

100

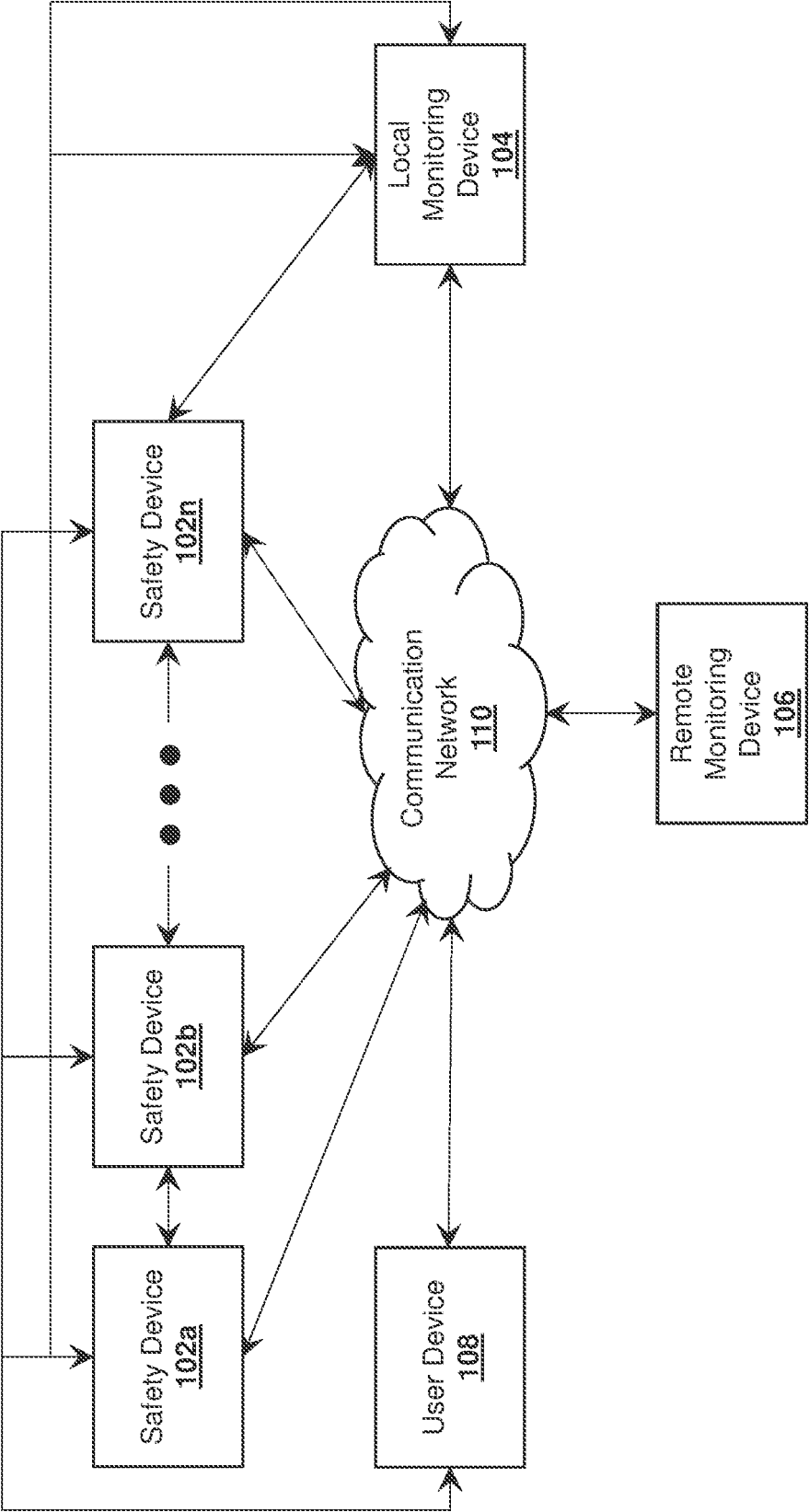


FIG. 1

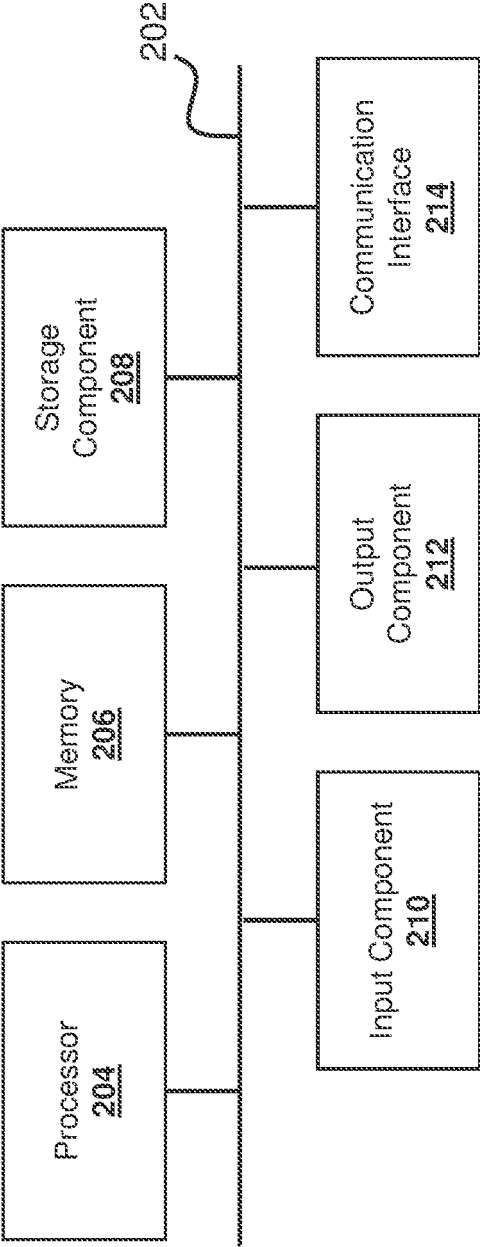


FIG. 2

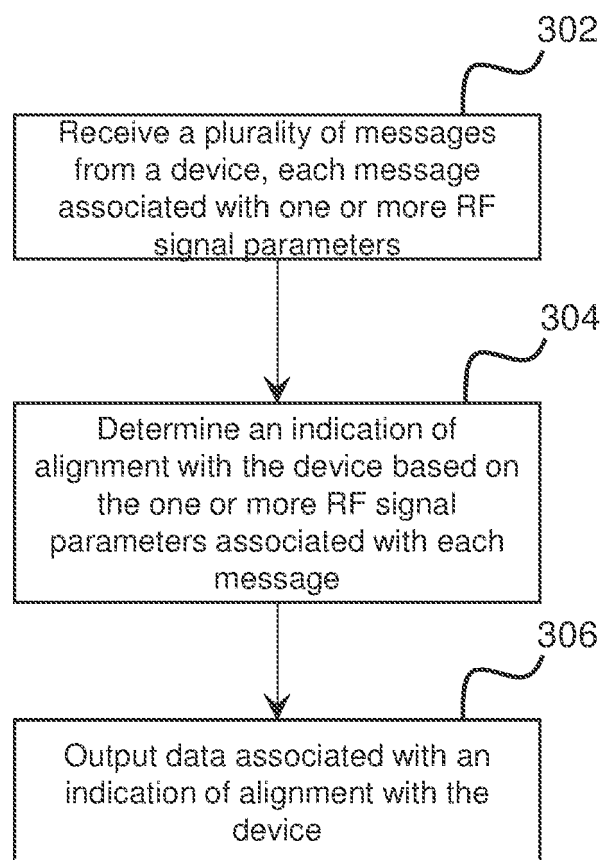
300

FIG. 3A

DEVICE ID:	User_Device_102b
Message ID:	0001
Power Level (-10db, 3db, 13db, 20db):	-10db

DEVICE ID:	User_Device_102b
Message ID:	0002
Power Level (-10db, 3db, 13db, 20db):	3db

•
•
•

DEVICE ID:	User_Device_102b
Message ID:	0008
Power Level (-10db, 3db, 13db, 20db):	20db

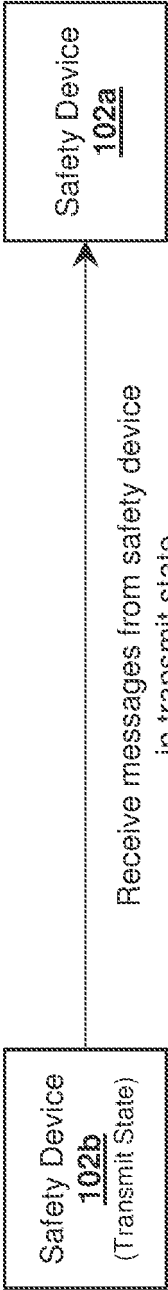


FIG. 3B

315

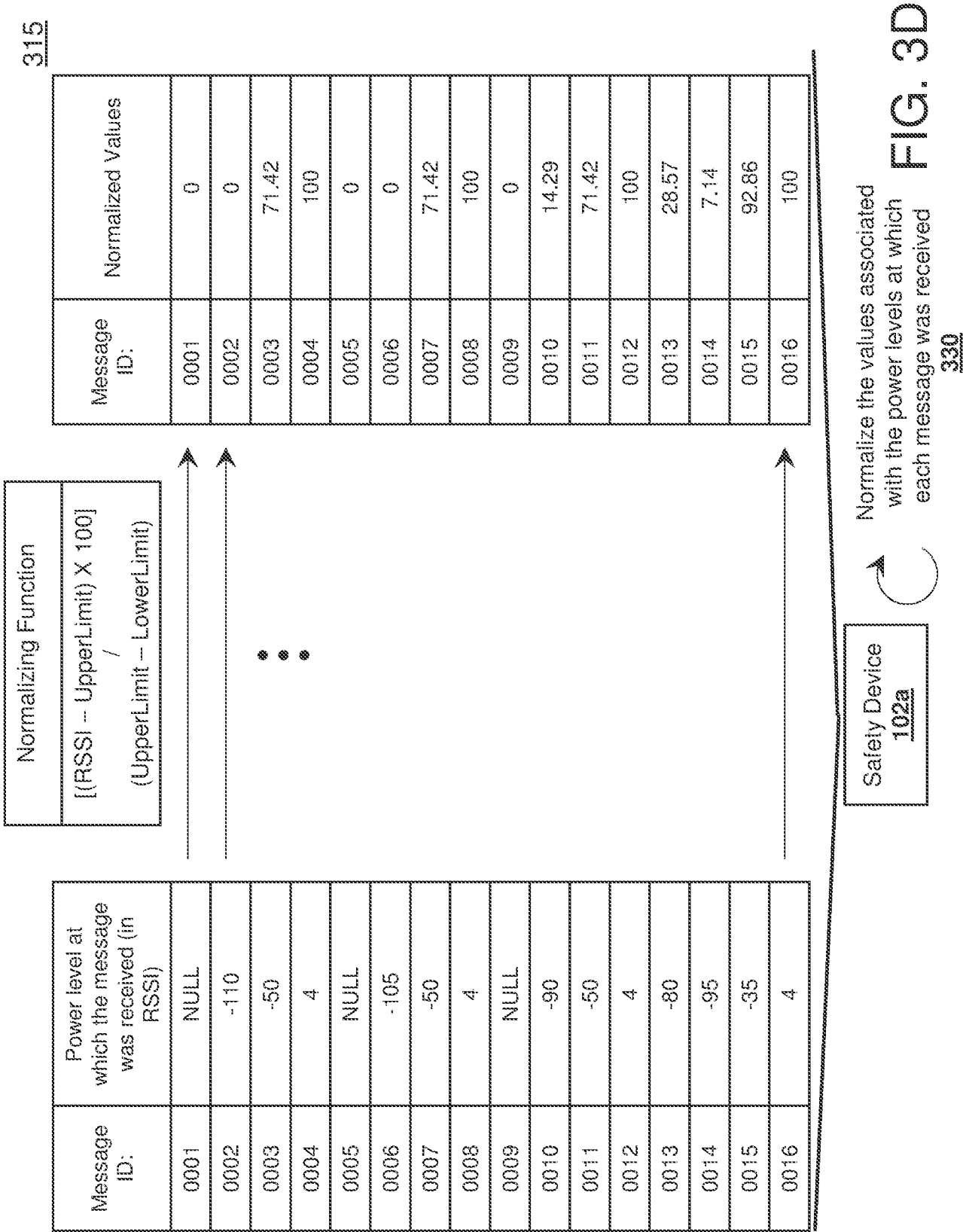
Message ID:	Power level at which the message was received (in RSSI)
0001	0
0002	-110
0003	-50
0004	4
0005	0
0006	-105
0007	-50
0008	4
0009	0
0010	-100
0011	-50
0012	4
0013	-120
0014	-95
0015	-35
0016	4

