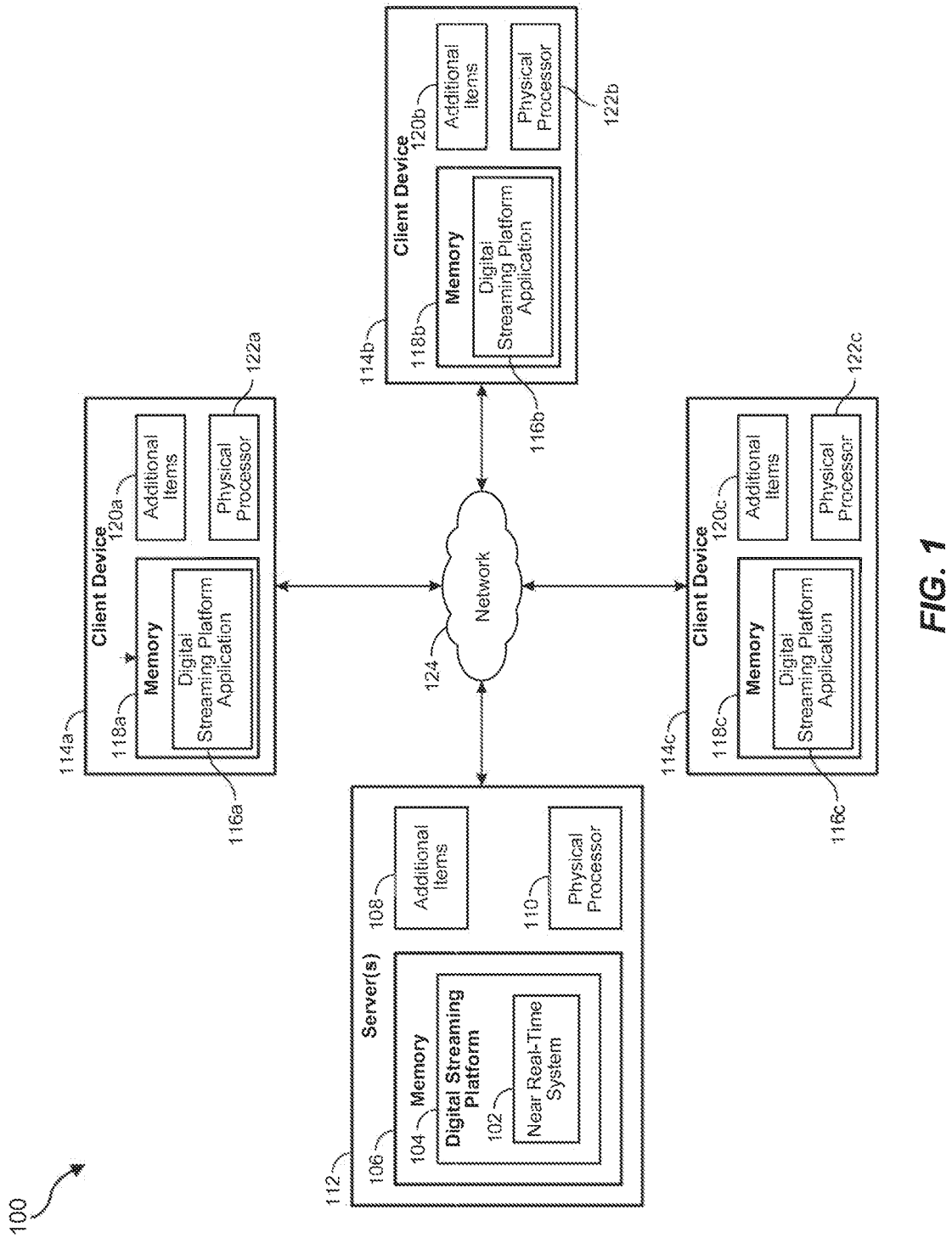

100
Server(s)
112
Memory
104
Digital Streaming Platform
102
Near Real-Time System
106
Additional Items
108
Physical Processor
110
Network
124
Client Device
114a
Memory
118a
Digital Streaming Platform Application
116a
Additional Items
120a
Physical Processor
122a
Client Device
114b
Memory
118b
Digital Streaming Platform Application
116b
Additional Items
120b
Physical Processor
122b
Client Device
114c
Memory
118c
Digital Streaming Platform Application
116c
Additional Items
120c
Physical Processor
122c

