FIG. 1

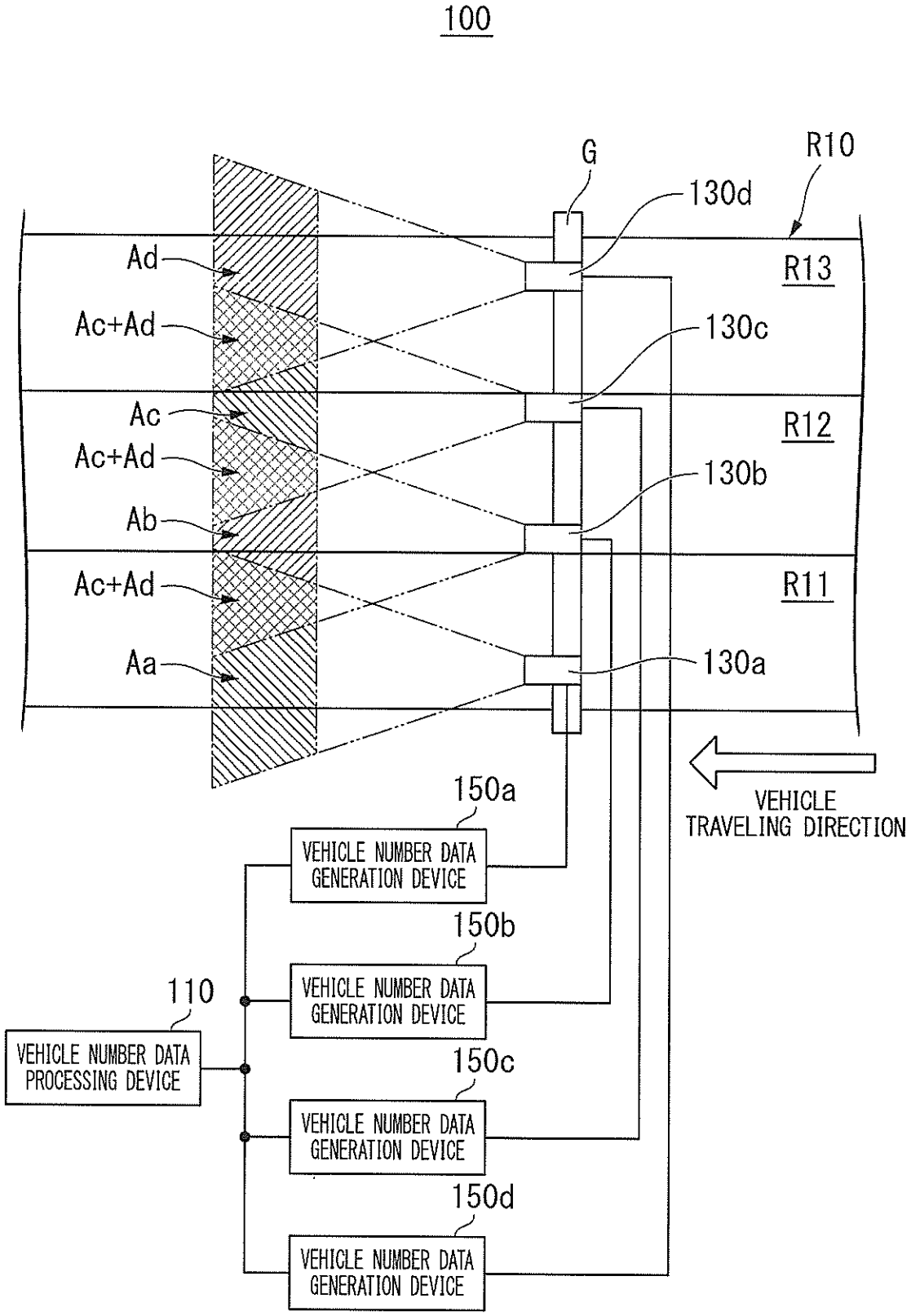

100
G
R10
130d
R13
Ad
Ac+Ad
130c
R12
Ac
Ac+Ad
130b
Ab
R11
Ac+Ad
Aa
130a
VEHICLE
TRAVELING DIRECTION
150a
VEHICLE NUMBER DATA
GENERATION DEVICE
150b
VEHICLE NUMBER DATA
GENERATION DEVICE
110
VEHICLE NUMBER DATA
PROCESSING DEVICE
150c
VEHICLE NUMBER DATA
GENERATION DEVICE
150d
VEHICLE NUMBER DATA
GENERATION DEVICE

