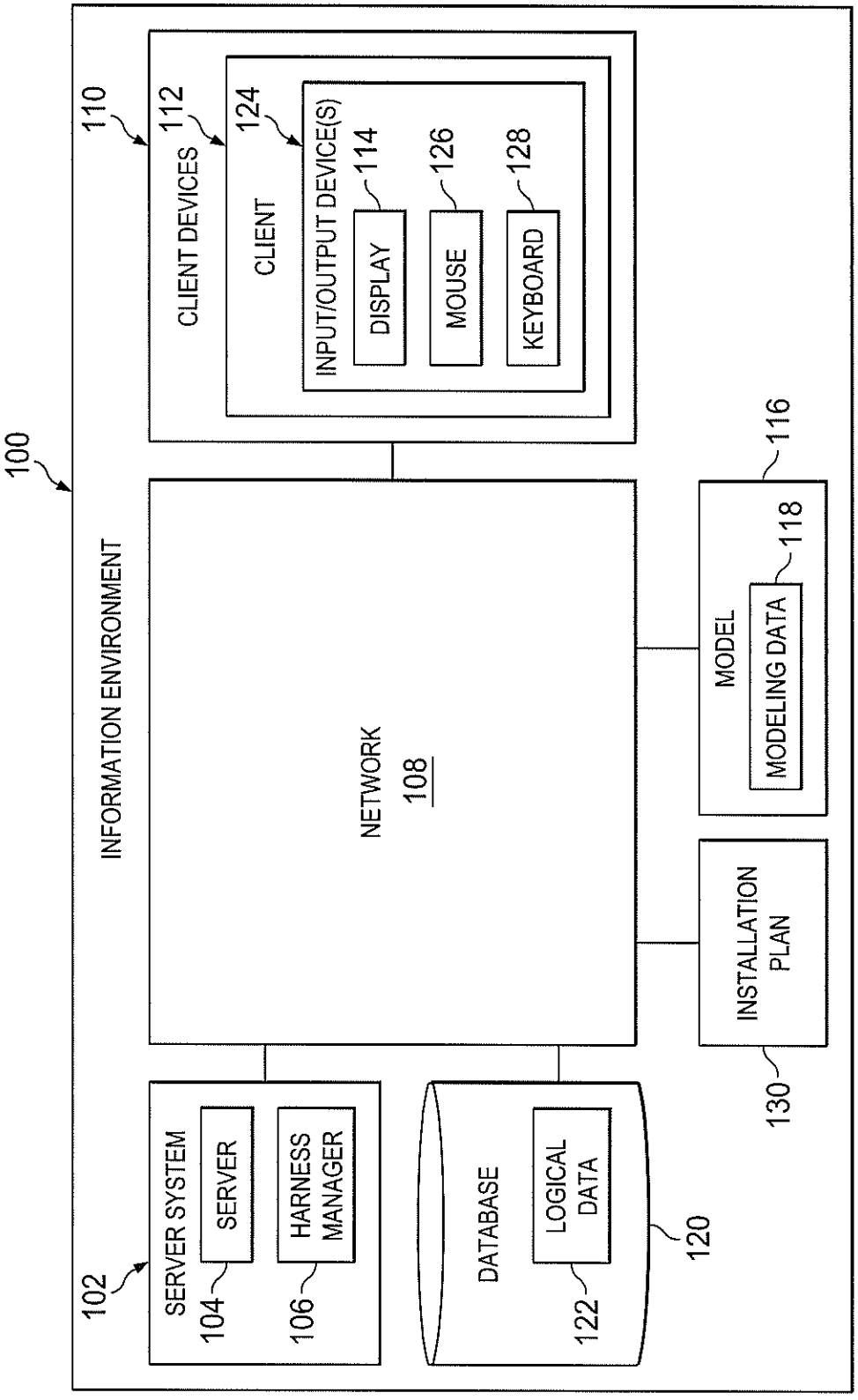

100
INFORMATION ENVIRONMENT
110
CLIENT DEVICES
112
CLIENT
124
INPUT/OUTPUT DEVICE(S)
114
DISPLAY
126
MOUSE
128
KEYBOARD
NETWORK
108
116
MODEL
118
MODELING DATA
INSTALLATION PLAN
130
102
SERVER SYSTEM
104
SERVER
106
HARNESS MANAGER
DATABASE
120
122
LOGICAL DATA

