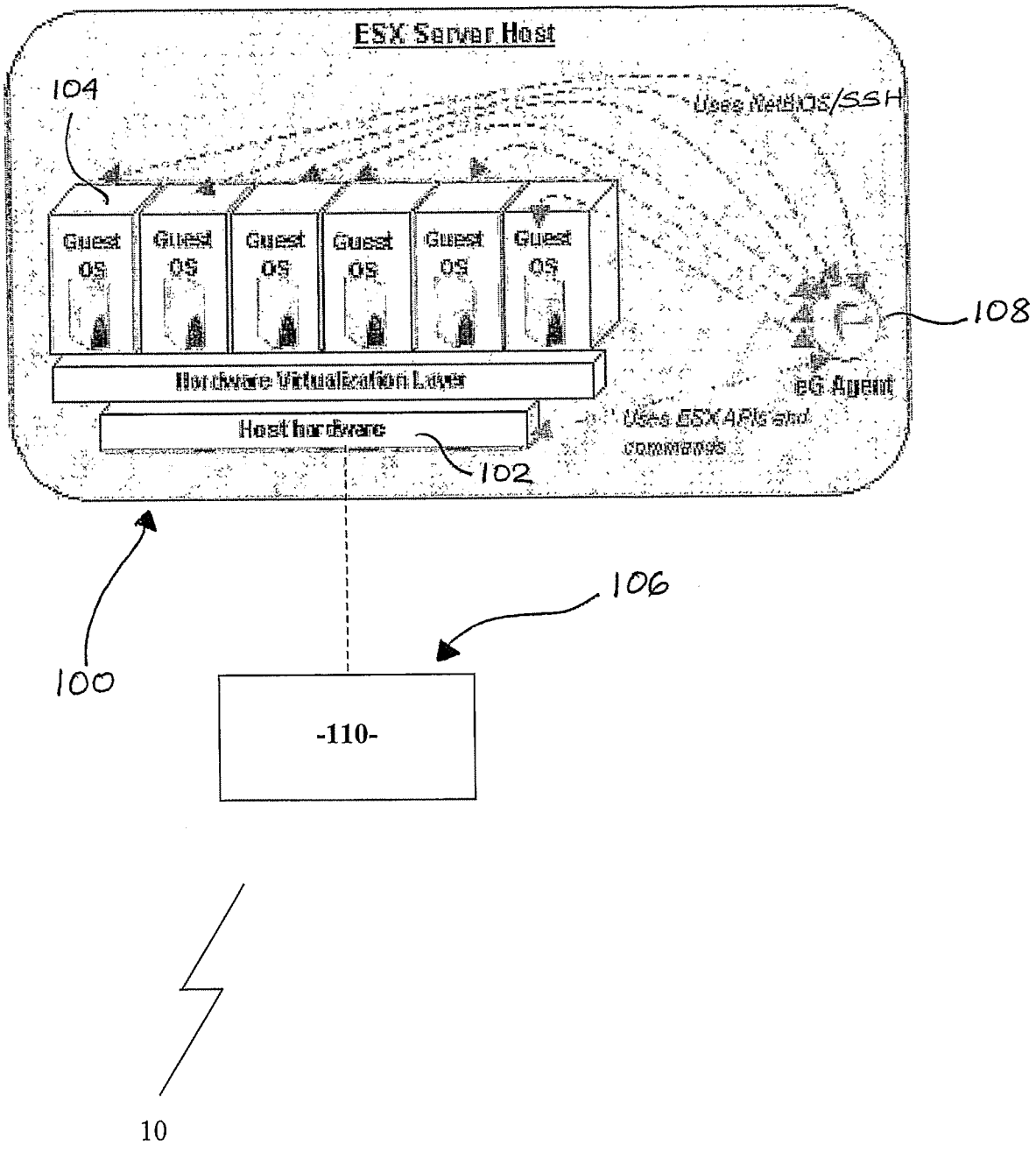

ESX Server Host
104
Uses NetBIOS/SSH
Guest OS
Guest OS
Guest OS
Guest OS
Guest OS
Guest OS
108
Hardware Virtualization Layer
eG Agent
Host hardware
Uses ESX APIs and commands
102
106
100
-110-
10

