FIG. 1

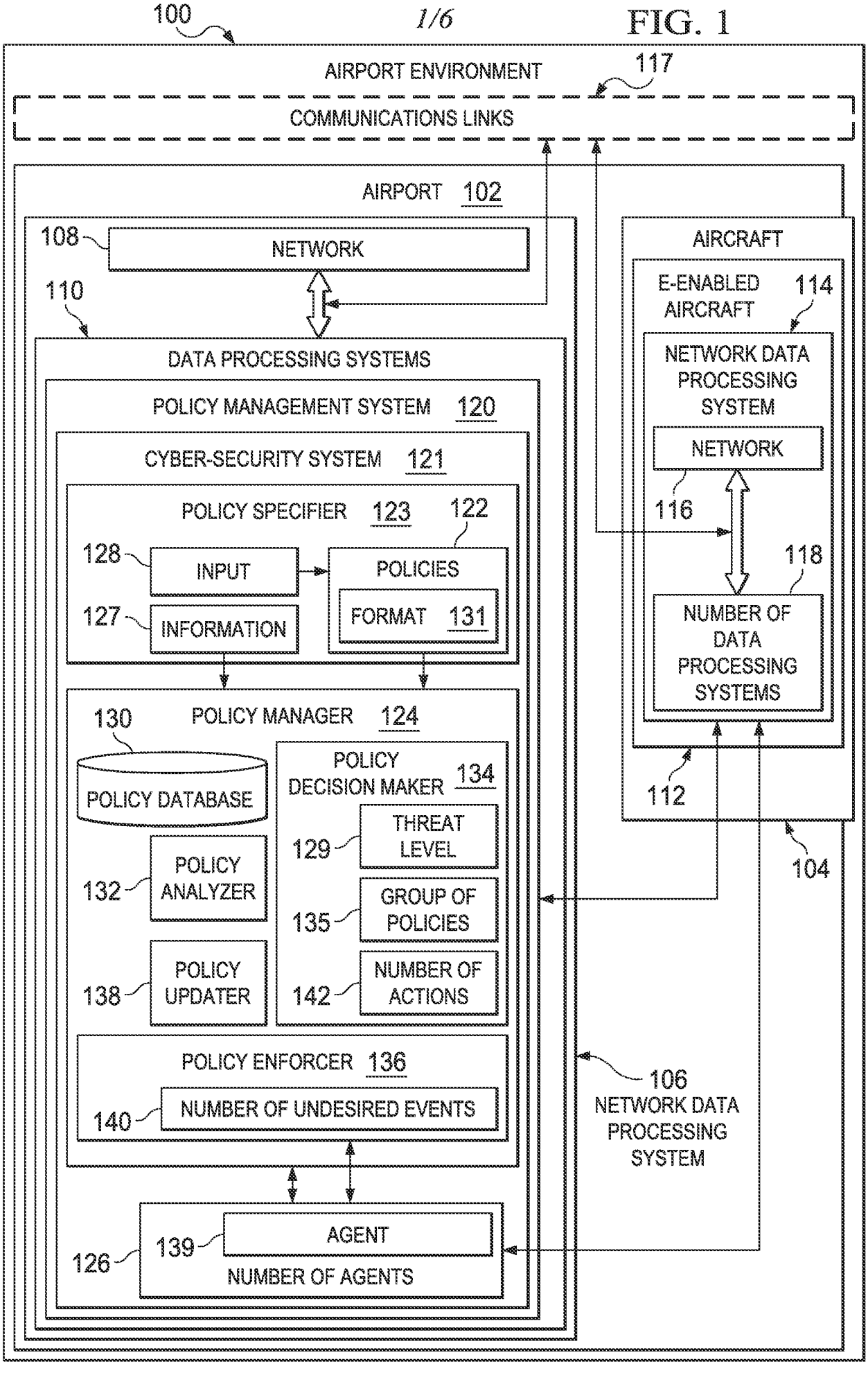

100
AIRPORT ENVIRONMENT
117
COMMUNICATIONS LINKS
AIRPORT 102
108
NETWORK
110
DATA PROCESSING SYSTEMS
POLICY MANAGEMENT SYSTEM 120
CYBER-SECURITY SYSTEM 121
POLICY SPECIFIER 123
122
128
INPUT
POLICIES
127
INFORMATION
FORMAT 131
130
POLICY MANAGER 124
POLICY DATABASE
POLICY DECISION MAKER 134
129
THREAT LEVEL
132
POLICY ANALYZER
135
GROUP OF POLICIES
138
POLICY UPDATER
142
NUMBER OF ACTIONS
POLICY ENFORCER 136
140
NUMBER OF UNDESIRED EVENTS
126
139
AGENT
NUMBER OF AGENTS
AIRCRAFT
E-ENABLED AIRCRAFT
114
NETWORK DATA PROCESSING SYSTEM
NETWORK
116
118
NUMBER OF DATA PROCESSING SYSTEMS
112
104
106
NETWORK DATA PROCESSING SYSTEM

