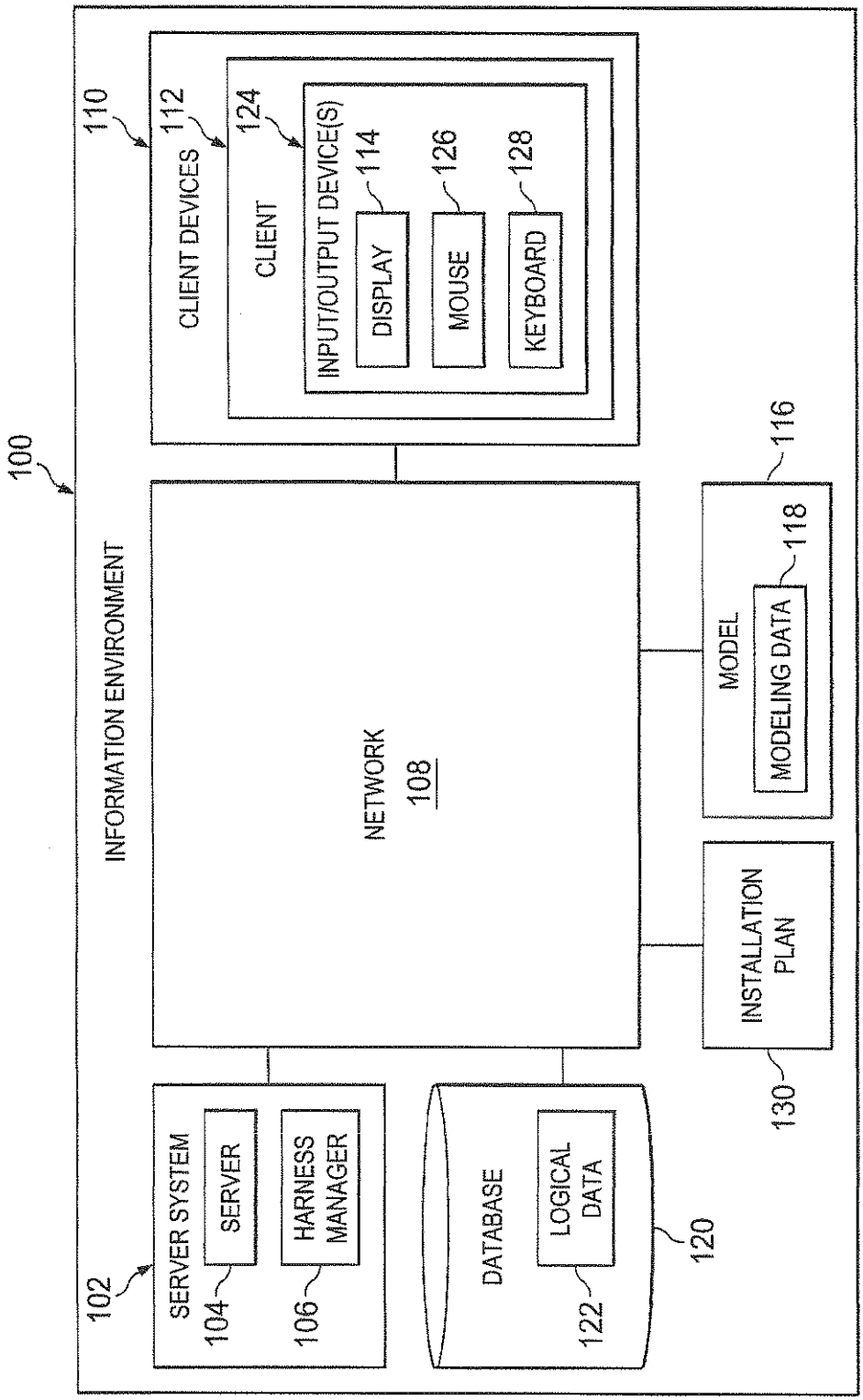

100
INFORMATION ENVIRONMENT
110
CLIENT DEVICES
112
CLIENT
124
INPUT/OUTPUT DEVICE(S)
114
DISPLAY
126
MOUSE
128
KEYBOARD
NETWORK
108
116
MODEL
118
MODELING DATA
INSTALLATION PLAN
130
102
SERVER SYSTEM
104
SERVER
106
HARNESS MANAGER
DATABASE
120
LOGICAL DATA
122