Figure 1

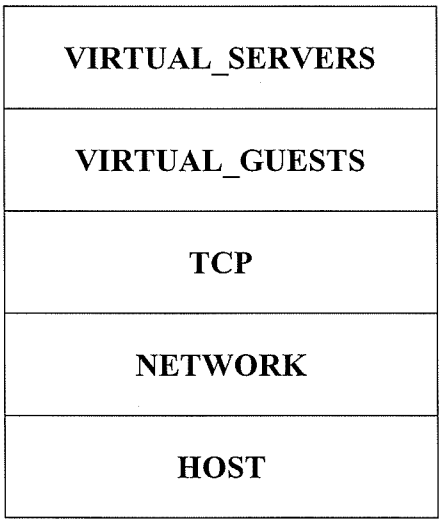


Figure 2

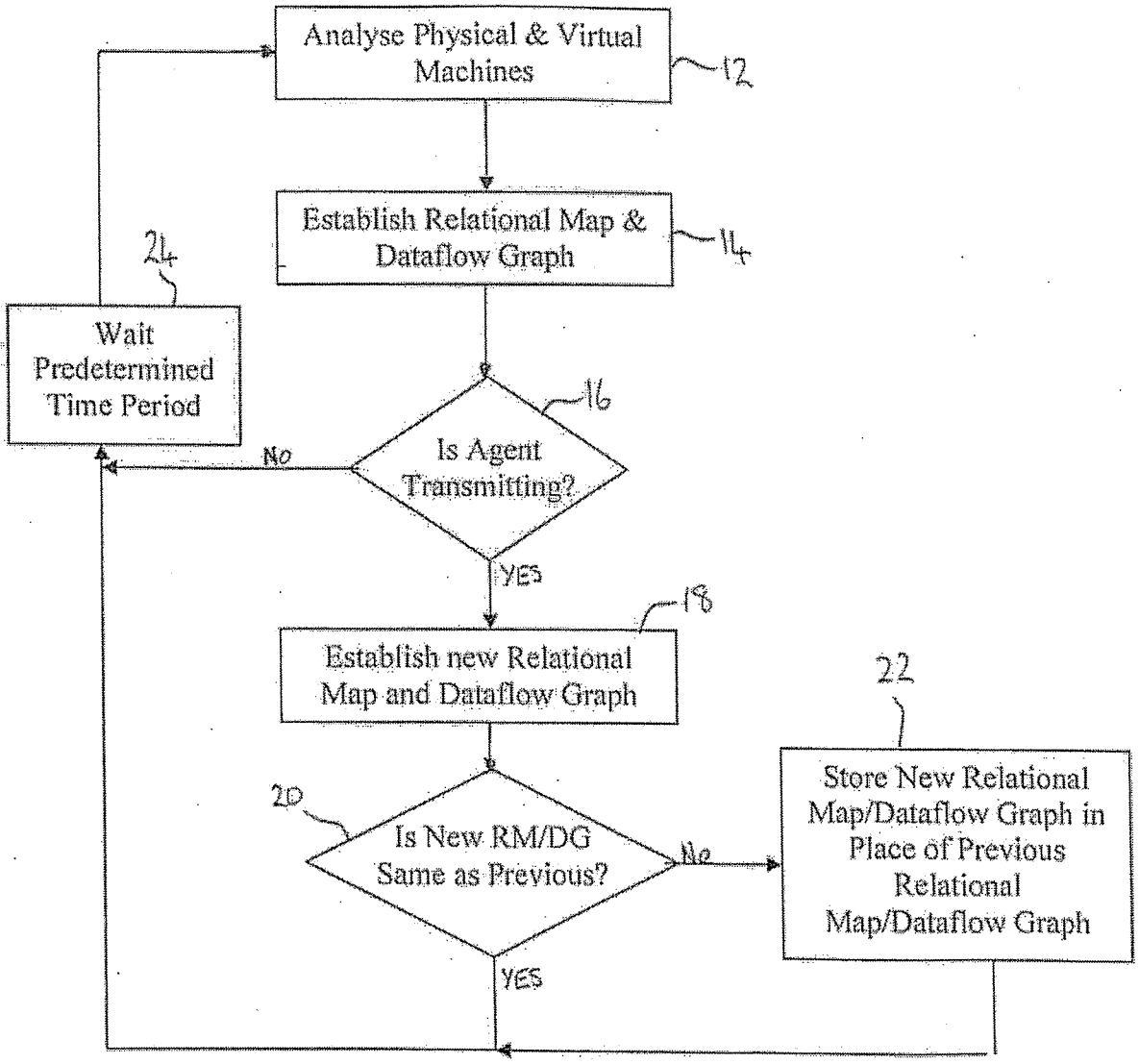

Analyse Physical & Virtual Machines
12
Establish Relational Map & Dataflow Graph
14
24
Wait Predetermined Time Period
16
Is Agent Transmitting?
No
YES
18
Establish new Relational Map and Dataflow Graph
22
20
Is New RM/DG Same as Previous?
No
Store New Relational Map/Dataflow Graph in Place of Previous Relational Map/Dataflow Graph
YES

