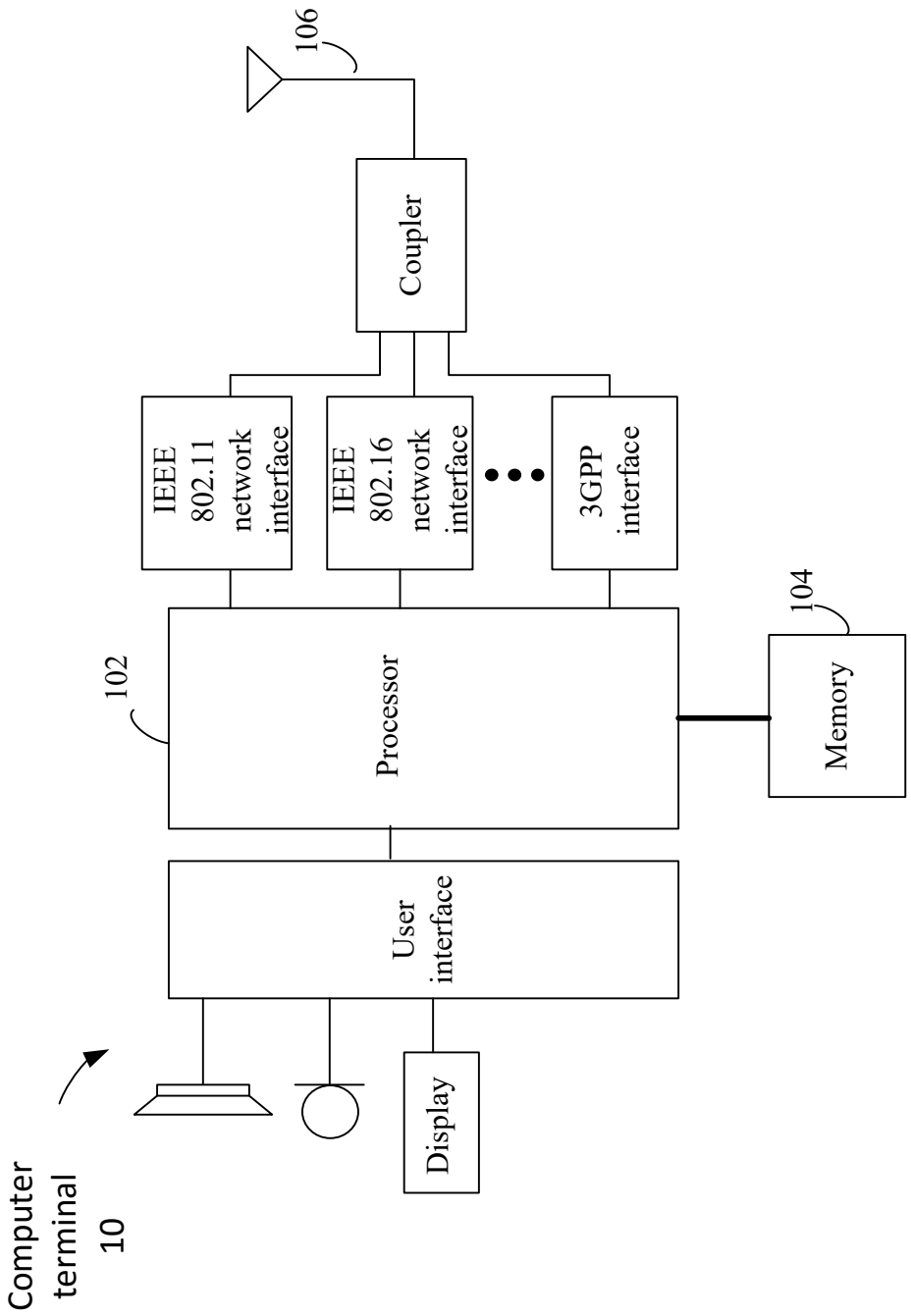
Computer terminal 10
Display
User interface
Processor
102
Memory
104
IEEE 802.11 network interface
IEEE 802.16 network interface
3GPP interface
Coupler
106