FIG. 1

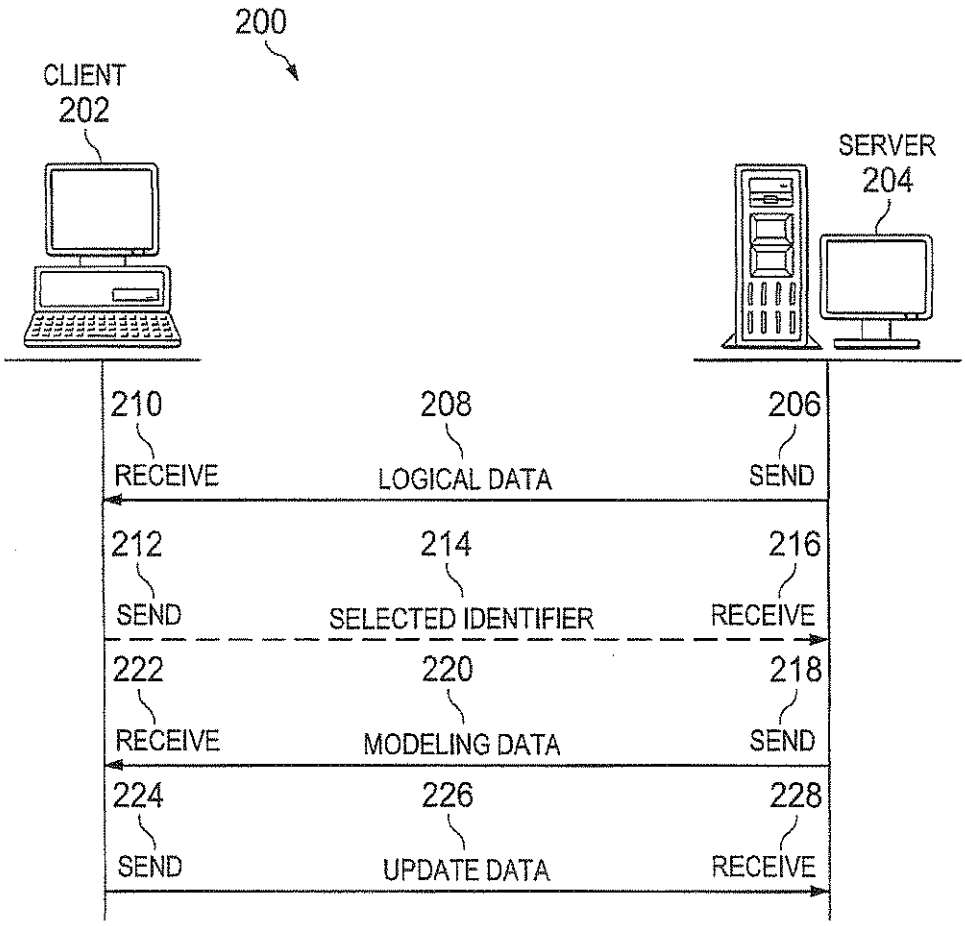

200
CLIENT
202
SERVER
204
210
RECEIVE
208
LOGICAL DATA
206
SEND
212
SEND
214
SELECTED IDENTIFIER
216
RECEIVE
222
RECEIVE
220
MODELING DATA
218
SEND
224
SEND
226
UPDATE DATA
228
RECEIVE

