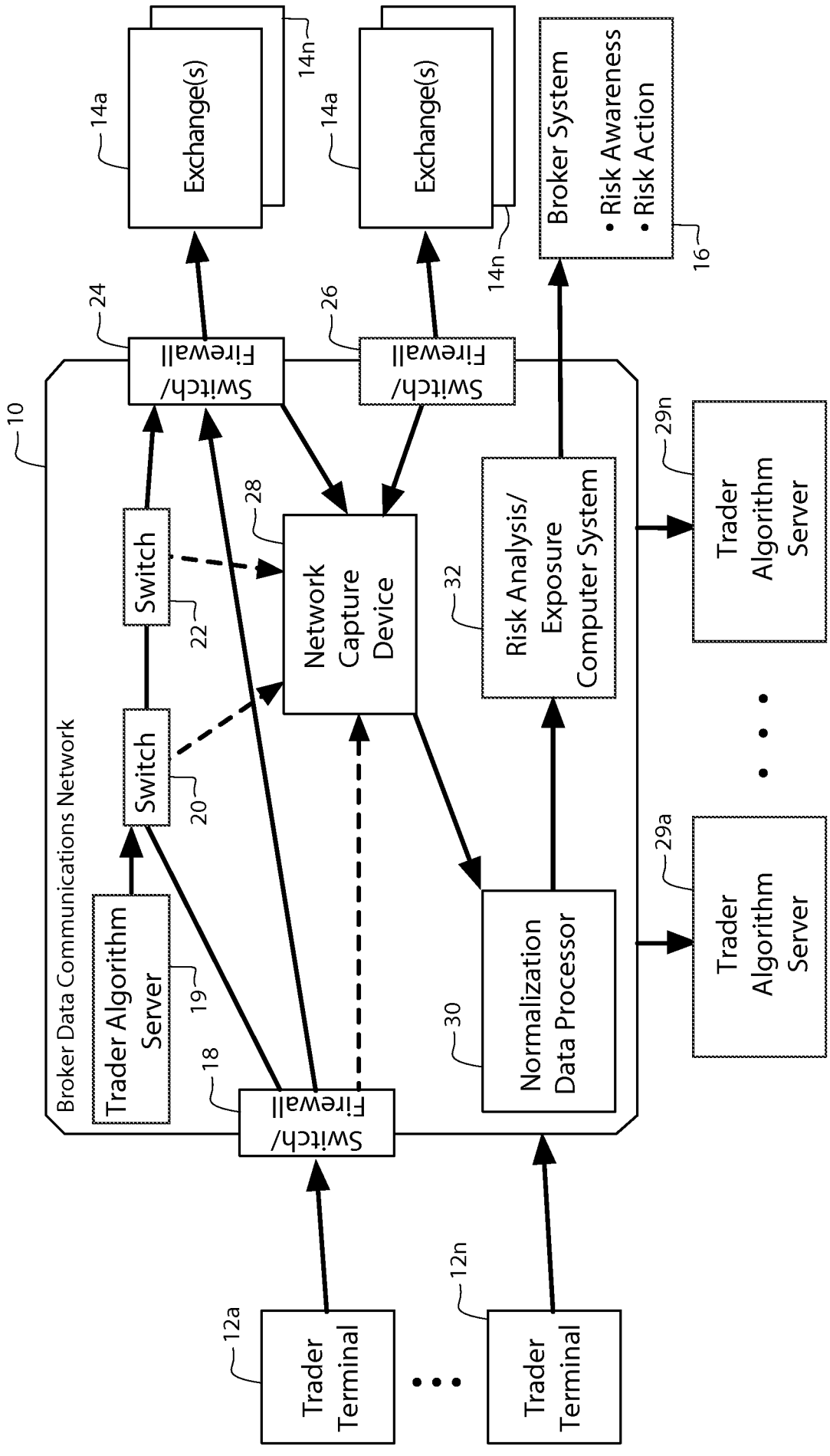

Exchange(s)
14a
14n
Exchange(s)
14a
14n
Broker System
• Risk Awareness
• Risk Action
16
24
Switch/
Firewall
26
Switch/
Firewall
10
Broker Data Communications Network
Switch
22
Switch
20
28
Network
Capture
Device
32
Risk Analysis/
Exposure
Computer System
29n
Trader
Algorithm
Server
Trader Algorithm
Server
19
18
Switch/
Firewall
30
Normalization
Data Processor
29a
Trader
Algorithm
Server
12a
Trader
Terminal
12n
Trader
Terminal