FIG. 2

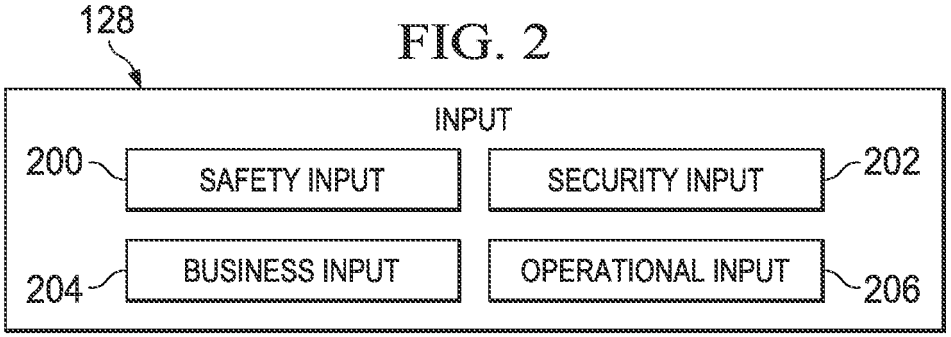


FIG. 3

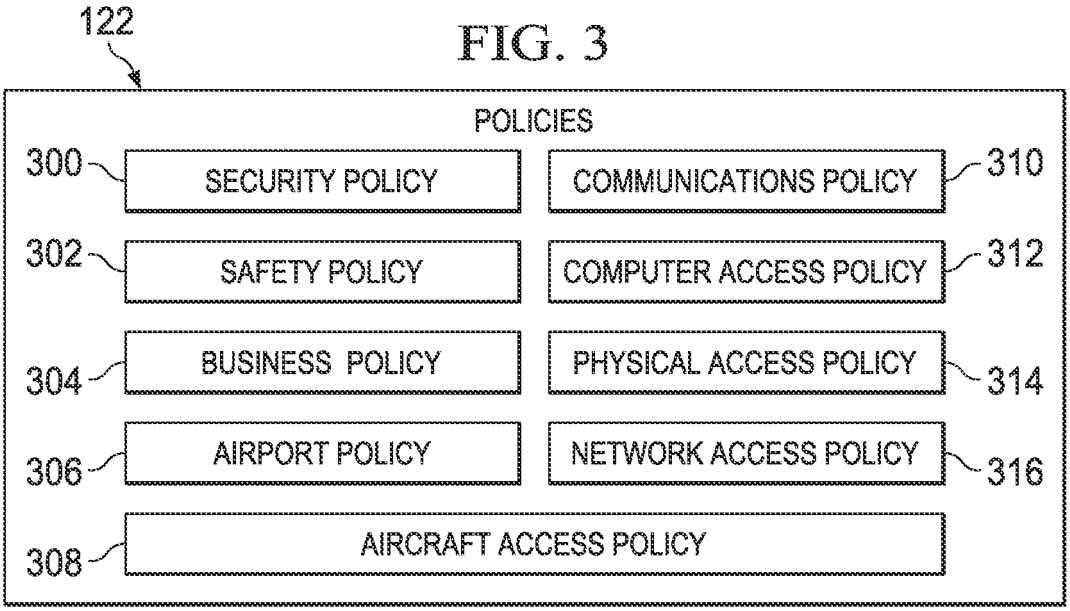
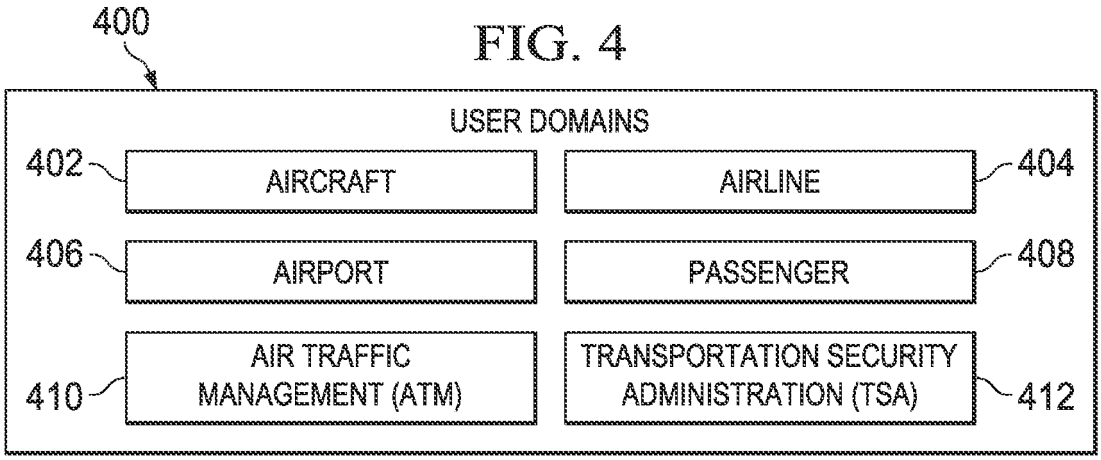


