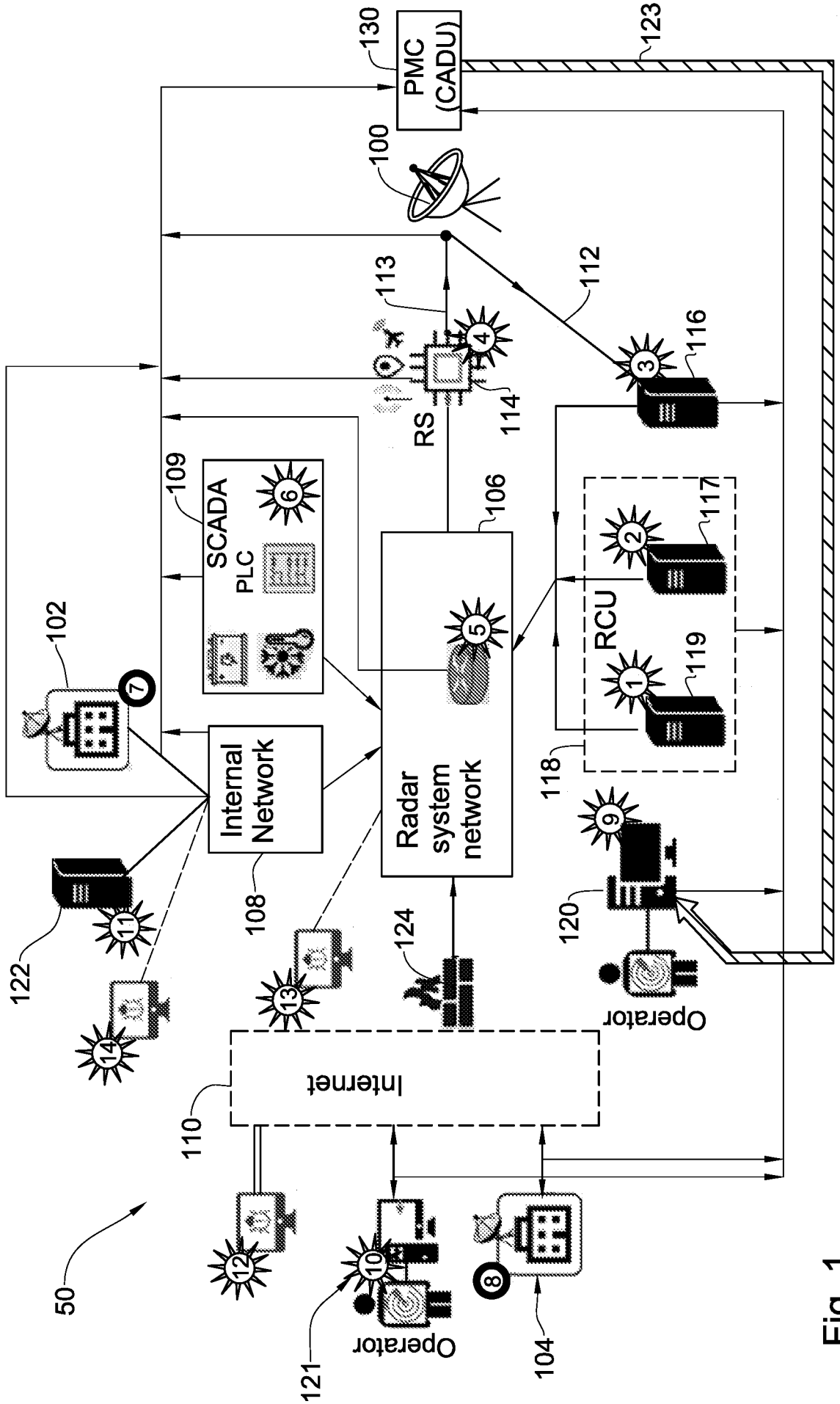

PMC (CADU)
130
123
100
113
112
RS
114
116
SCADA
PLC
109
106
117
RCU
119
102
Internal Network
Radar system network
118
108
122
124
120
Operator
Internet
110
121
Operator
104
50