FIG. 1

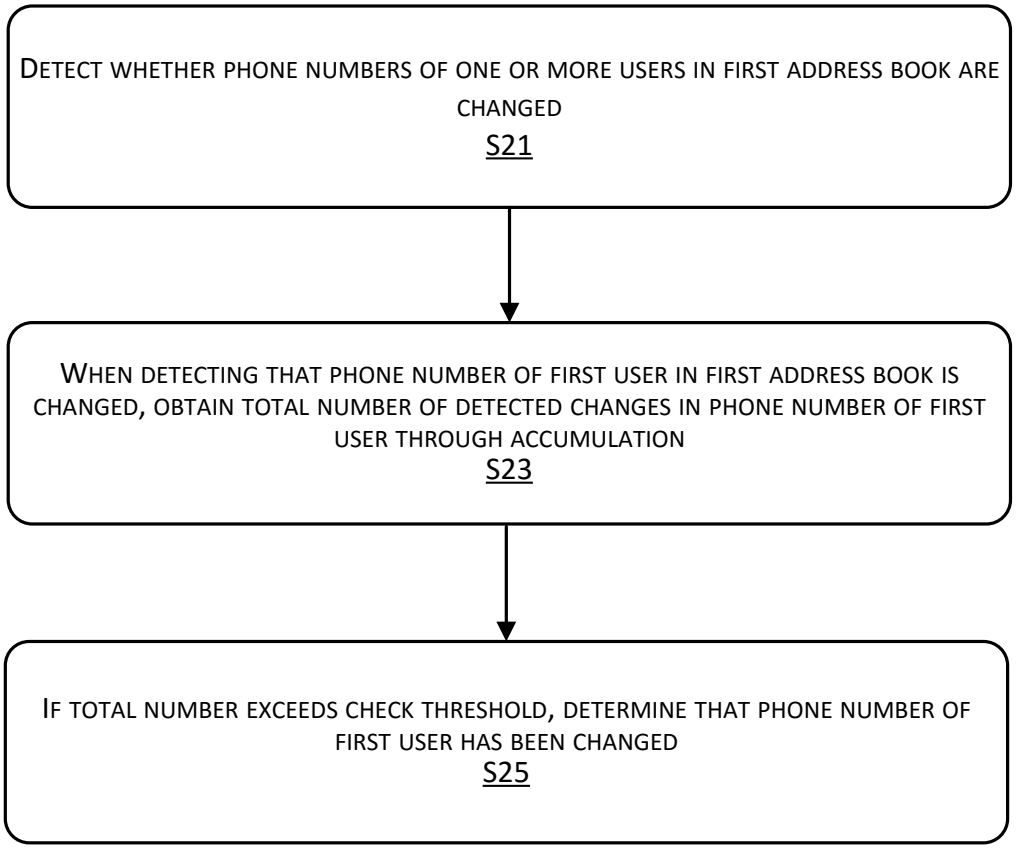
DETECT WHETHER PHONE NUMBERS OF ONE OR MORE USERS IN FIRST ADDRESS BOOK ARE CHANGED
S21
WHEN DETECTING THAT PHONE NUMBER OF FIRST USER IN FIRST ADDRESS BOOK IS CHANGED, OBTAIN TOTAL NUMBER OF DETECTED CHANGES IN PHONE NUMBER OF FIRST USER THROUGH ACCUMULATION
S23
IF TOTAL NUMBER EXCEEDS CHECK THRESHOLD, DETERMINE THAT PHONE NUMBER OF FIRST USER HAS BEEN CHANGED
S25

FIG. 2

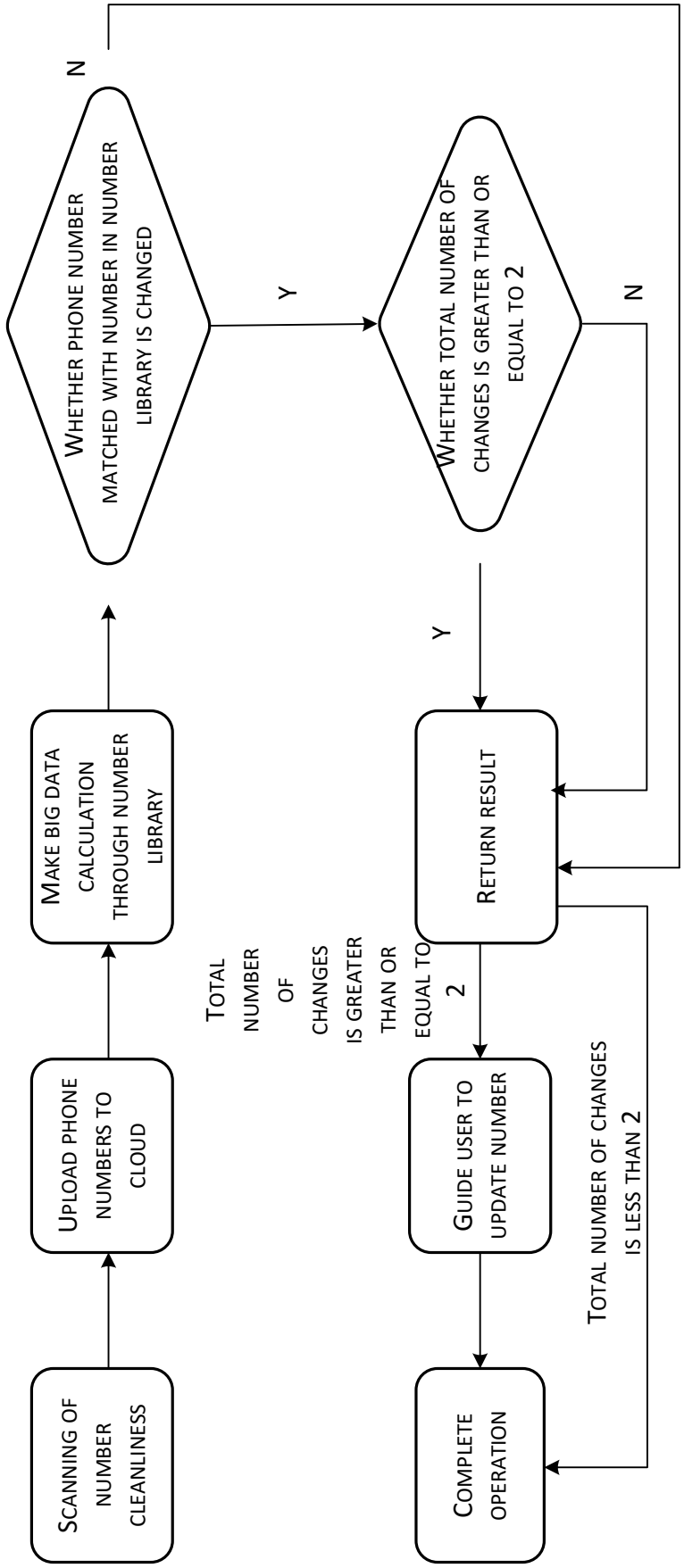
SCANNING OF NUMBER CLEANLINESS
UPLOAD PHONE NUMBERS TO CLOUD
MAKE BIG DATA CALCULATION THROUGH NUMBER LIBRARY
WHETHER PHONE NUMBER MATCHED WITH NUMBER IN NUMBER LIBRARY IS CHANGED
N
Y
WHETHER TOTAL NUMBER OF CHANGES IS GREATER THAN OR EQUAL TO 2
N
Y
RETURN RESULT
TOTAL NUMBER OF CHANGES IS GREATER THAN OR EQUAL TO 2
GUIDE USER TO UPDATE NUMBER
TOTAL NUMBER OF CHANGES IS LESS THAN 2
COMPLETE OPERATION