FIG. 1

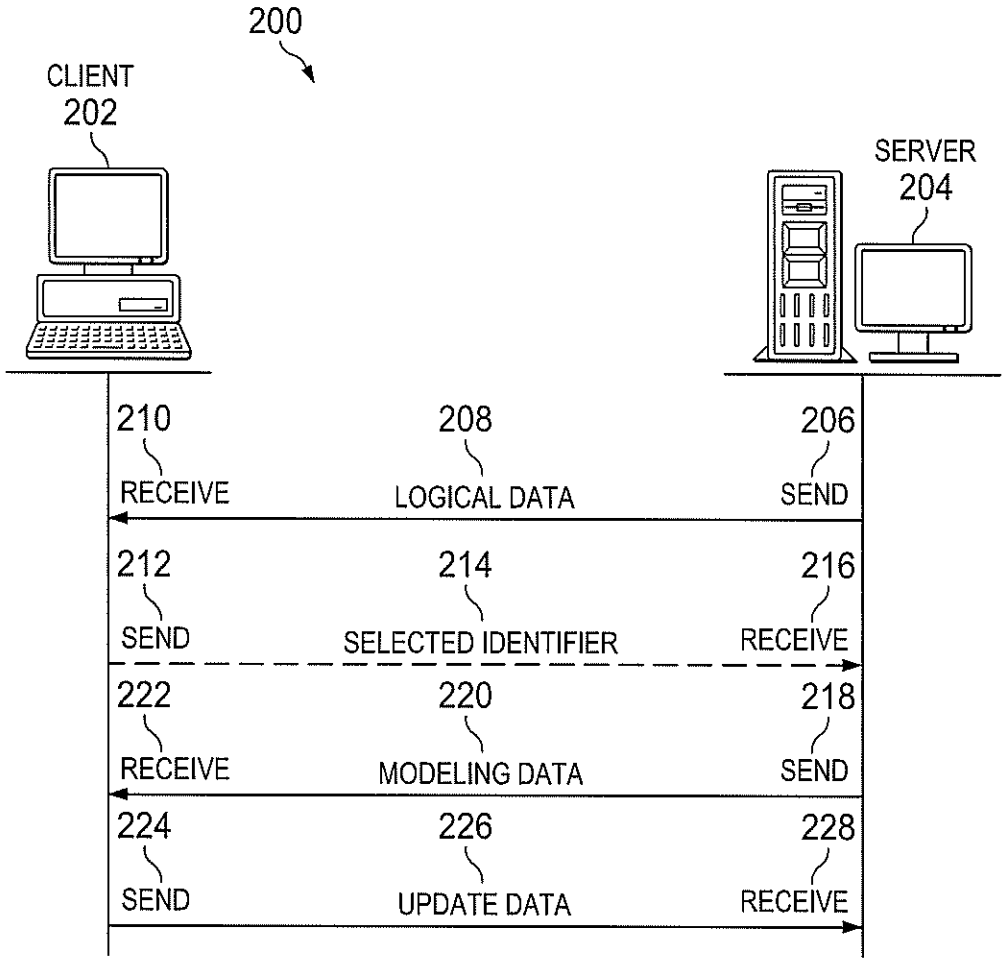

200
CLIENT
202
SERVER
204
210
RECEIVE
208
LOGICAL DATA
206
SEND
212
SEND
214
SELECTED IDENTIFIER
216
RECEIVE
222
RECEIVE
220
MODELING DATA
218
SEND
224
SEND
226
UPDATE DATA
228
RECEIVE