FIG. 2

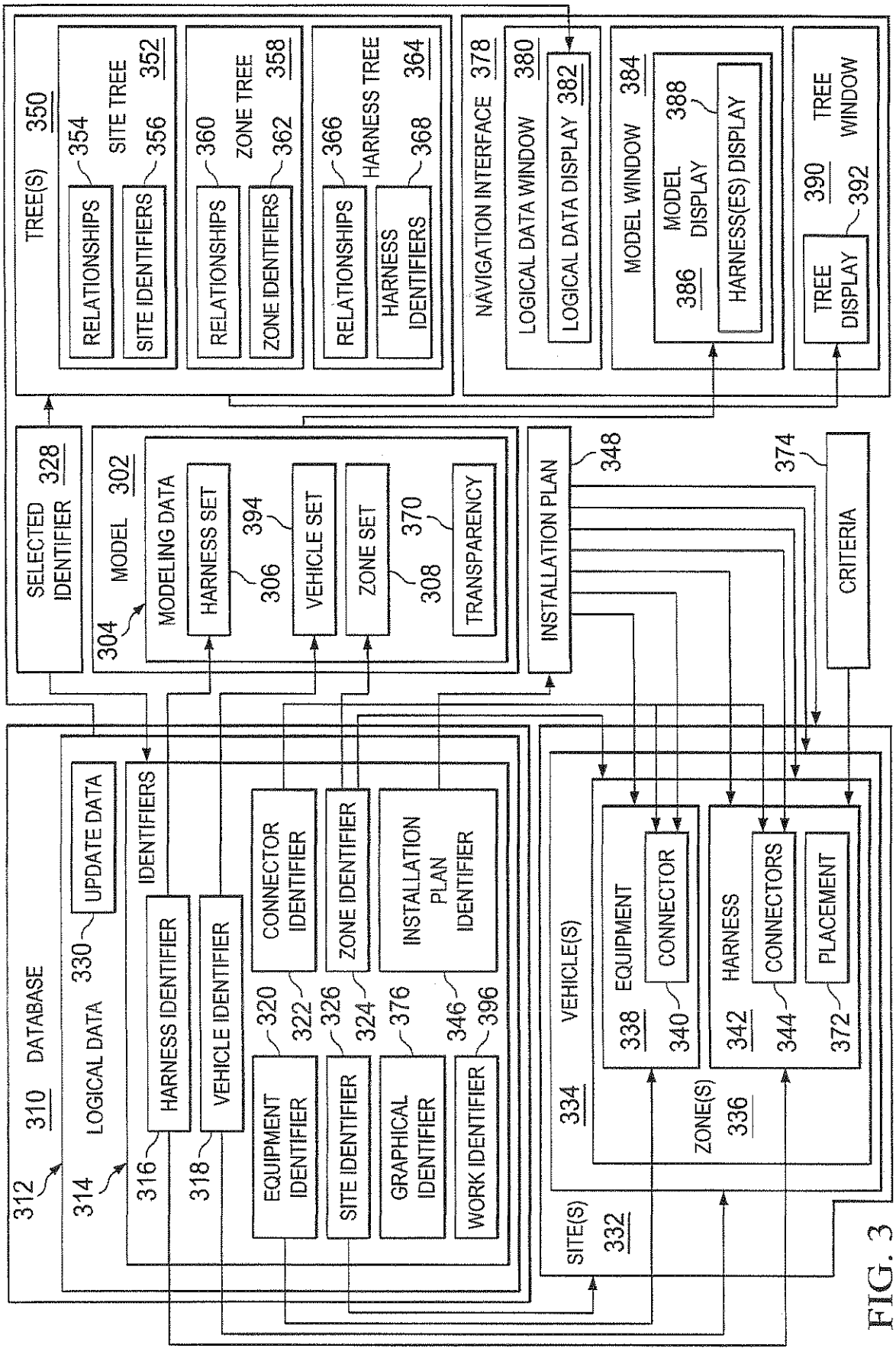

TREE(S) 350
RELATIONSHIPS 354
SITE IDENTIFIERS 356
SITE TREE 352
RELATIONSHIPS 360
ZONE IDENTIFIERS 362
ZONE TREE 358
RELATIONSHIPS 366
HARNESS IDENTIFIERS 368
HARNESS TREE 364
NAVIGATION INTERFACE 378
LOGICAL DATA WINDOW 380
LOGICAL DATA DISPLAY 382
MODEL WINDOW 384
MODEL DISPLAY 386
HARNESS(ES) DISPLAY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