FIG. 2

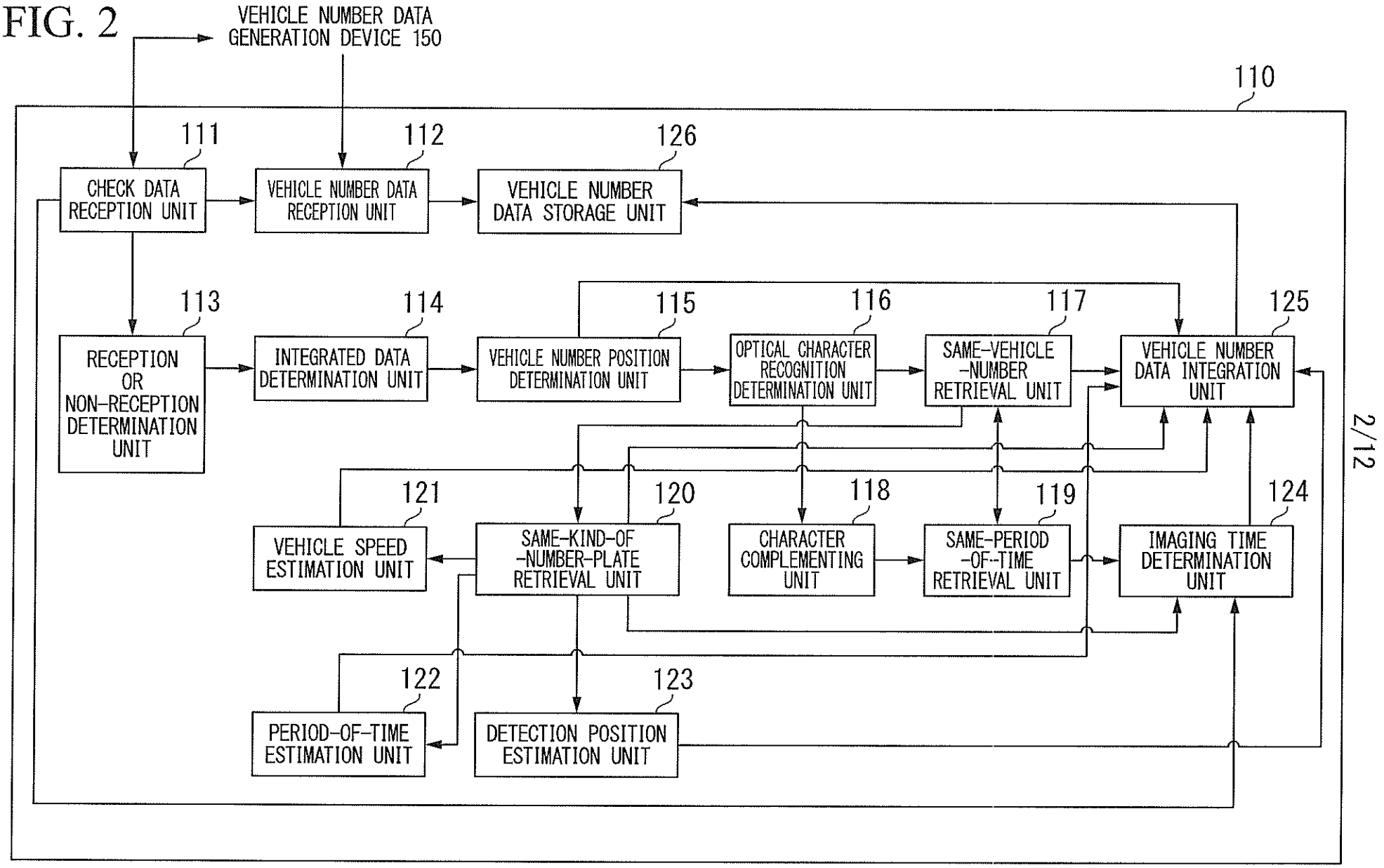

VEHICLE NUMBER DATA GENERATION DEVICE 150
110
111
CHECK DATA RECEPTION UNIT
112
VEHICLE NUMBER DATA RECEPTION UNIT
126
VEHICLE NUMBER DATA STORAGE UNIT
113
RECEPTION OR NON-RECEPTION DETERMINATION UNIT
114
INTEGRATED DATA DETERMINATION UNIT
115
VEHICLE NUMBER POSITION DETERMINATION UNIT
116
OPTICAL CHARACTER RECOGNITION DETERMINATION UNIT
117
SAME-VEHICLE-NUMBER RETRIEVAL UNIT
125
VEHICLE NUMBER DATA INTEGRATION UNIT
121
VEHICLE SPEED ESTIMATION UNIT
120
SAME-KIND-OF-NUMBER-PLATE RETRIEVAL UNIT
118
CHARACTER COMPLEMENTING UNIT
119
SAME-PERIOD-OF-TIME RETRIEVAL UNIT
124
IMAGING TIME DETERMINATION UNIT
122
PERIOD-OF-TIME ESTIMATION UNIT
123
DETECTION POSITION ESTIMATION UNIT
2/12

FIG. 3

127

DATA ID	IMAGE ID	VEHICLE NUMBER	OPTICAL CHARACTER RECOGNITION ESTIMATION VALUE	KIND OF NUMBER PLATE	CENTRAL POSITION OF VEHICLE NUMBER DETECTION REGION	CENTRAL POSITION OF VEHICLE DETECTION REGION	
D0001	A0048	SZA5792B	0.96	FOUR WHEELS, TWO STAGES	(X11、Y11)	(X12、Y12)	