FIG. 2

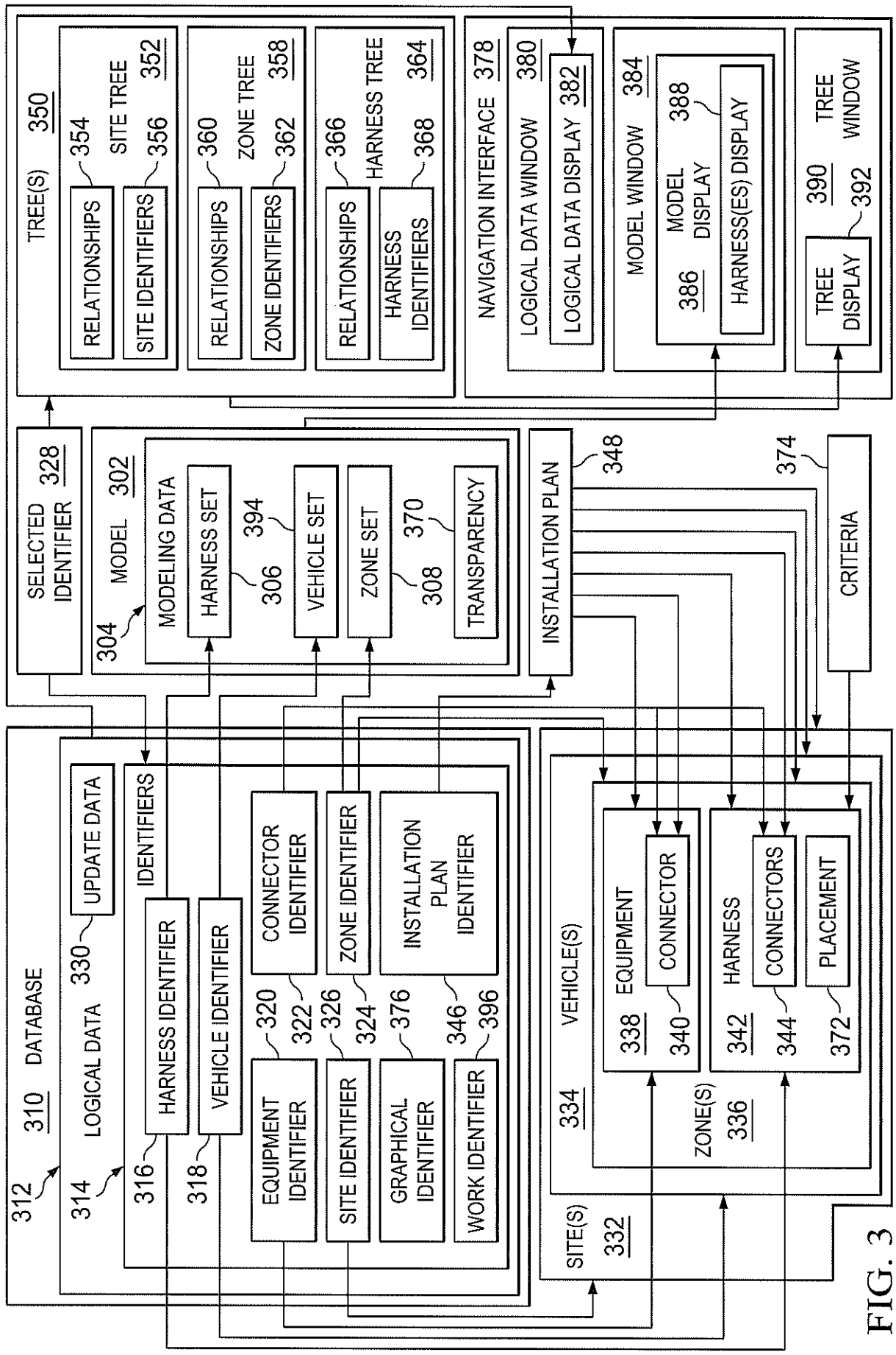

312
310 DATABASE
314
LOGICAL DATA
330 UPDATE DATA
316 HARNESS IDENTIFIER
318 VEHICLE IDENTIFIER
IDENTIFIERS
320 EQUIPMENT IDENTIFIER
322 CONNECTOR IDENTIFIER
326 SITE IDENTIFIER
324 ZONE IDENTIFIER
376 GRAPHICAL IDENTIFIER
346 INSTALLATION PLAN IDENTIFIER
396 WORK IDENTIFIER
SELECTED IDENTIFIER 328
304 MODEL 302
MODELING DATA
306 HARNESS SET
394 VEHICLE SET
308 ZONE SET
370 TRANSPARENCY
INSTALLATION PLAN 348
374 CRITERIA
TREE(S) 350
354 RELATIONSHIPS
356 SITE IDENTIFIERS
SITE TREE 352
360 RELATIONSHIPS
362 ZONE IDENTIFIERS
ZONE TREE 358
366 RELATIONSHIPS
368 HARNESS IDENTIFIERS
HARNESS TREE 364
NAVIGATION INTERFACE 378
LOGICAL DATA WINDOW 380
LOGICAL DATA DISPLAY 382
MODEL WINDOW 384
386 MODEL DISPLAY
388 HARNESS(ES) DISPLAY
TREE DISPLAY 390
392 TREE WINDOW
SITE(S) 332
334 VEHICLE(S)
338 EQUIPMENT
340 CONNECTOR
ZONE(S) 336
342 HARNESS
344 CONNECTORS
372 PLACEMENT