Determine values associated with power levels at which each message was received

325

Safety Device
102a

FIG. 3C



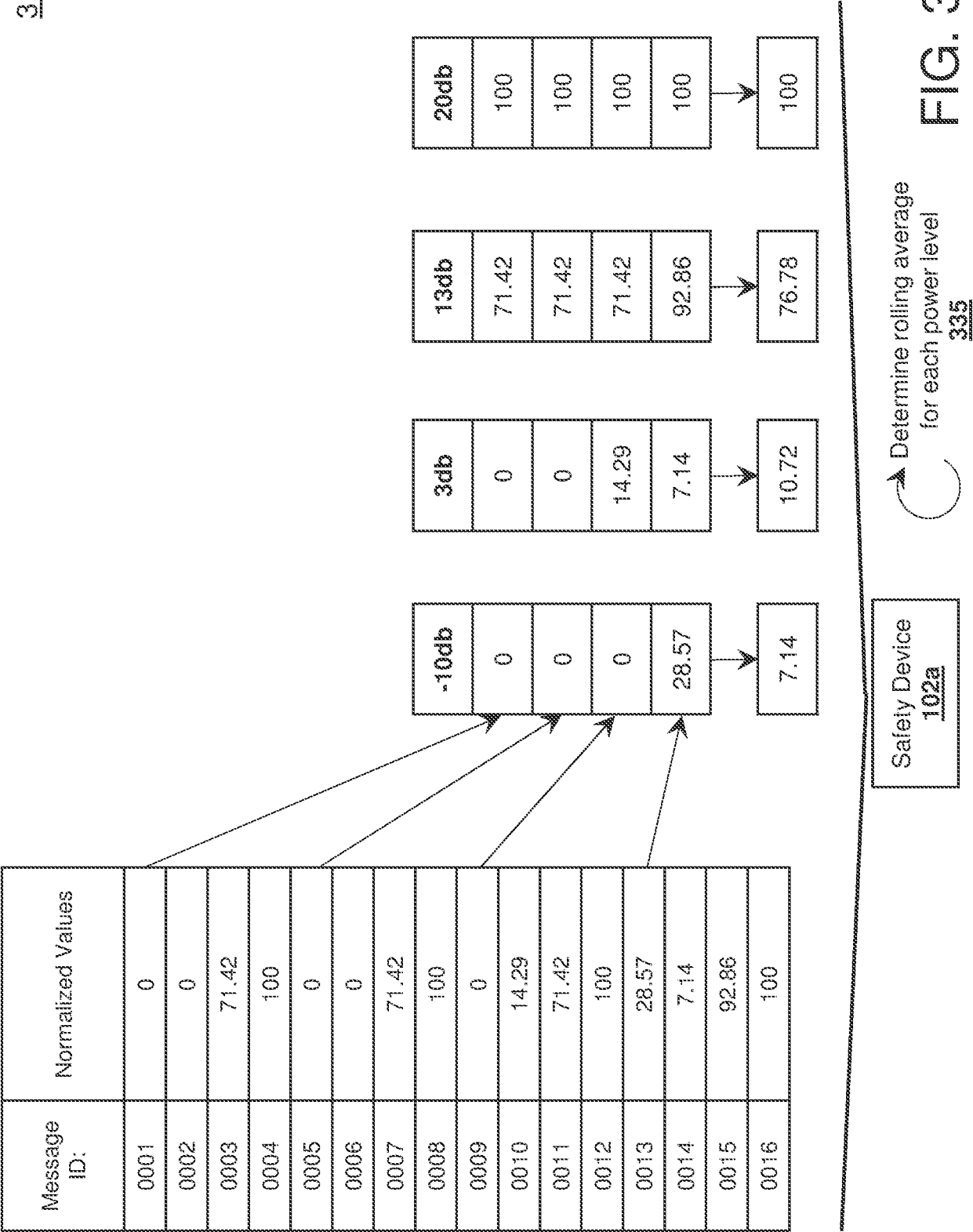


FIG. 3E

315

Power level at which the message was transmitted	Rolling average of values associated with the power levels at which each message was received (in RSSI)	Scaling factor corresponding to power level at which message was transmitted	Alignment value
-10db	7.14	0.30	2.14
3db	10.72	0.20	2.14
13db	76.78	0.20	15.36
20db	100	0.30	30

-10db	3db	13db	20db
0	0	71.42	100
0	0	71.42	100
0	14.29	71.42	100
28.57	7.14	92.86	100

7.14

10.72

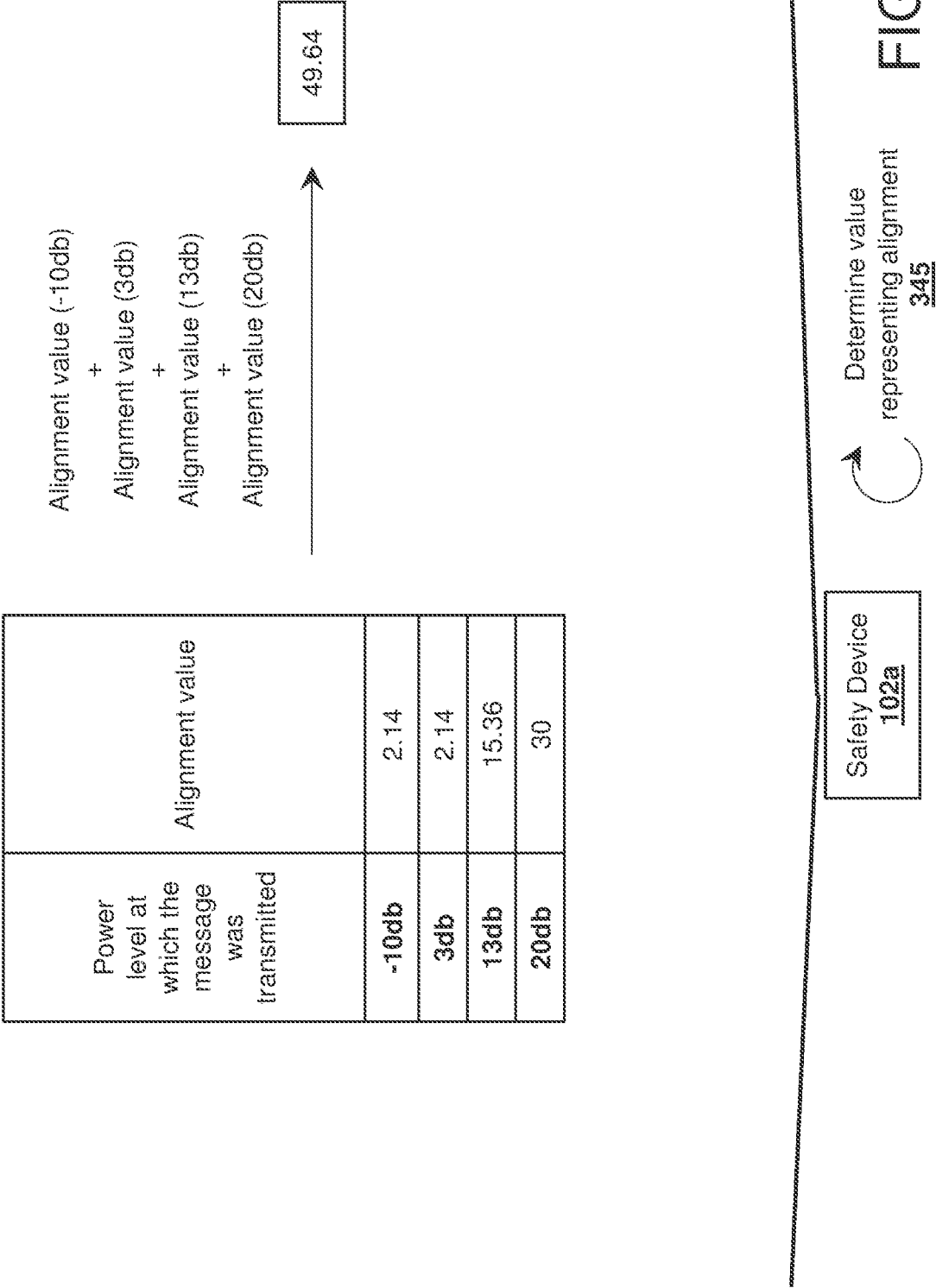
76.78

100

Safety Device
102a

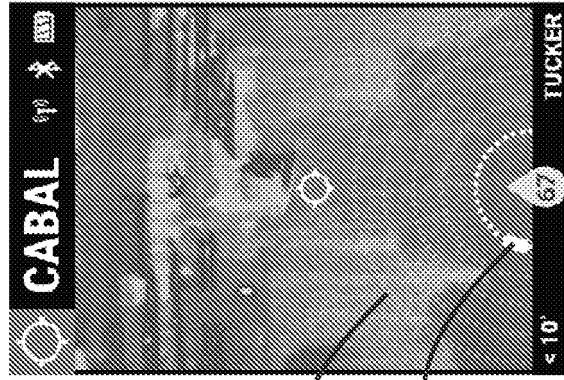
Determine alignment values
340

FIG. 3F



102a

345



Indication of the
distance to the device in
the transmit state

Indication of the
direction of alignment

Display an indication of
alignment with the
safety device
in the transmit state
350