FIG. 1

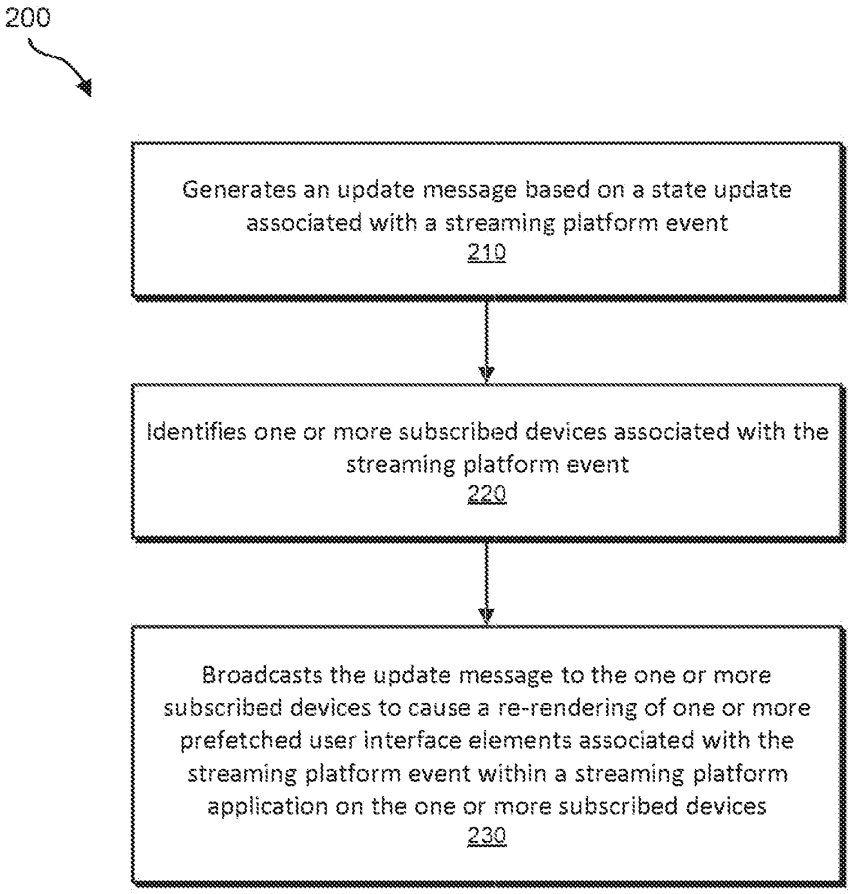

200
Generates an update message based on a state update associated with a streaming platform event
210
Identifies one or more subscribed devices associated with the streaming platform event
220
Broadcasts the update message to the one or more subscribed devices to cause a re-rendering of one or more prefetched user interface elements associated with the streaming platform event within a streaming platform application on the one or more subscribed devices
230