D0002	B0326	SZA5792B	0.91	FOUR WHEELS, TWO STAGES	(X21、Y21)	(X22、Y22)	
D0003	A0059	?BH3518E	0.49	FOUR WHEELS, ONE STAGE	(X31、Y31)	(X32、Y32)	
⋮	⋮	⋮	⋮	⋮	⋮	⋮	

FIG. 4

127

DATA ID		VEHICLE DETECTION ESTIMATION VALUE	VEHICLE SPEED (km/h)	IMAGING TIME (YEAR/MONTH/DAY/HOUR:MINUTE:SECOND)	CAMERA ID	
D0001		1.0	79	2011/07/15/16:08:20.10	130a	
D0002		1.0	81	2011/07/15/16:08:20.15	130b	
D0003		1.0	75	2011/07/15/16:08:21.10	130a	
⋮		⋮	⋮	⋮	⋮	

FIG. 5

127

DATA ID		INITIAL DETECTION TIME (YEAR/MONTH/DAY/HOUR:MINUTE:SECOND)	FINAL DETECTION TIME (YEAR/MONTH/DAY/HOUR:MINUTE:SECOND)	NUMBER OF VEHICLES (VEHICLES)	DETECTION POSITION (VEHICLE SEQUENCE)	
D0001		2011/07/15/16:08:20.05	2011/07/15/16:08:20.20	2	2	
D0002		2011/07/15/16:08:20.10	2011/07/15/16:08:20.20	2	1	
D0003		2011/07/15/16:08:21.05	2011/07/15/16:08:21.25	1	1	
⋮		⋮	⋮	⋮	⋮	

FIG. 6

127

DATA ID		CHECK DATA RECEPTION TIME (YEAR/MONTH/DAY/HOUR:MINUTE:SECOND)	IS INTEGRATION COMPLETED? (Yes or No)
D0001		2011/07/15/16:08:21.00	No
D0002		2011/07/15/16:08:21.00	No
D0003		2011/07/15/16:08:22.05	No
⋮		⋮	⋮

