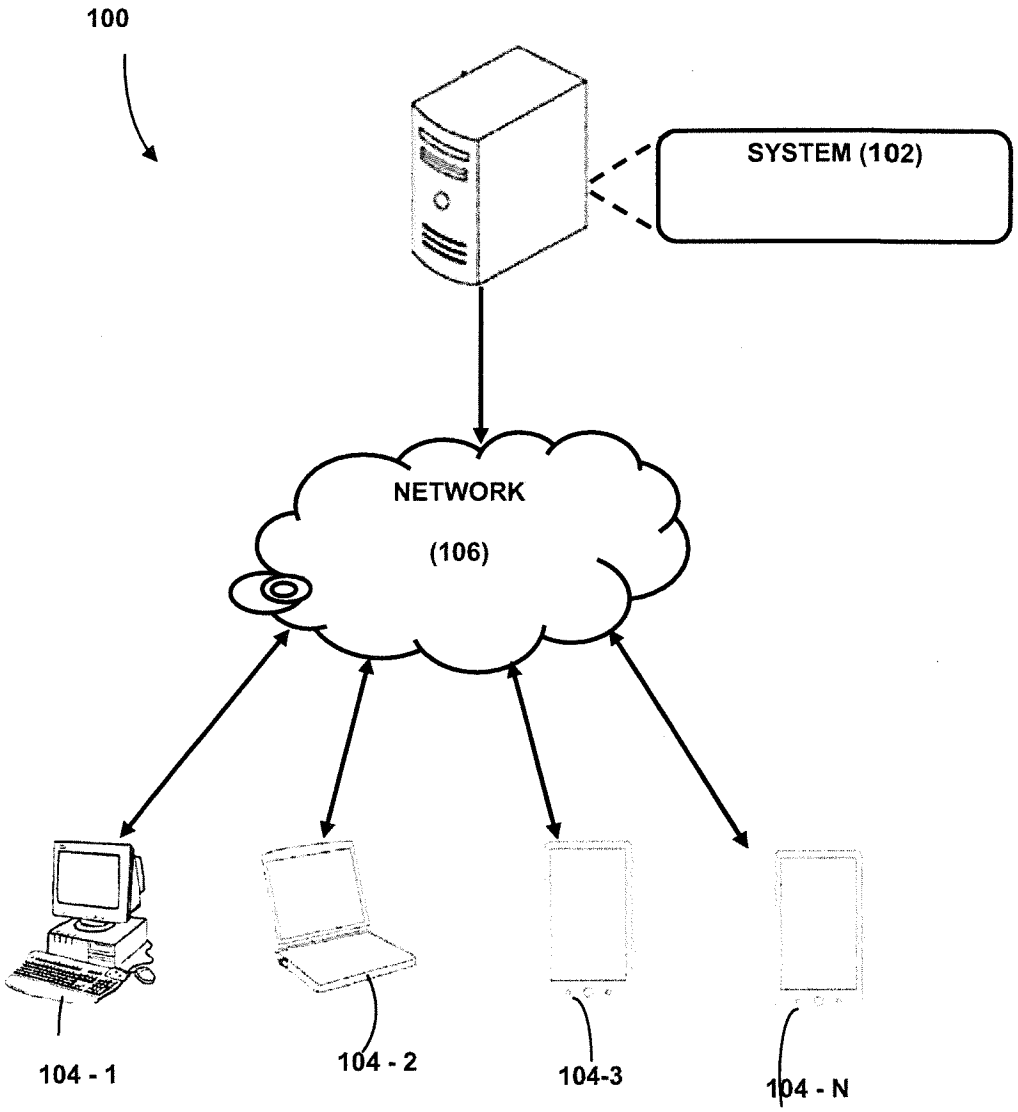


Figure 1

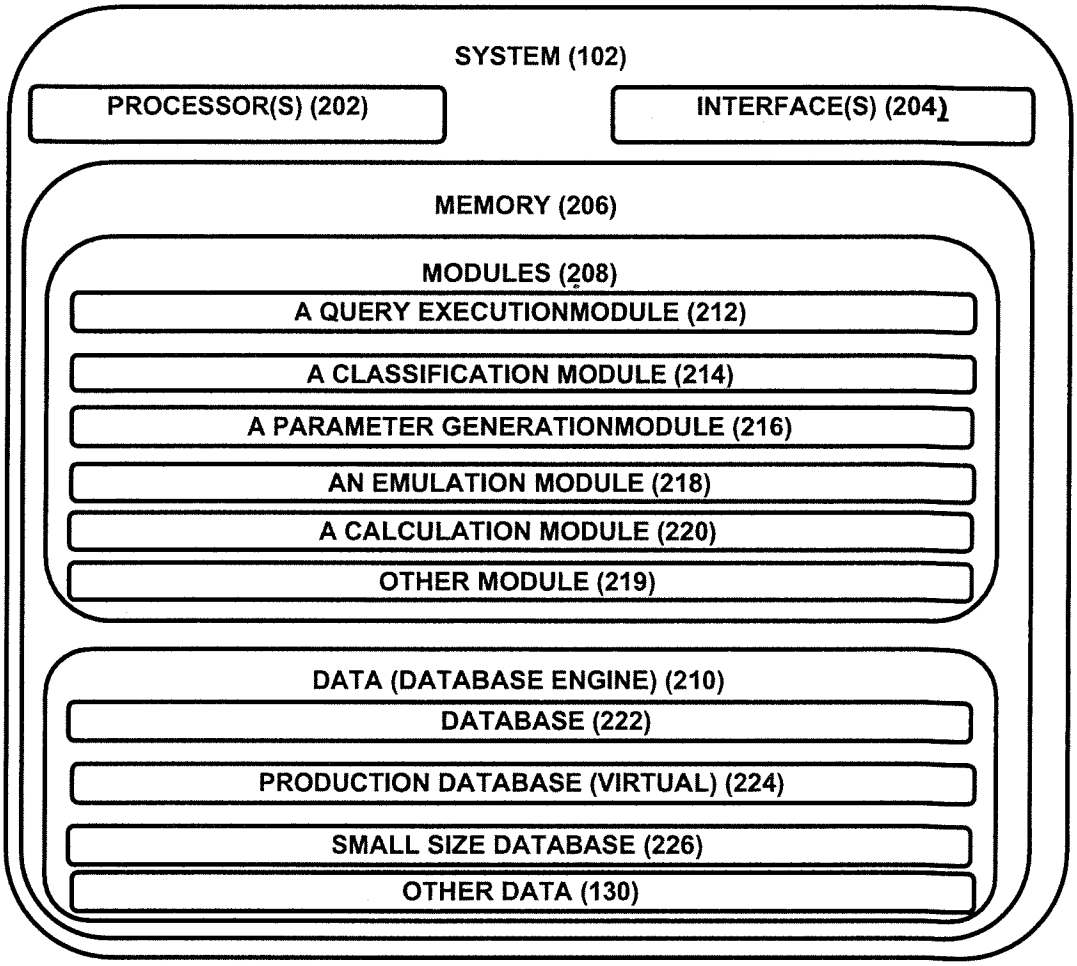

SYSTEM (102)
PROCESSOR(S) (202)
INTERFACE(S) (204)
MEMORY (206)
MODULES (208)
A QUERY EXECUTIONMODULE (212)
A CLASSIFICATION MODULE (214)
A PARAMETER GENERATIONMODULE (216)
AN EMULATION MODULE (218)
A CALCULATION MODULE (220)
OTHER MODULE (219)
DATA (DATABASE ENGINE) (210)
DATABASE (222)
PRODUCTION DATABASE (VIRTUAL) (224)
SMALL SIZE DATABASE (226)
OTHER DATA (130)