FIG. 2

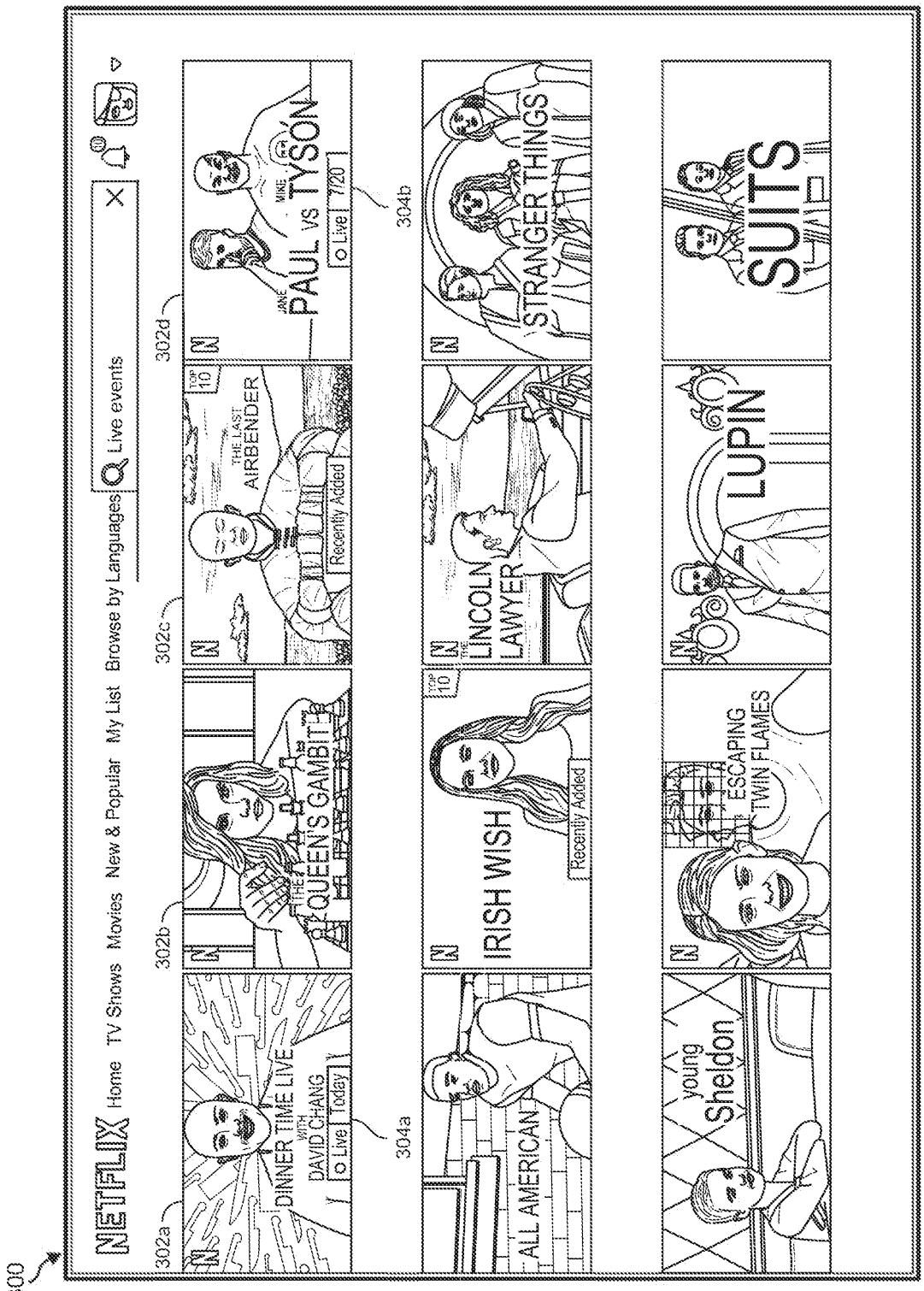

300
NETFLIX
Home
TV Shows
Movies
New & Popular
My List
Browse by Languages
Live events
302a
302b
302c
302d
304a
304b
DINNER TIME LIVE
WITH
DAVID CHANG
Live
Today
THE QUEEN'S GAMBIT
THE LAST AIRBENDER
Recently Added
JANE
PAUL VS TYSON
MIKE
Live
7/20
ALL AMERICAN
IRISH WISH
Recently Added
THE LINCOLN LAWYER
STRANGER THINGS
young Sheldon
ESCAPING TWIN FLAMES
LUPIN
SUITS
TOP 10