FIG. 3

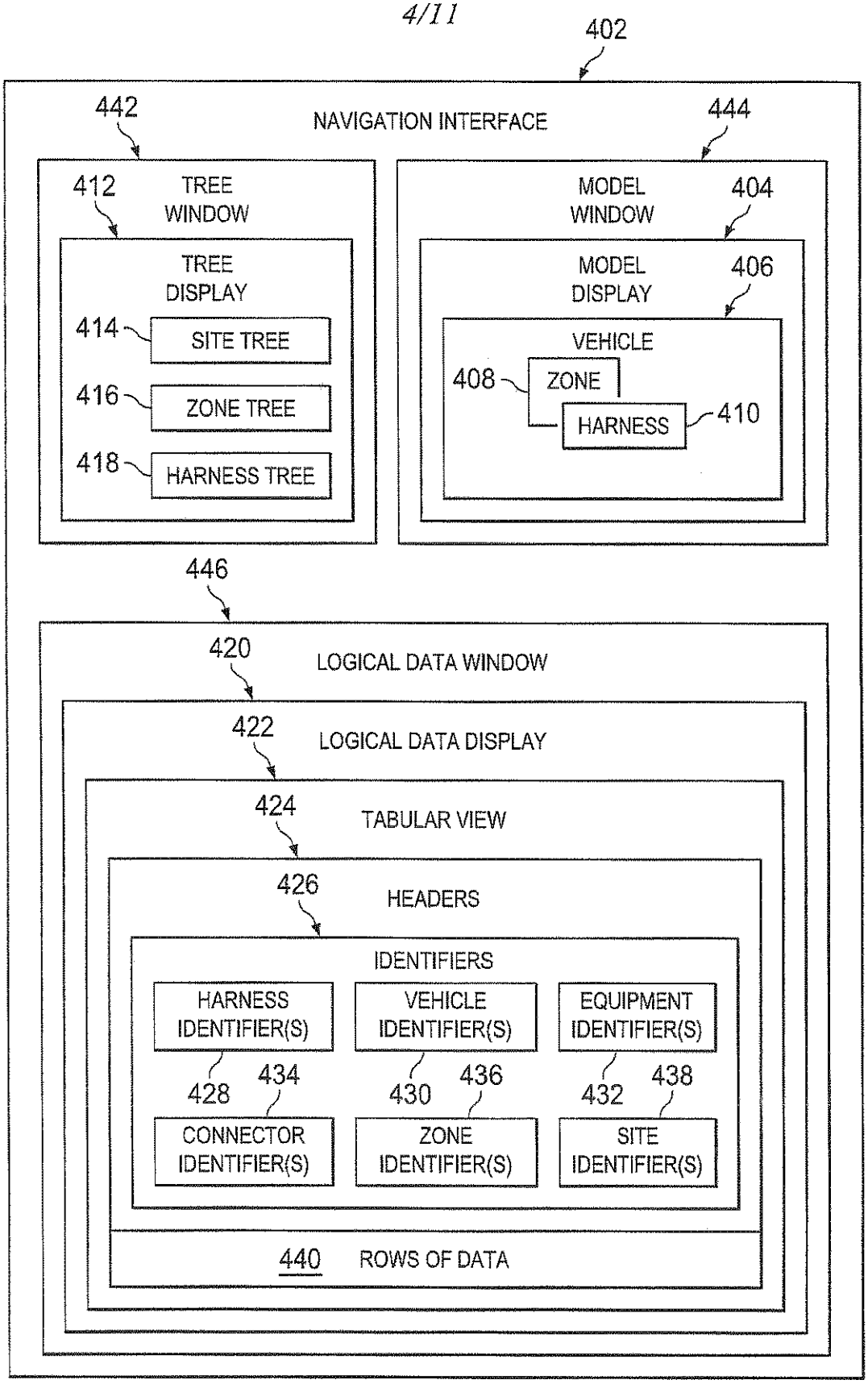

402
442
NAVIGATION INTERFACE
444
412
TREE WINDOW
MODEL WINDOW
404
TREE DISPLAY
MODEL DISPLAY
406
414
SITE TREE
VEHICLE
408
ZONE
416
ZONE TREE
HARNESS
410
418
HARNESS TREE
446
420
LOGICAL DATA WINDOW
422
LOGICAL DATA DISPLAY
424
TABULAR VIEW
426
HEADERS
IDENTIFIERS
HARNESS IDENTIFIER(S)
VEHICLE IDENTIFIER(S)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

FIG. 4

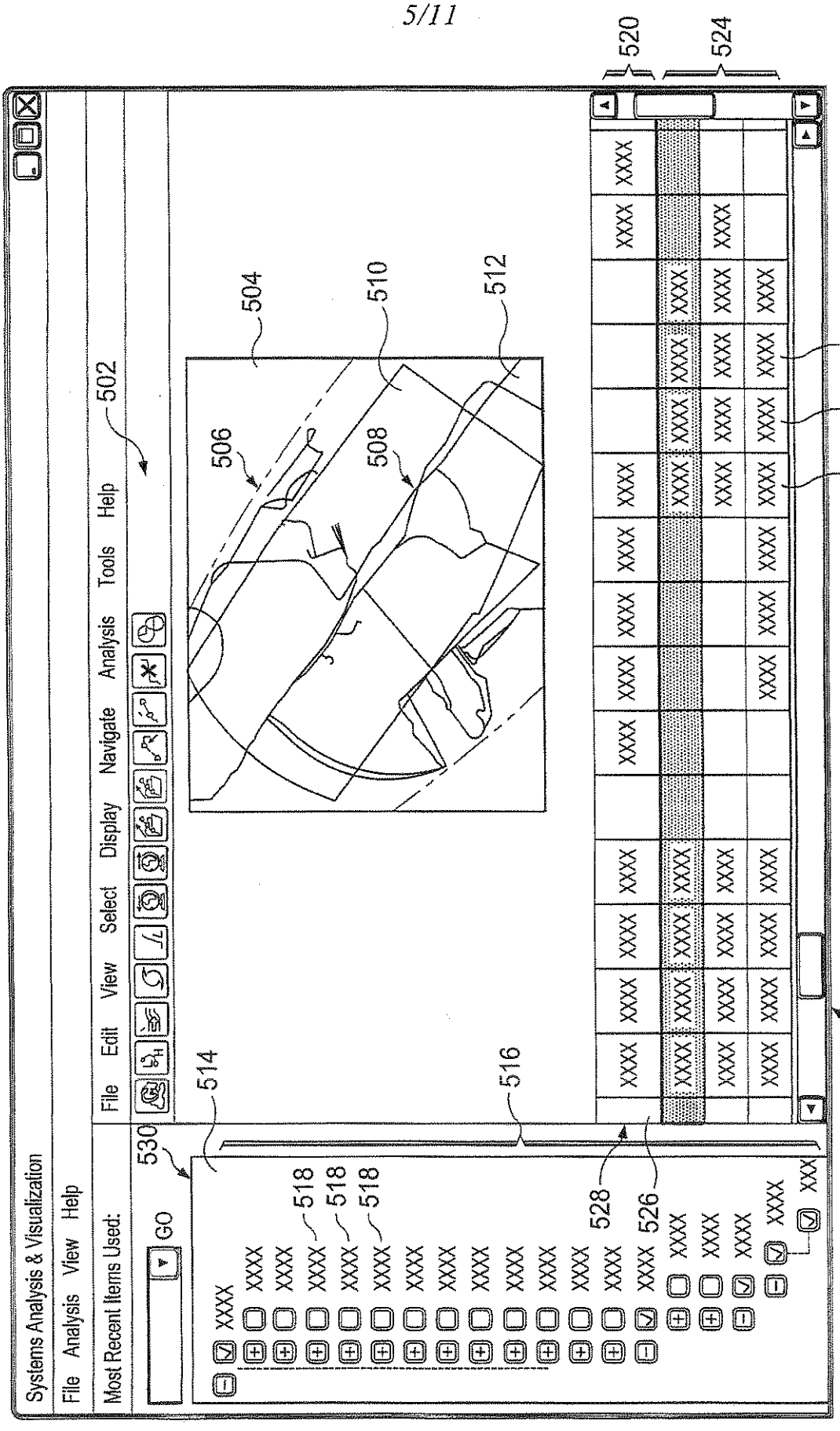

Systems Analysis & Visualization
File Analysis View Help
Most Recent Items Used:
GO
File Edit View Select Display Navigate Analysis Tools Help
502
504
506
508
510
512
514
516
518
520
522
524
526
528
530
500
XXXX