Safety Device
102a

FIG. 3H

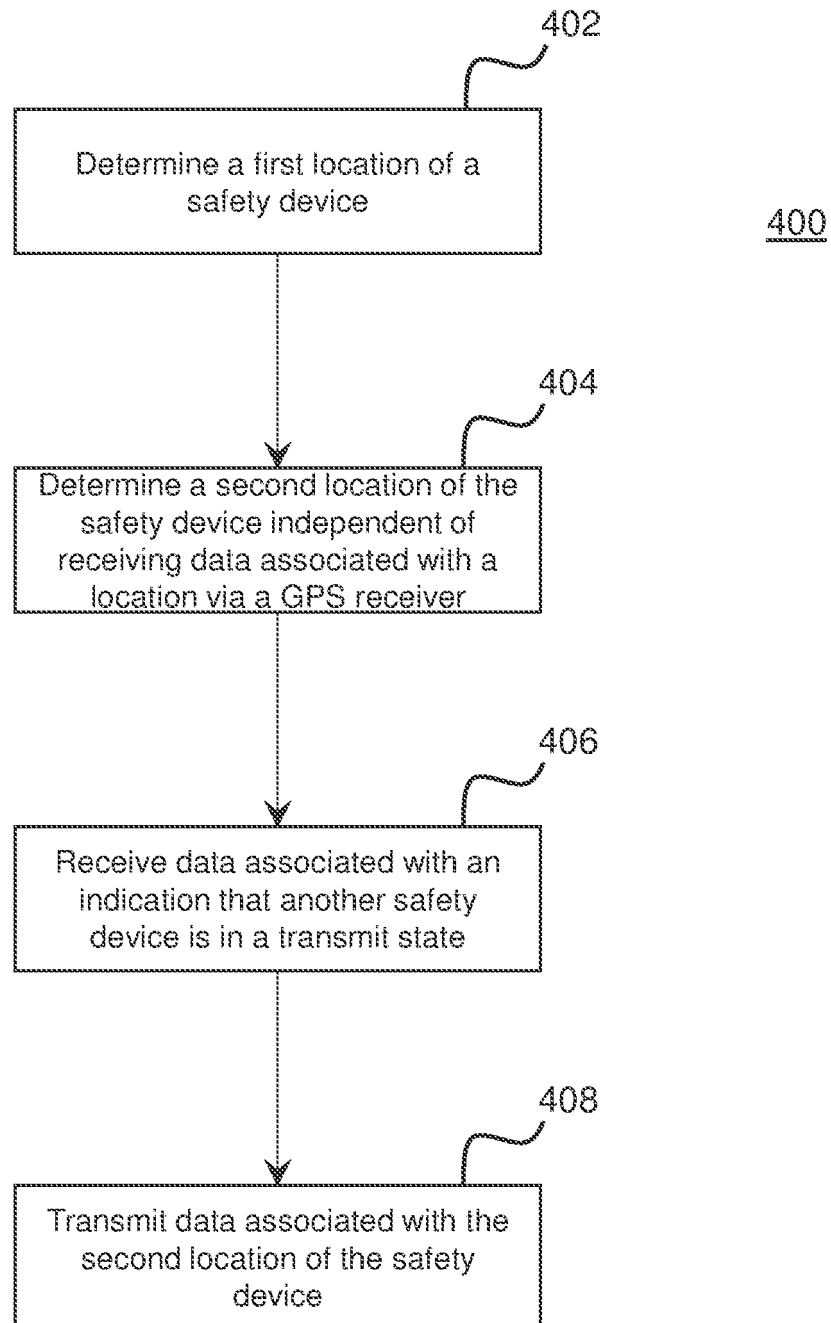


FIG. 4A

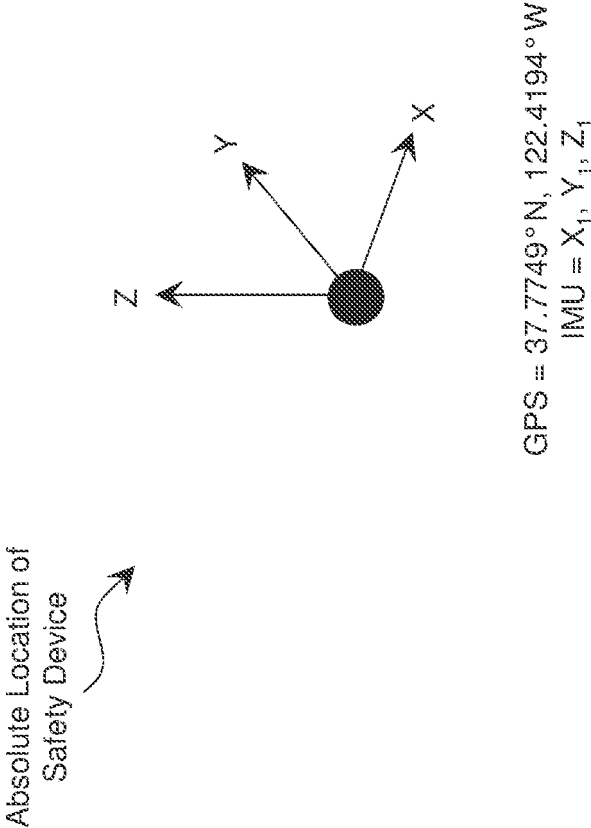


FIG. 4B

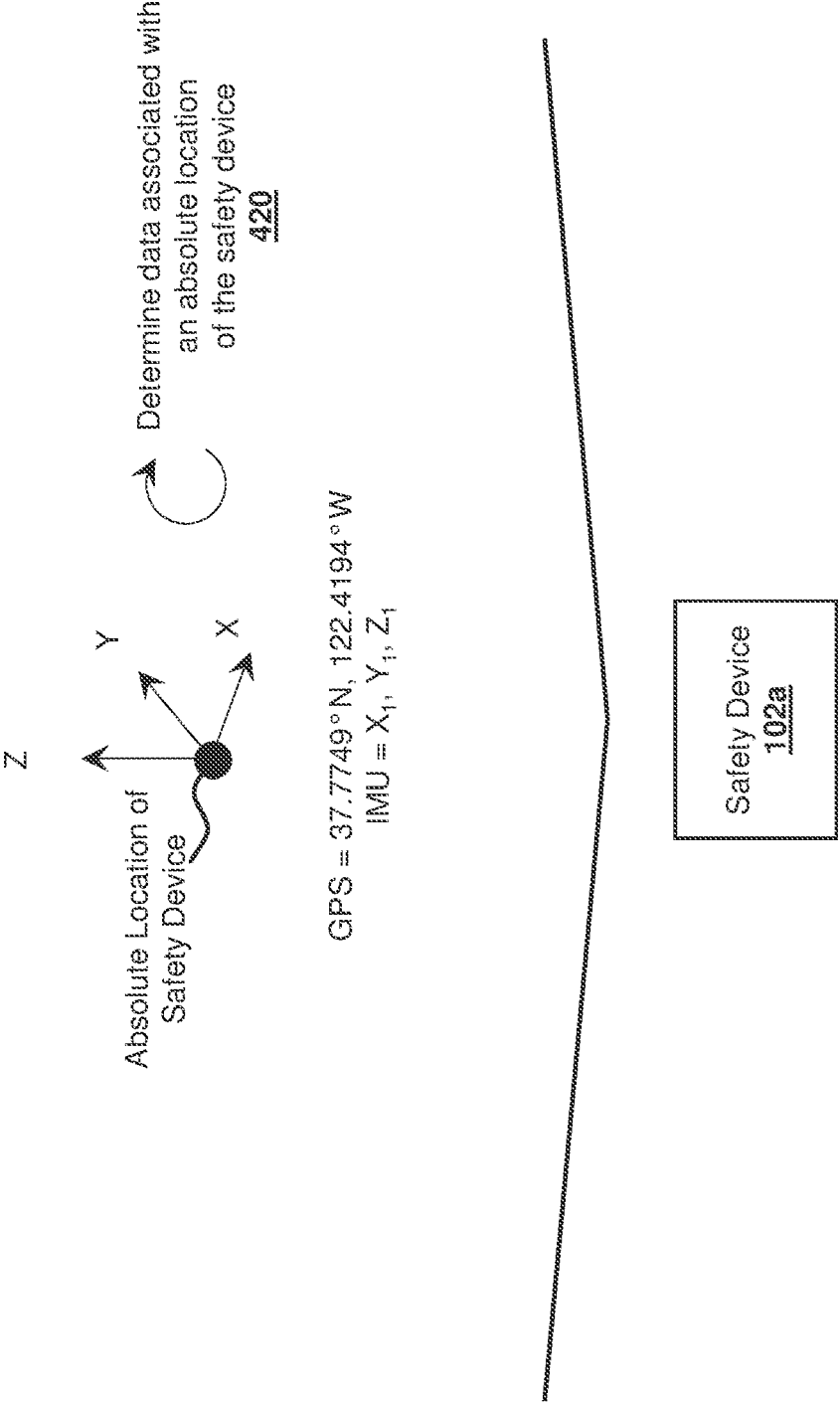


FIG. 4C

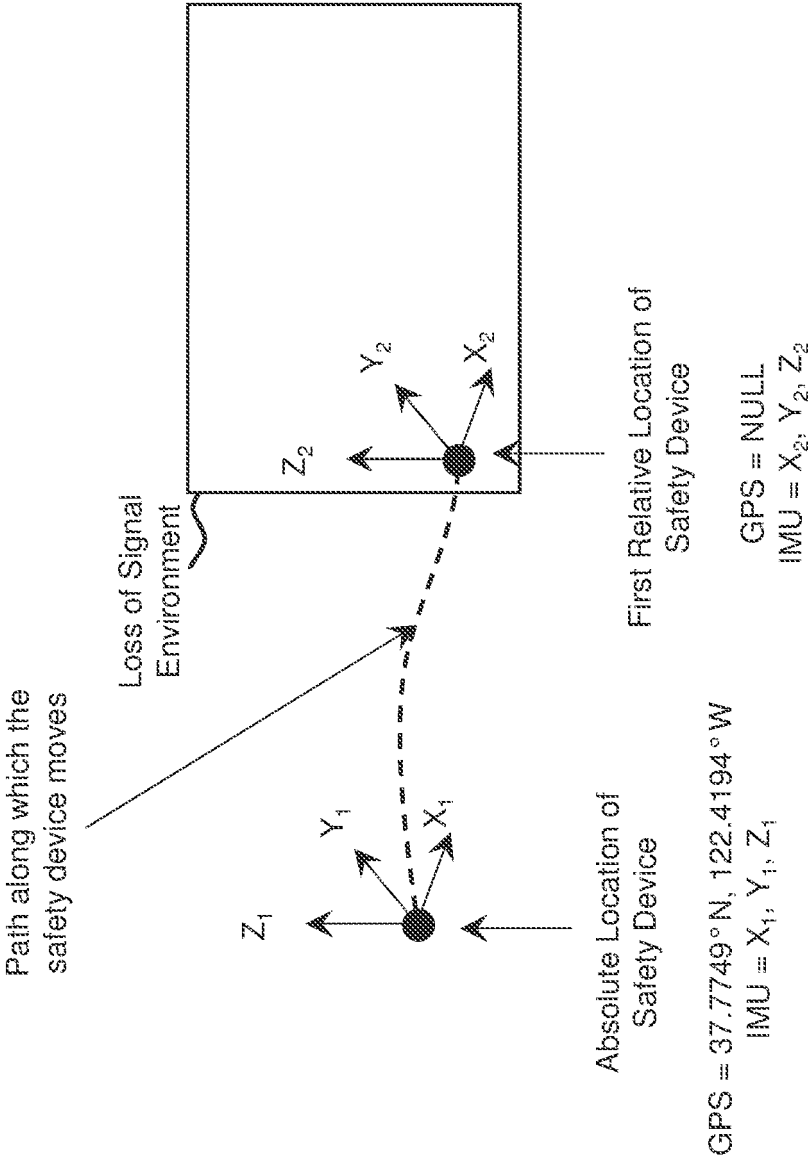


FIG. 4D

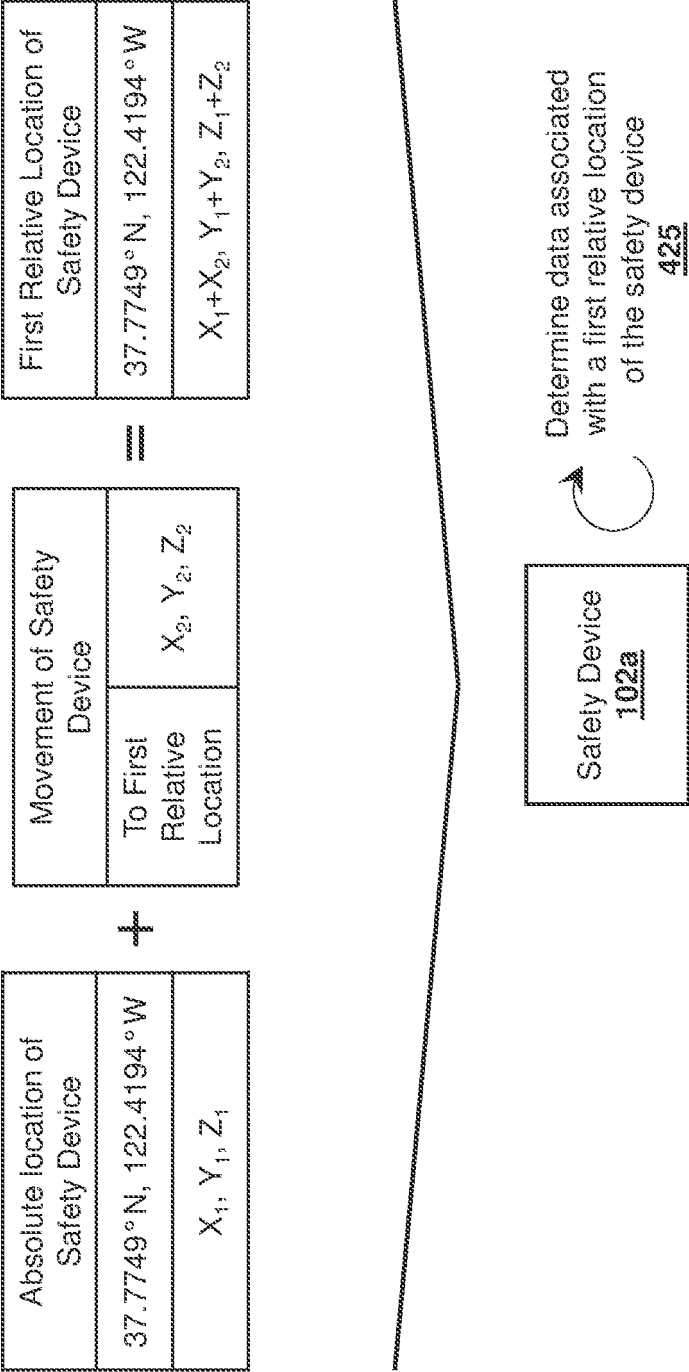


FIG. 4E

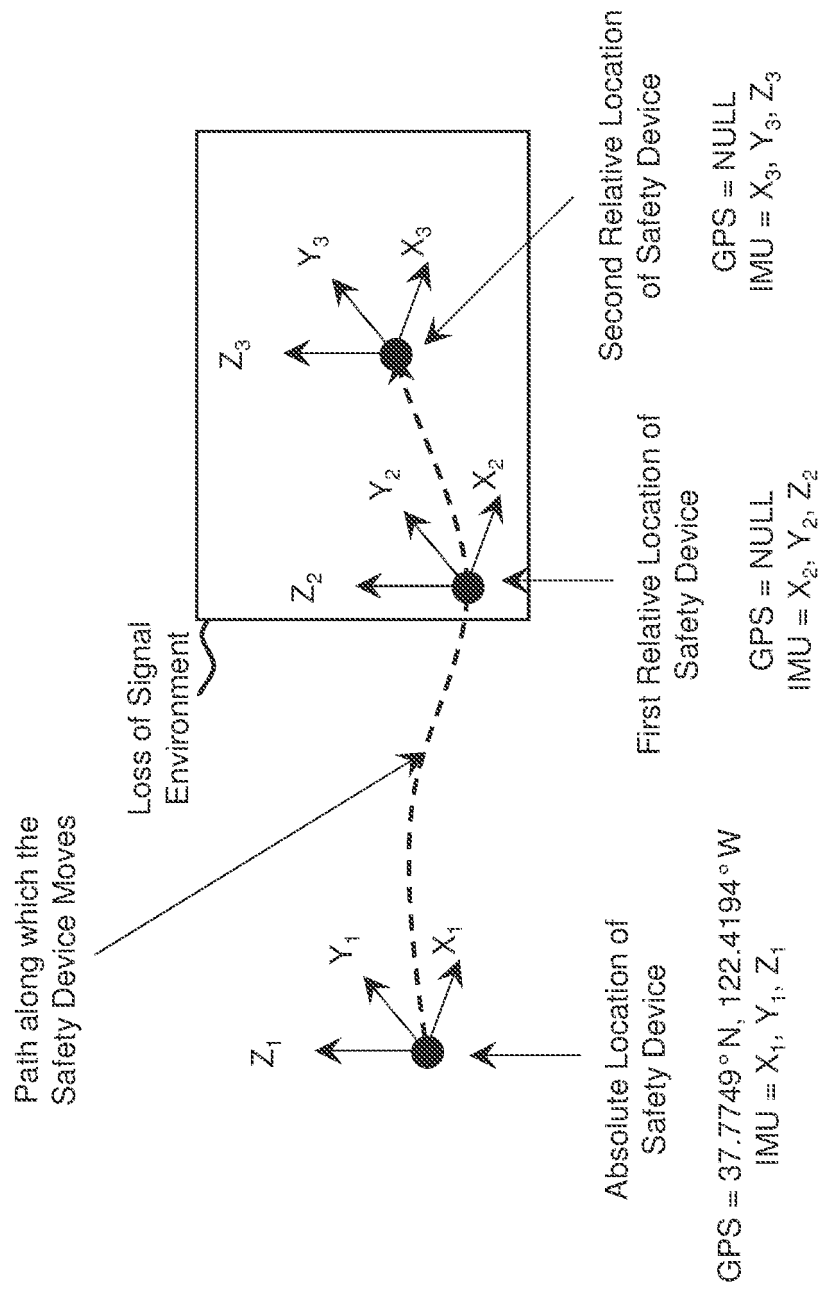


FIG. 4F

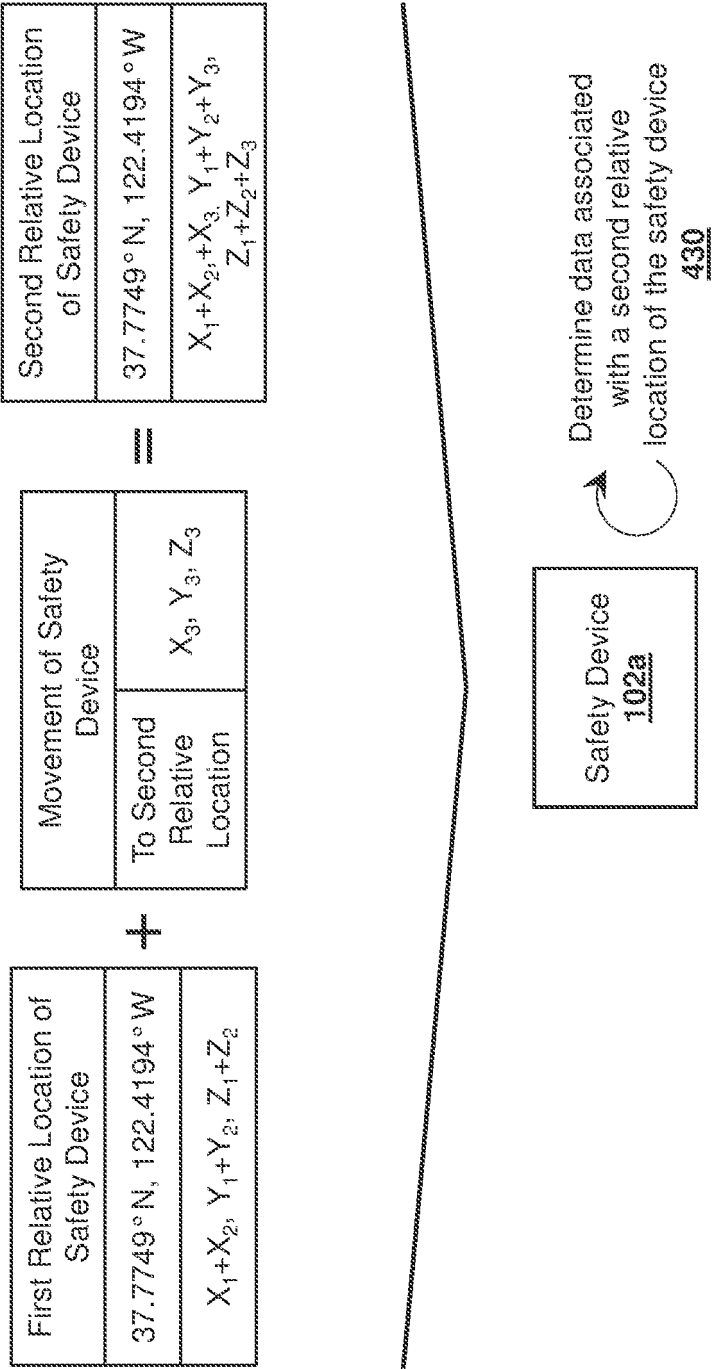
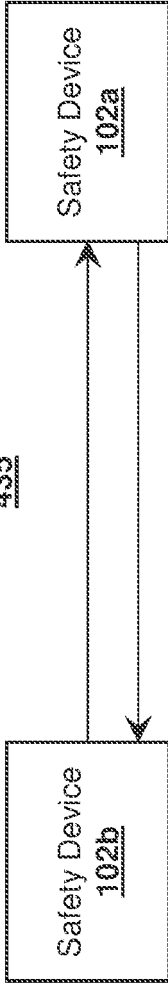


FIG. 4G

415

DEVICE ID:	User_Device_102b
Message ID:	0001
Power Level (1-4):	1
Device State:	TRANSMIT
Time:	0:01

Receive data associated with an indication that a safety device is in a transmit state 435



Transmit data associated with the second relative location of the safety device 440

DEVICE ID:	User_Device_102a
Message ID:	0002
Device Location	Second Relative Location
Device State:	FIRST STATE
Time:	0:02



