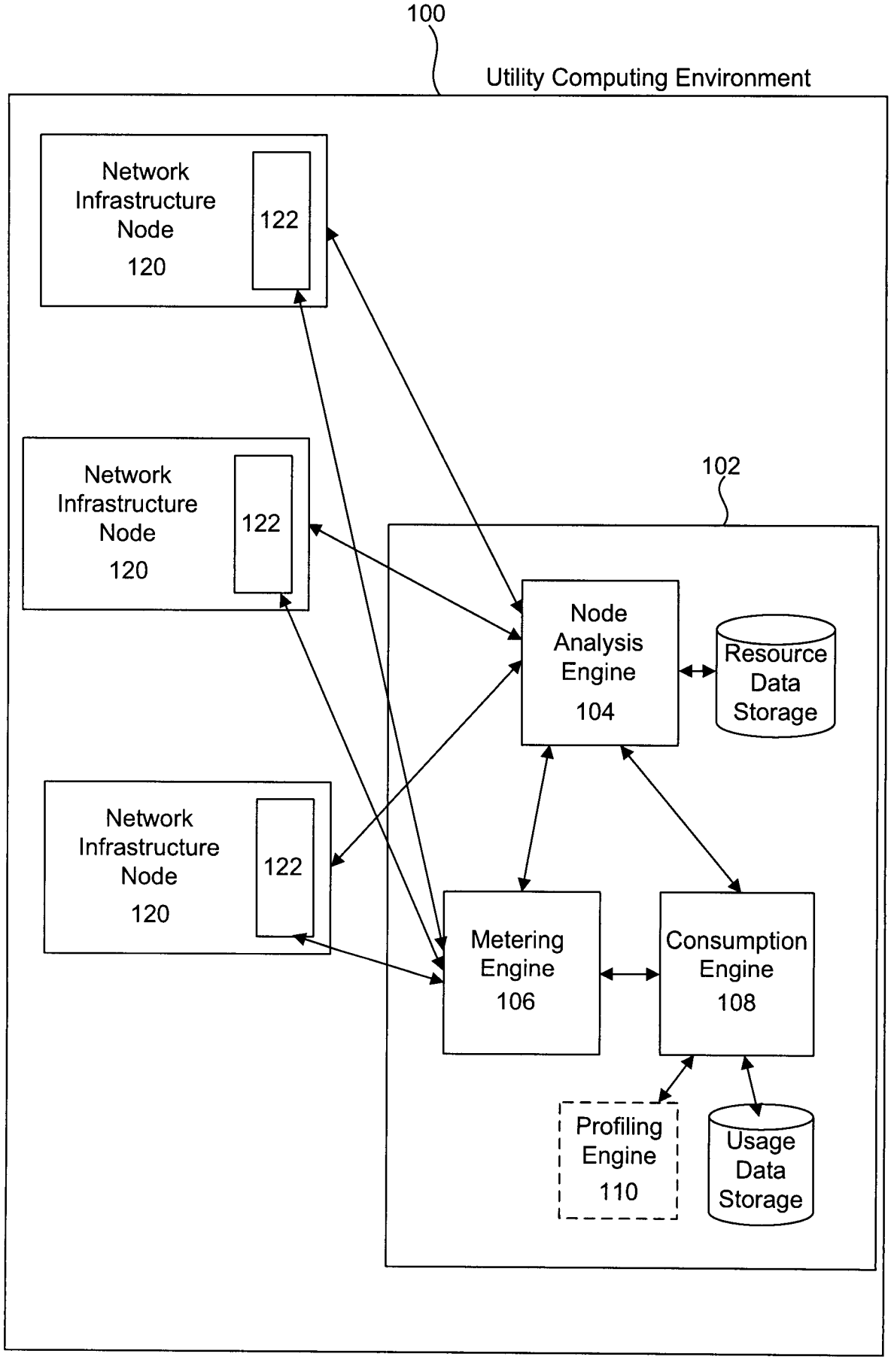

100
Utility Computing Environment
Network Infrastructure Node 120
122
Network Infrastructure Node 120
122
Network Infrastructure Node 120
122
102
Node Analysis Engine 104
Resource Data Storage
Metering Engine 106
Consumption Engine 108
Profiling Engine 110
Usage Data Storage