FIG. 5

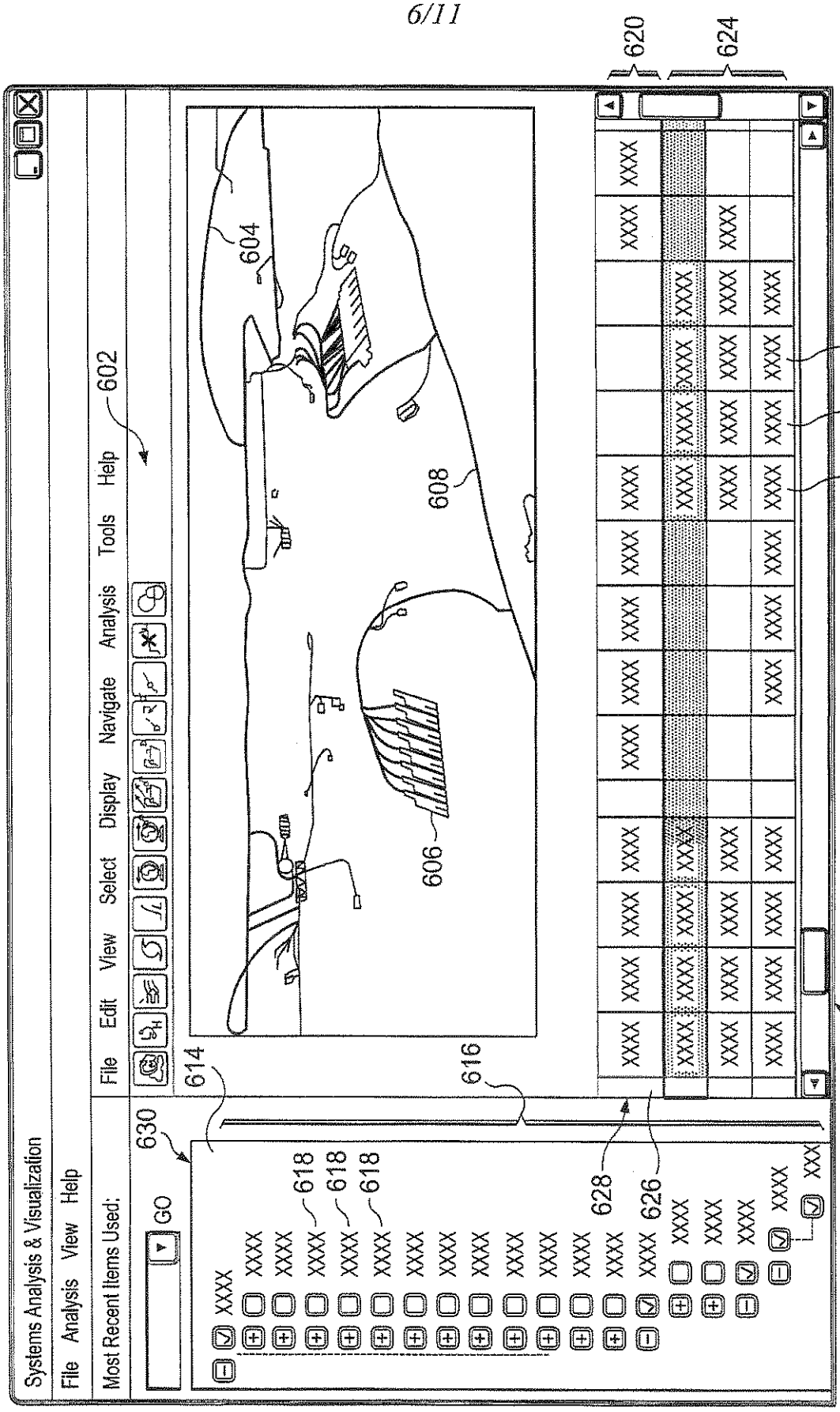

Systems Analysis & Visualization
File Analysis View Help
Most Recent Items Used:
GO
File Edit View Select Display Navigate Analysis Tools Help
602
604
606
608
614
616
618
620
622
624
626
628
630
600
XXXX
XXX