Figure 2

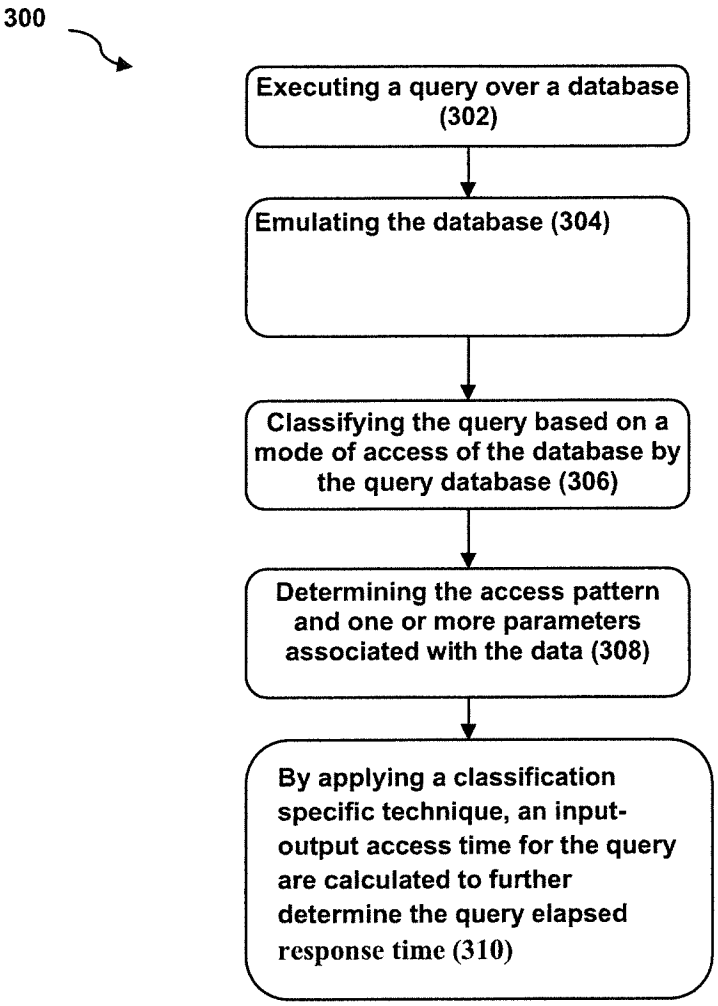

300
Executing a query over a database (302)
Emulating the database (304)
Classifying the query based on a mode of access of the database by the query database (306)
Determining the access pattern and one or more parameters associated with the data (308)
By applying a classification specific technique, an input-output access time for the query are calculated to further determine the query elapsed response time (310)

Figure 3

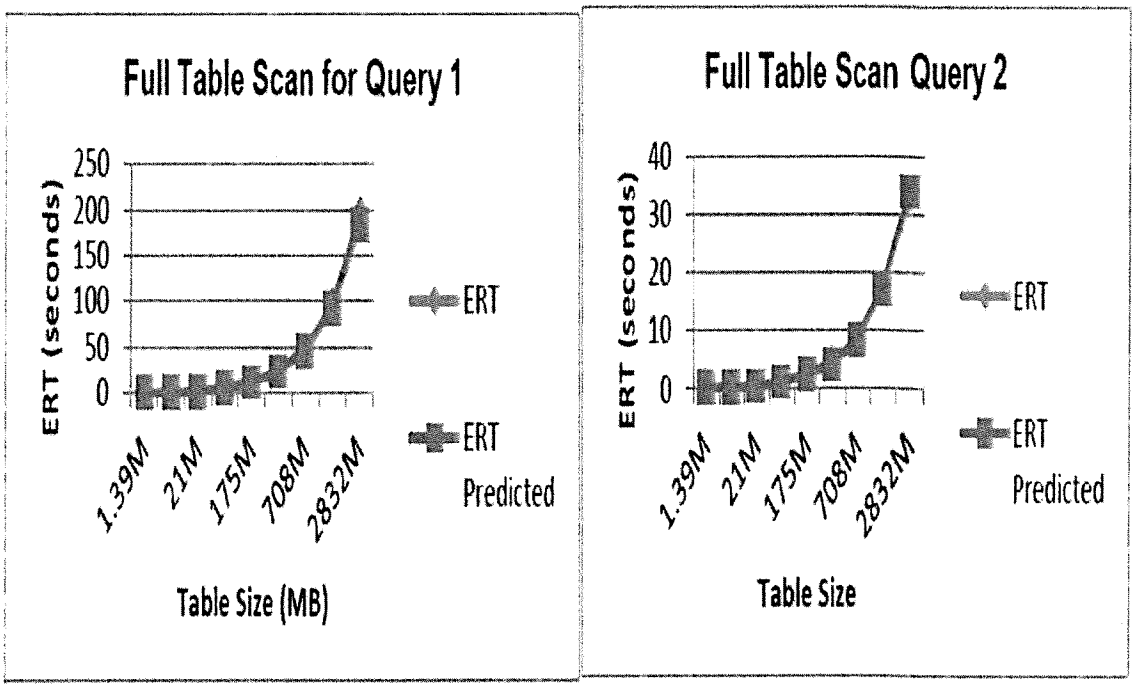

Full Table Scan for Query 1
ERT (seconds)
250
200
150
100
50
0
1.39M
21M
175M
708M
2832M
Table Size (MB)
ERT
ERT Predicted
Full Table Scan Query 2
ERT (seconds)
40
30
20
10
0
1.39M
21M
175M
708M
2832M
Table Size
ERT
ERT Predicted