FIG. 3

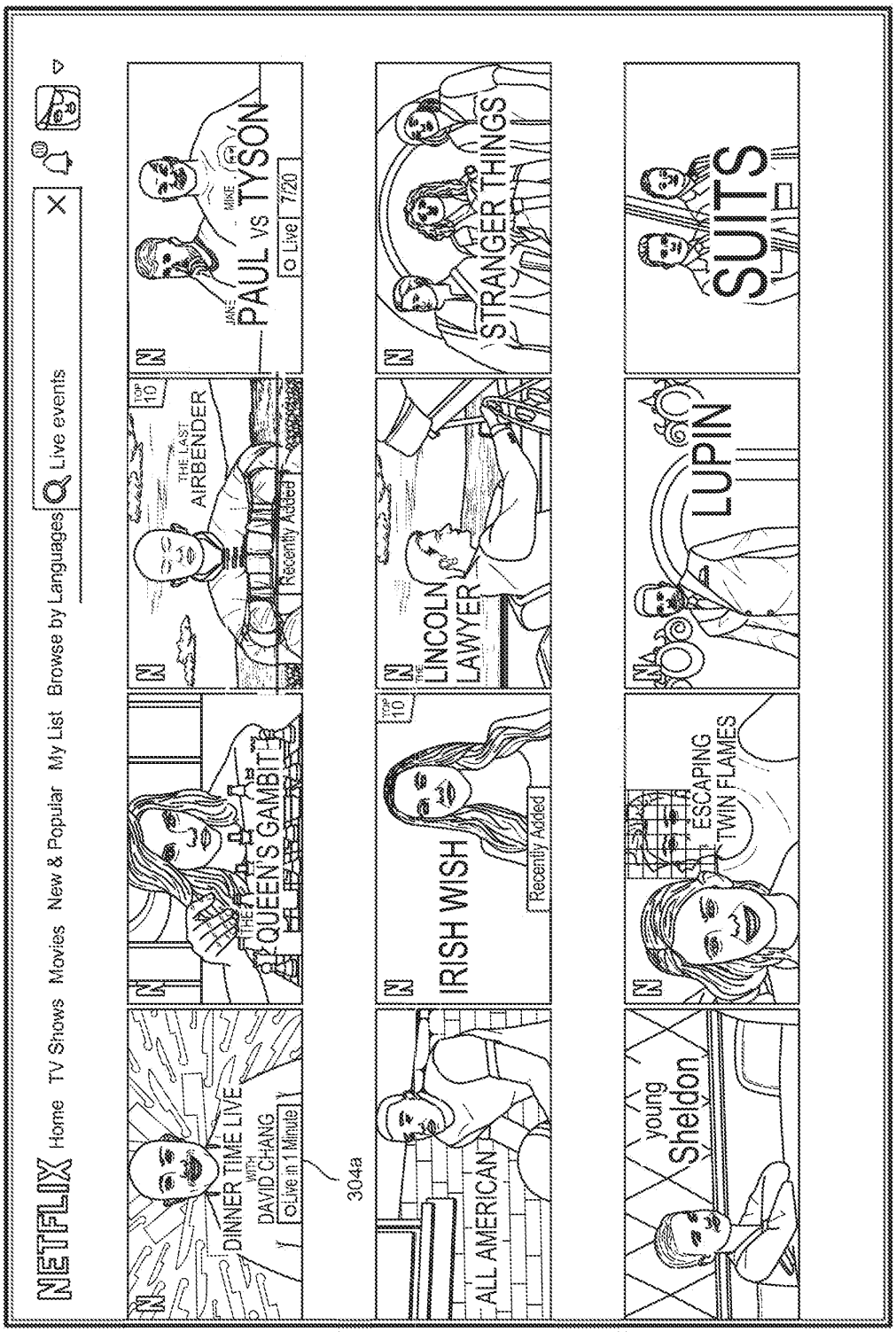

NETFLIX
Home
TV Shows
Movies
New & Popular
My List
Browse by Languages
Live events
DINNER TIME LIVE
WITH
DAVID CHANG
Live in 1 Minute
THE QUEEN'S GAMBIT
Recently Added
THE LAST AIRBENDER
TOP 10
JAKE PAUL vs MIKE TYSON
Live 7/20
ALL AMERICAN
IRISH WISH
Recently Added
THE LINCOLN LAWYER
STRANGER THINGS
young Sheldon
ESCAPING TWIN FLAMES
LUPIN
SUITS LA
3044a