FIG. 6

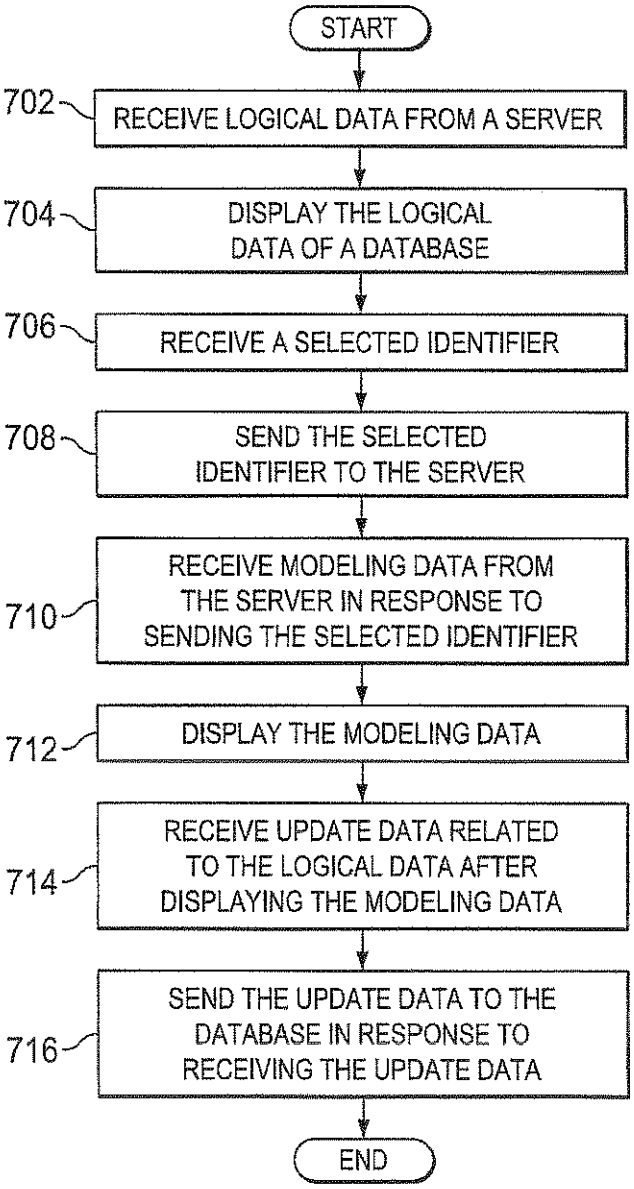

START
702
RECEIVE LOGICAL DATA FROM A SERVER
704
DISPLAY THE LOGICAL DATA OF A DATABASE
706
RECEIVE A SELECTED IDENTIFIER
708
SEND THE SELECTED IDENTIFIER TO THE SERVER
710
RECEIVE MODELING DATA FROM THE SERVER IN RESPONSE TO SENDING THE SELECTED IDENTIFIER
712
DISPLAY THE MODELING DATA
714
RECEIVE UPDATE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

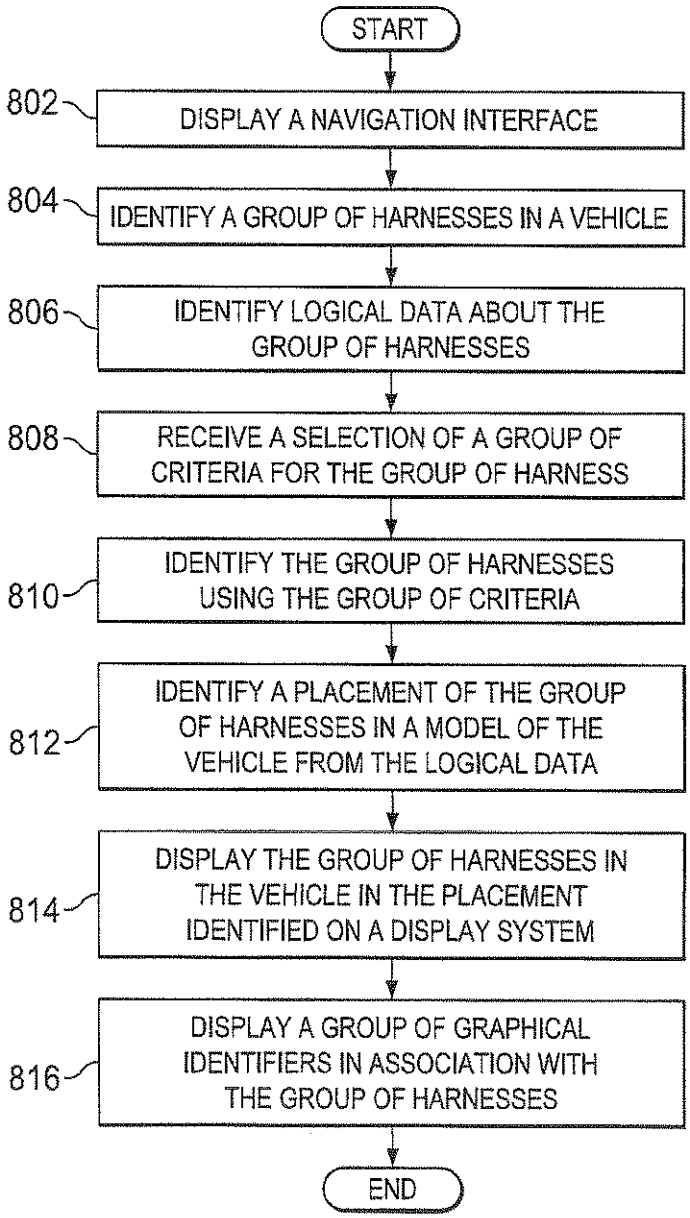

START
802
DISPLAY A NAVIGATION INTERFACE
804
IDENTIFY A GROUP OF HARNESSES IN A VEHICLE
806
IDENTIFY LOGICAL DATA ABOUT THE GROUP OF HARNESSES
808
RECEIVE A SELECTION OF A GROUP OF CRITERIA FOR THE GROUP OF HARNESS
810
IDENTIFY THE GROUP OF HARNESSES USING THE GROUP OF CRITERIA
812
IDENTIFY A PLACEMENT 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