FIG. 3

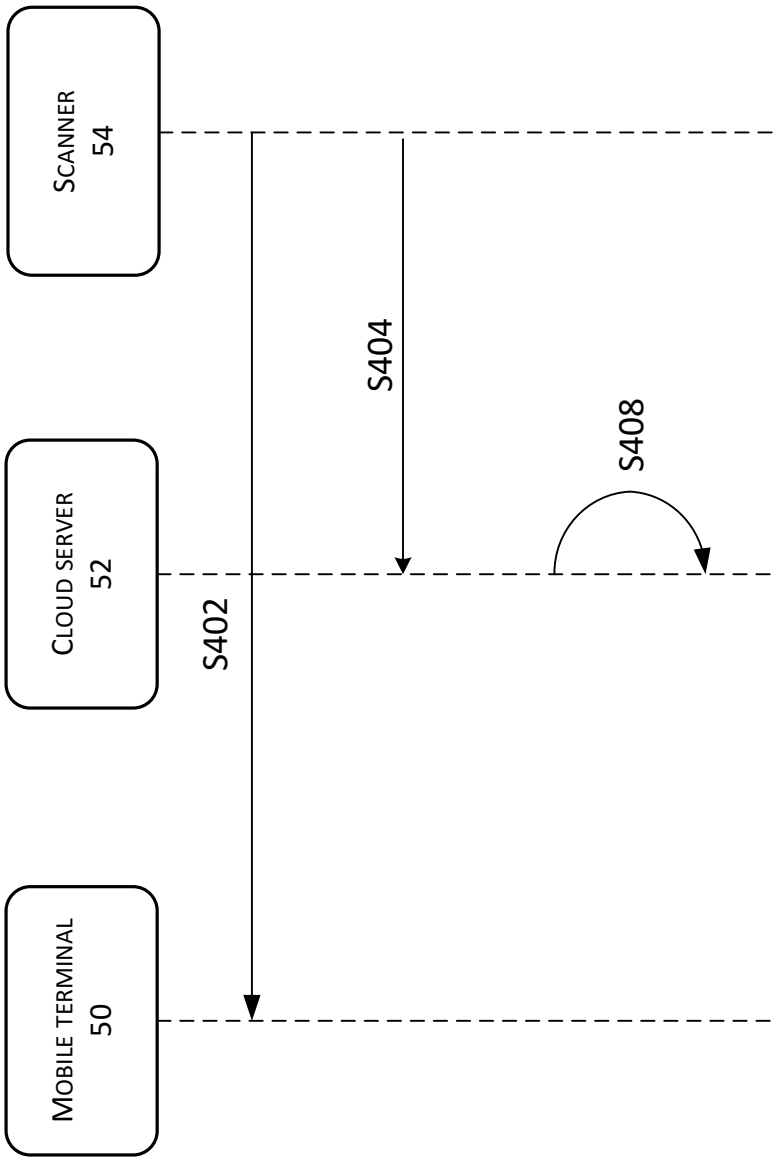
SCANNER
54
CLOUD SERVER
52
MOBILE TERMINAL
50
S402
S404
S408