FIG. 3

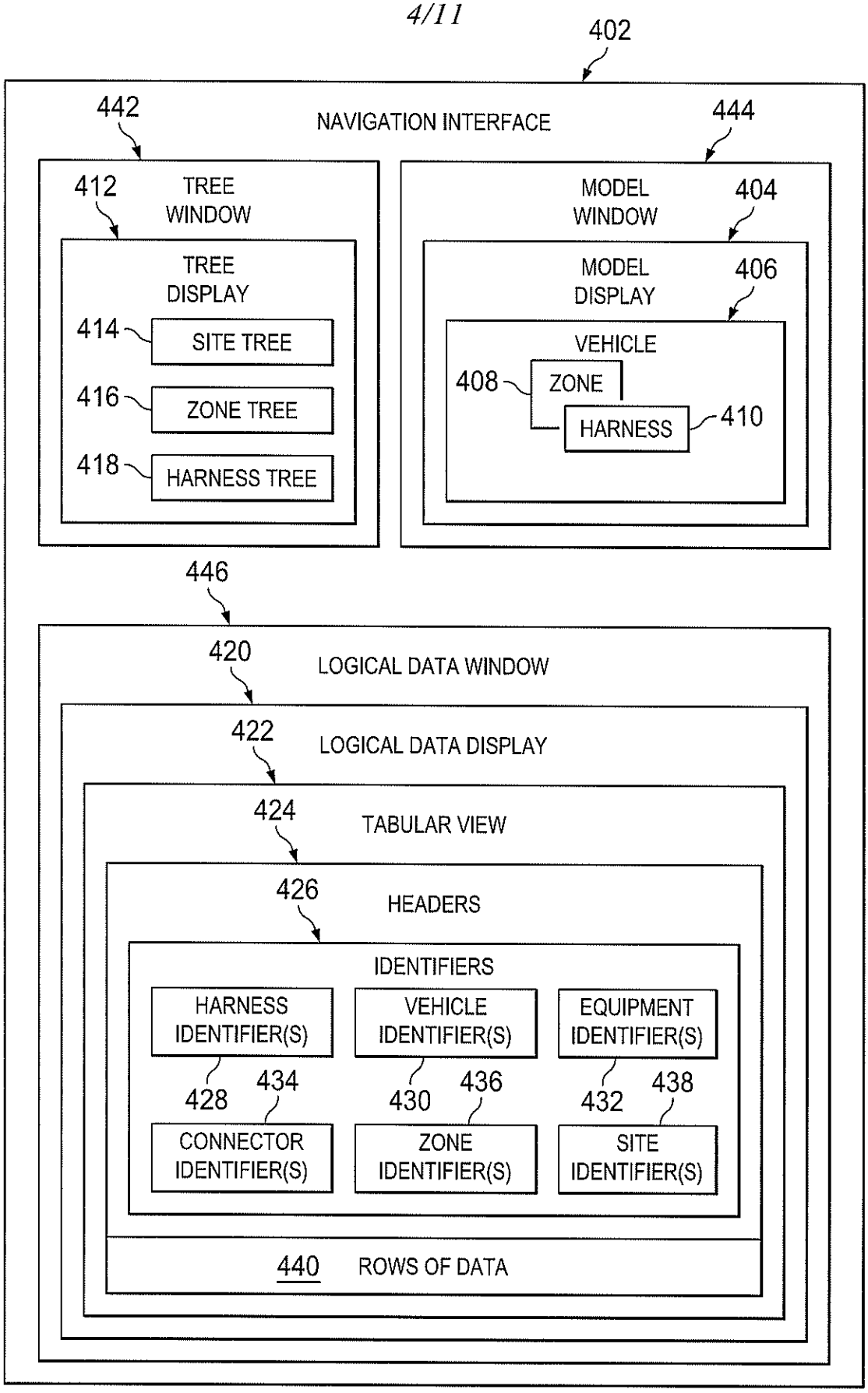

402
NAVIGATION INTERFACE
442
444
412
TREE WINDOW
TREE DISPLAY
414
SITE TREE
416
ZONE TREE
418
HARNESS TREE
MODEL WINDOW
404
MODEL DISPLAY
406
VEHICLE
408
ZONE
HARNESS
410
446
420
LOGICAL DATA WINDOW
422
LOGICAL DATA DISPLAY
424
TABULAR VIEW
426
HEADERS
IDENTIFIERS
HARNESS IDENTIFIER(S)
VEHICLE IDENTIFIER(S)
EQUIPMENT IDENTIFIER(S)
428
434
430
436
432
438
CONNECTOR IDENTIFIER(S)
ZONE IDENTIFIER(S)
SITE IDENTIFIER(S)
440
ROWS OF DATA

FIG. 4

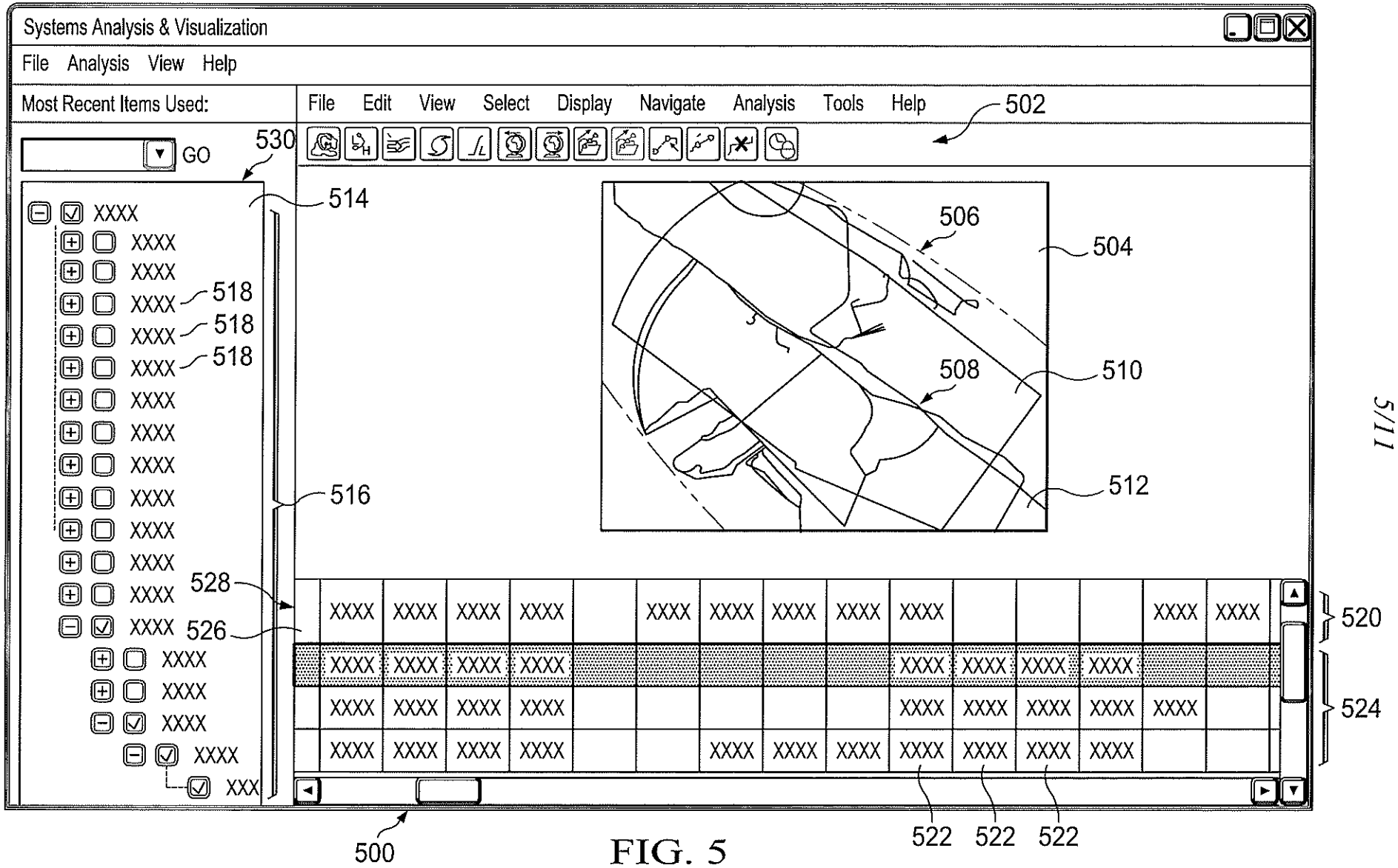

Systems Analysis & Visualization
File Analysis View Help
Most Recent Items Used:
GO
530
514
XXXX
518
516
528
526
File Edit View Select Display Navigate Analysis Tools Help
502
506
504
508
510
512
520
524
522
500