Fig. 1

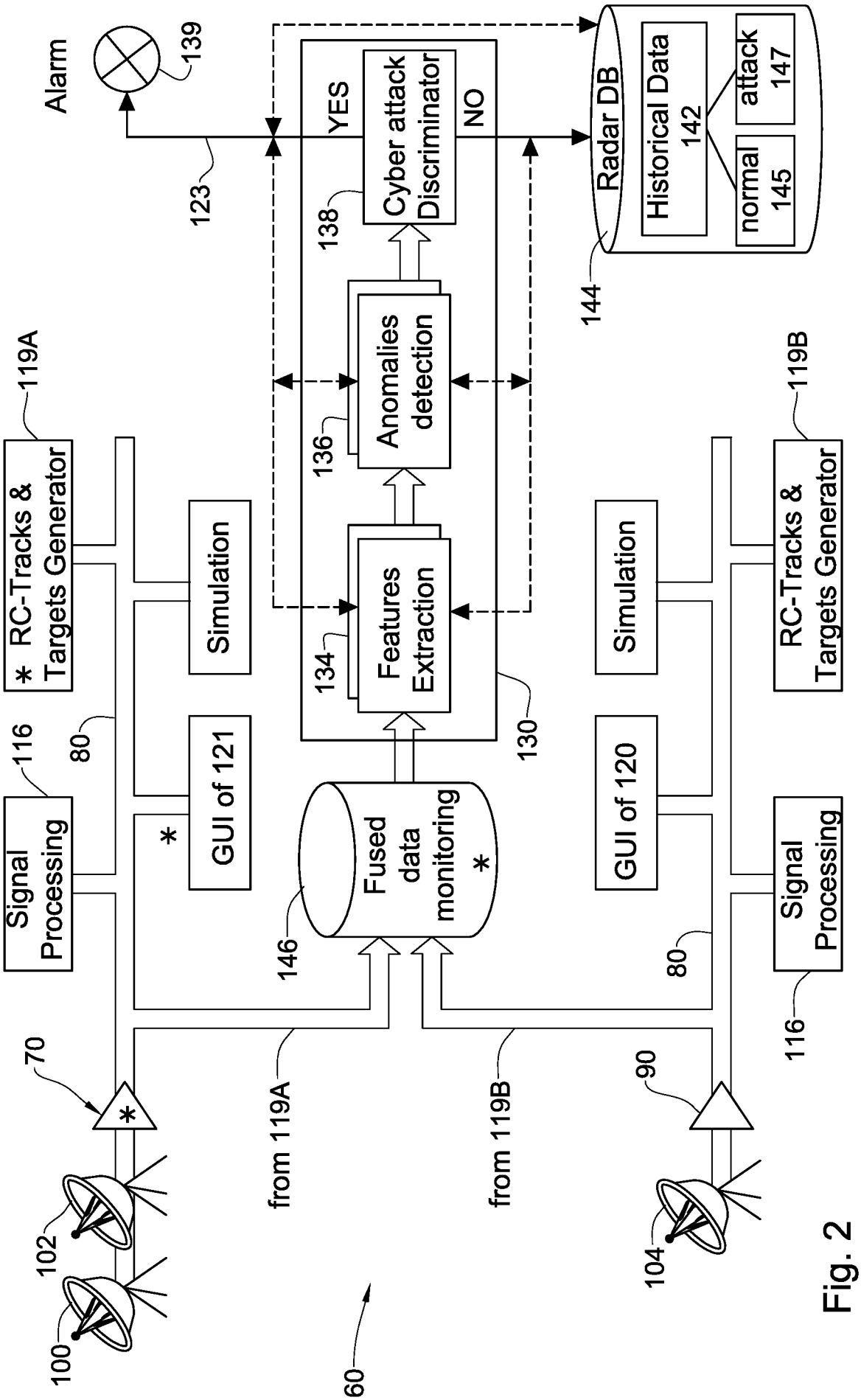
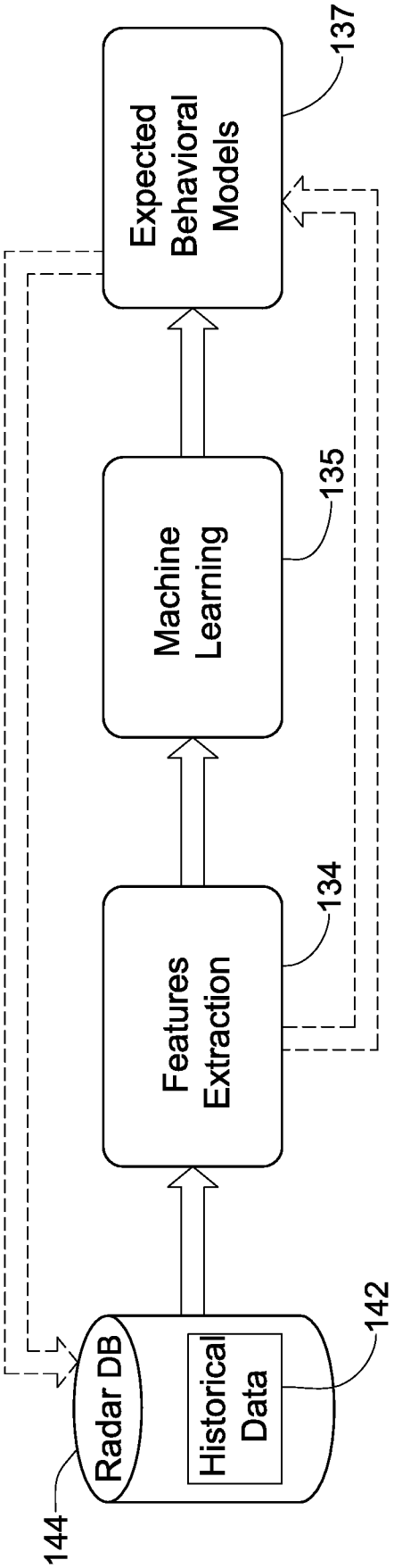