Figure 1

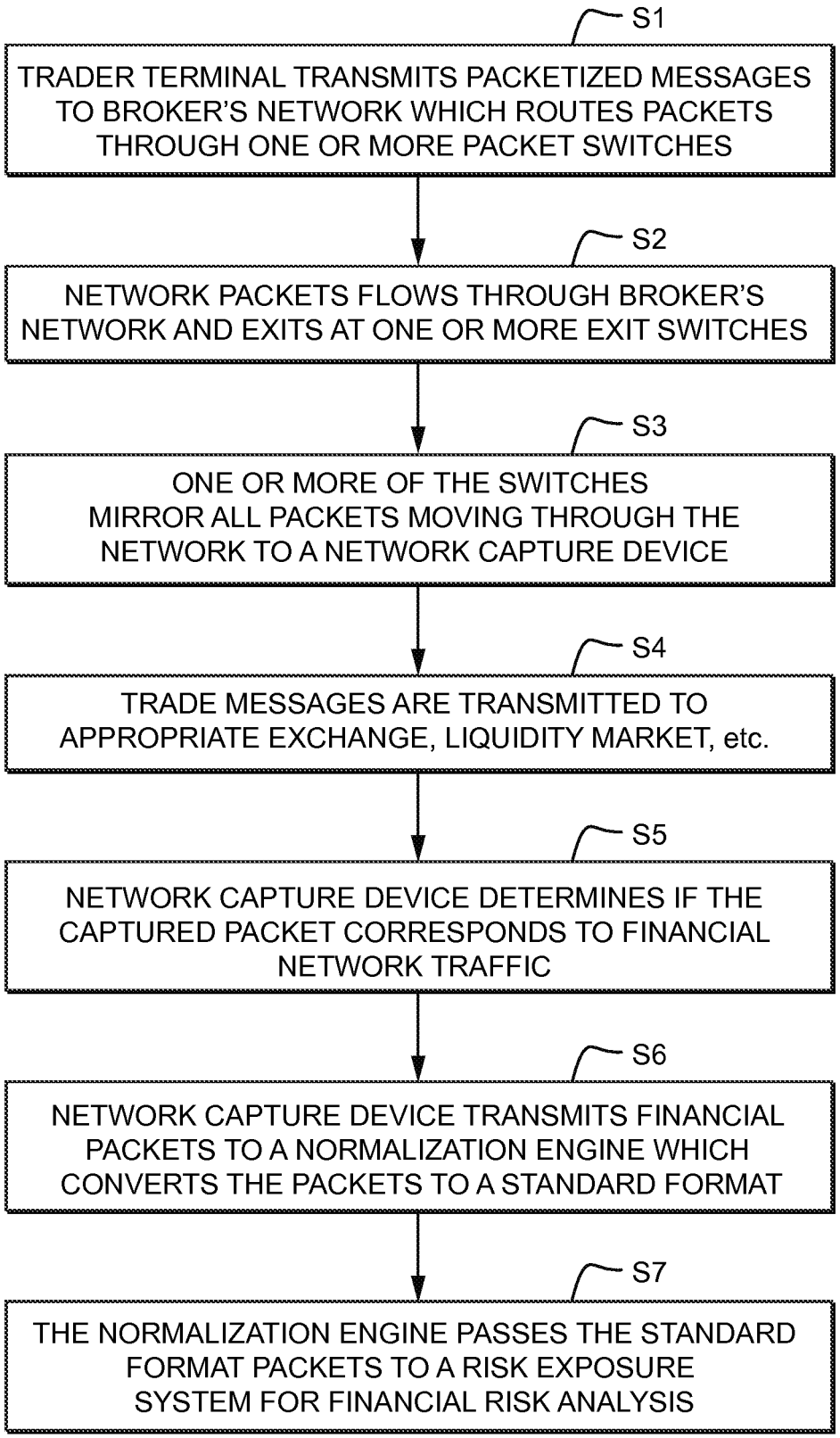

S1
TRADER TERMINAL TRANSMITS PACKETIZED MESSAGES TO BROKER'S NETWORK WHICH ROUTES PACKETS THROUGH ONE OR MORE PACKET SWITCHES
S2
NETWORK PACKETS FLOWS THROUGH BROKER'S NETWORK AND EXITS AT ONE OR MORE EXIT SWITCHES
S3
ONE OR MORE OF THE SWITCHES MIRROR ALL PACKETS MOVING THROUGH THE NETWORK TO A NETWORK CAPTURE DEVICE
S4
TRADE MESSAGES ARE TRANSMITTED TO APPROPRIATE EXCHANGE, LIQUIDITY MARKET, etc.
S5
NETWORK CAPTURE DEVICE DETERMINES IF THE CAPTURED PACKET CORRESPONDS TO FINANCIAL NETWORK TRAFFIC
S6
NETWORK CAPTURE DEVICE TRANSMITS FINANCIAL PACKETS TO A NORMALIZATION ENGINE WHICH CONVERTS THE PACKETS TO A STANDARD FORMAT
S7
THE NORMALIZATION ENGINE PASSES THE STANDARD FORMAT PACKETS TO A RISK EXPOSURE SYSTEM FOR FINANCIAL RISK ANALYSIS