FIG. 4



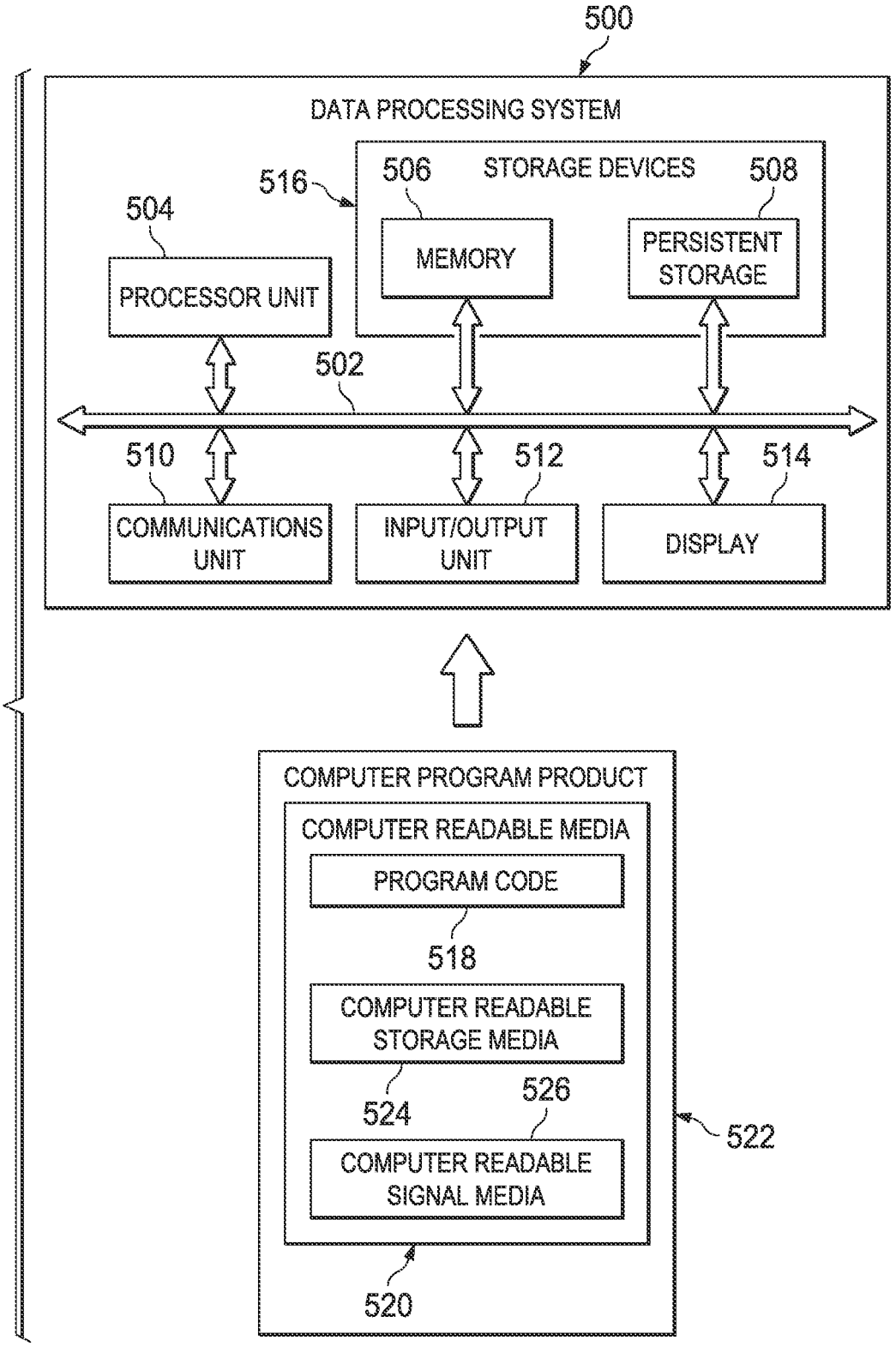

500
DATA PROCESSING SYSTEM
516
506
STORAGE DEVICES
508
504
MEMORY
PERSISTENT STORAGE
PROCESSOR UNIT
502
510
512
514
COMMUNICATIONS UNIT
INPUT/OUTPUT UNIT
DISPLAY
COMPUTER PROGRAM PRODUCT
COMPUTER READABLE MEDIA
PROGRAM CODE
518
COMPUTER READABLE STORAGE MEDIA
524
526
COMPUTER READABLE SIGNAL MEDIA
522
520

FIG. 5

600

614 SAFETY EVENT	616 SECURITY EVENT	618 BUSINESS EVENT	620 OPERATIONAL EVENT	602 THREAT LEVELS	
3	4	NA	NA	RED	612
2	3	NA	NA	ORANGE	610
1	2	3	3	YELLOW	608
0	1	2	2	BLUE	606
0	0	1	1	GREEN	604