Alarm
139
123
YES
NO
Cyber attack Discriminator
138
Radar DB
144
Historical Data 142
attack 147
normal 145
119A
119B
* RC-Tracks & Targets Generator
RC-Tracks & Targets Generator
Anomalies detection
136
Features Extraction
134
130
Simulation
Simulation
GUI of 121
GUI of 120
116
Signal Processing
Signal Processing
80
80
Fused data monitoring *
146
70
90
from 119A
from 119B
102
100
104
60

Fig. 2

Fig. 3


Expected Behavioral Models
137
Machine Learning
135
Features Extraction
134
Radar DB
Historical Data
142
144

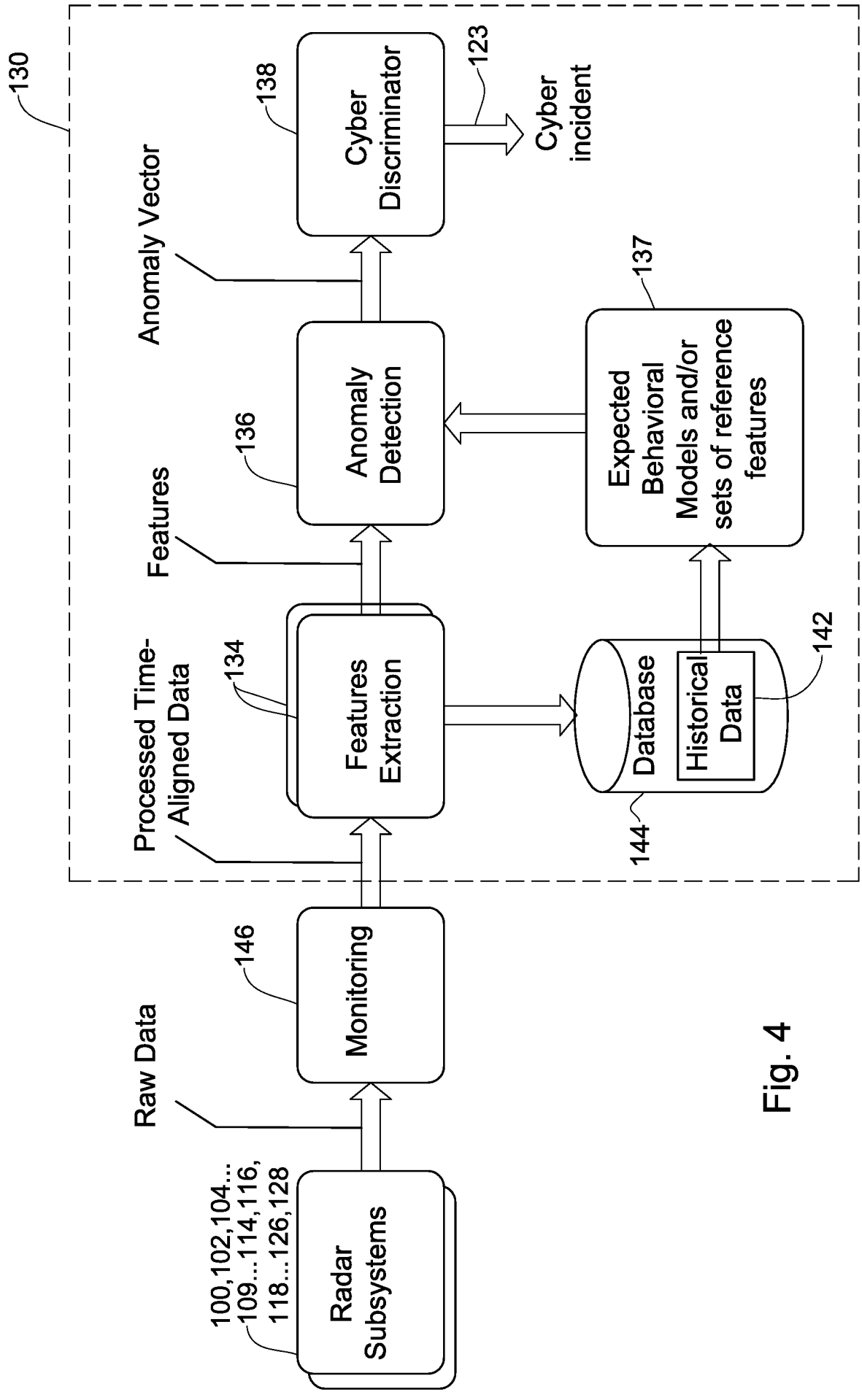

130
Radar Subsystems
100,102,104...
109...114,116,
118...126,128
Raw Data
Monitoring
146
Processed Time-Aligned Data
Features Extraction
134
Features
Anomaly Detection
136
Anomaly Vector
Cyber Discriminator
138
Cyber incident
123
Expected Behavioral Models and/or sets of reference features
137
Database
Historical Data
142
144