FIG. 1

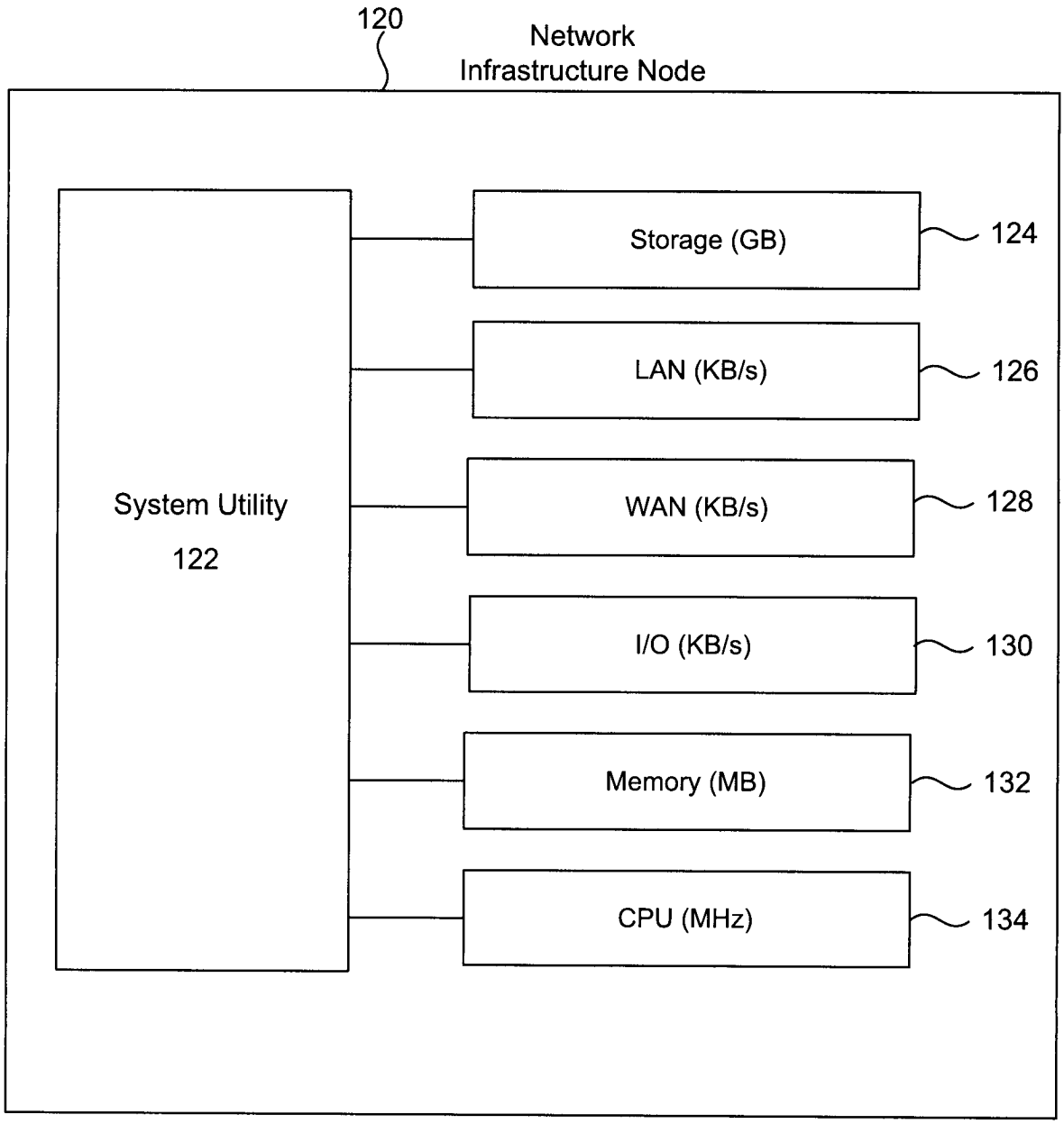

120
Network
Infrastructure Node
System Utility
122
Storage (GB)
124
LAN (KB/s)
126
WAN (KB/s)
128
I/O (KB/s)
130
Memory (MB)
132
CPU (MHz)
134