FIG. 4

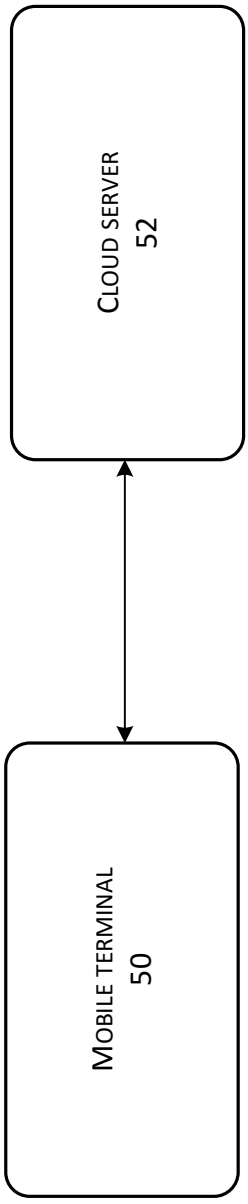

FIG. 5

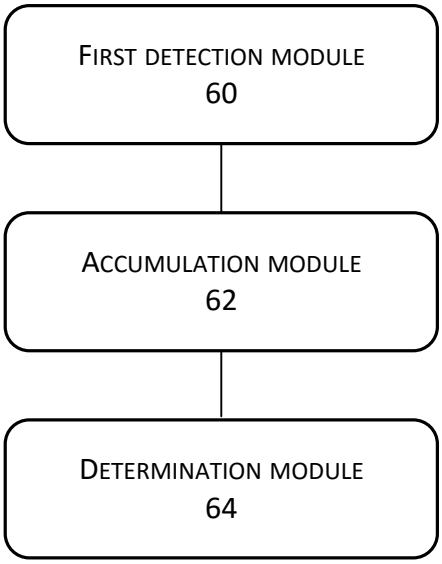
FIRST DETECTION MODULE
60
ACCUMULATION MODULE
62
DETERMINATION MODULE
64

FIG. 6

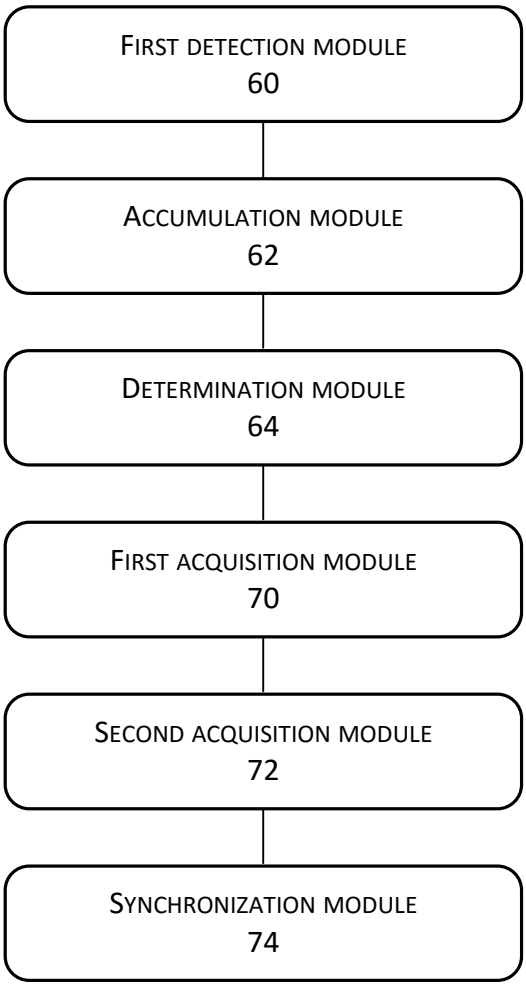
FIRST DETECTION MODULE
60
ACCUMULATION MODULE
62
DETERMINATION MODULE
64
FIRST ACQUISITION MODULE
70
SECOND ACQUISITION MODULE
72
SYNCHRONIZATION MODULE
74