FIG. 4

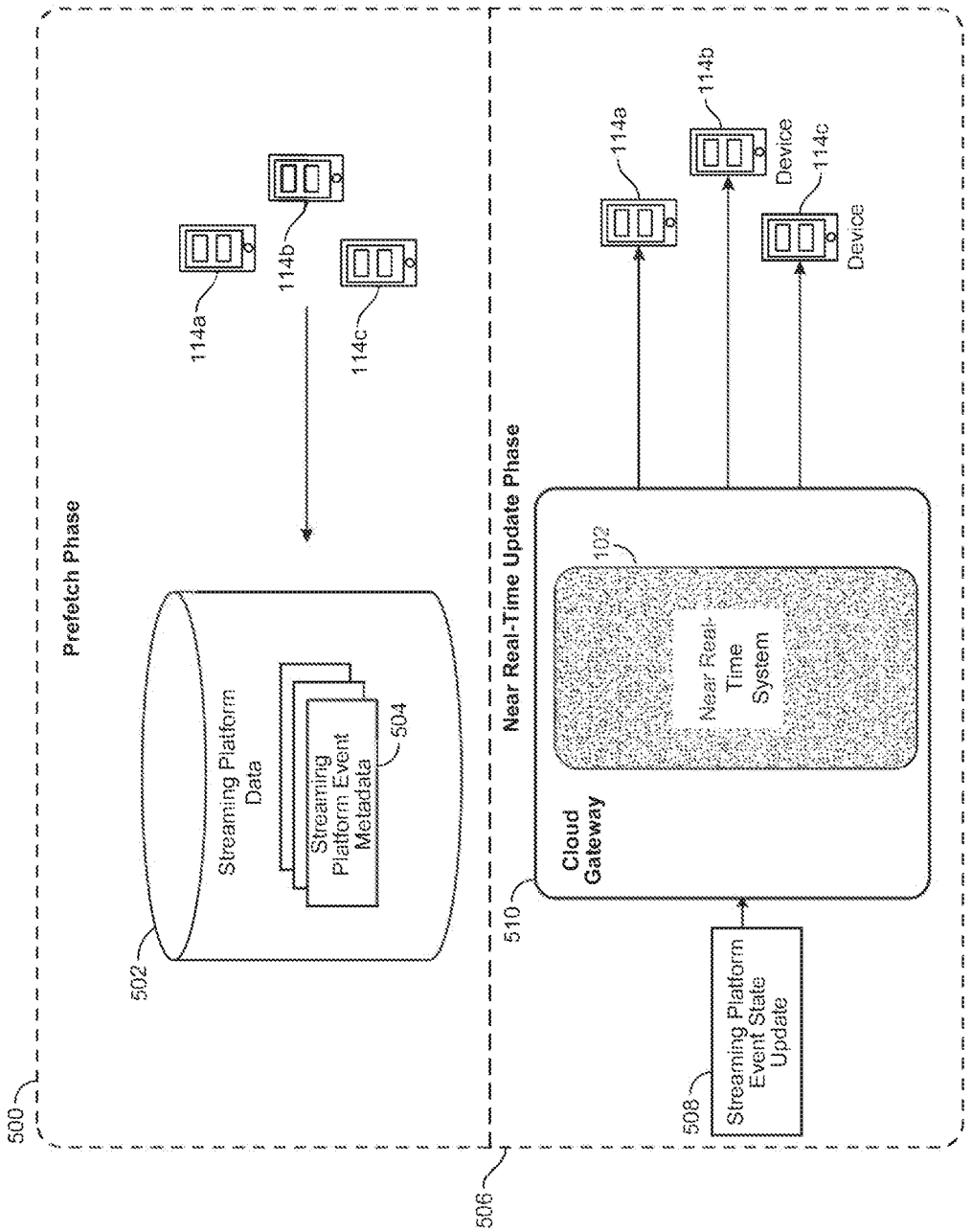

Prefetch Phase
Near Real-Time Update Phase
114a
114b
114c
Device
Device
Streaming Platform Data
Streaming Platform Event Metadata
504
502
Cloud Gateway
102
Near Real-Time System
510
Streaming Platform Event State Update
508
500
506