FIG. 7

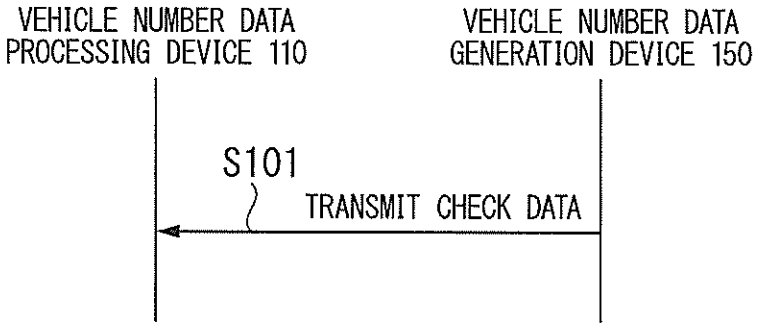


FIG. 8

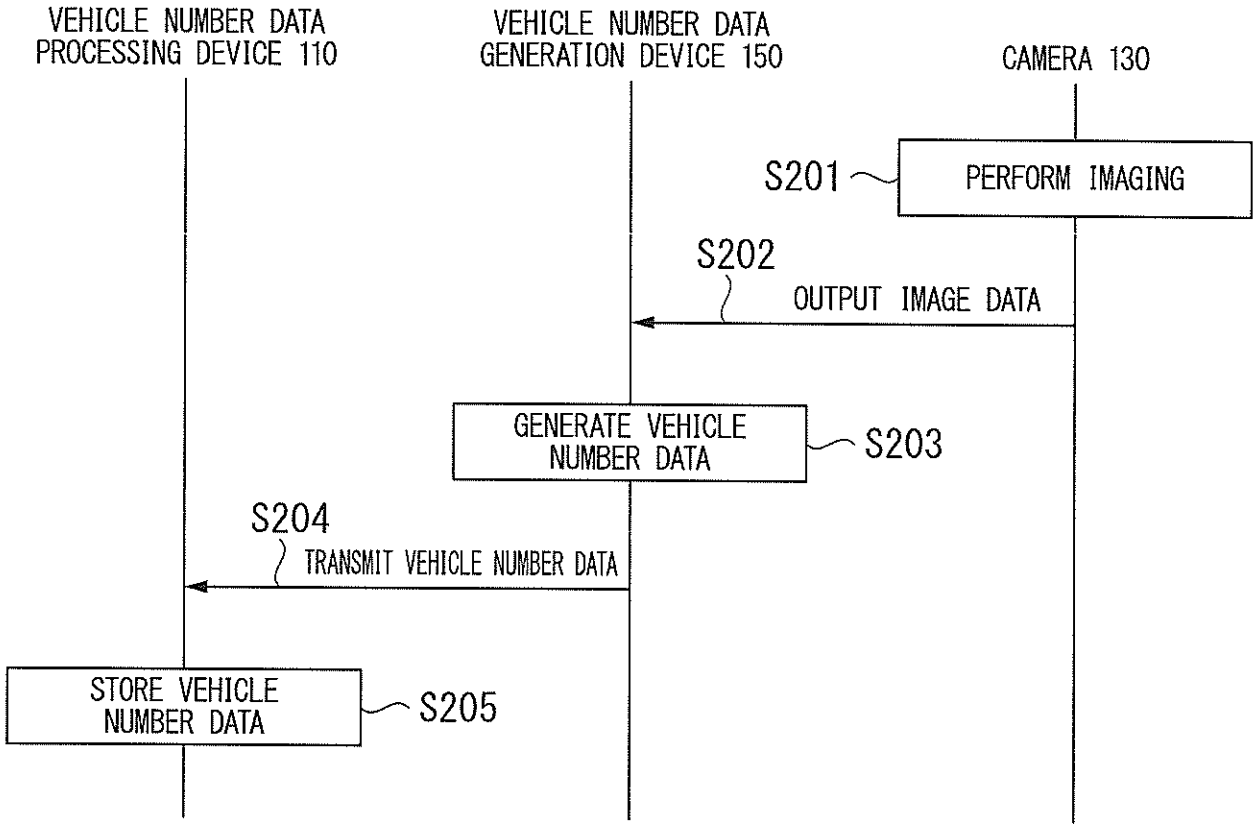

VEHICLE NUMBER DATA PROCESSING DEVICE 110
VEHICLE NUMBER DATA GENERATION DEVICE 150
CAMERA 130
S201
PERFORM IMAGING
S202
OUTPUT IMAGE DATA
GENERATE VEHICLE NUMBER DATA
S203
S204
TRANSMIT VEHICLE NUMBER DATA
STORE VEHICLE NUMBER DATA
S205