624 622

FIG. 6

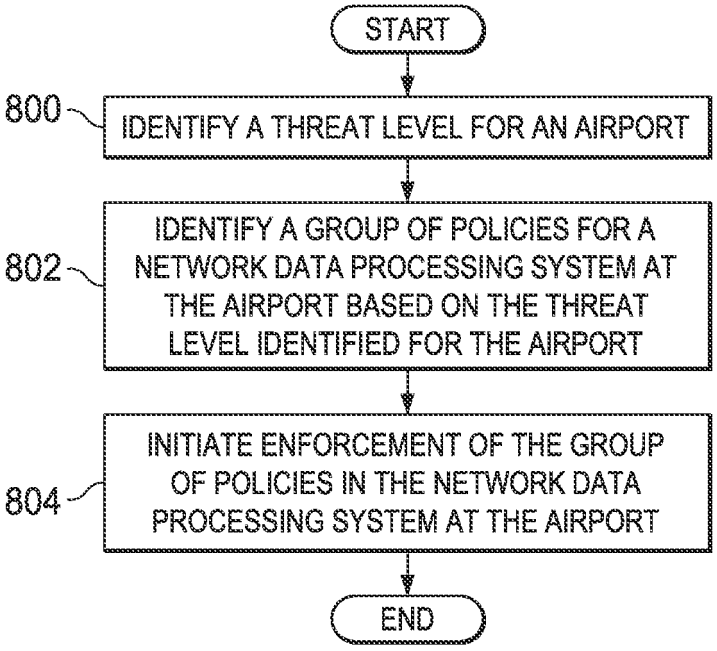