FIG. 7

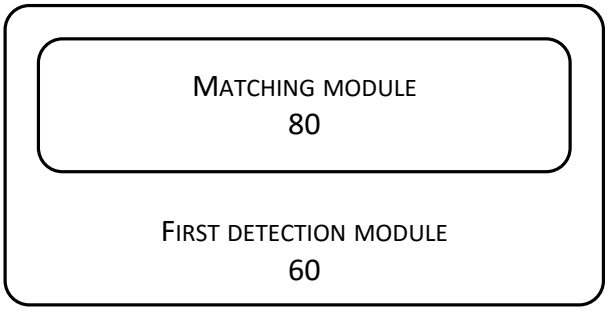

FIG. 8

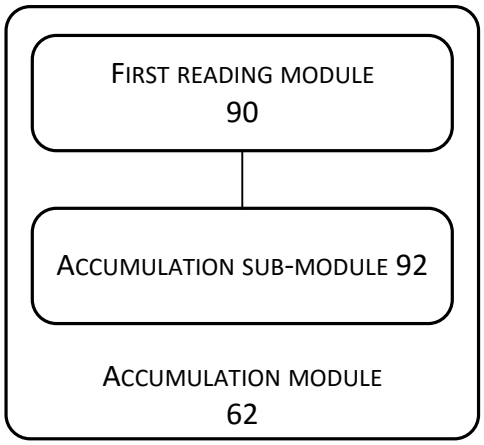
FIRST READING MODULE
90
ACCUMULATION SUB-MODULE 92
ACCUMULATION MODULE
62

FIG. 9

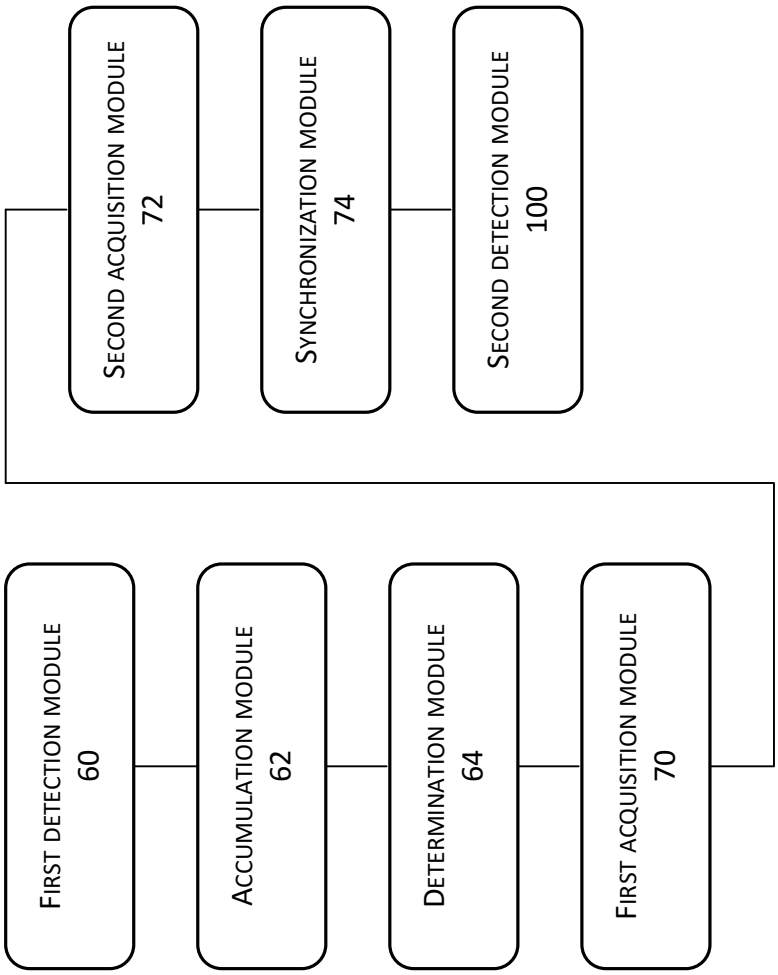
First detection module
60
Accumulation module
62
Determination module
64
First acquisition module
70
Second acquisition module
72
Synchronization module
74
Second detection module
100