FIG. 5

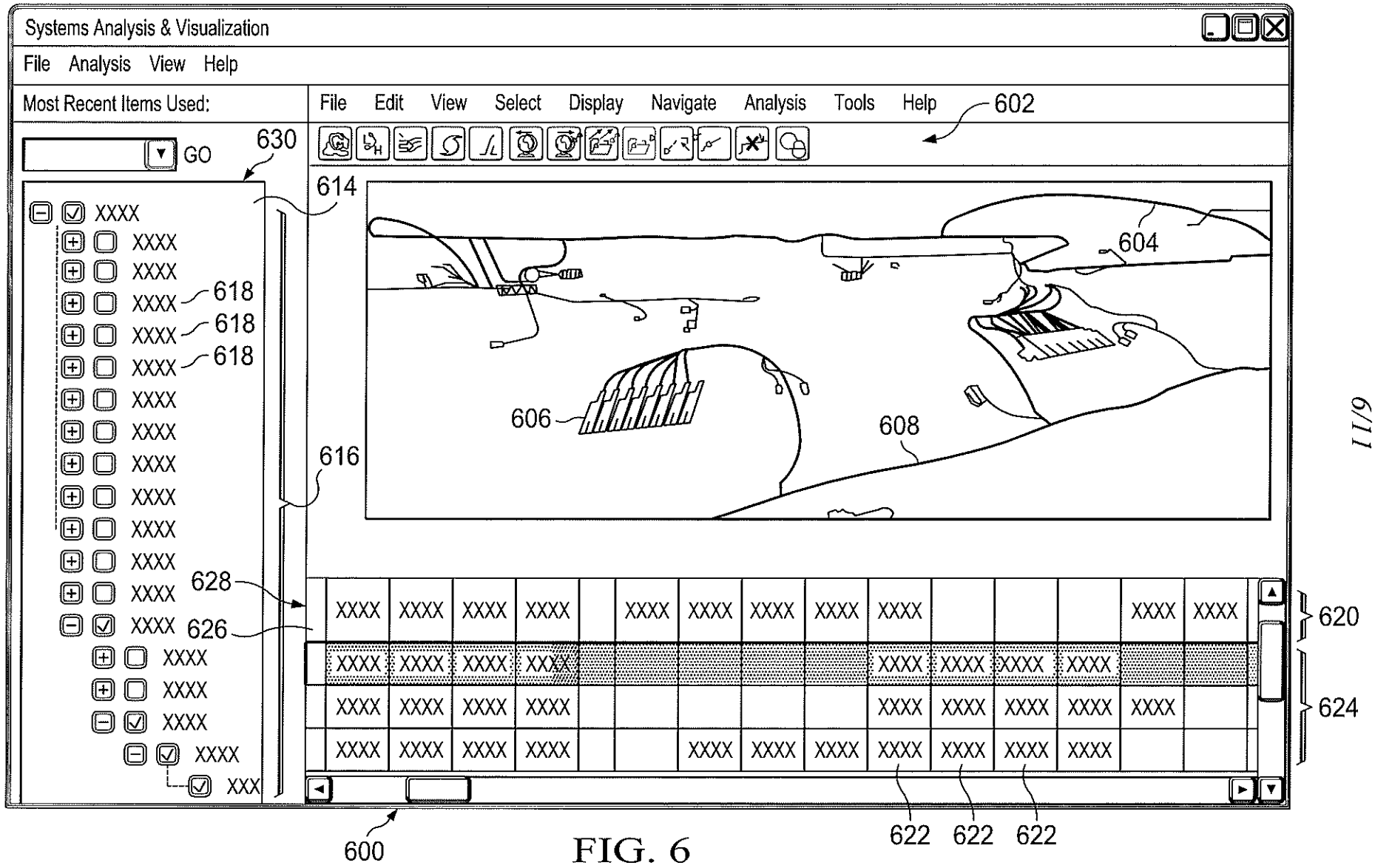

Systems Analysis & Visualization
File Analysis View Help
Most Recent Items Used:
File Edit View Select Display Navigate Analysis Tools Help
602
GO
630
614
XXXX
618
618
618
604
606
608
616
628
626
620
624
622
622
622
600