Figure 4

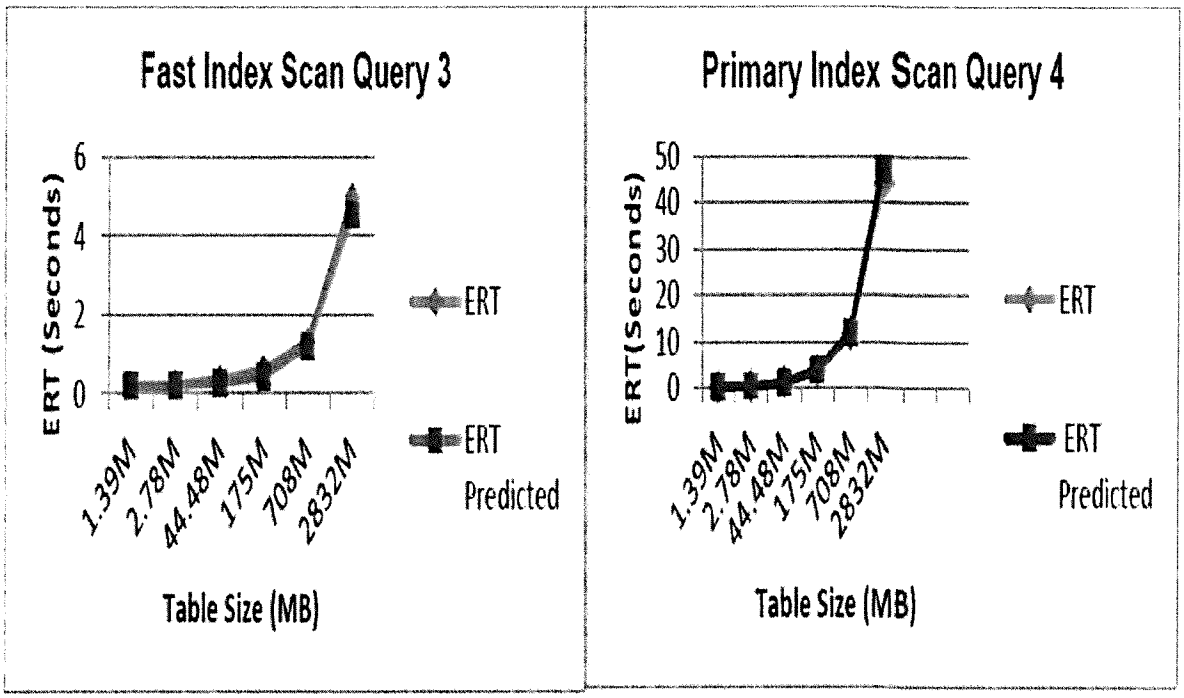

Fast Index Scan Query 3
ERT (Seconds)
6
4
2
0
1.39M
2.78M
44.48M
175M
708M
2832M
Table Size (MB)
ERT
ERT Predicted
Primary Index Scan Query 4
ERT(Seconds)
50
40
30
20
10
0
1.39M
2.78M
44.48M
175M
708M
2832M
Table Size (MB)
ERT
ERT Predicted

Figure 5

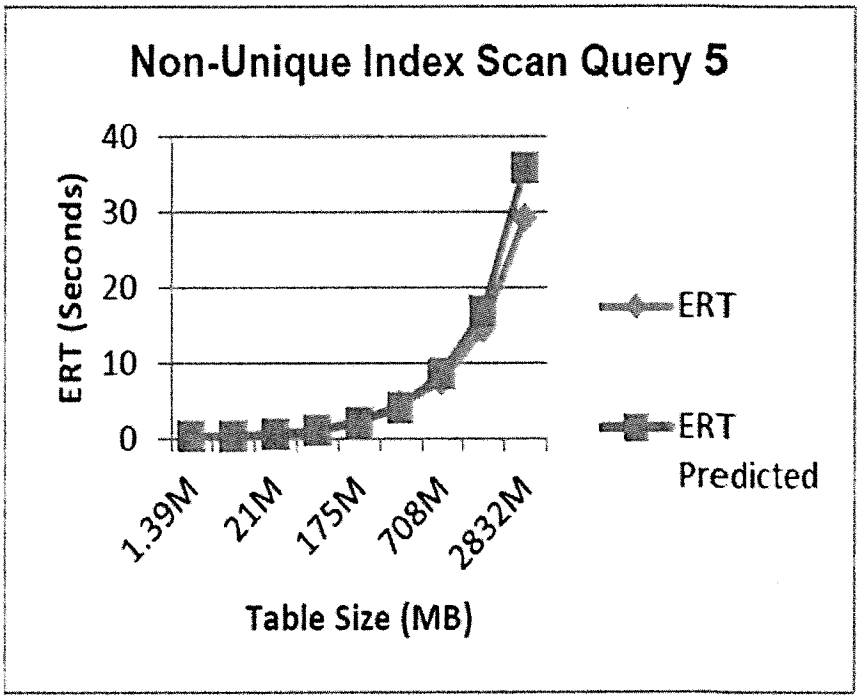

Non-Unique Index Scan Query 5
ERT (Seconds)
40
30
20
10
0
1.39M
21M
175M
708M
2832M
Table Size (MB)
ERT
ERT Predicted

Figure 6