FIG. 5

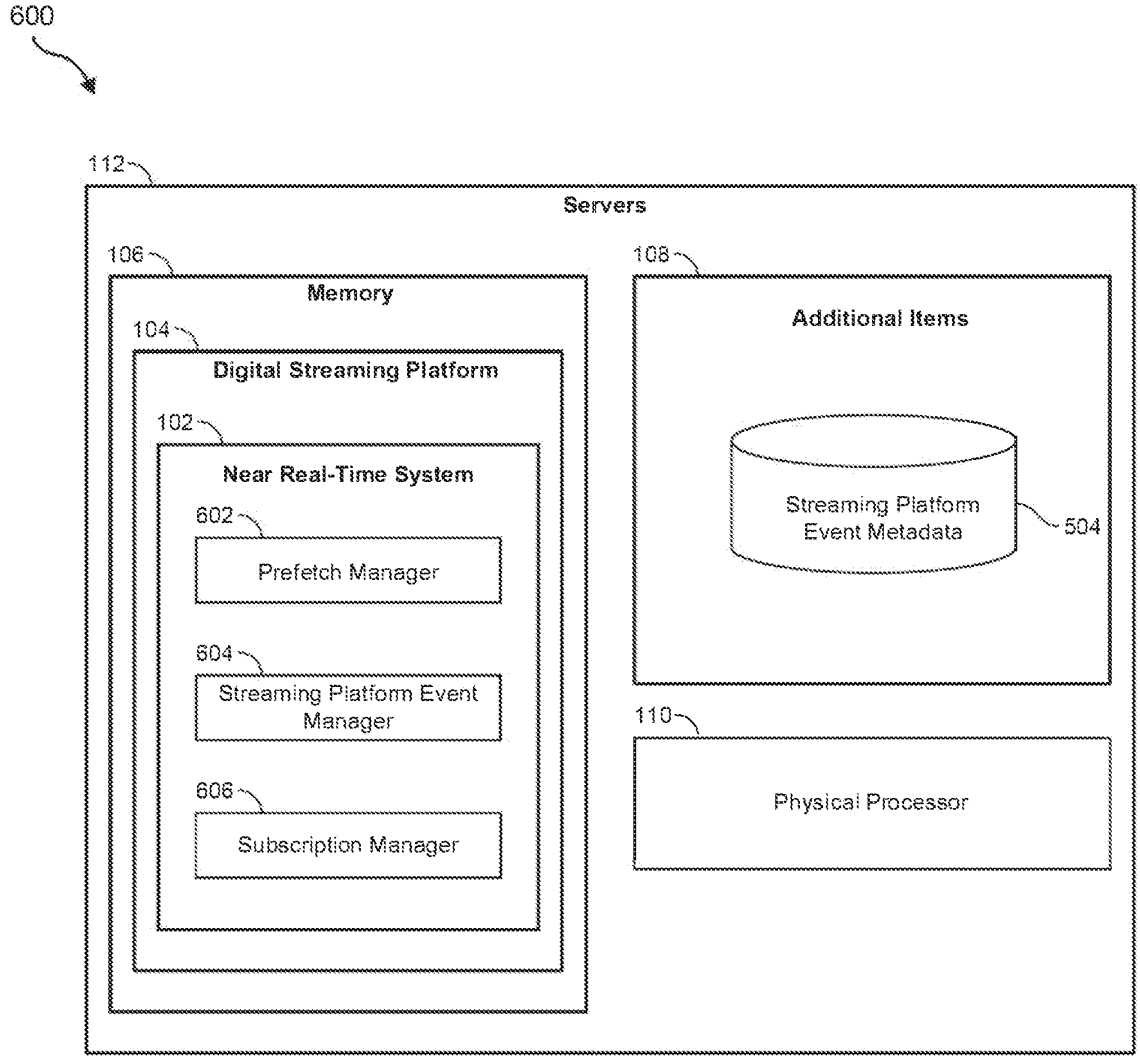

600
112
Servers
106
Memory
104
Digital Streaming Platform
102
Near Real-Time System
602
Prefetch Manager
604
Streaming Platform Event Manager
606
Subscription Manager
108
Additional Items
Streaming Platform Event Metadata
504
110
Physical Processor

FIG. 6

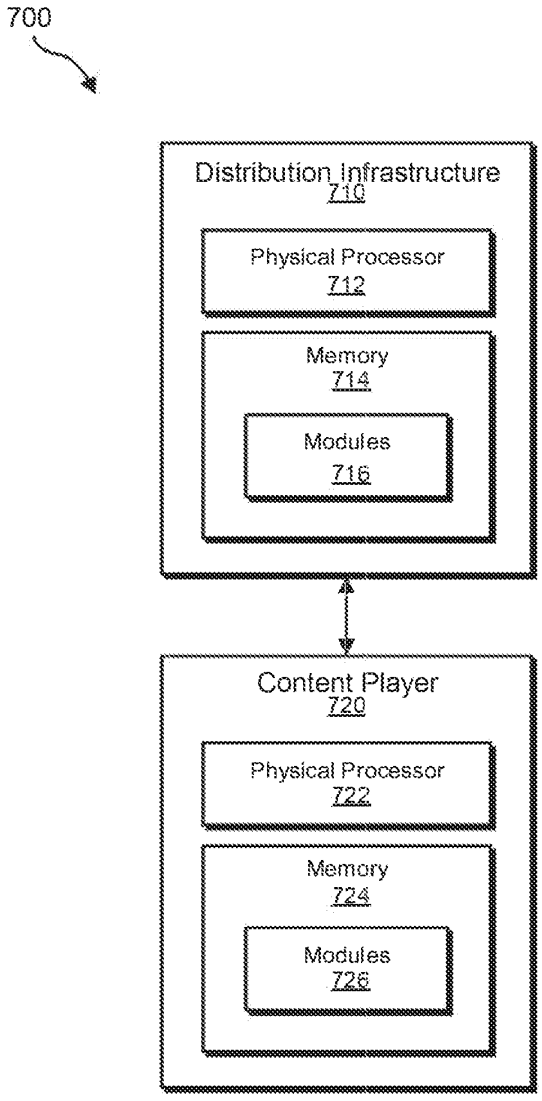

700
Distribution Infrastructure
710
Physical Processor
712
Memory
714
Modules
716
Content Player
720
Physical Processor
722
Memory
724
Modules
726