FIG. 2

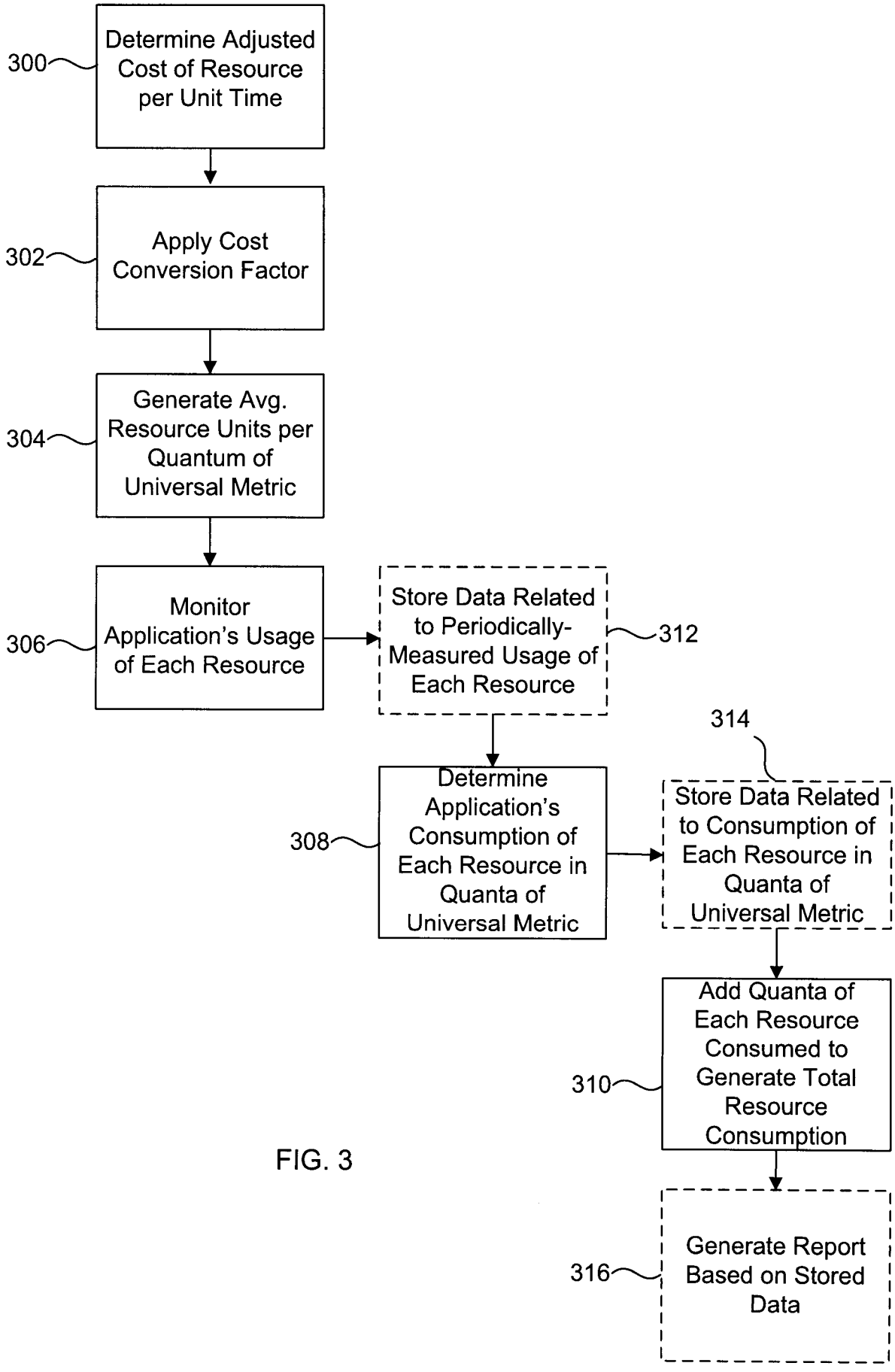

300
Determine Adjusted Cost of Resource per Unit Time
302
Apply Cost Conversion Factor
304
Generate Avg. Resource Units per Quantum of Universal Metric
306
Monitor Application's Usage of Each Resource
Store Data Related to Periodically-Measured Usage of Each Resource
312
314
308
Determine Application's Consumption of Each Resource in Quanta of Universal Metric
Store Data Related to Consumption of Each Resource in Quanta of Universal Metric
310
Add Quanta of Each Resource Consumed to Generate Total Resource Consumption
316
Generate Report Based on Stored Data