FIG. 8

FIG. 7

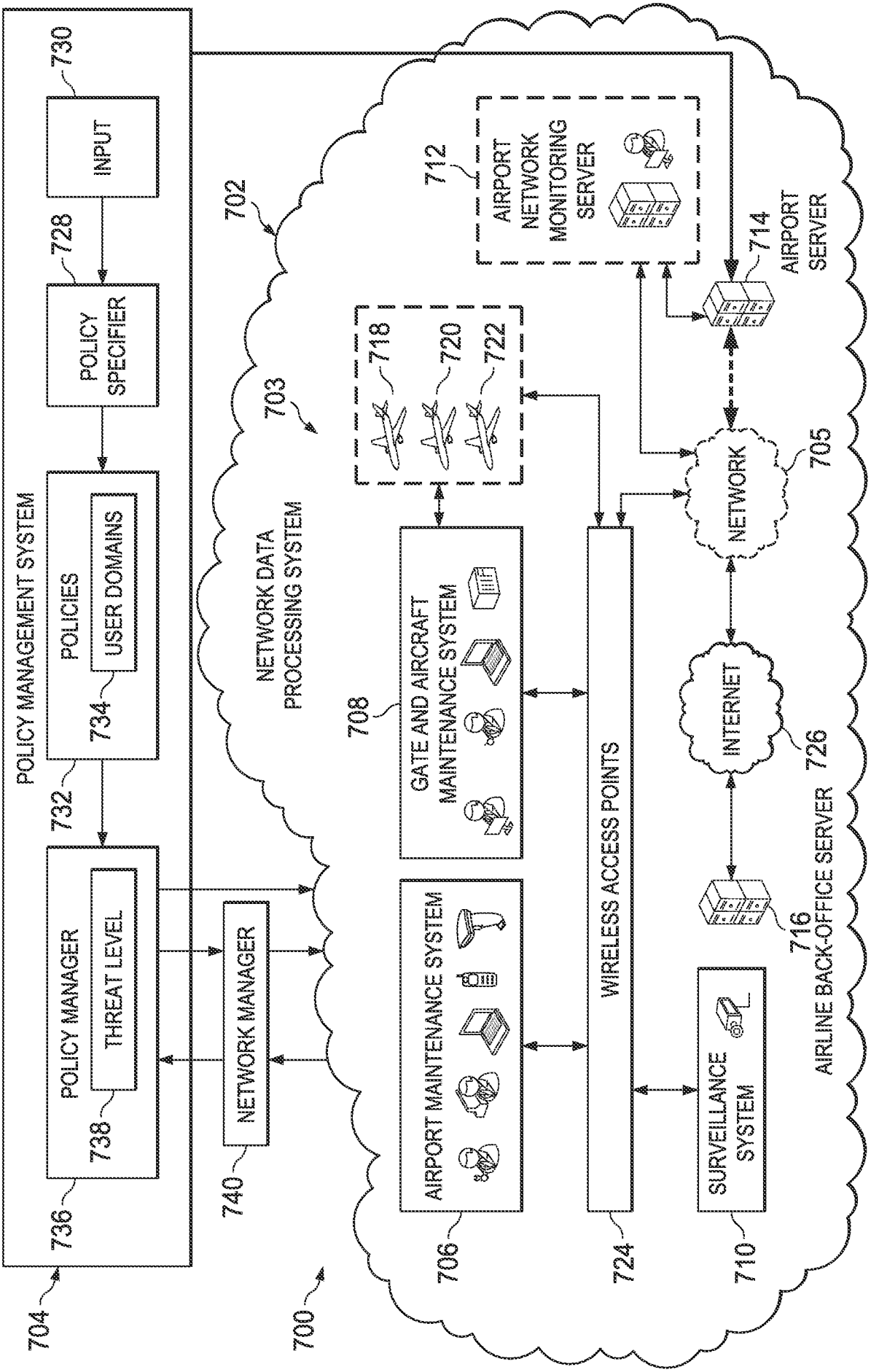