FIG. 6

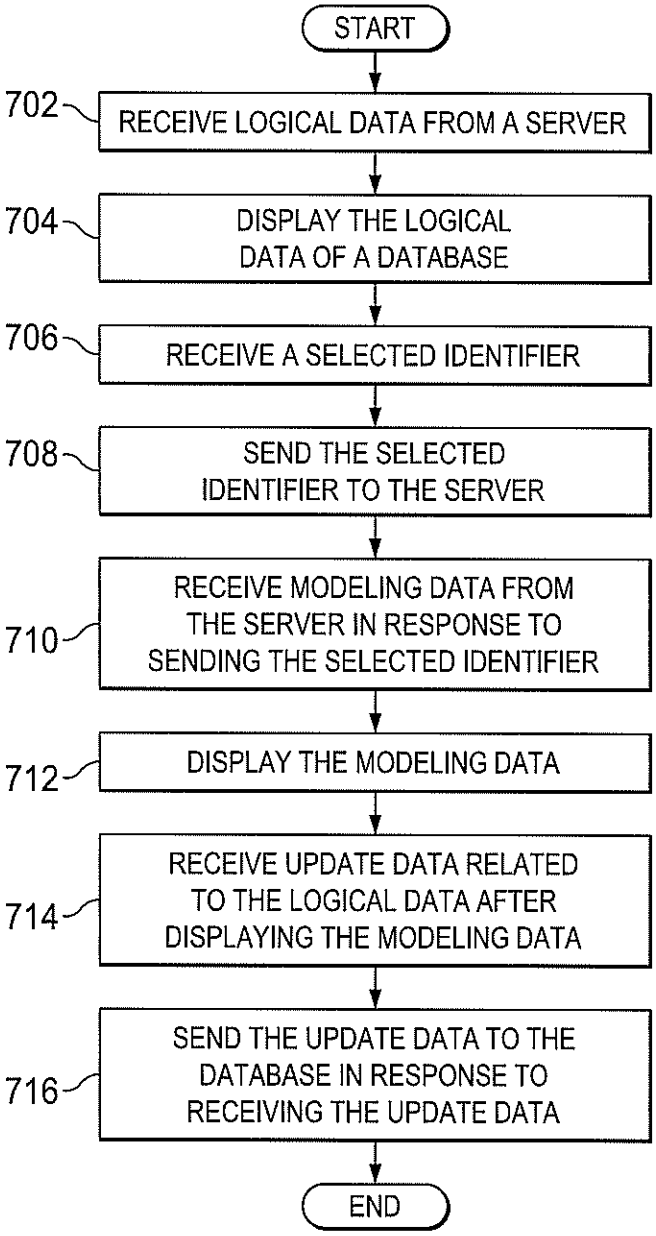

START
702
RECEIVE LOGICAL DATA FROM A SERVER
704
DISPLAY THE LOGICAL DATA OF A DATABASE
706
RECEIVE A SELECTED IDENTIFIER
708
SEND THE SELECTED IDENTIFIER TO THE SERVER
710
RECEIVE MODELING DATA FROM THE SERVER IN RESPONSE TO SENDING THE SELECTED IDENTIFIER
712
DISPLAY THE MODELING DATA
714
RECEIVE UPDATE DATA RELATED TO THE LOGICAL DATA AFTER DISPLAYING THE MODELING DATA
716
SEND THE UPDATE DATA TO THE DATABASE IN RESPONSE TO RECEIVING THE UPDATE DATA
END

FIG. 7

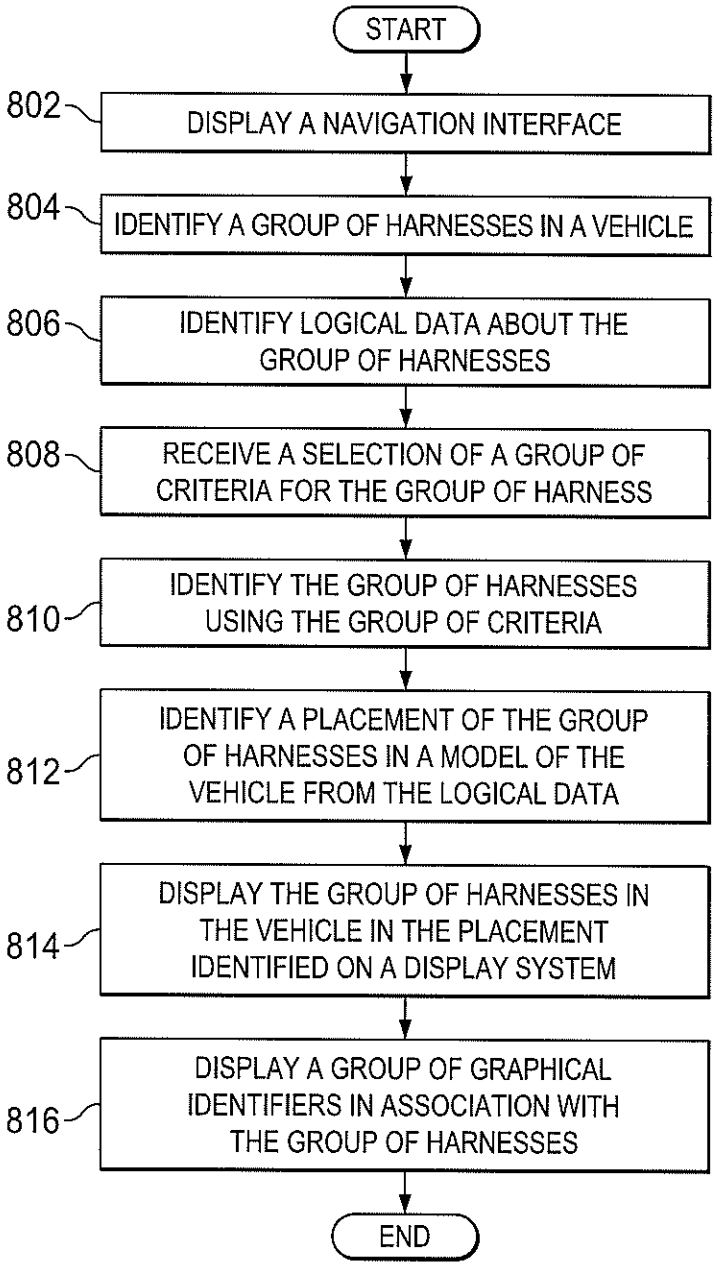

START
802
DISPLAY A NAVIGATION INTERFACE
804
IDENTIFY A GROUP OF HARNESSES IN A VEHICLE
806
IDENTIFY LOGICAL DATA ABOUT THE GROUP OF HARNESSES
808
RECEIVE A SELECTION OF A GROUP OF CRITERIA FOR THE GROUP OF HARNESS
810
IDENTIFY THE GROUP OF HARNESSES USING THE GROUP OF CRITERIA
812
IDENTIFY A PLACEMENT OF THE GROUP OF HARNESSES IN A MODEL OF THE VEHICLE FROM THE LOGICAL DATA
814
DISPLAY THE GROUP OF HARNESSES IN THE VEHICLE IN THE PLACEMENT IDENTIFIED ON A DISPLAY SYSTEM
816
DISPLAY A GROUP OF GRAPHICAL IDENTIFIERS IN ASSOCIATION WITH THE GROUP OF HARNESSES
END