Figure 3

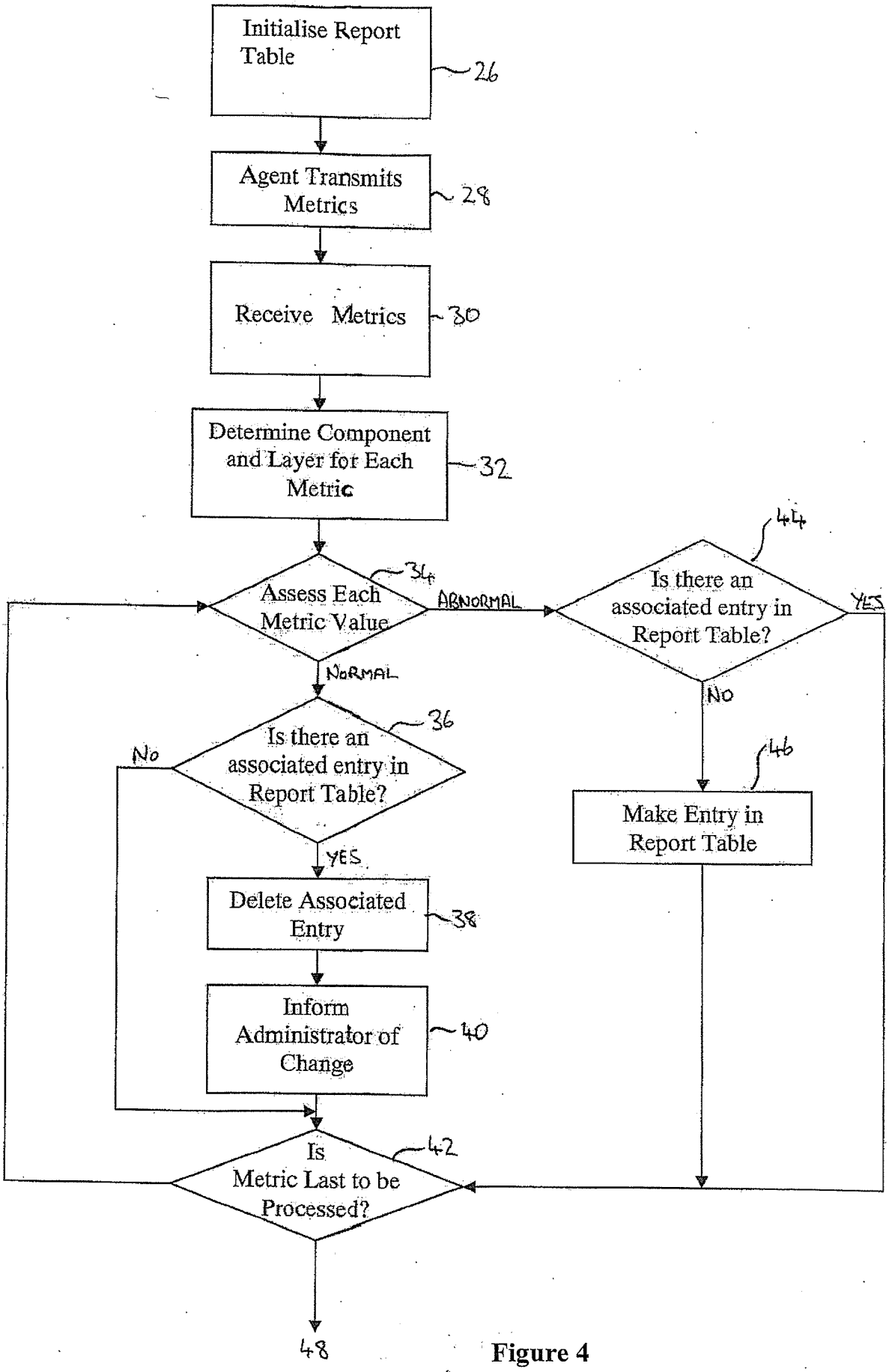

Initialise Report Table
26
Agent Transmits Metrics
28
Receive Metrics
30
Determine Component and Layer for Each Metric
32
Assess Each Metric Value
34
ABNORMAL
NORMAL
Is there an associated entry in Report Table?
44
YES
NO
Make Entry in Report Table
46
Is there an associated entry in Report Table?
36
No
YES
Delete Associated Entry
38
Inform Administrator of Change
40
Is Metric Last to be Processed?
42
48