Figure 2

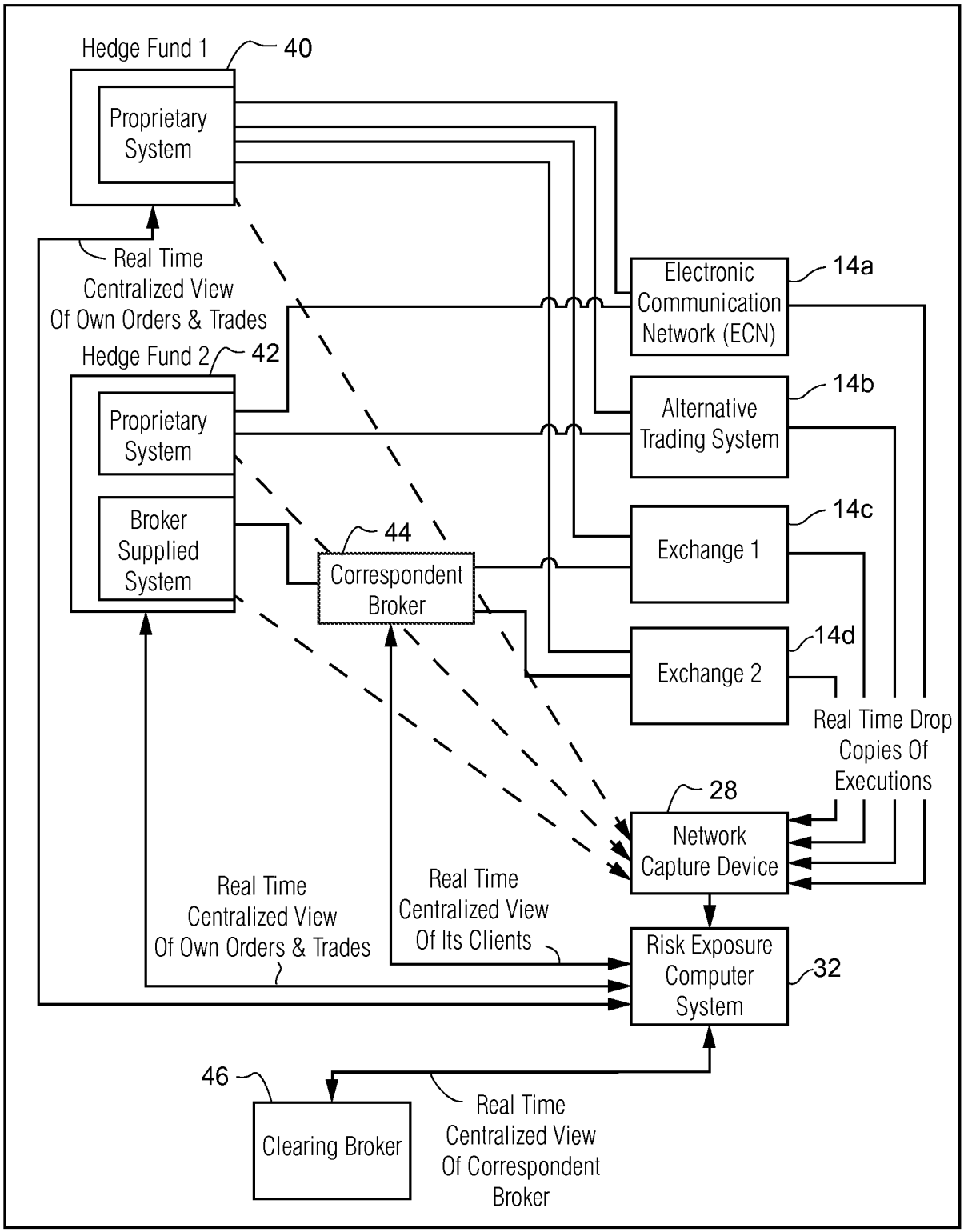

Hedge Fund 1
40
Proprietary System
Real Time Centralized View Of Own Orders & Trades
Hedge Fund 2
42
Proprietary System
Broker Supplied System
44
Correspondent Broker
Electronic Communication Network (ECN)
14a
Alternative Trading System
14b
Exchange 1
14c
Exchange 2
14d
Real Time Drop Copies Of Executions
28
Network Capture Device