FIG. 8

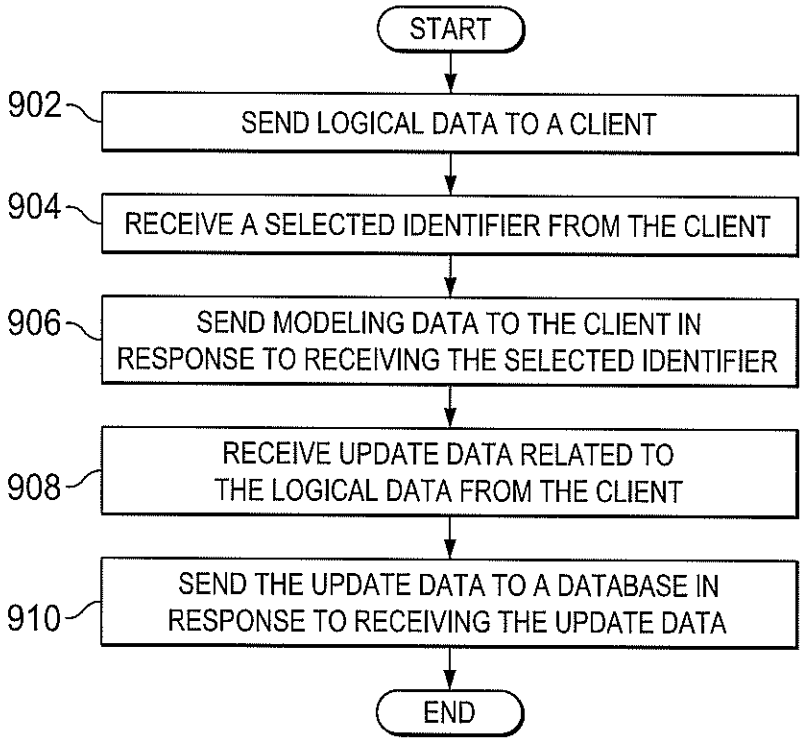
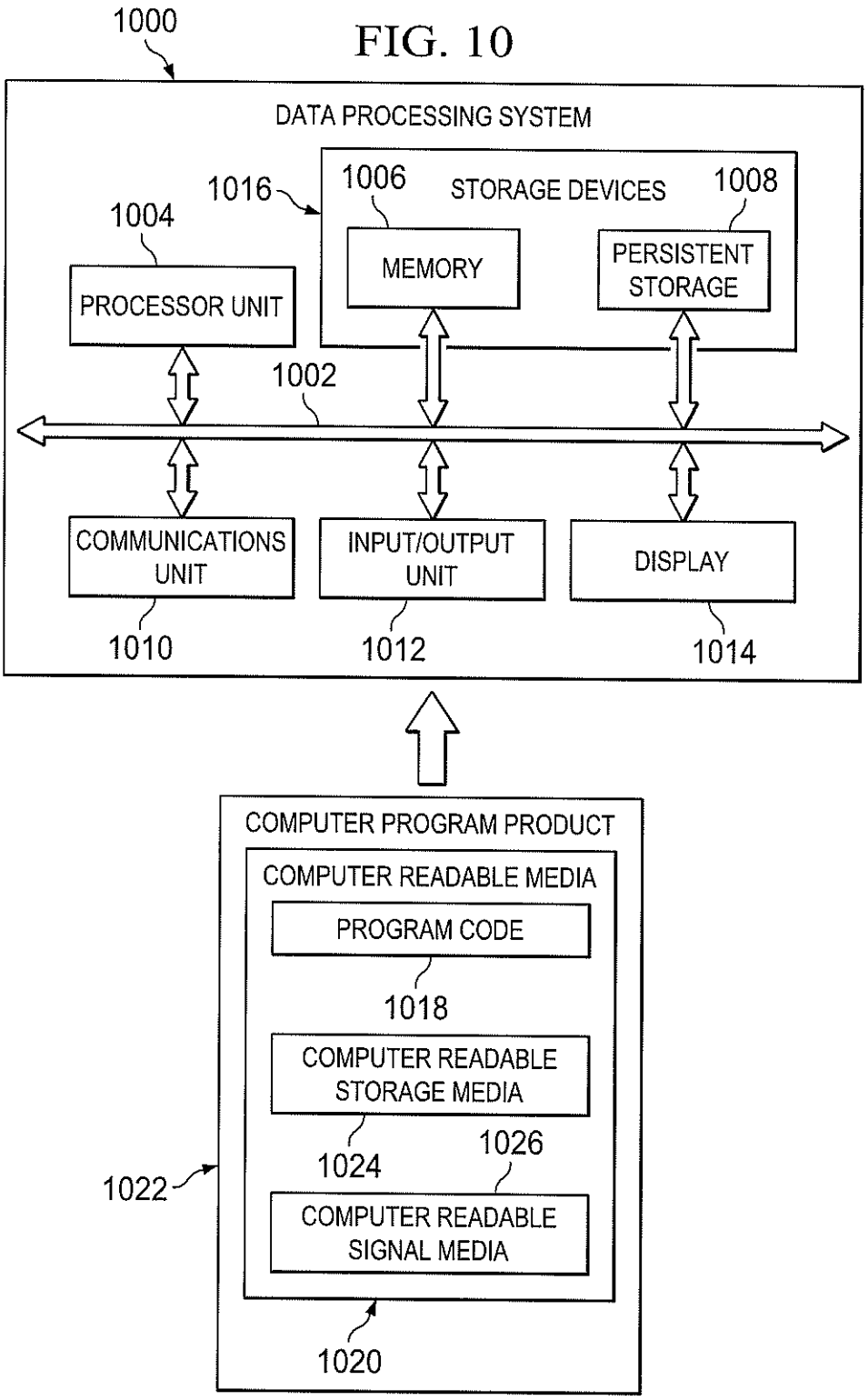