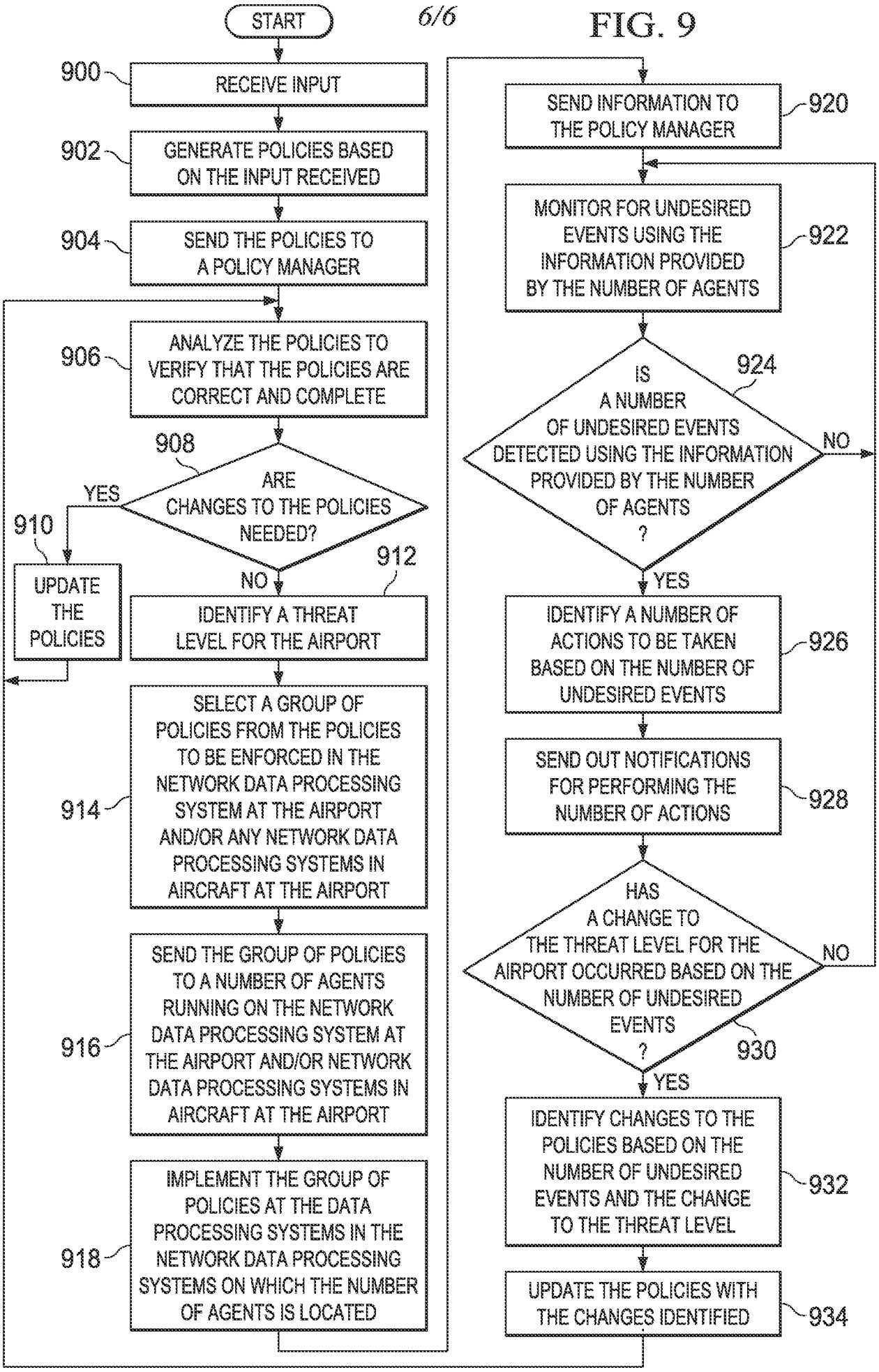