Fig. 4

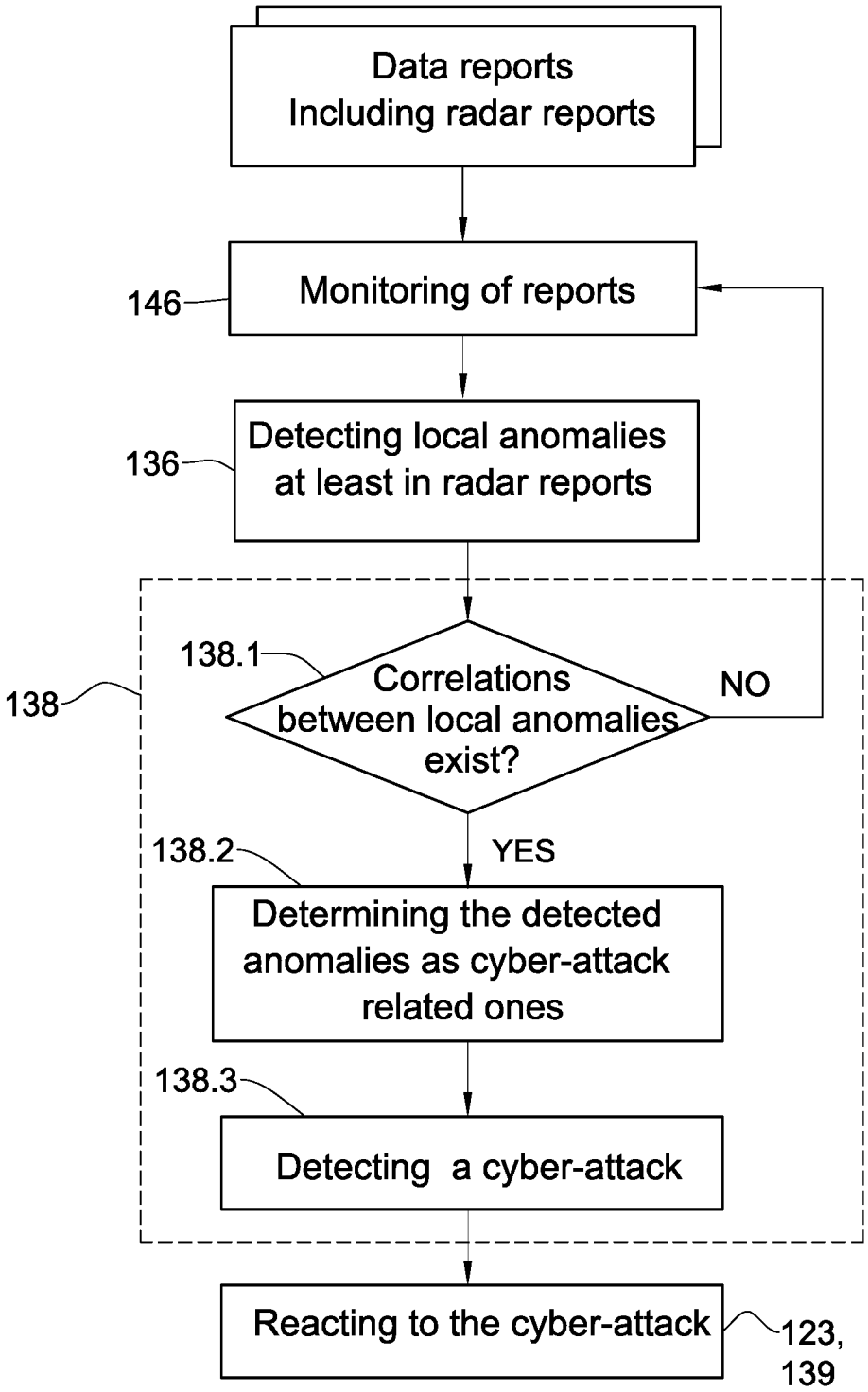

Data reports
Including radar reports
146
Monitoring of reports
136
Detecting local anomalies
at least in radar reports
138
138.1
Correlations
between local anomalies
exist?
NO
YES
138.2
Determining the detected
anomalies as cyber-attack
related ones
138.3
Detecting a cyber-attack
Reacting to the cyber-attack
123,
139

Fig. 5