START
902
SEND LOGICAL DATA TO A CLIENT
904
RECEIVE A SELECTED IDENTIFIER FROM THE CLIENT
906
SEND MODELING DATA TO THE CLIENT IN RESPONSE TO RECEIVING THE SELECTED IDENTIFIER
908
RECEIVE UPDATE DATA RELATED TO THE LOGICAL DATA FROM THE CLIENT
910
SEND THE UPDATE DATA TO A DATABASE IN RESPONSE TO RECEIVING THE UPDATE DATA
END

FIG. 9

FIG. 10


1000
DATA PROCESSING SYSTEM
1016
1006
STORAGE DEVICES
1008
1004
MEMORY
PERSISTENT STORAGE
PROCESSOR UNIT
1002
COMMUNICATIONS UNIT
INPUT/OUTPUT UNIT
DISPLAY
1010
1012
1014
COMPUTER PROGRAM PRODUCT
COMPUTER READABLE MEDIA
PROGRAM CODE
1018
COMPUTER READABLE STORAGE MEDIA
1024
1026
1022
COMPUTER READABLE SIGNAL MEDIA
1020

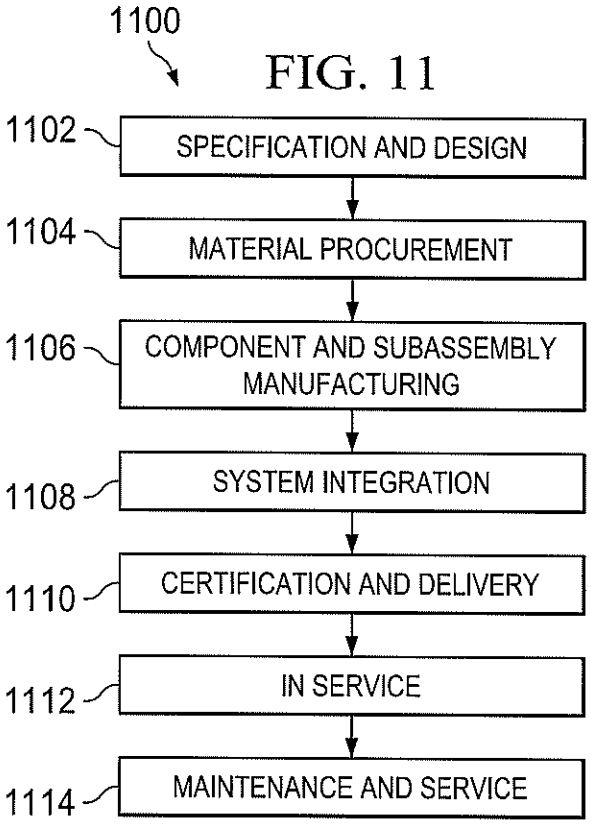

1100
1102
SPECIFICATION AND DESIGN
1104
MATERIAL PROCUREMENT
1106
COMPONENT AND SUBASSEMBLY MANUFACTURING
1108
SYSTEM INTEGRATION
1110
CERTIFICATION AND DELIVERY
1112
IN SERVICE
1114
MAINTENANCE AND SERVICE

FIG. 11

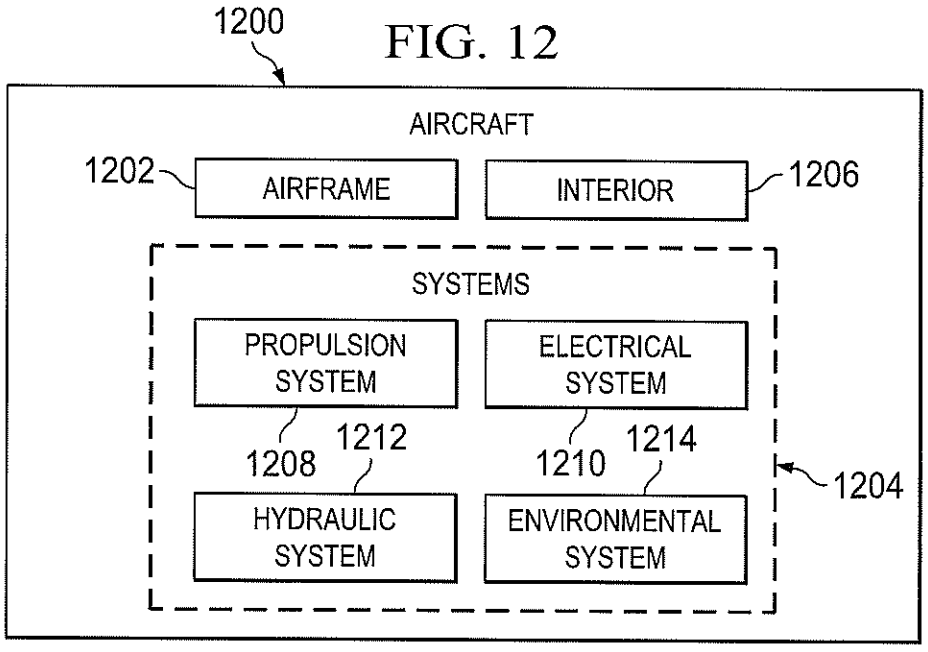

1200
AIRCRAFT
1202
AIRFRAME
INTERIOR
1206
SYSTEMS
PROPULSION SYSTEM
ELECTRICAL SYSTEM
1208
1212
1210
1214
HYDRAULIC SYSTEM
ENVIRONMENTAL SYSTEM
1204

FIG. 12