FIG. 4H

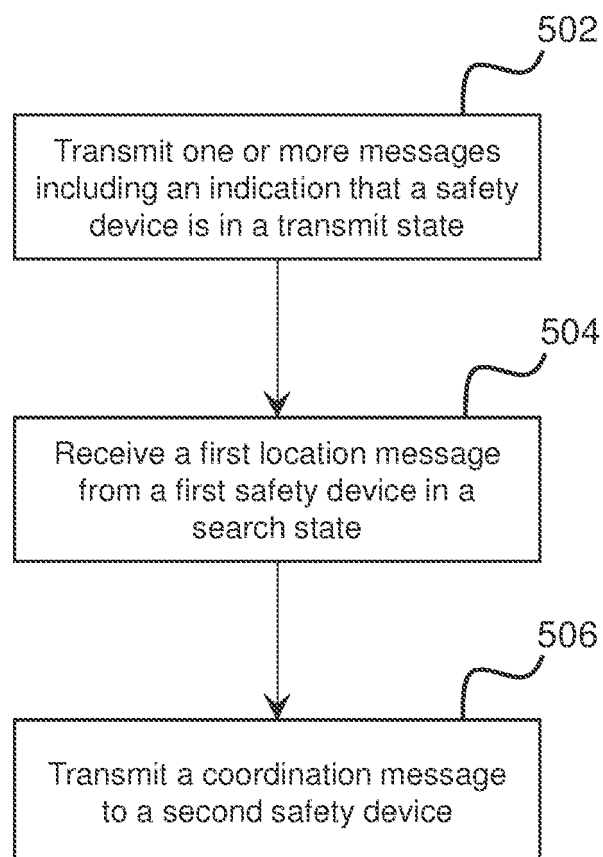
500

FIG. 5A

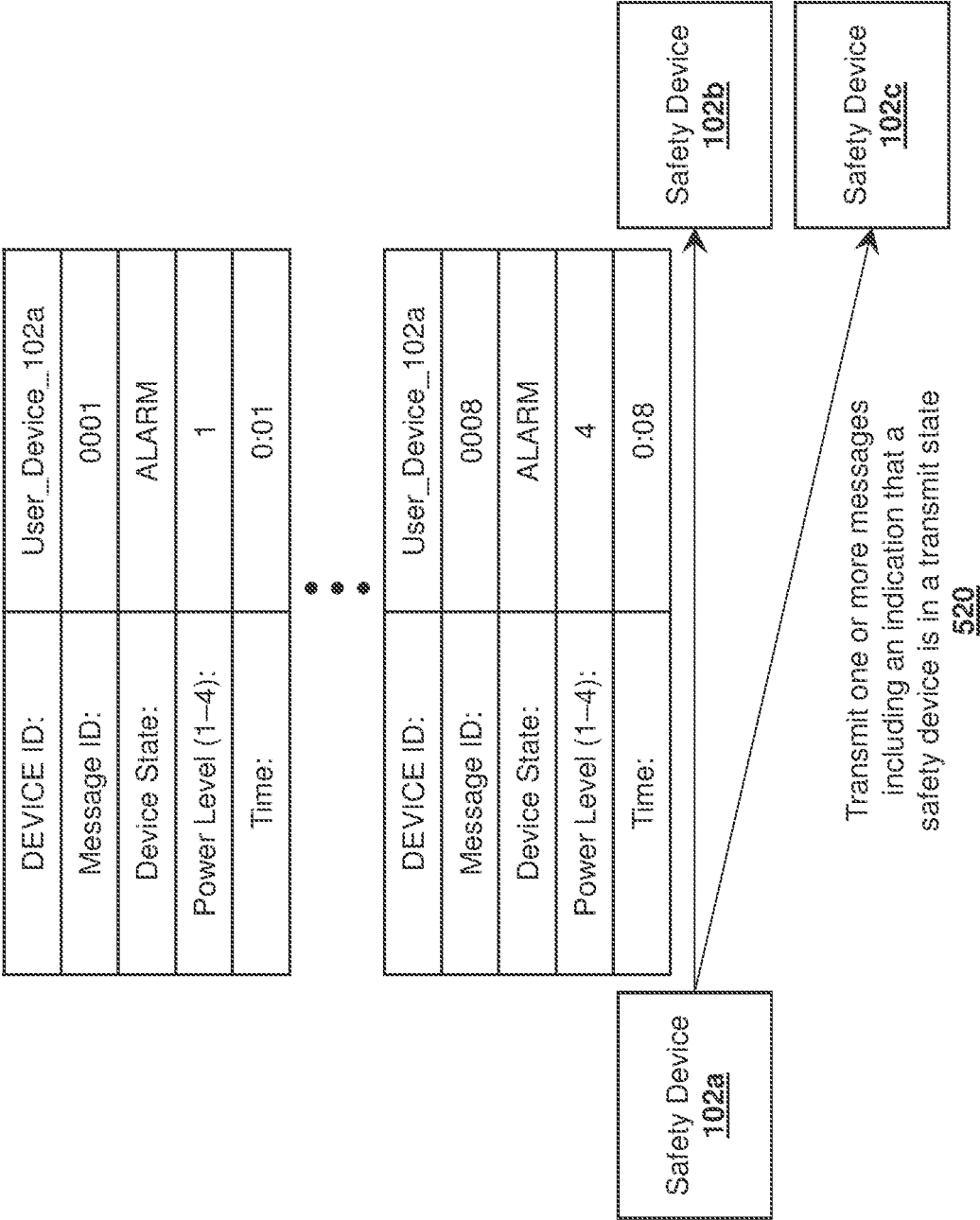


FIG. 5B

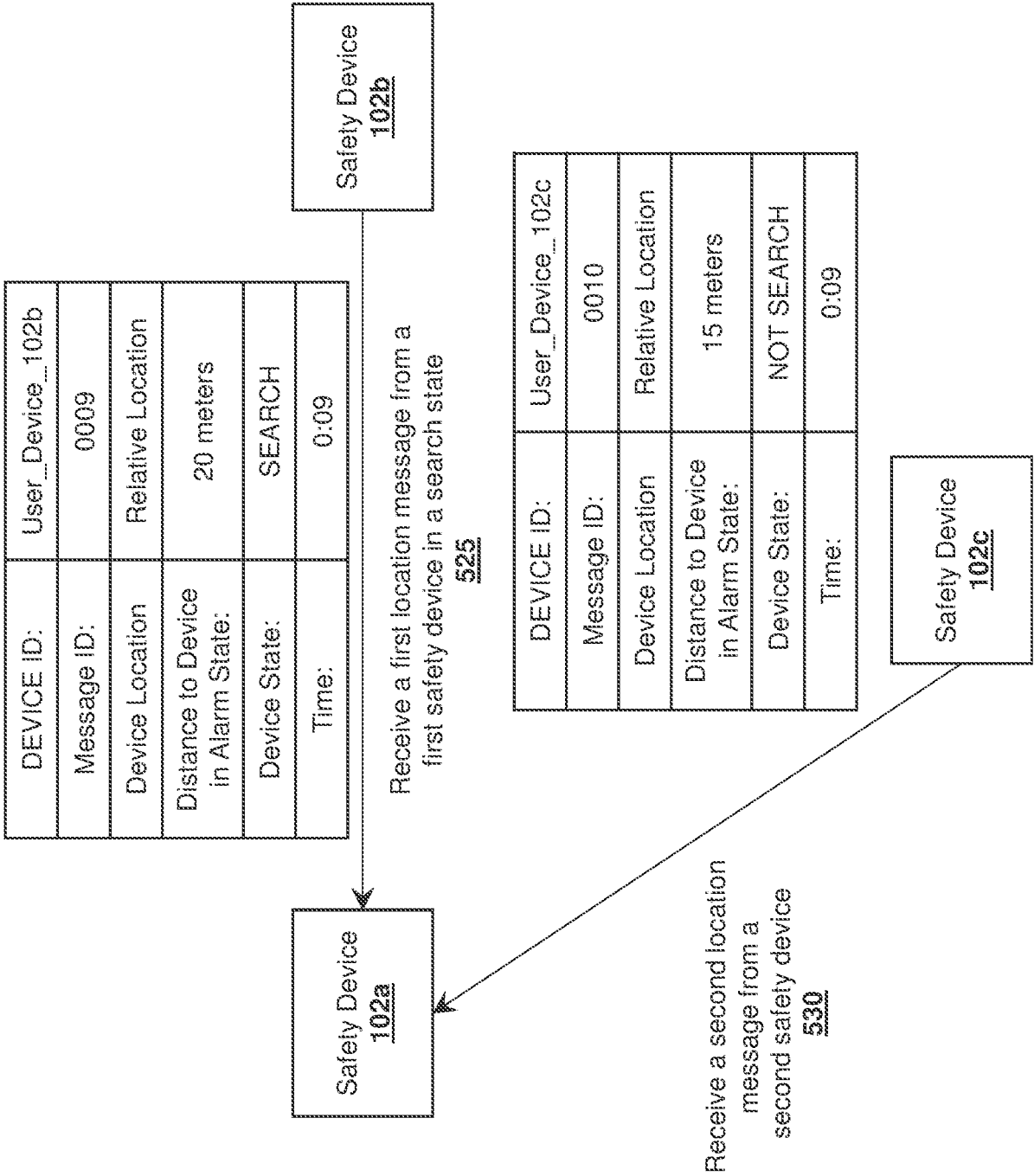


FIG. 5C

515

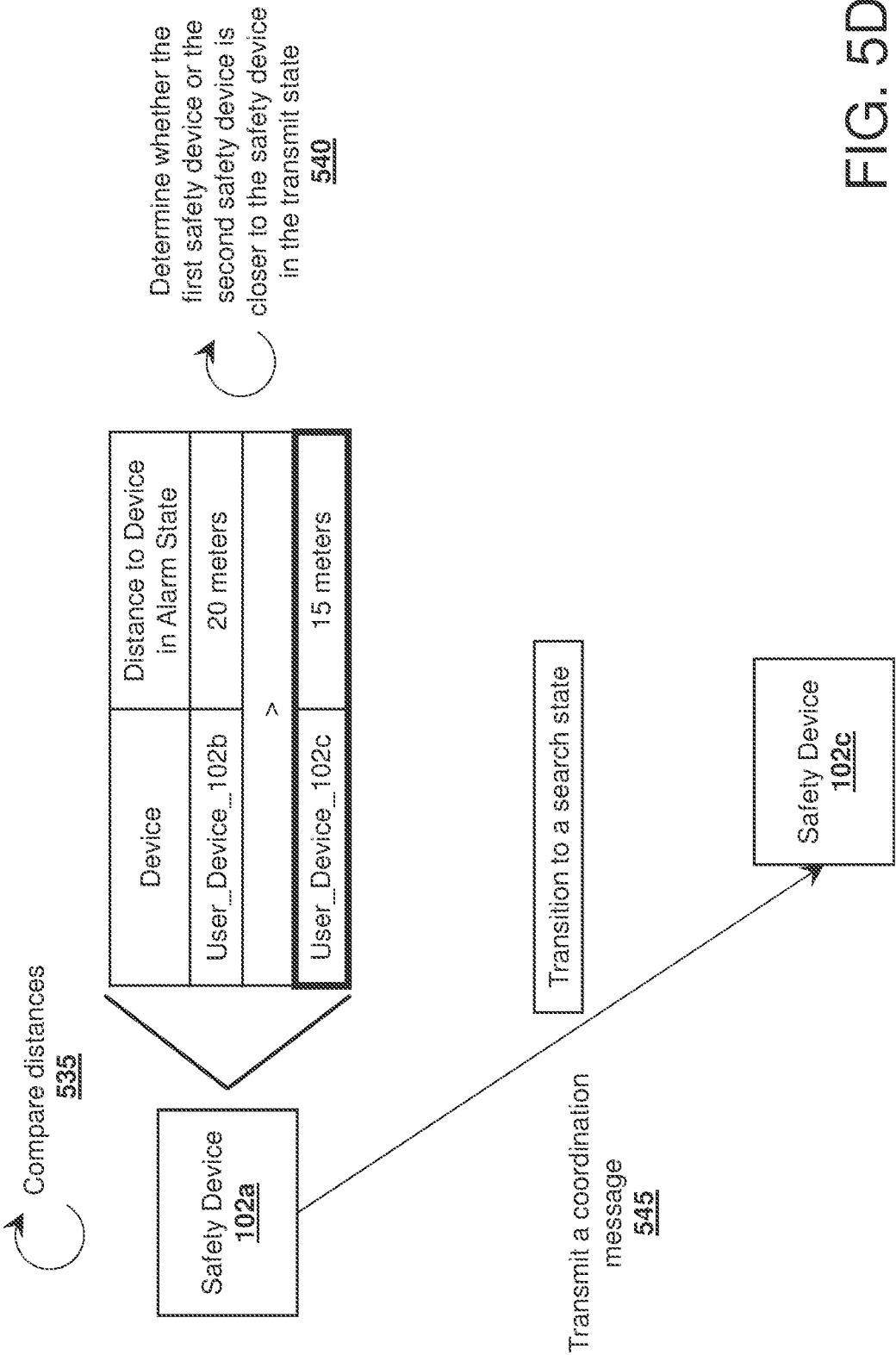


FIG. 5D

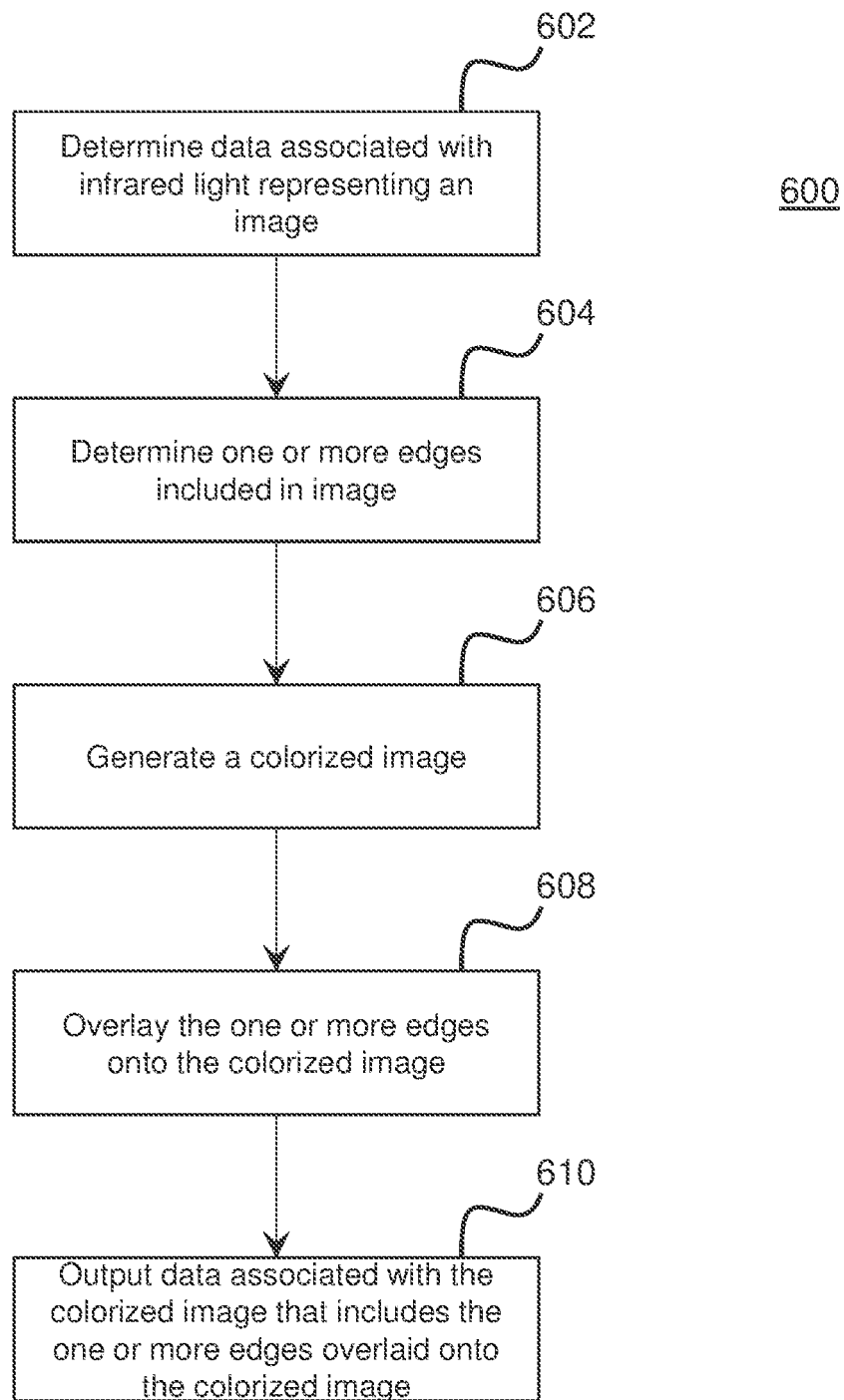


FIG. 6A



0.02 _{1,1}	0.04 _{1,2}	0.04 _{1,3}	•
0.06 _{2,1}	0.07 _{2,2}	0.06 _{2,3}	•
0.01 _{3,1}	0.02 _{3,2}	0.02 _{3,3}	•
• • •			