FIG. 10

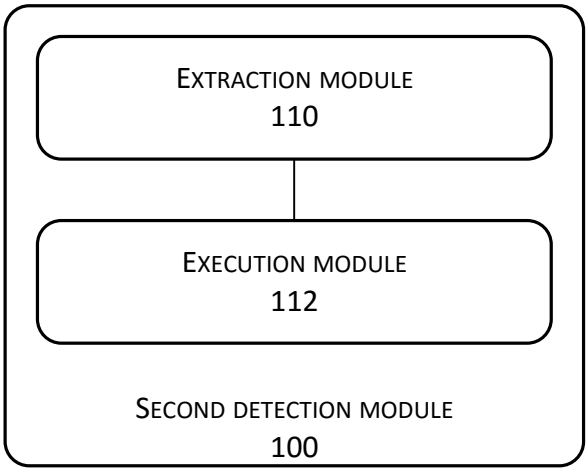
EXTRACTION MODULE
110
EXECUTION MODULE
112
SECOND DETECTION MODULE
100

FIG. 11

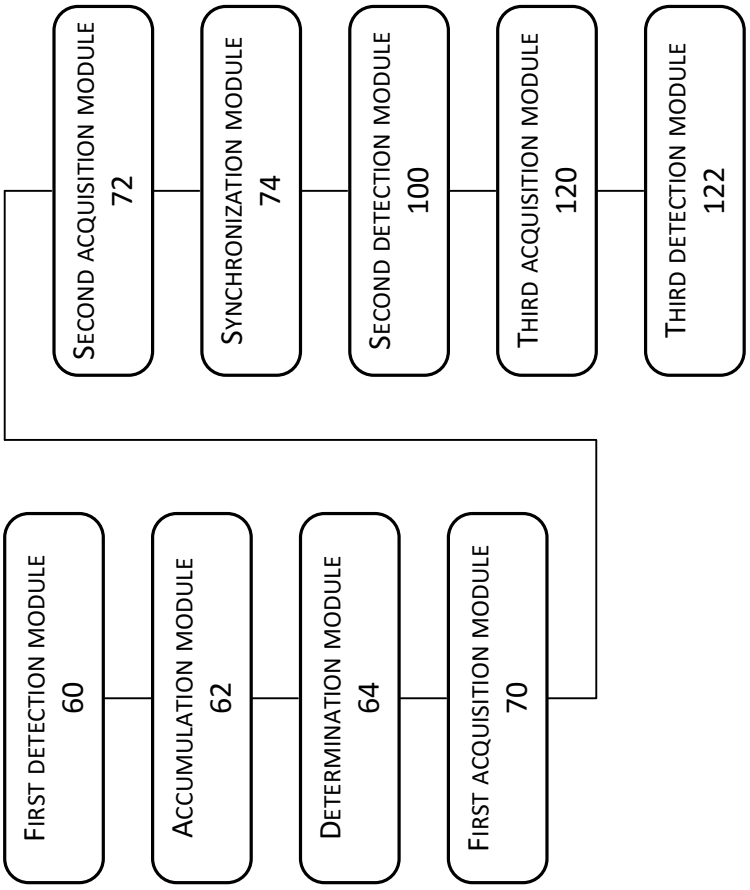
First detection module
60
Accumulation module
62
Determination module
64
First acquisition module
70
Second acquisition module
72
Synchronization module
74
Second detection module
100
Third acquisition module
120
Third detection module
122

FIG. 12

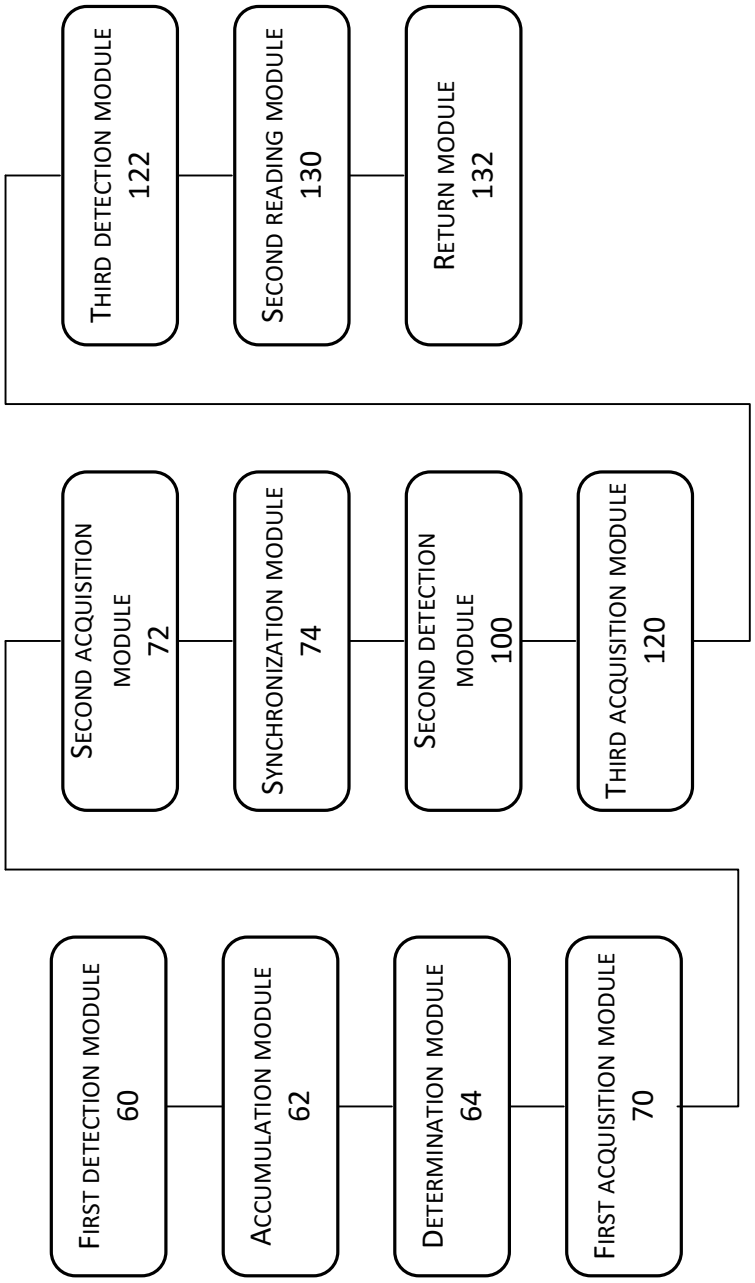
First detection module 60
Accumulation module 62
Determination module 64
First acquisition module 70
Second acquisition module 72
Synchronization module 74
Second detection module 100
Third acquisition module 120
Third detection module 122
Second reading module 130
Return module 132