FIG. 7

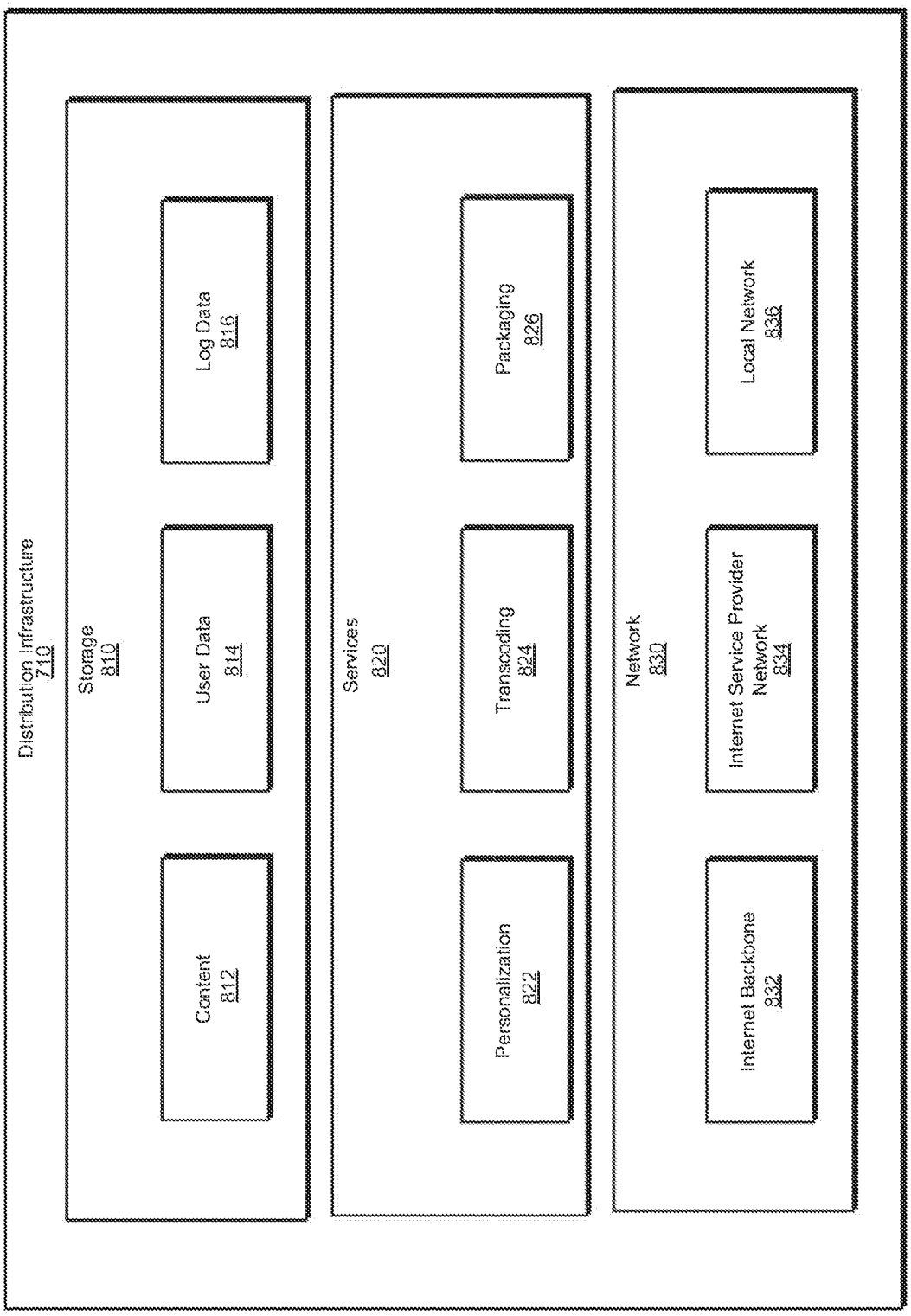

Distribution Infrastructure
710
Storage
810
Content
812
User Data
814
Log Data
816
Services
820
Personalization
822
Transcoding
824
Packaging
826
Network
830
Internet Backbone
832
Internet Service Provider
Network
834
Local Network
836