FIG. 9

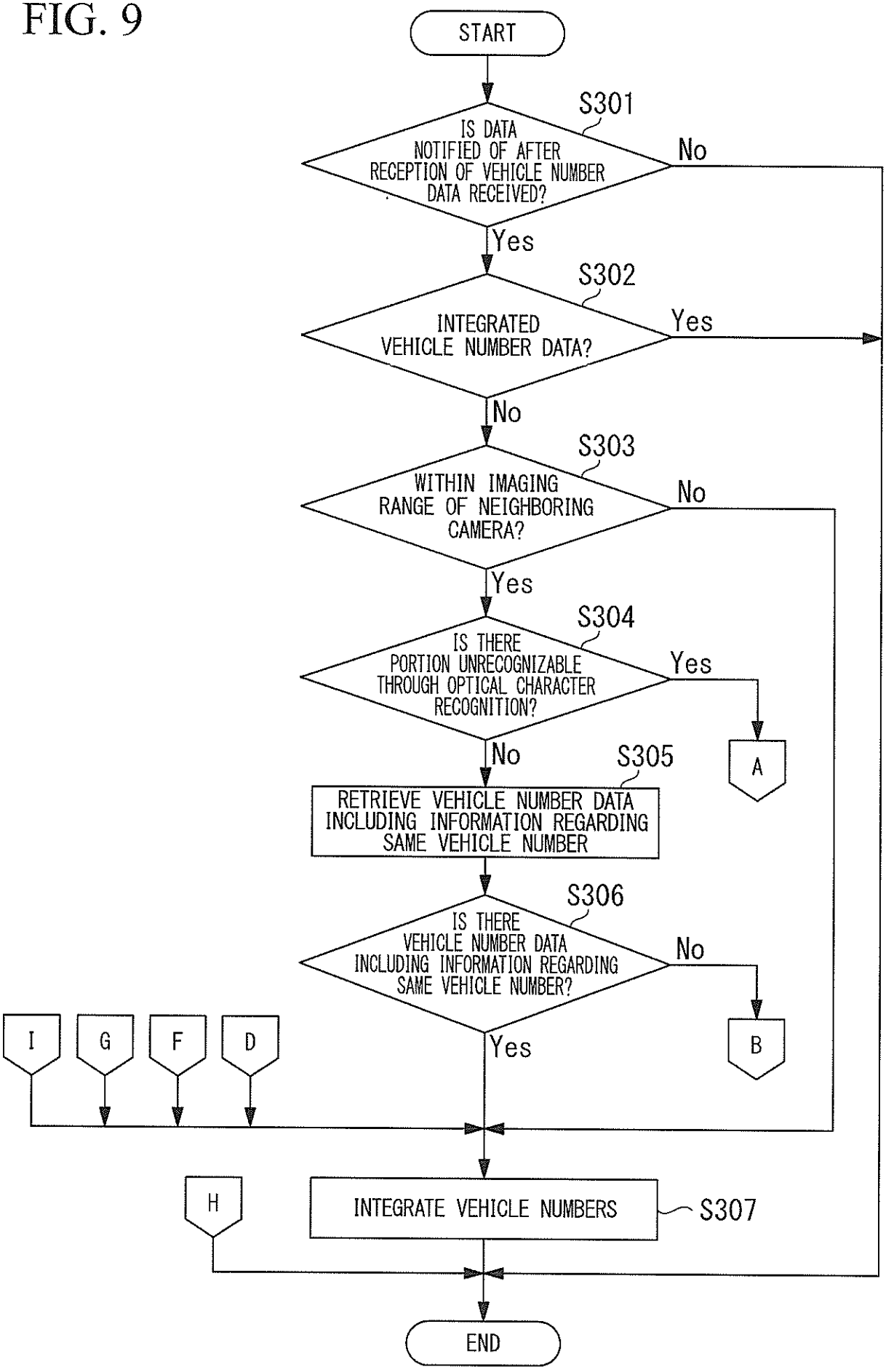

START
S301
IS DATA NOTIFIED OF AFTER RECEPTION OF VEHICLE NUMBER DATA RECEIVED?
No
Yes
S302
INTEGRATED VEHICLE NUMBER DATA?
Yes
No
S303
WITHIN IMAGING RANGE OF NEIGHBORING CAMERA?
No
Yes
S304
IS THERE PORTION UNRECOGNIZABLE THROUGH OPTICAL CHARACTER RECOGNITION?
Yes
A
No
S305
RETRIEVE VEHICLE NUMBER DATA INCLUDING INFORMATION REGARDING SAME VEHICLE NUMBER
S306
IS THERE VEHICLE NUMBER DATA INCLUDING INFORMATION REGARDING SAME VEHICLE NUMBER?
No
B
Yes
I
G
F
D
H
INTEGRATE VEHICLE NUMBERS
S307
END