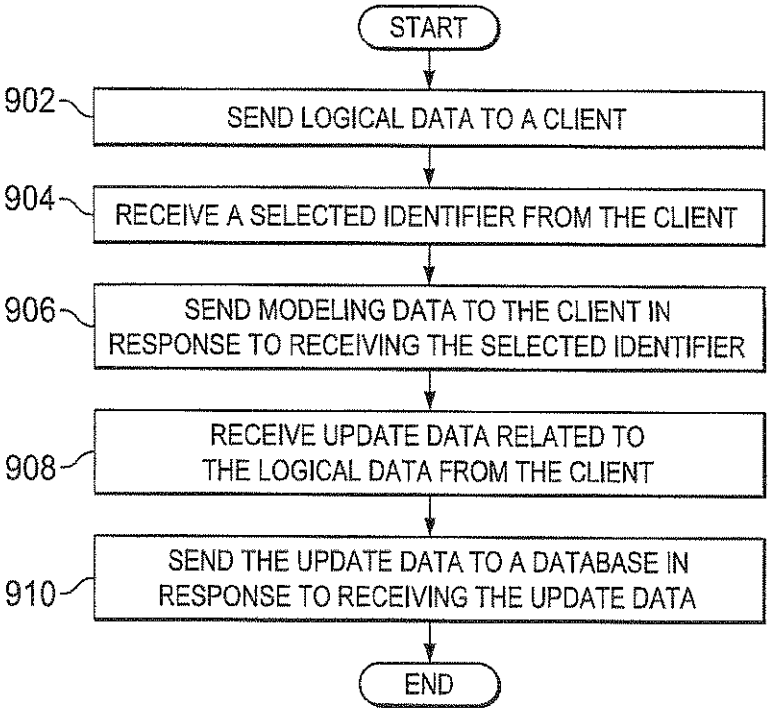
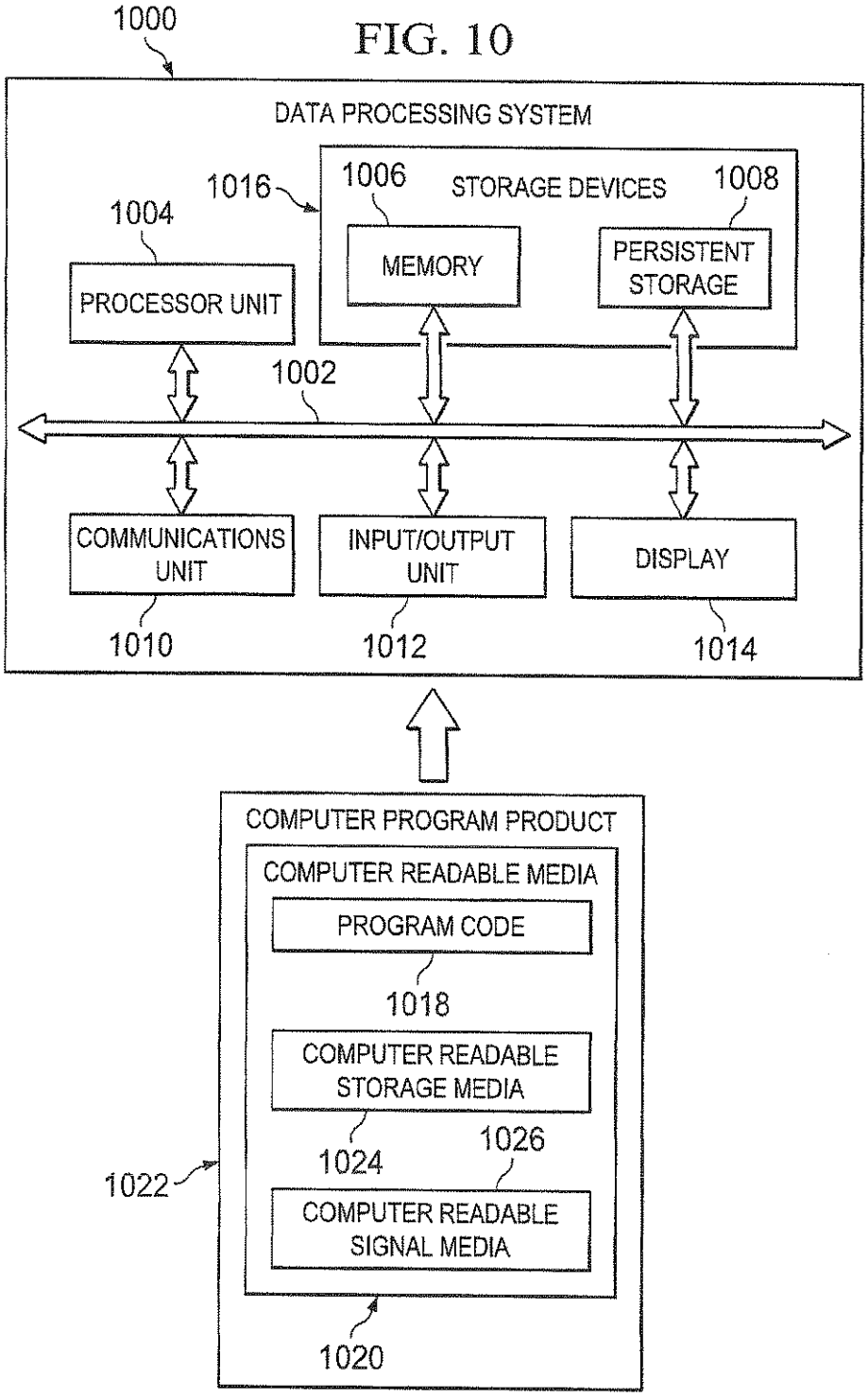