Real Time Centralized View Of Own Orders & Trades
Real Time Centralized View Of Its Clients
Risk Exposure Computer System
32
46
Clearing Broker
Real Time Centralized View Of Correspondent Broker
MIRRORED PACKET TRAFFIC

Figure 3

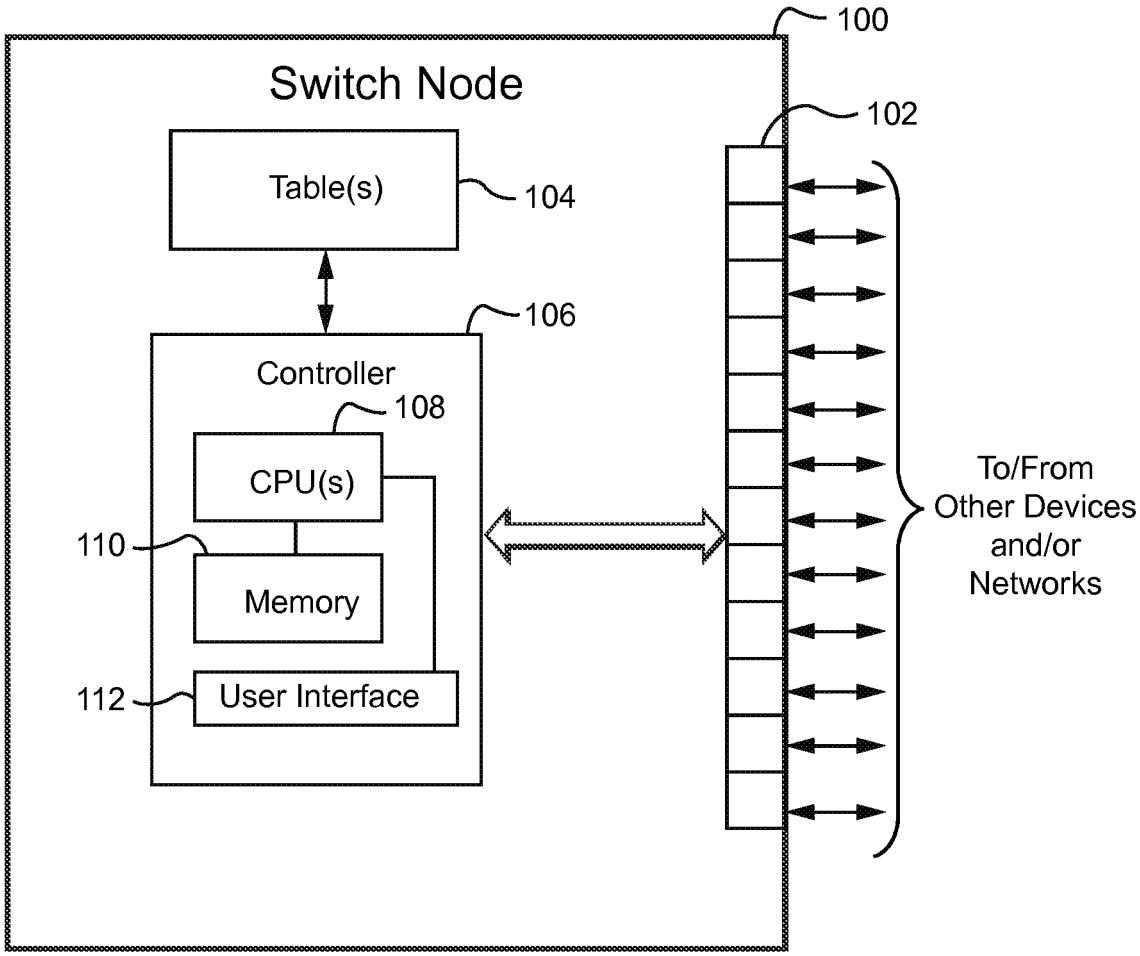

100
Switch Node
102
Table(s)
104
106
Controller
108
CPU(s)
110
Memory
112
User Interface
To/From
Other Devices
and/or
Networks