FIG. 10

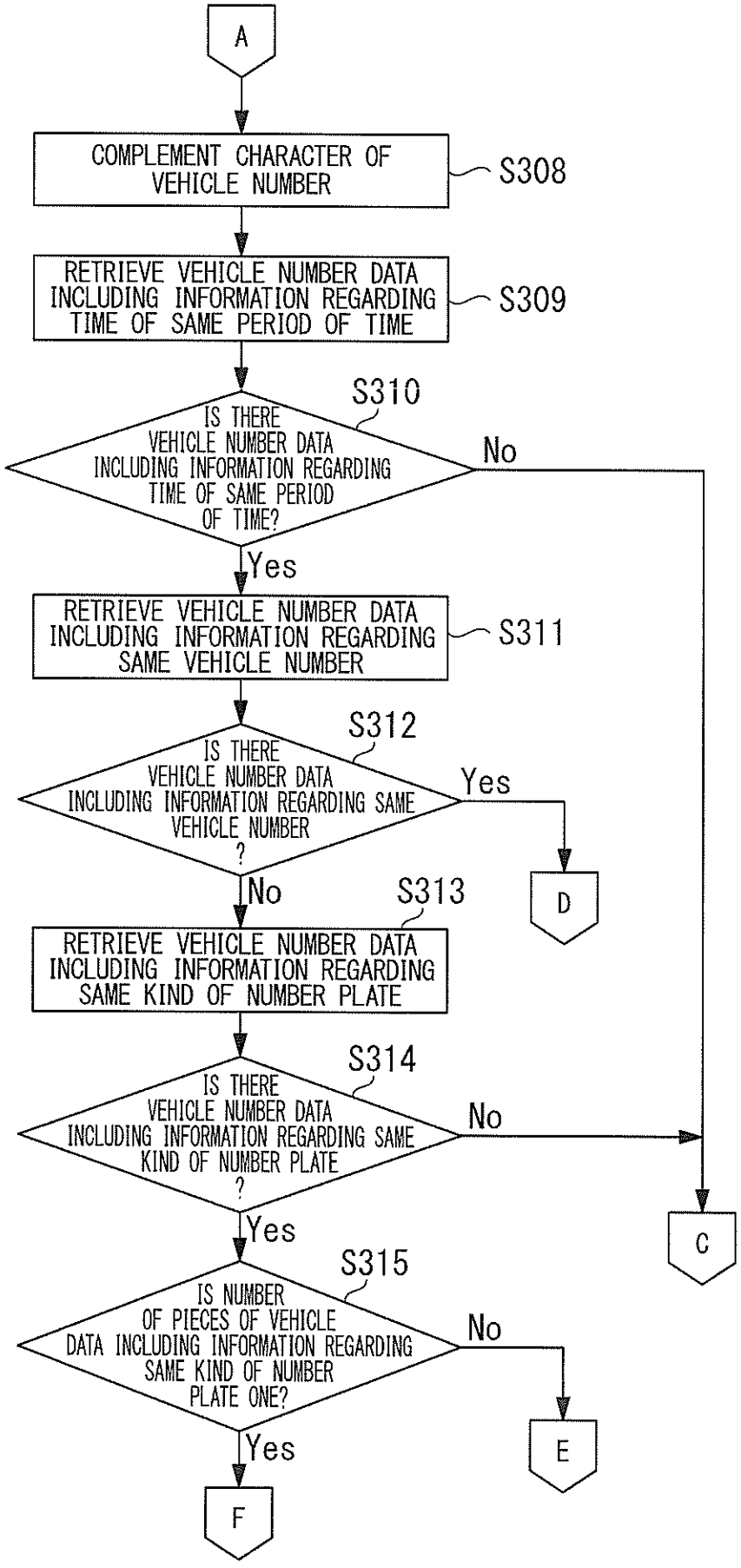

A
COMPLEMENT CHARACTER OF VEHICLE NUMBER
S308
RETRIEVE VEHICLE NUMBER DATA INCLUDING INFORMATION REGARDING TIME OF SAME PERIOD OF TIME
S309
S310
IS THERE VEHICLE NUMBER DATA INCLUDING INFORMATION REGARDING TIME OF SAME PERIOD OF TIME?
No
Yes
RETRIEVE VEHICLE NUMBER DATA INCLUDING INFORMATION REGARDING SAME VEHICLE NUMBER
S311
S312
IS THERE VEHICLE NUMBER DATA INCLUDING INFORMATION REGARDING SAME VEHICLE NUMBER ?
Yes
No
D
S313
RETRIEVE VEHICLE NUMBER DATA INCLUDING INFORMATION REGARDING SAME KIND OF NUMBER PLATE
S314
IS THERE VEHICLE NUMBER DATA INCLUDING INFORMATION REGARDING SAME KIND OF NUMBER PLATE ?
No
Yes
C
S315
IS NUMBER OF PIECES OF VEHICLE DATA INCLUDING INFORMATION REGARDING SAME KIND OF NUMBER PLATE ONE?
No
Yes
E
F

