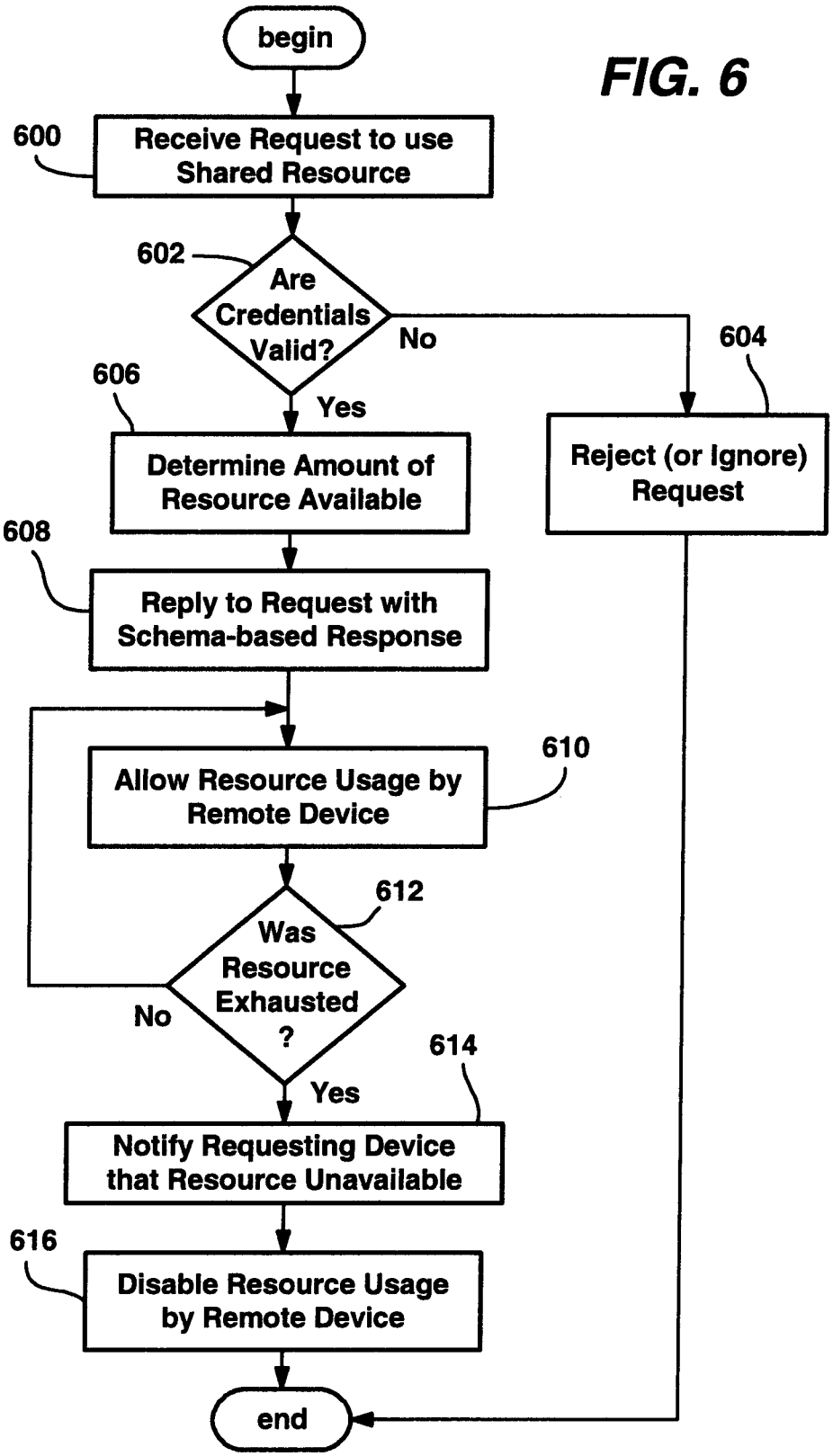

begin
600
Receive Request to use Shared Resource
602
Are Credentials Valid?
No
604
Reject (or Ignore) Request
Yes
606
Determine Amount of Resource Available
608
Reply to Request with Schema-based Response
610
Allow Resource Usage by Remote Device
612
Was Resource Exhausted ?
No
Yes
614
Notify Requesting Device that Resource Unavailable
616
Disable Resource Usage by Remote Device
end