FIG. 3

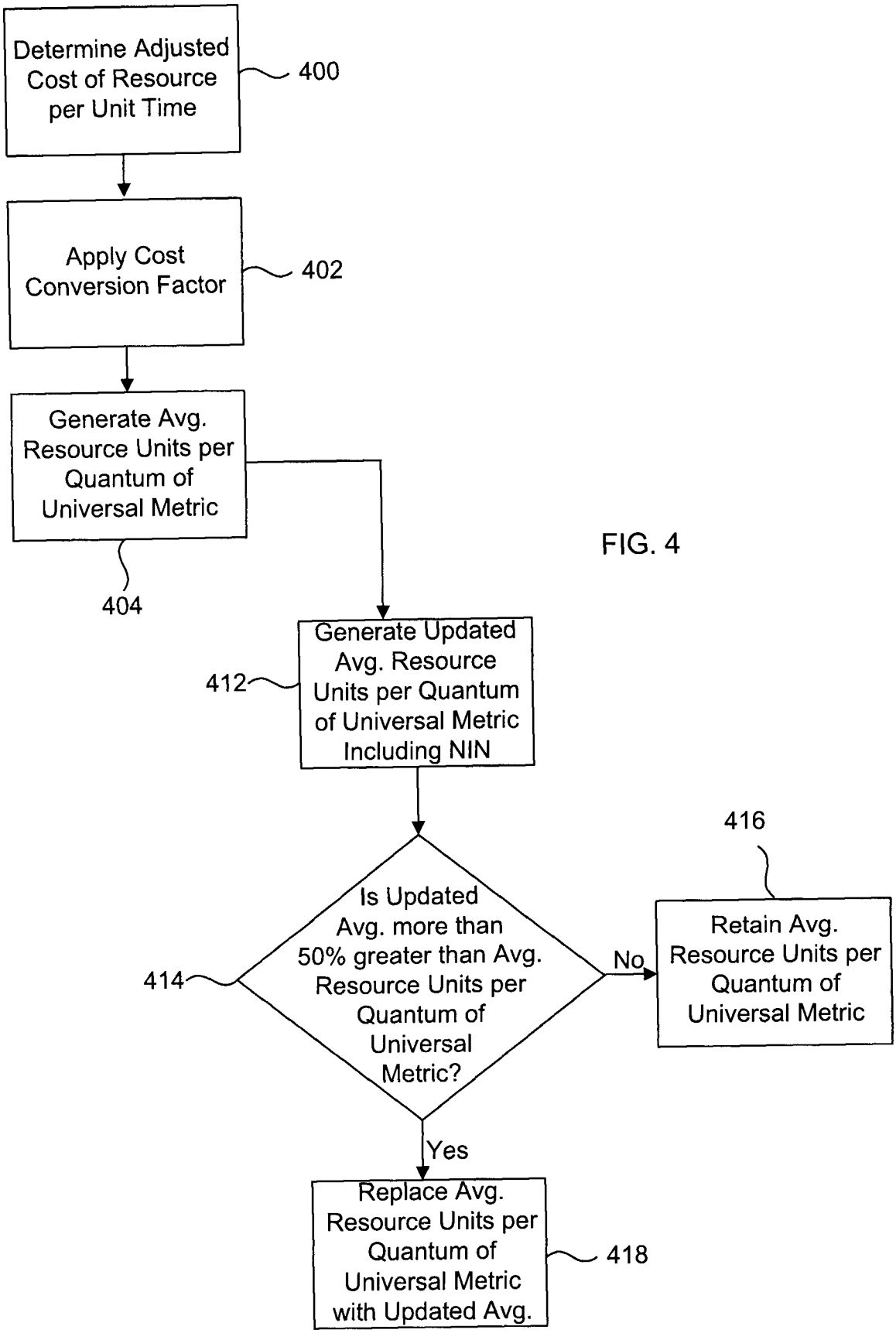

Determine Adjusted Cost of Resource per Unit Time
400
Apply Cost Conversion Factor
402
Generate Avg. Resource Units per Quantum of Universal Metric
404
Generate Updated Avg. Resource Units per Quantum of Universal Metric Including NIN
412
Is Updated Avg. more than 50% greater than Avg. Resource Units per Quantum of Universal Metric?
414
No
416