FIG. 13

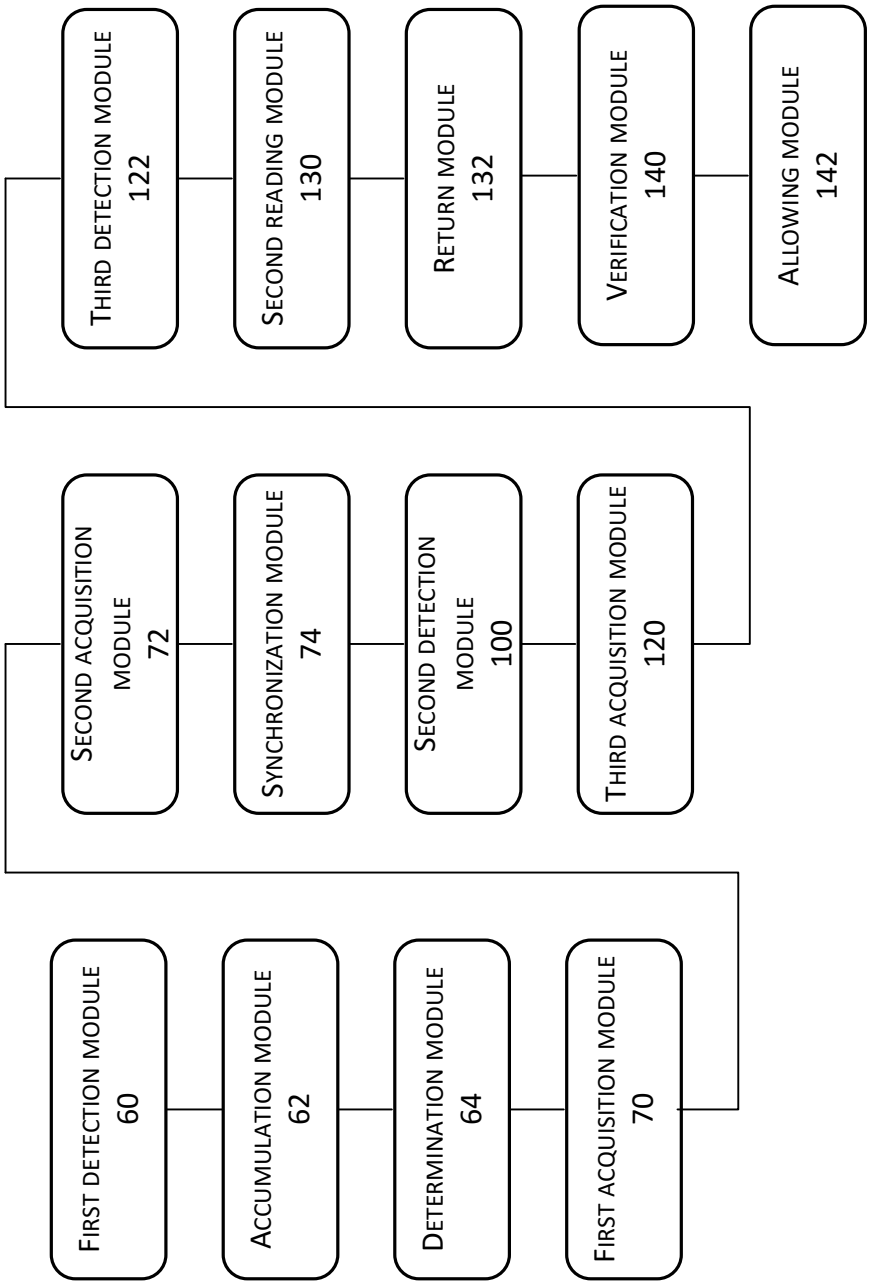
First detection module 60
Accumulation module 62
Determination module 64
First acquisition module 70
Second acquisition module 72
Synchronization module 74
Second detection module 100
Third acquisition module 120
Third detection module 122
Second reading module 130
Return module 132
Verification module 140
Allowing module 142