FIG. 6

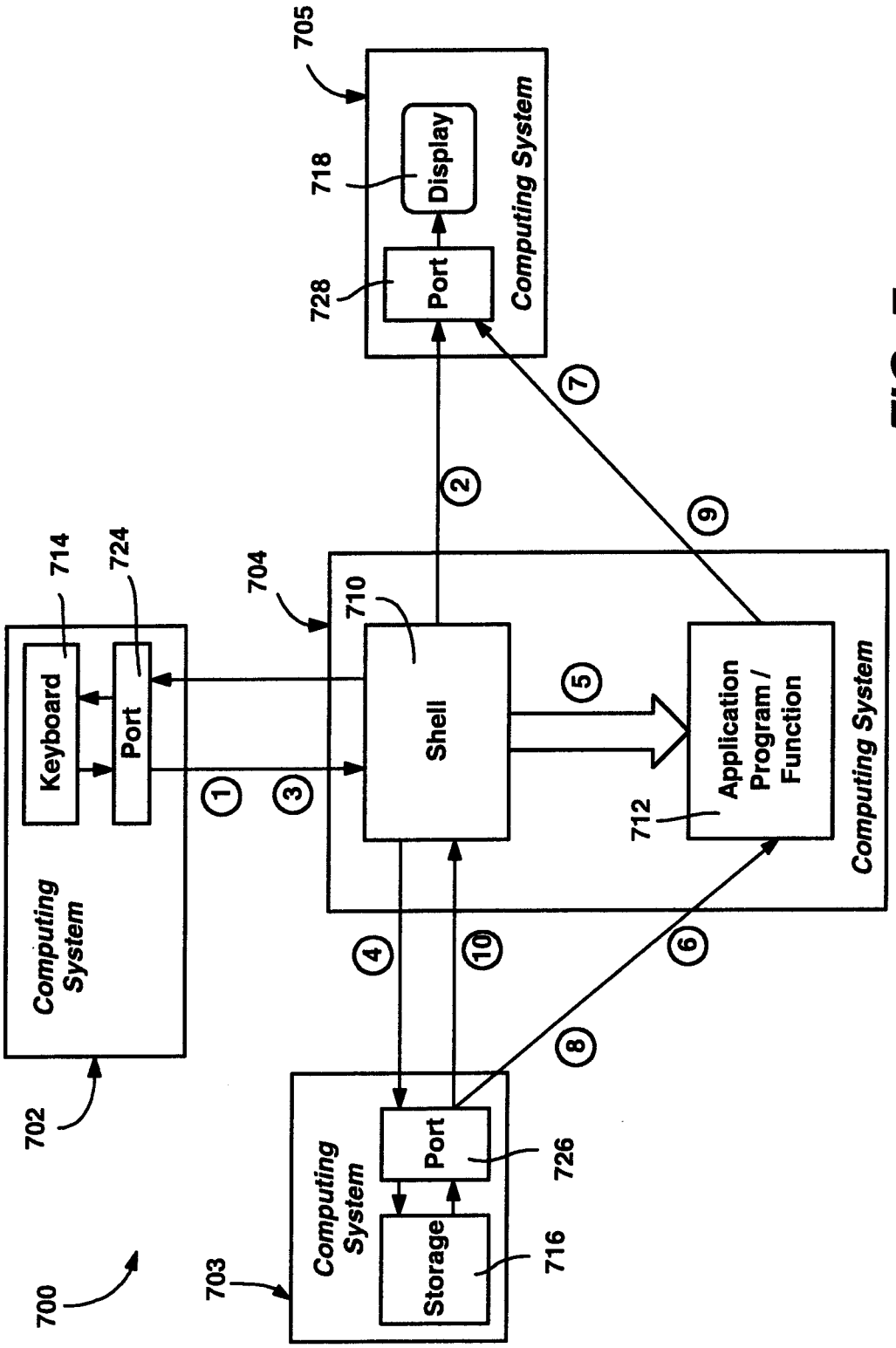

700
702
703
704
705
710
712
714
716
718
724
726
728
Computing System
Keyboard
Port
Shell
Application Program / Function
Display
Storage
1
2
3
4
5
6
7
8
9
10

FIG. 7