Retain Avg. Resource Units per Quantum of Universal Metric
Yes
Replace Avg. Resource Units per Quantum of Universal Metric with Updated Avg.
418

FIG. 4

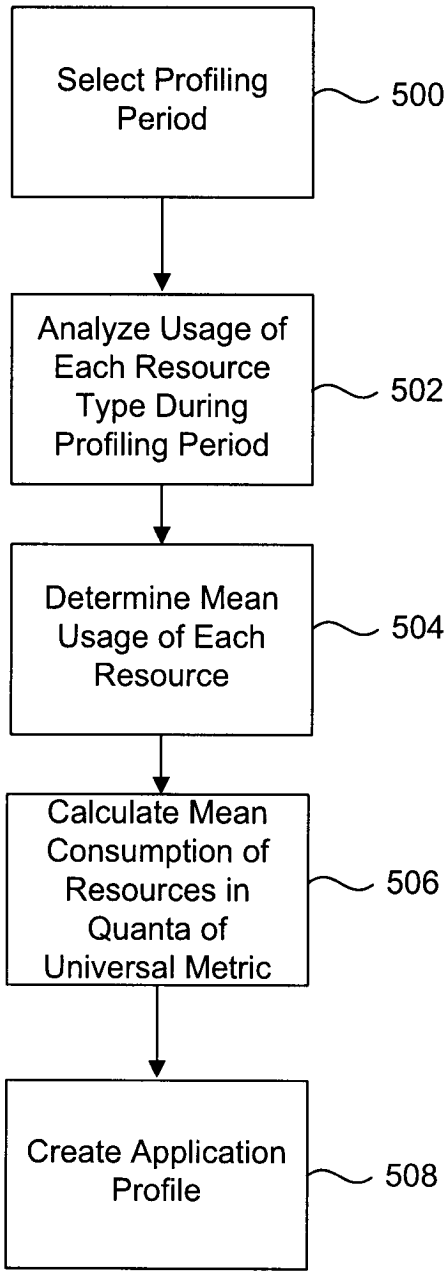

Select Profiling Period
500
Analyze Usage of Each Resource Type During Profiling Period
502
Determine Mean Usage of Each Resource
504
Calculate Mean Consumption of Resources in Quanta of Universal Metric
506
Create Application Profile
508