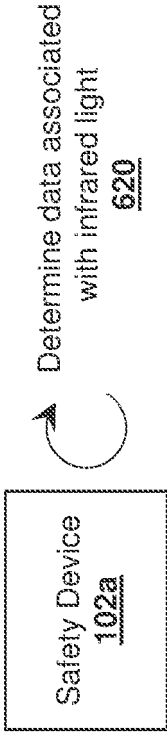


FIG. 6B

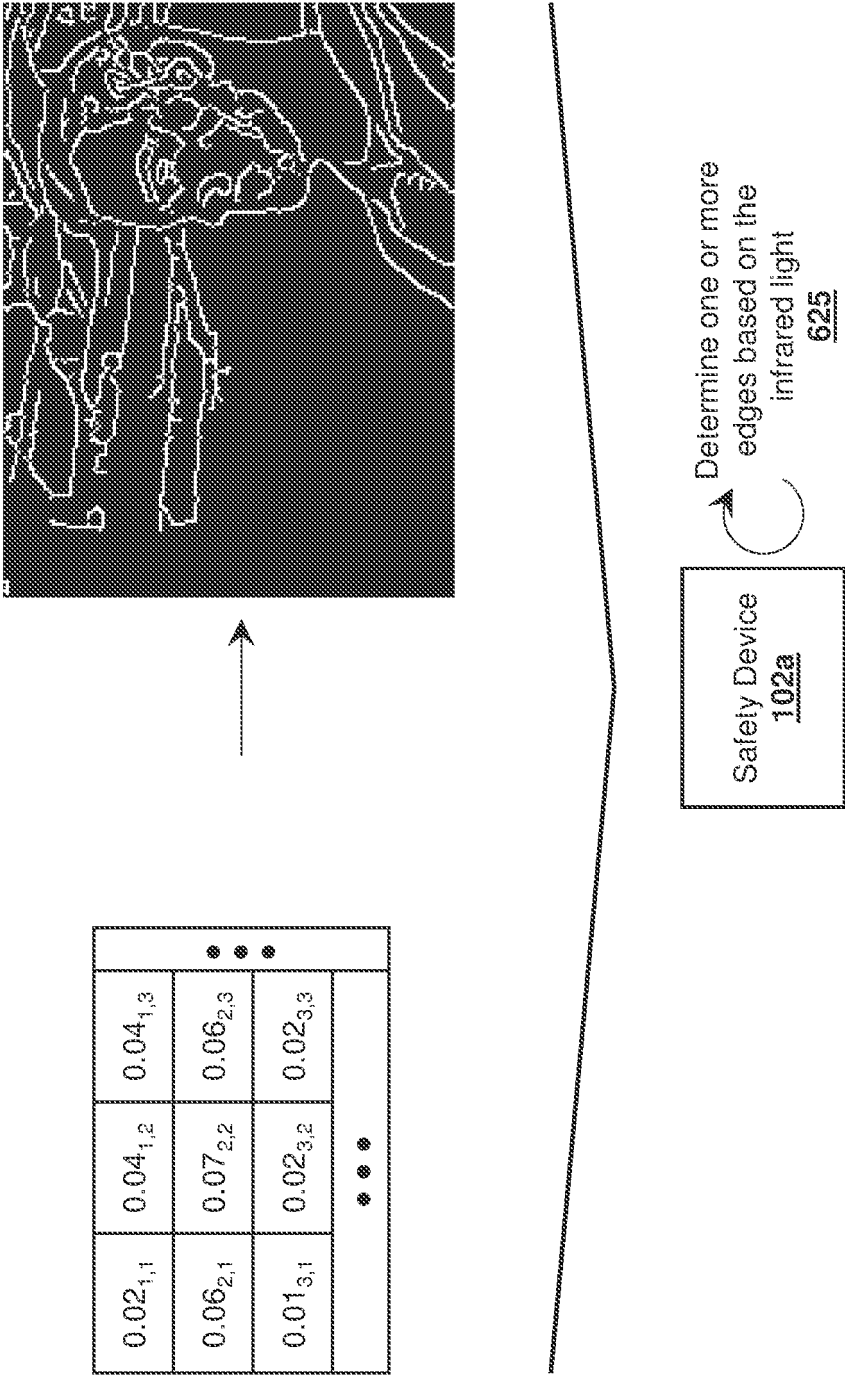


FIG. 6C

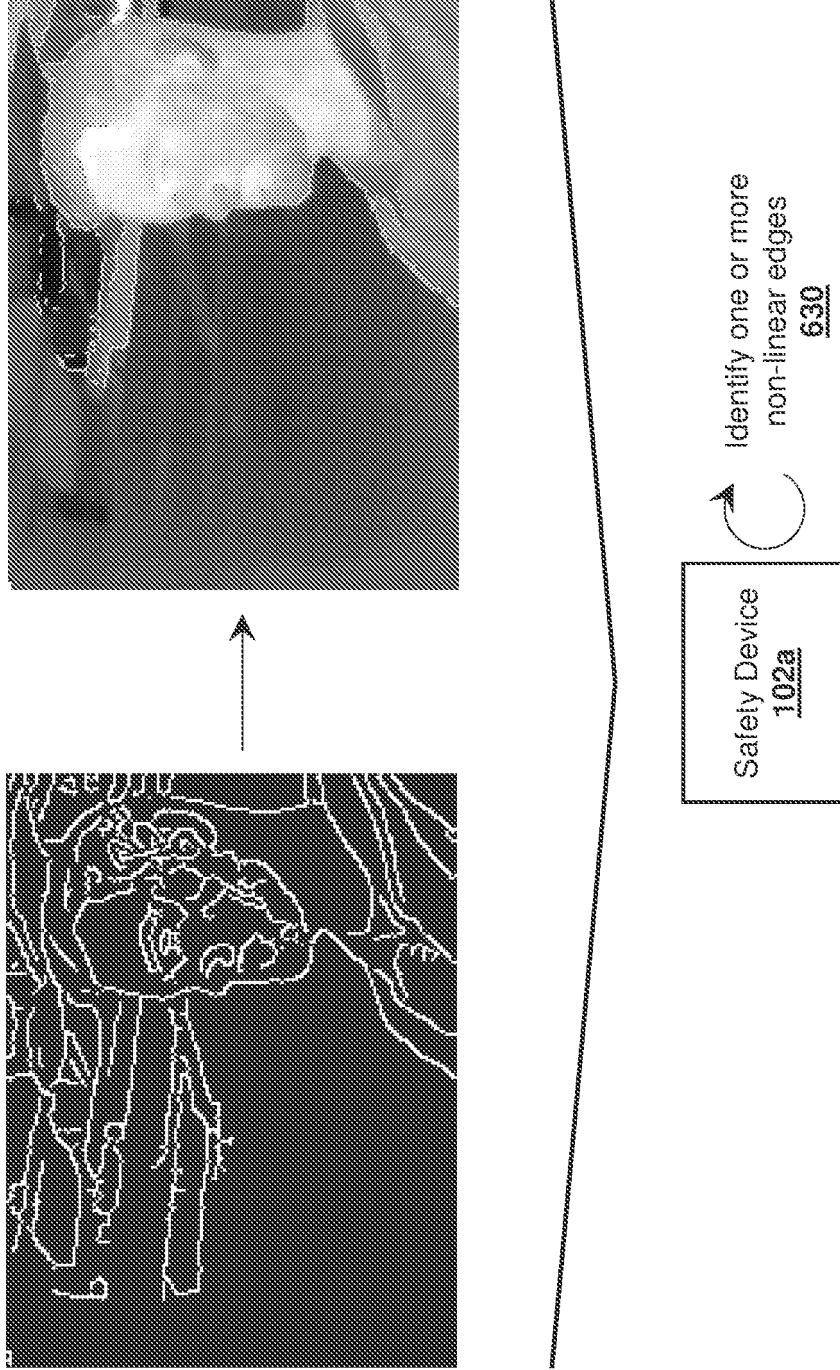


FIG. 6D

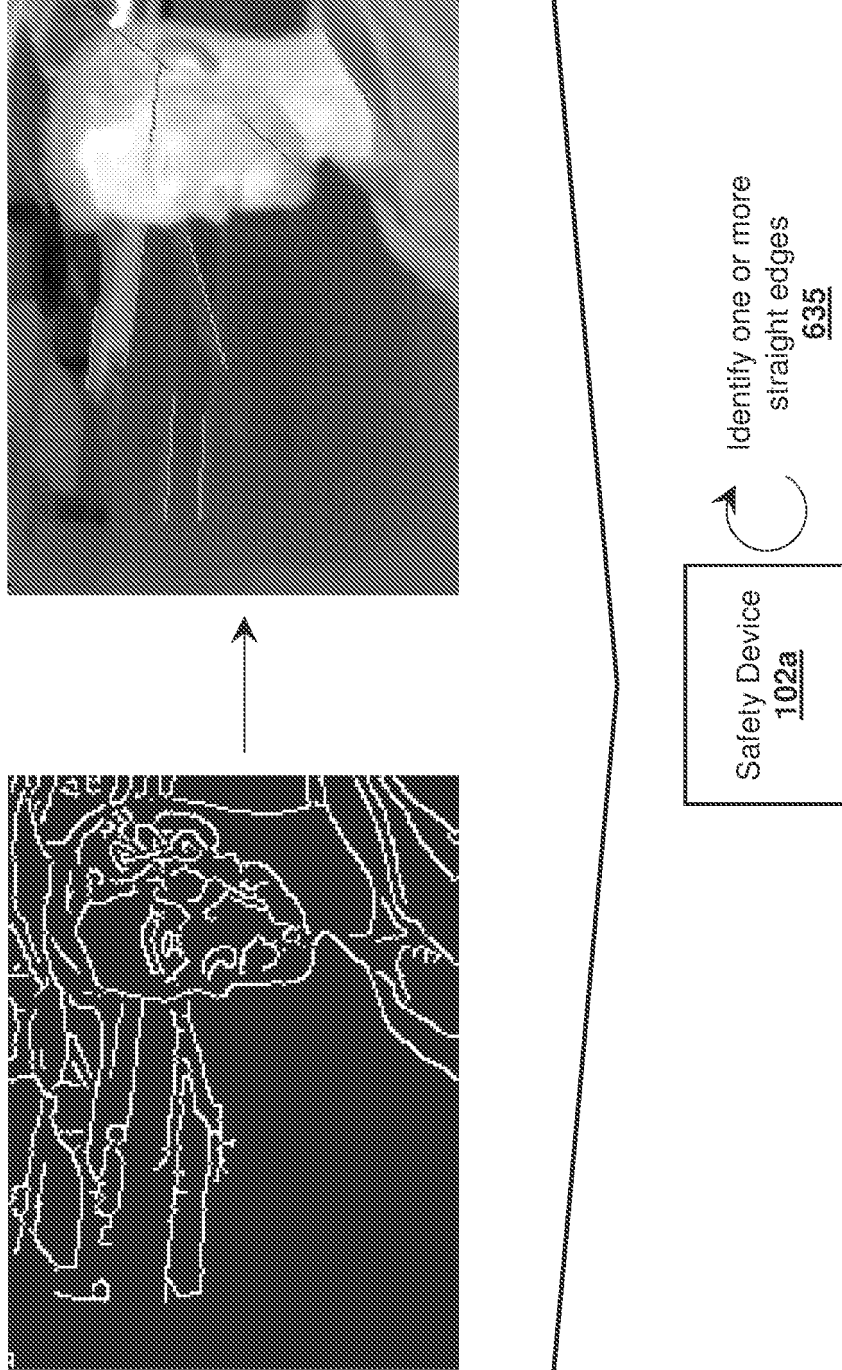


FIG. 6E

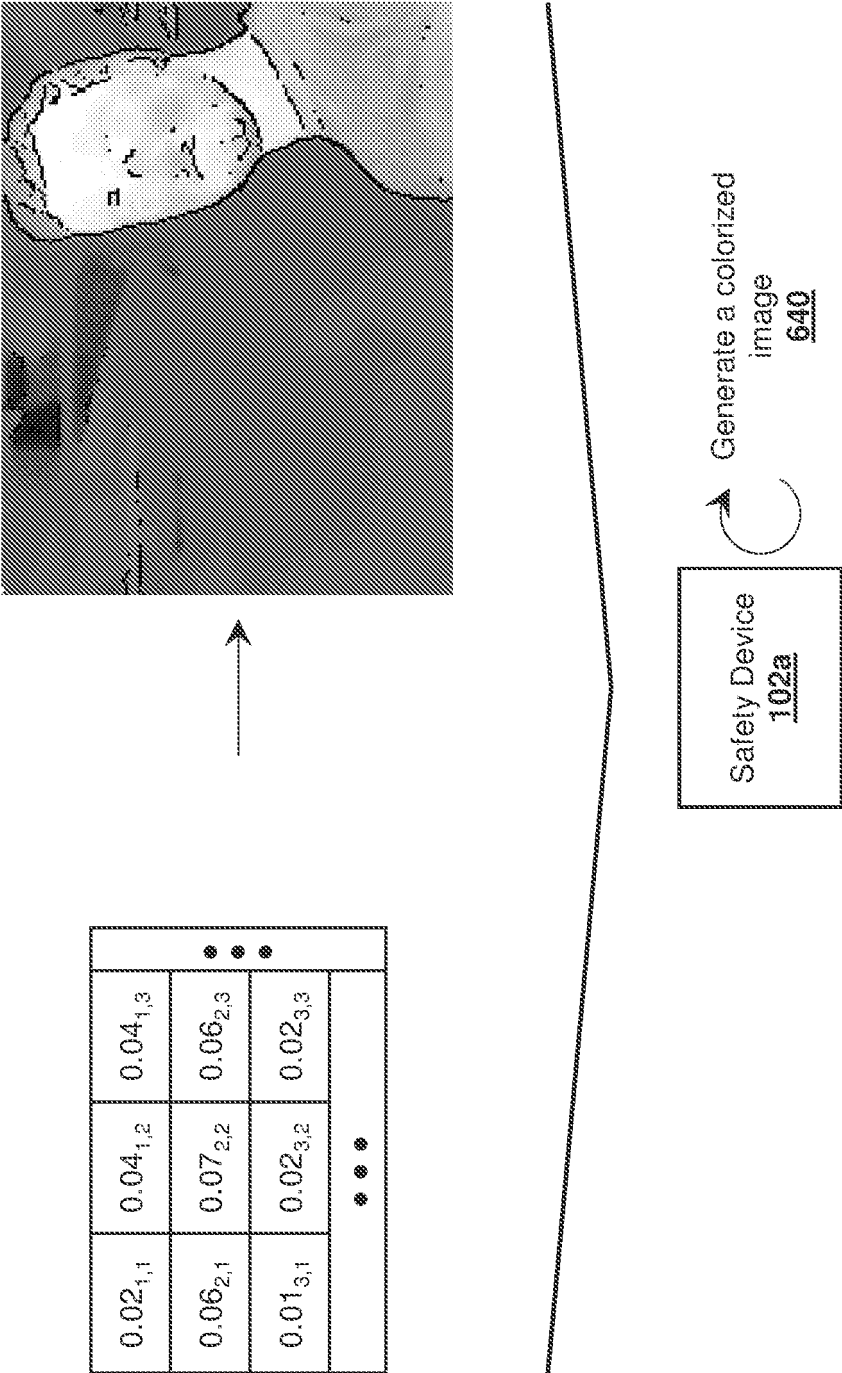


FIG. 6F

615

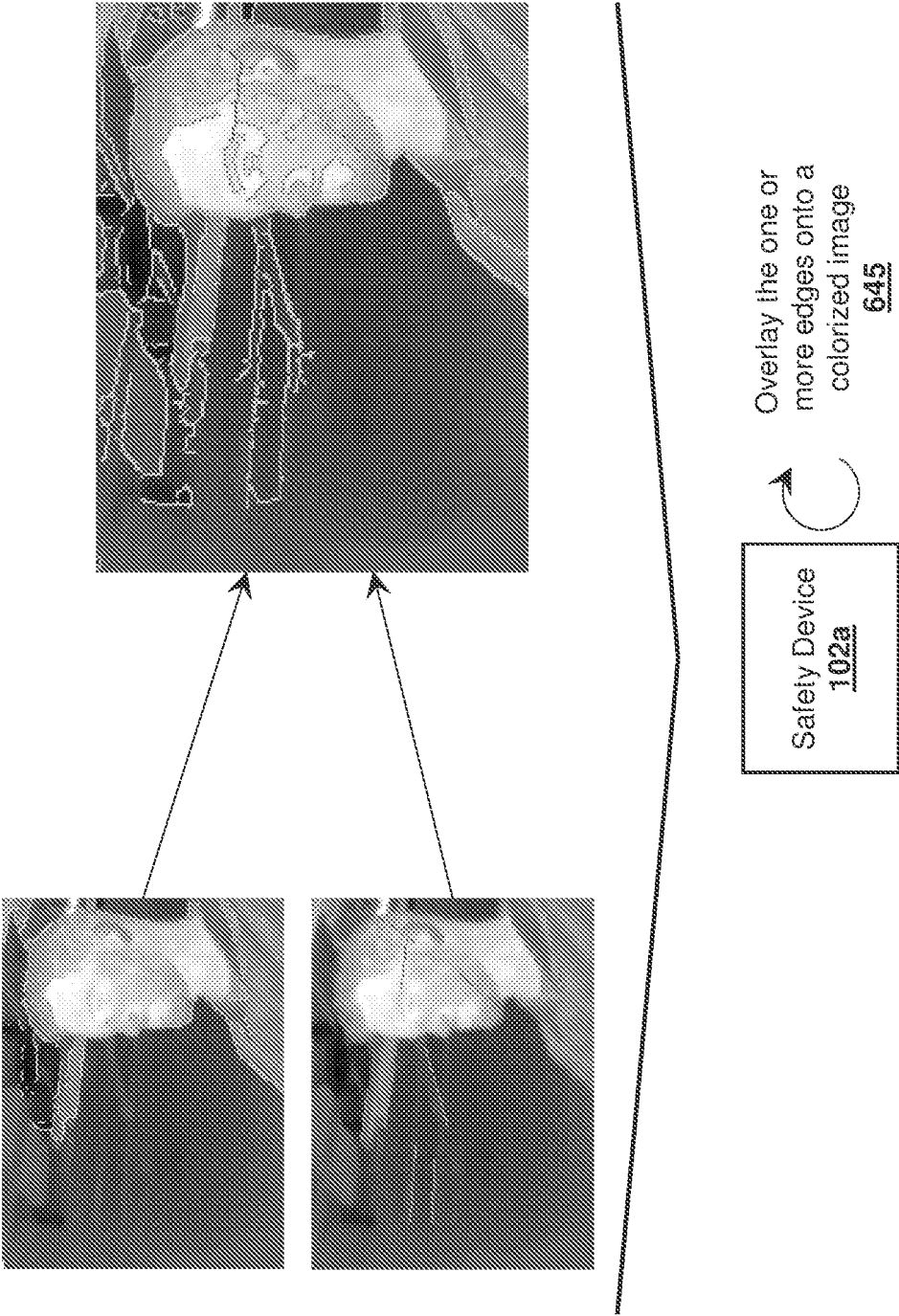


FIG. 6G

615

Generate data associated with
the colored image that includes the one
or more edges overlaid onto the colored image
650