FIG. 8

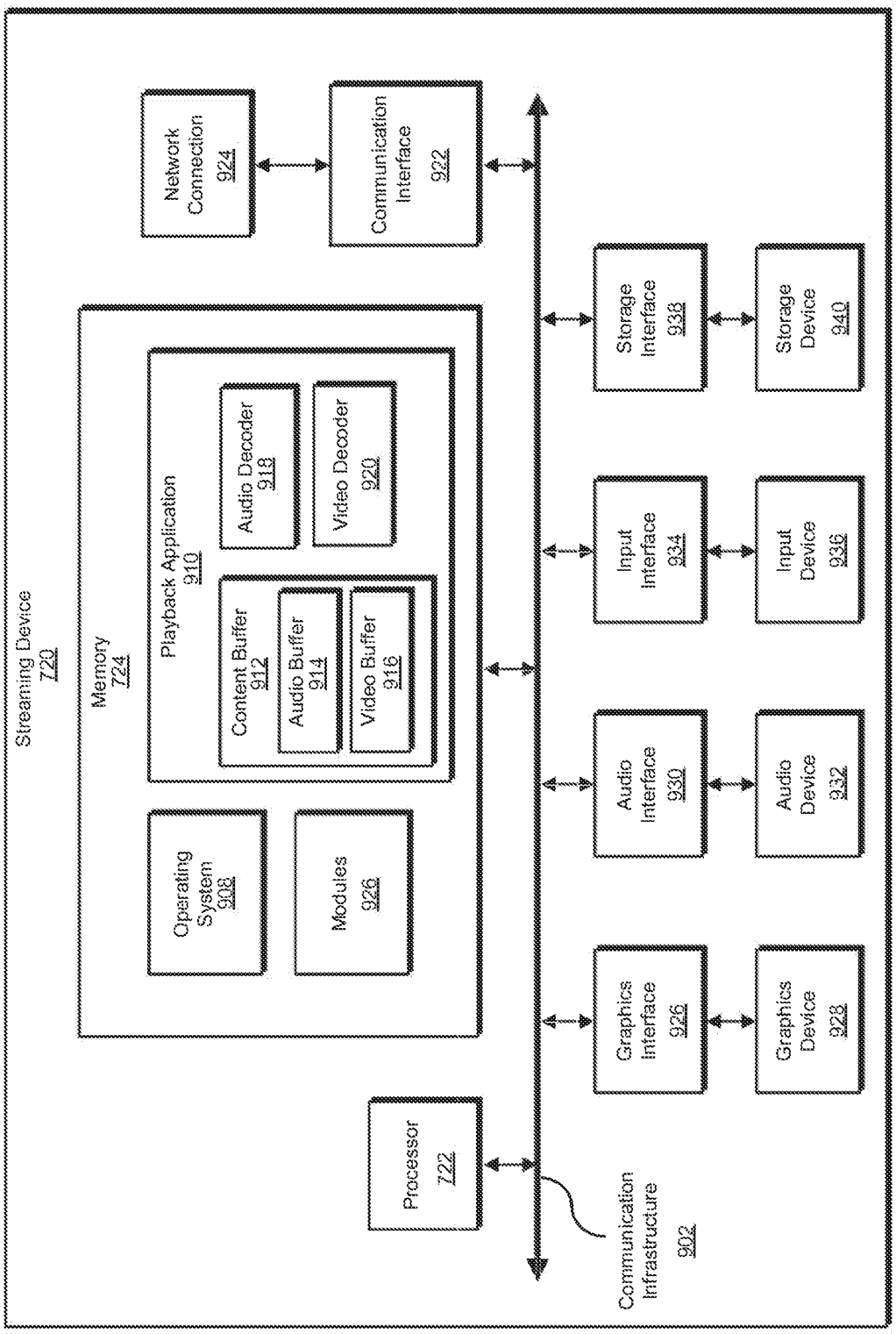

Streaming Device
720
Memory
724
Playback Application
910
Content Buffer
912
Audio Buffer
914
Video Buffer
916
Audio Decoder
918
Video Decoder
920
Operating System
908
Modules
926
Network Connection
924
Communication Interface
922
Storage Interface
938
Storage Device
940
Input Interface
934
Input Device
936
Audio Interface
930
Audio Device
932
Graphics Interface
926
Graphics Device
928
Processor
722
Communication Infrastructure
902

FIG. 9