FIG. 5

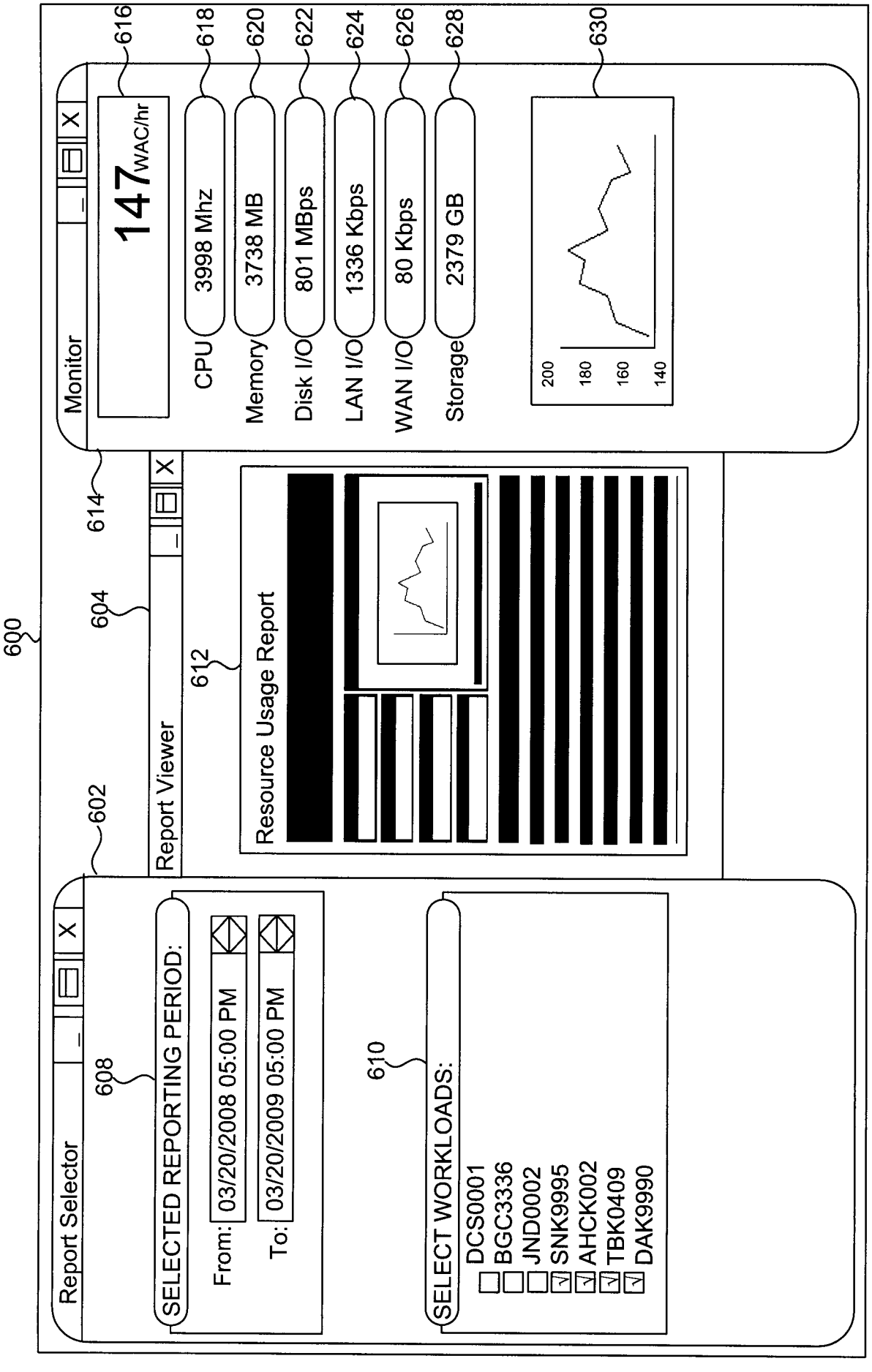

600
Report Selector
602
SELECTED REPORTING PERIOD:
608
From: 03/20/2008 05:00 PM
To: 03/20/2009 05:00 PM
SELECT WORKLOADS:
610
DCS0001
BGC3336
JND0002
SNK9995
AHCK002
TBK0409
DAK9990
Report Viewer
604
612
Resource Usage Report
Monitor
614
616
147 WAC/hr
CPU 3998 Mhz
618
Memory 3738 MB
620
Disk I/O 801 MBps
622
LAN I/O 1336 Kbps
624
WAN I/O 80 Kbps
626
Storage 2379 GB
628
630
200
180
160
140

FIG. 6