RGB _{1,1}	RGB _{1,2}	RGB _{1,3}	•
RGB _{2,1}	RGB _{2,2}	RGB _{2,3}	•
RGB _{3,1}	RGB _{3,2}	RGB _{3,3}	•
• • •			

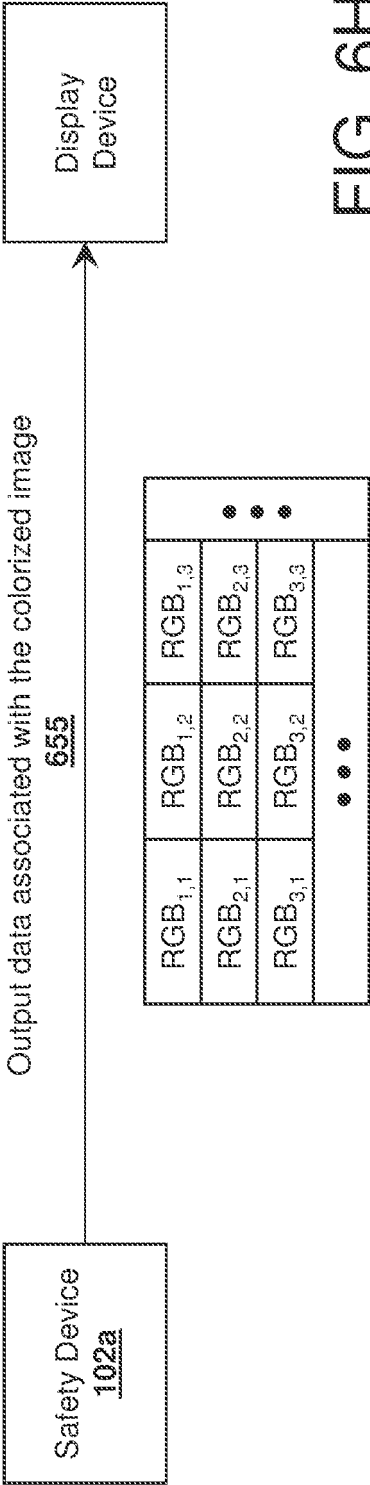


FIG. 6H

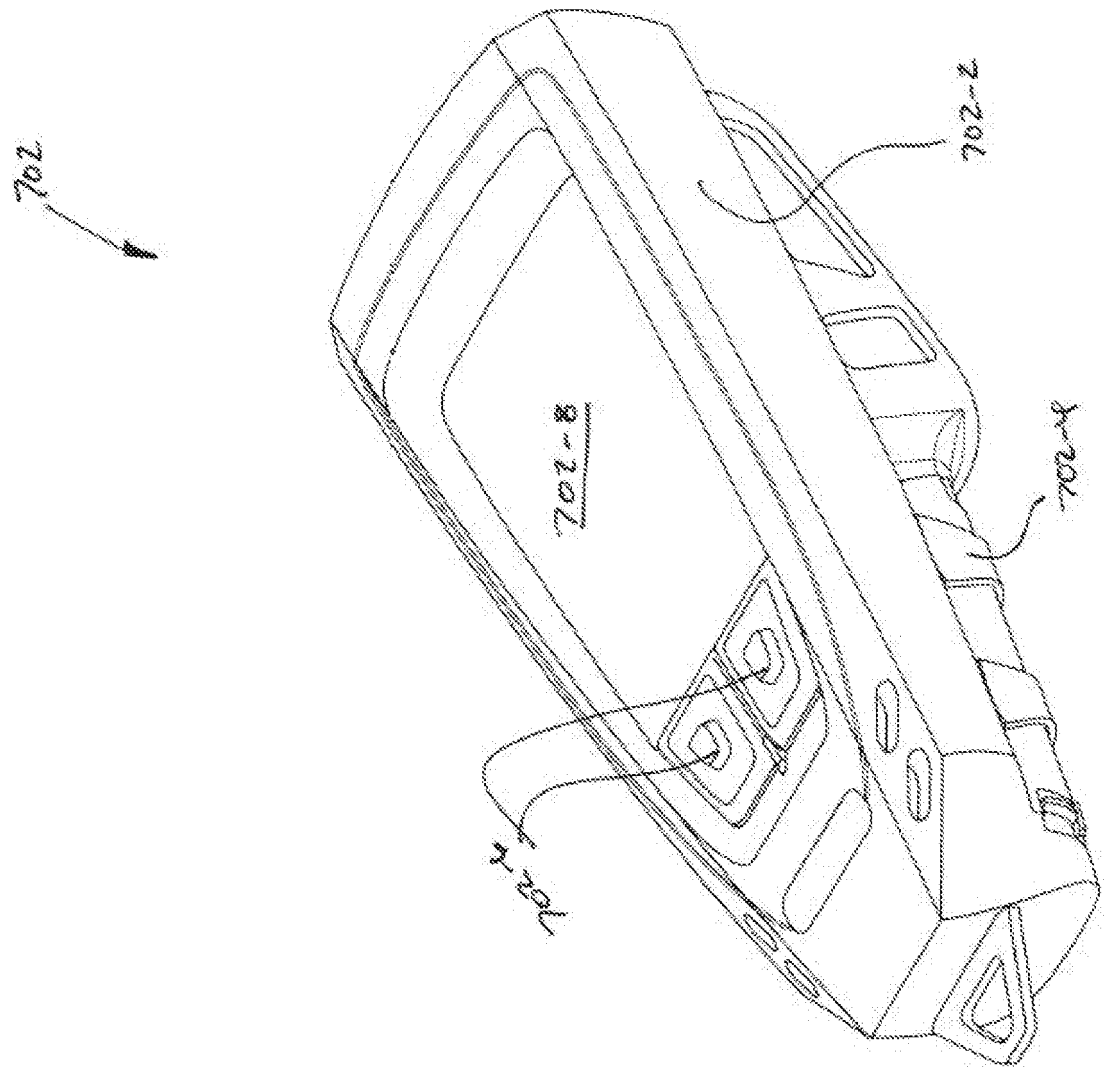