Figure 4

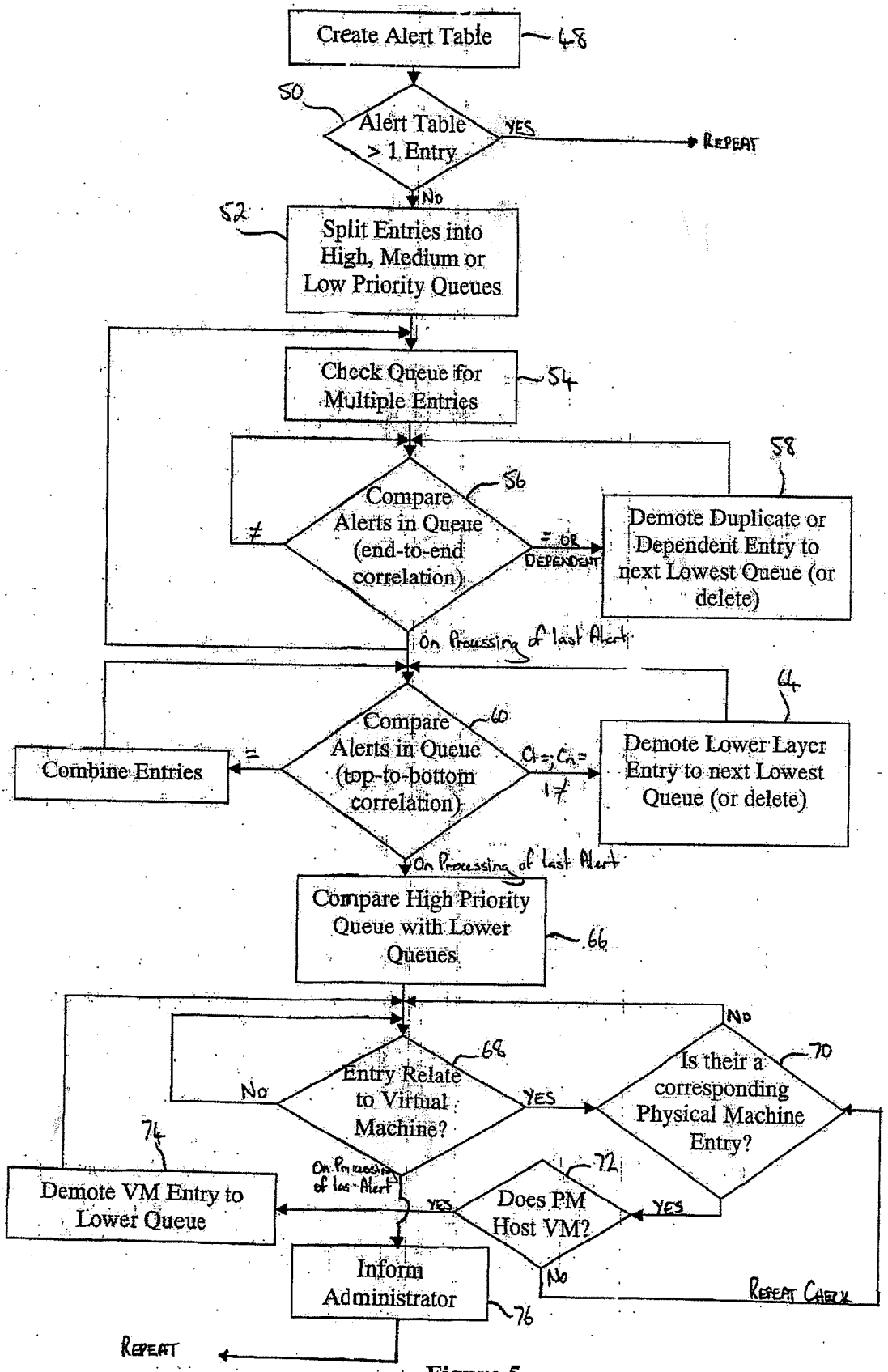

Create Alert Table
48
50
Alert Table > 1 Entry
YES
REPEAT
No
52
Split Entries into High, Medium or Low Priority Queues
Check Queue for Multiple Entries
54
58
Compare Alerts in Queue (end-to-end correlation)
56
≠
= OR DEPENDENT
Demote Duplicate or Dependent Entry to next Lowest Queue (or delete)
On Processing of last Alert
64
Compare Alerts in Queue (top-to-bottom correlation)
60
=
Combine Entries
C1=; Cn= 1?
Demote Lower Layer Entry to next Lowest Queue (or delete)
On Processing of last Alert
Compare High Priority Queue with Lower Queues
66
No
68
Entry Relate to Virtual Machine?
No
YES
70
Is their a corresponding Physical Machine Entry?
74
Demote VM Entry to Lower Queue
On Processing of last Alert
YES
72
Does PM Host VM?
YES
No
Inform Administrator
76
REPEAT CHECK
REPEAT

Figure 5