Figure 4

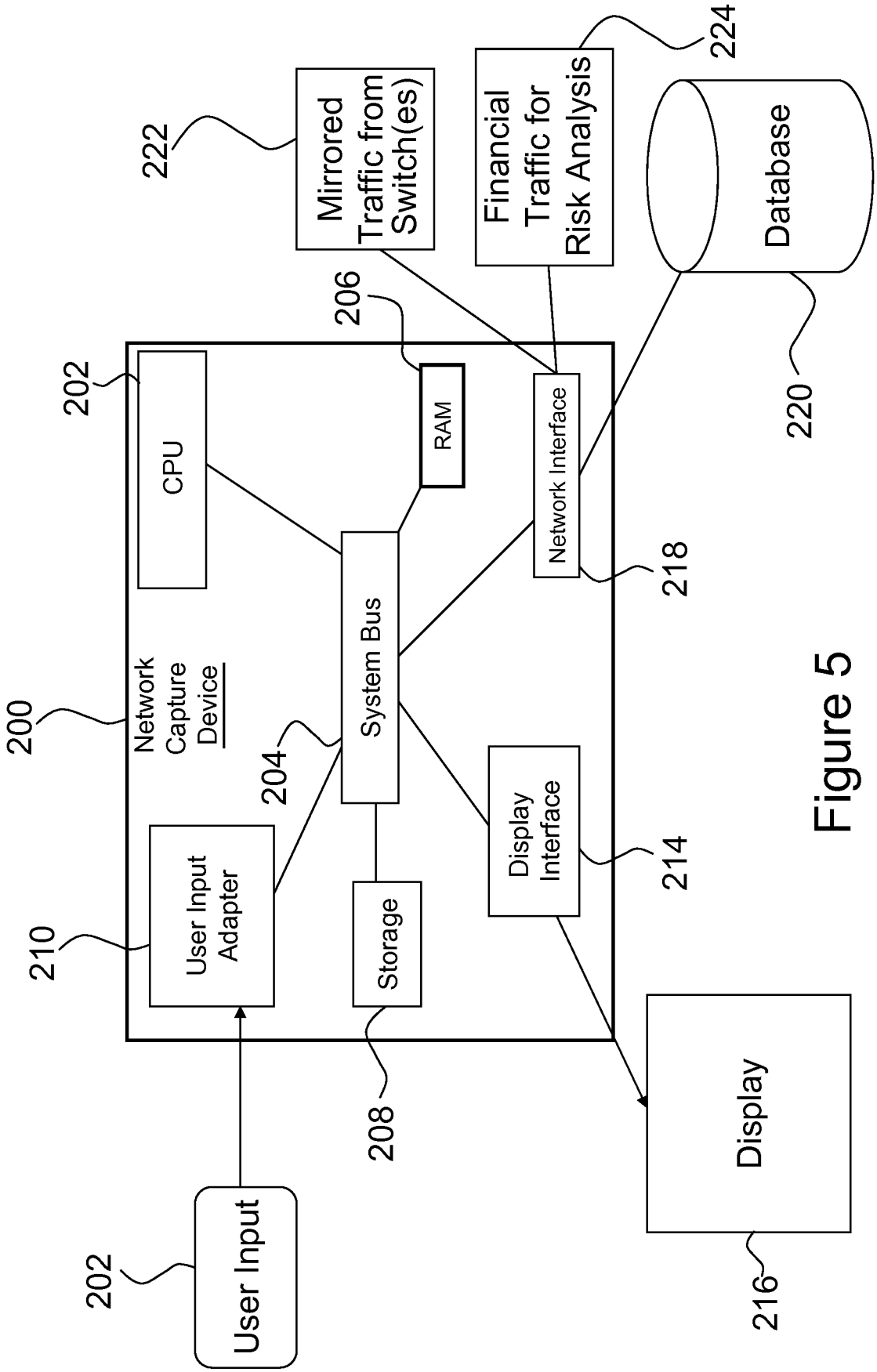

Mirrored Traffic from Switch(es)
222
Financial Traffic for Risk Analysis
224
Database
220
206
202
CPU
RAM
Network Interface
218
Network Capture Device
200
System Bus
204
Display Interface
214
User Input Adapter
210
Storage
208
Display
216
User Input
202

Figure 5