FIG. 7A

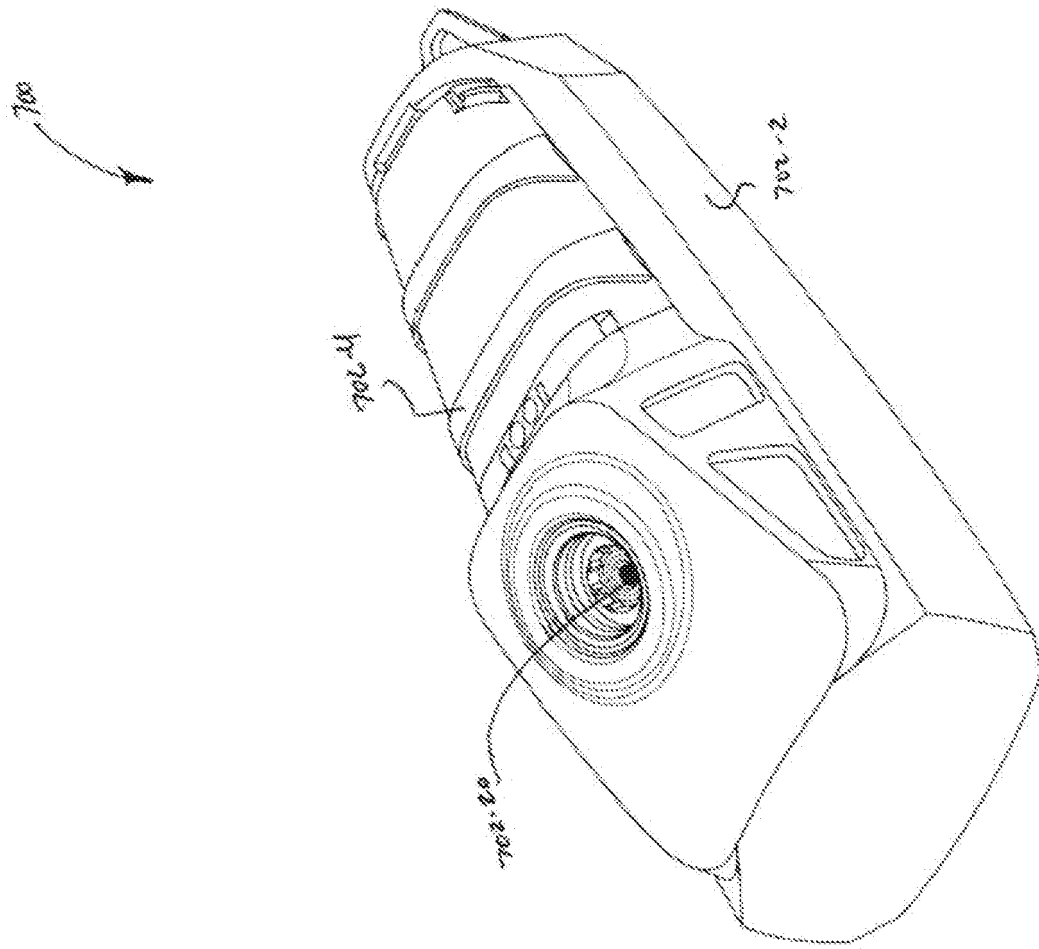


FIG. 7B

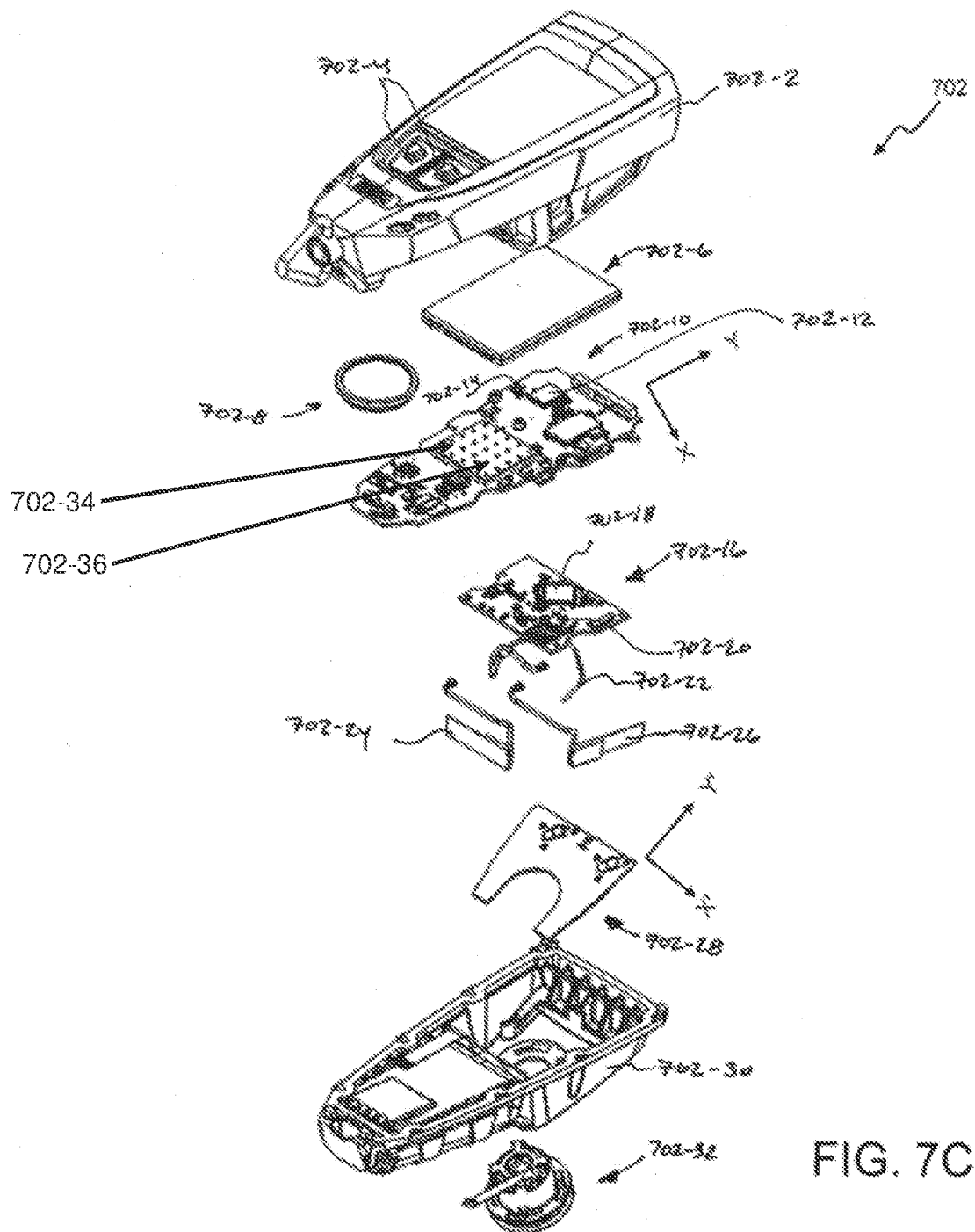


FIG. 7C

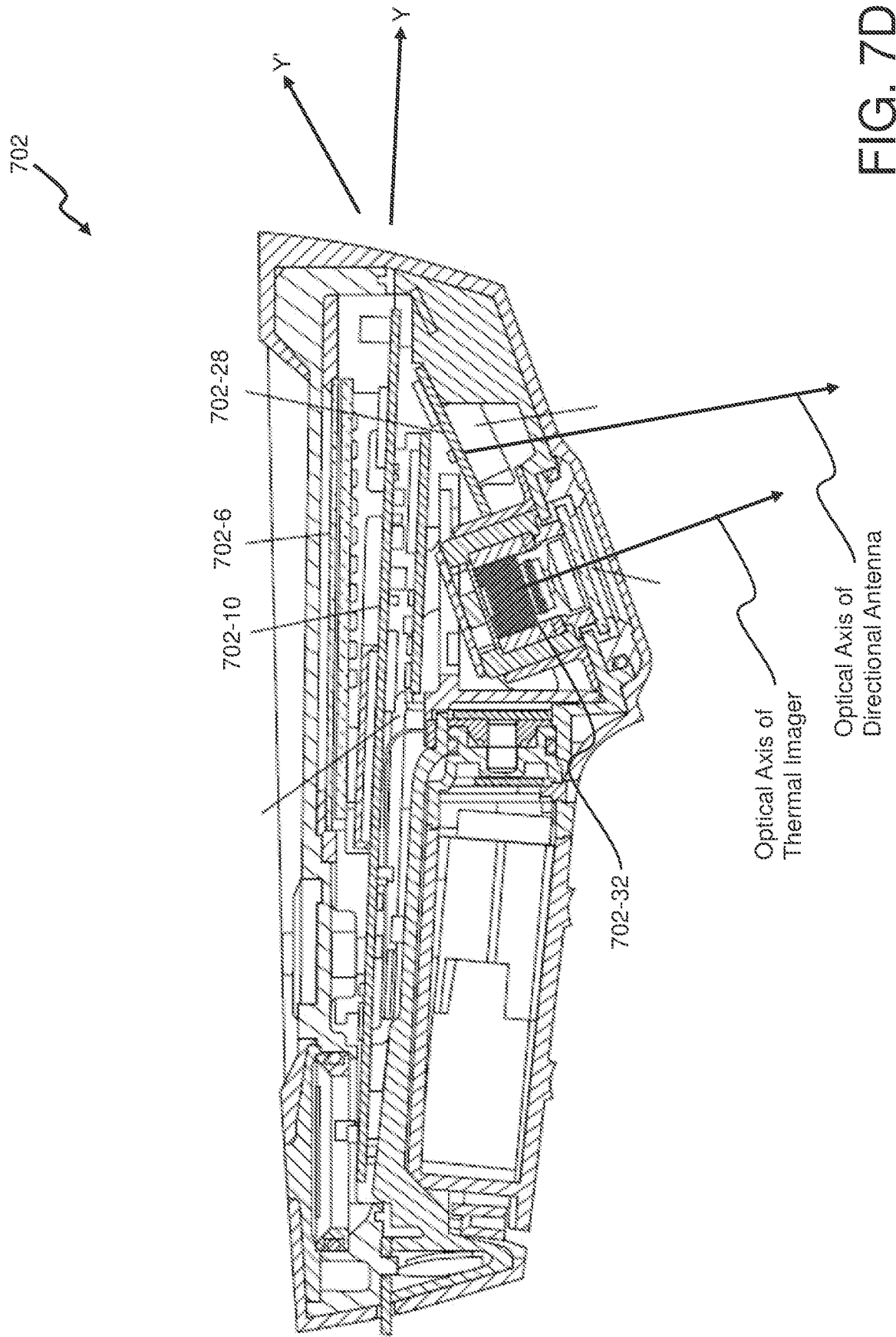


FIG. 7D

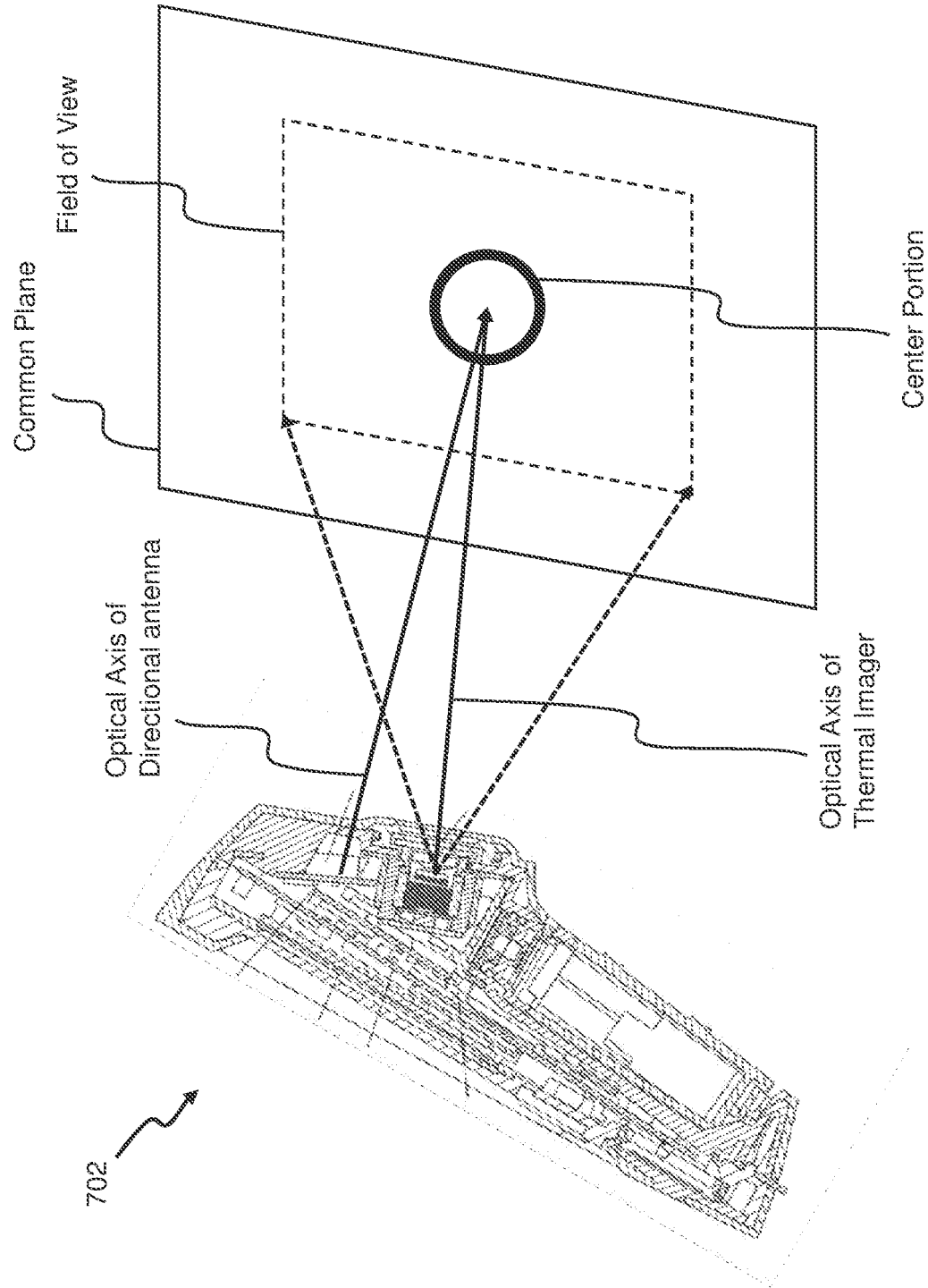


FIG. 7E