POLICY MANAGEMENT SYSTEM
704
730
INPUT
728
POLICY SPECIFIER
POLICIES
734
USER DOMAINS
732
POLICY MANAGER
THREAT LEVEL
738
736
NETWORK MANAGER
740
700
NETWORK DATA PROCESSING SYSTEM
702
703
712
AIRPORT NETWORK MONITORING SERVER
714
AIRPORT SERVER
718
720
722
GATE AND AIRCRAFT MAINTENANCE SYSTEM
708
AIRPORT MAINTENANCE SYSTEM
706
WIRELESS ACCESS POINTS
724
SURVEILLANCE SYSTEM
710
NETWORK
705
INTERNET
726
716
AIRLINE BACK-OFFICE SERVER

FIG. 9


START
900
RECEIVE INPUT
902
GENERATE POLICIES BASED ON THE INPUT RECEIVED
904
SEND THE POLICIES TO A POLICY MANAGER
906
ANALYZE THE POLICIES TO VERIFY THAT THE POLICIES ARE CORRECT AND COMPLETE
908
ARE CHANGES TO THE POLICIES NEEDED?
YES
910
UPDATE THE POLICIES
NO
912
IDENTIFY A THREAT LEVEL FOR THE AIRPORT
914
SELECT A GROUP OF POLICIES FROM THE POLICIES TO BE ENFORCED IN THE NETWORK DATA PROCESSING SYSTEM AT THE AIRPORT AND/OR ANY NETWORK DATA PROCESSING SYSTEMS IN AIRCRAFT AT THE AIRPORT
916
SEND THE GROUP OF POLICIES TO A NUMBER OF AGENTS RUNNING ON THE NETWORK DATA PROCESSING SYSTEM AT THE AIRPORT AND/OR NETWORK DATA PROCESSING SYSTEMS IN AIRCRAFT AT THE AIRPORT
918
IMPLEMENT THE GROUP OF POLICIES AT THE DATA PROCESSING SYSTEMS IN THE NETWORK DATA PROCESSING SYSTEMS ON WHICH THE NUMBER OF AGENTS IS LOCATED
920
SEND INFORMATION TO THE POLICY MANAGER
922
MONITOR FOR UNDESIRED EVENTS USING THE INFORMATION PROVIDED BY THE NUMBER OF AGENTS
924
IS A NUMBER OF UNDESIRED EVENTS DETECTED USING THE INFORMATION PROVIDED BY THE NUMBER OF AGENTS ?
NO
YES
926
IDENTIFY A NUMBER OF ACTIONS TO BE TAKEN BASED ON THE NUMBER OF UNDESIRED EVENTS
928
SEND OUT NOTIFICATIONS FOR PERFORMING THE NUMBER OF ACTIONS
930
HAS A CHANGE TO THE THREAT LEVEL FOR THE AIRPORT OCCURRED BASED ON THE NUMBER OF UNDESIRED EVENTS ?
NO
YES
932
IDENTIFY CHANGES TO THE POLICIES BASED ON THE NUMBER OF UNDESIRED EVENTS AND THE CHANGE TO THE THREAT LEVEL
934
UPDATE THE POLICIES WITH THE CHANGES IDENTIFIED