FIG. 14

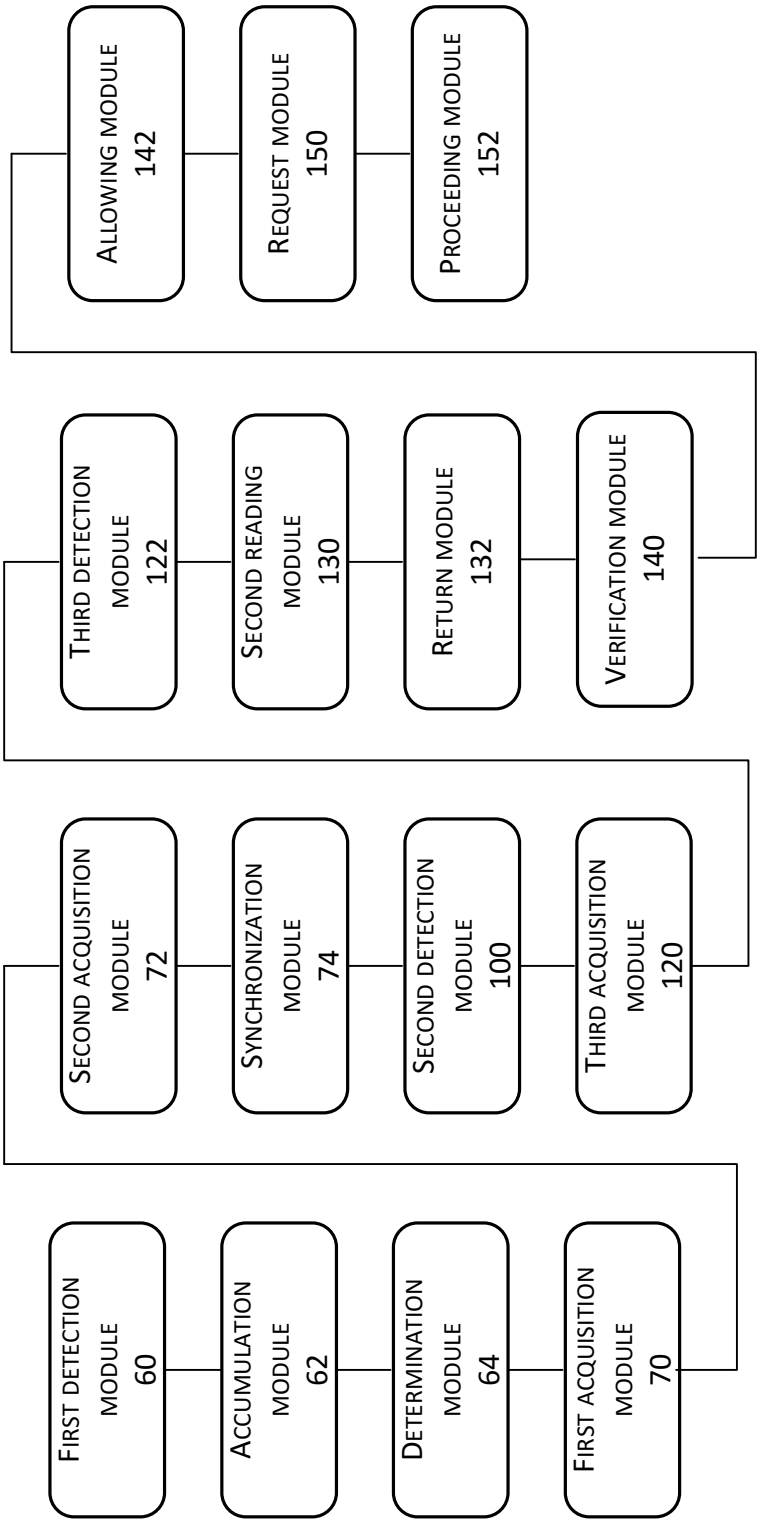
First detection module 60
Accumulation module 62
Determination module 64
First acquisition module 70
Second acquisition module 72
Synchronization module 74
Second detection module 100
Third acquisition module 120
Third detection module 122
Second reading module 130
Return module 132
Verification module 140
Allowing module 142
Request module 150
Proceeding module 152

FIG. 15

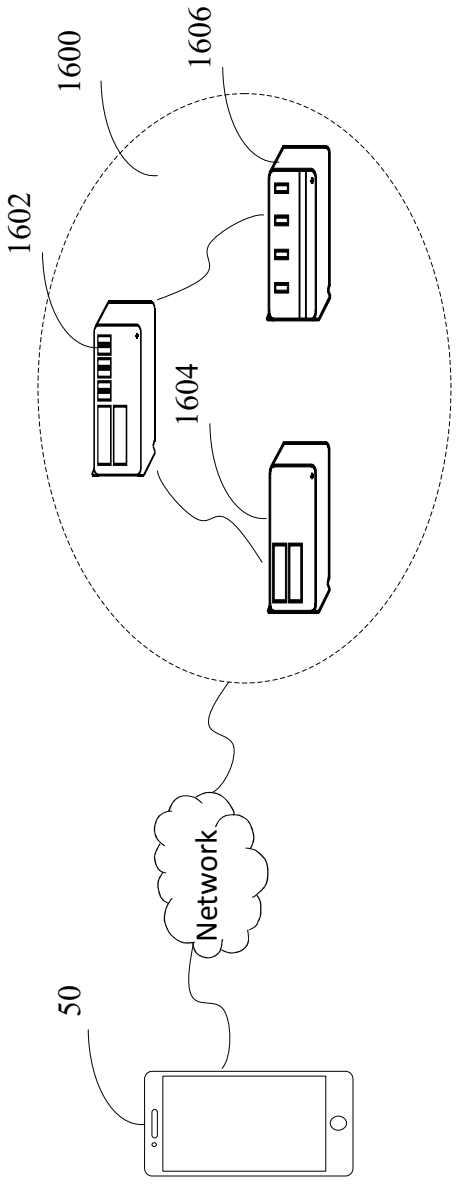

FIG. 16