START
902
SEND LOGICAL DATA TO A CLIENT
904
RECEIVE A SELECTED IDENTIFIER FROM THE CLIENT
906
SEND MODELING DATA TO THE CLIENT IN RESPONSE TO RECEIVING THE SELECTED IDENTIFIER
908
RECEIVE UPDATE DATA RELATED TO THE LOGICAL DATA FROM THE CLIENT
910
SEND THE UPDATE DATA TO A DATABASE IN RESPONSE TO RECEIVING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

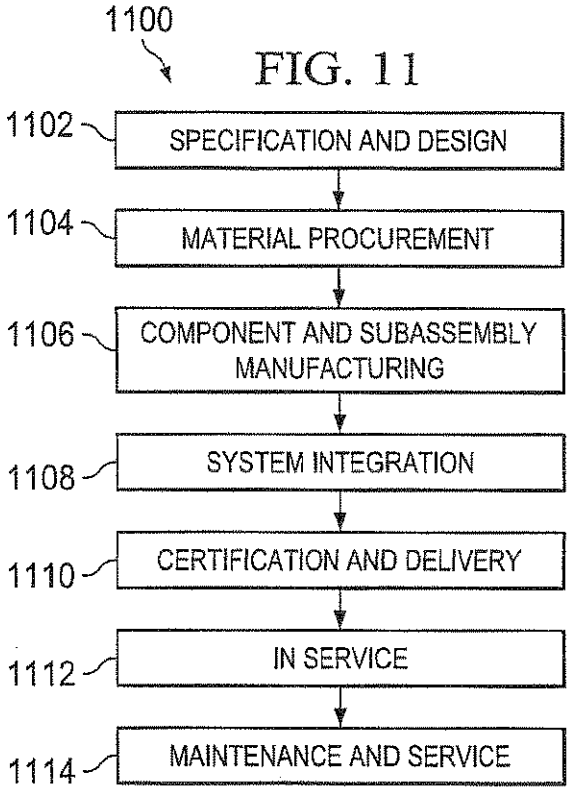

1100
1102
SPECIFICATION AND DESIGN
1104
MATERIAL PROCUREMENT
1106
COMPONENT AND SUBASSEMBLY MANUFACTURING
1108
SYSTEM INTEGRATION
1110
CERTIFICATION AND DELIVERY
1112
IN SERVICE
1114
MAINTENANCE AND SERVICE

FIG. 11

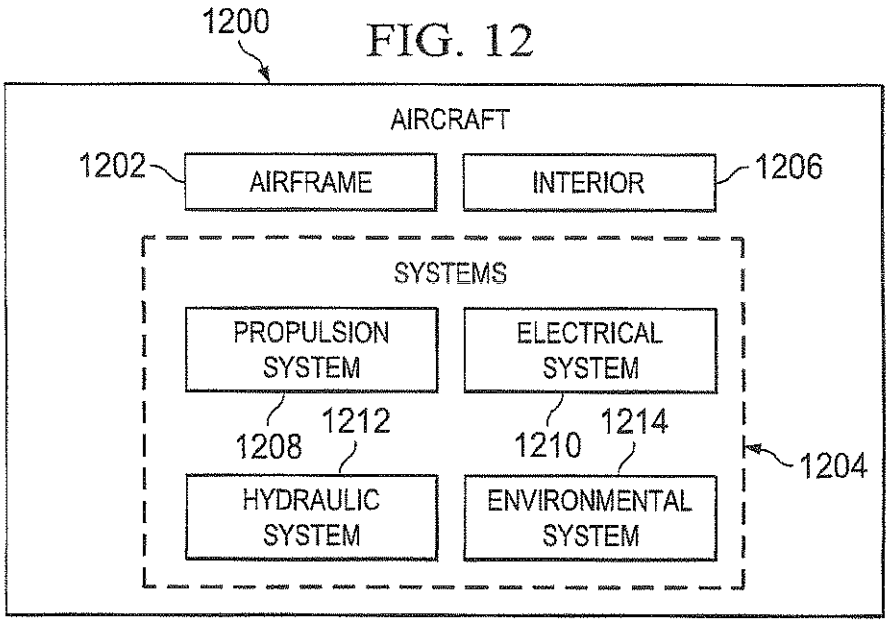

1200
AIRCRAFT
1202
AIRFRAME
INTERIOR
1206
SYSTEMS
PROPULSION SYSTEM
ELECTRICAL SYSTEM
1208
1212
1210
1214
HYDRAULIC SYSTEM
ENVIRONMENTAL SYSTEM
1204

FIG. 12