FIG. 11

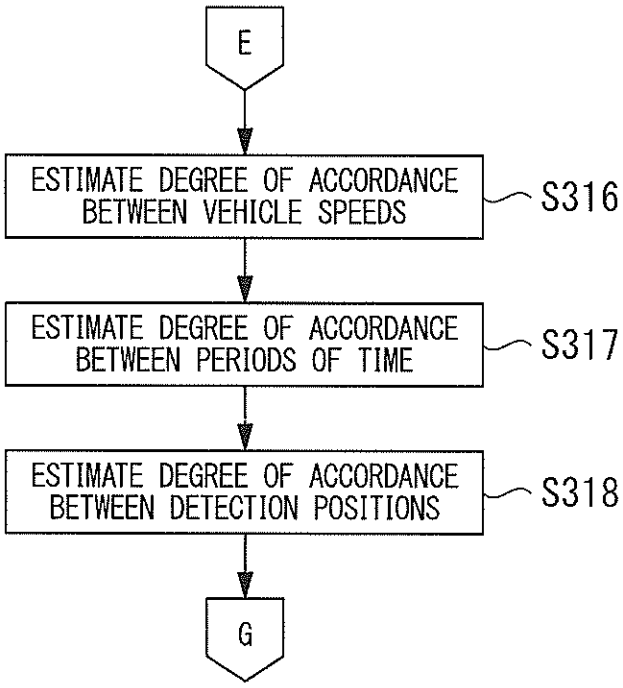

E
ESTIMATE DEGREE OF ACCORDANCE BETWEEN VEHICLE SPEEDS
S316
ESTIMATE DEGREE OF ACCORDANCE BETWEEN PERIODS OF TIME
S317
ESTIMATE DEGREE OF ACCORDANCE BETWEEN DETECTION POSITIONS
S318
G

FIG. 12

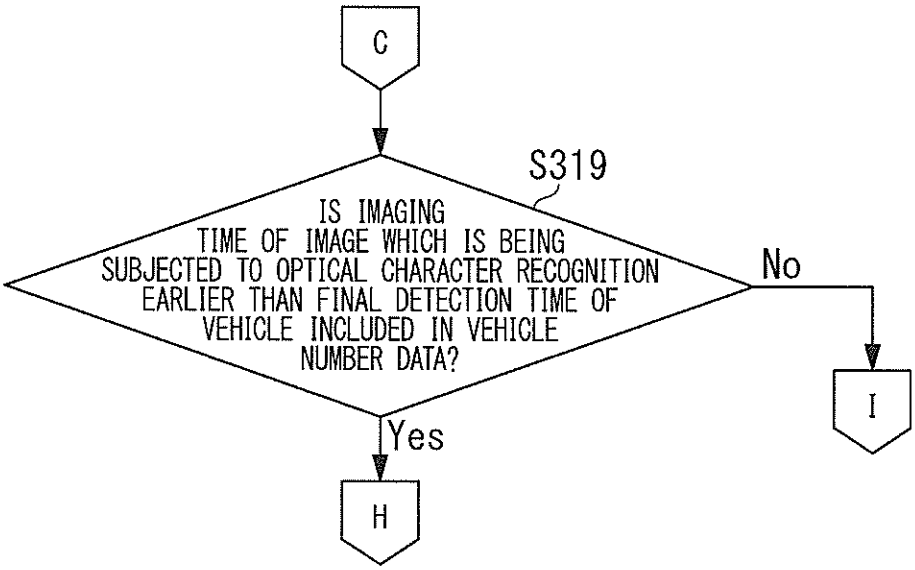

C
S319
IS IMAGING TIME OF IMAGE WHICH IS BEING SUBJECTED TO OPTICAL CHARACTER RECOGNITION EARLIER THAN FINAL DETECTION TIME OF VEHICLE INCLUDED IN VEHICLE NUMBER DATA?
No
I
Yes
H

FIG. 13

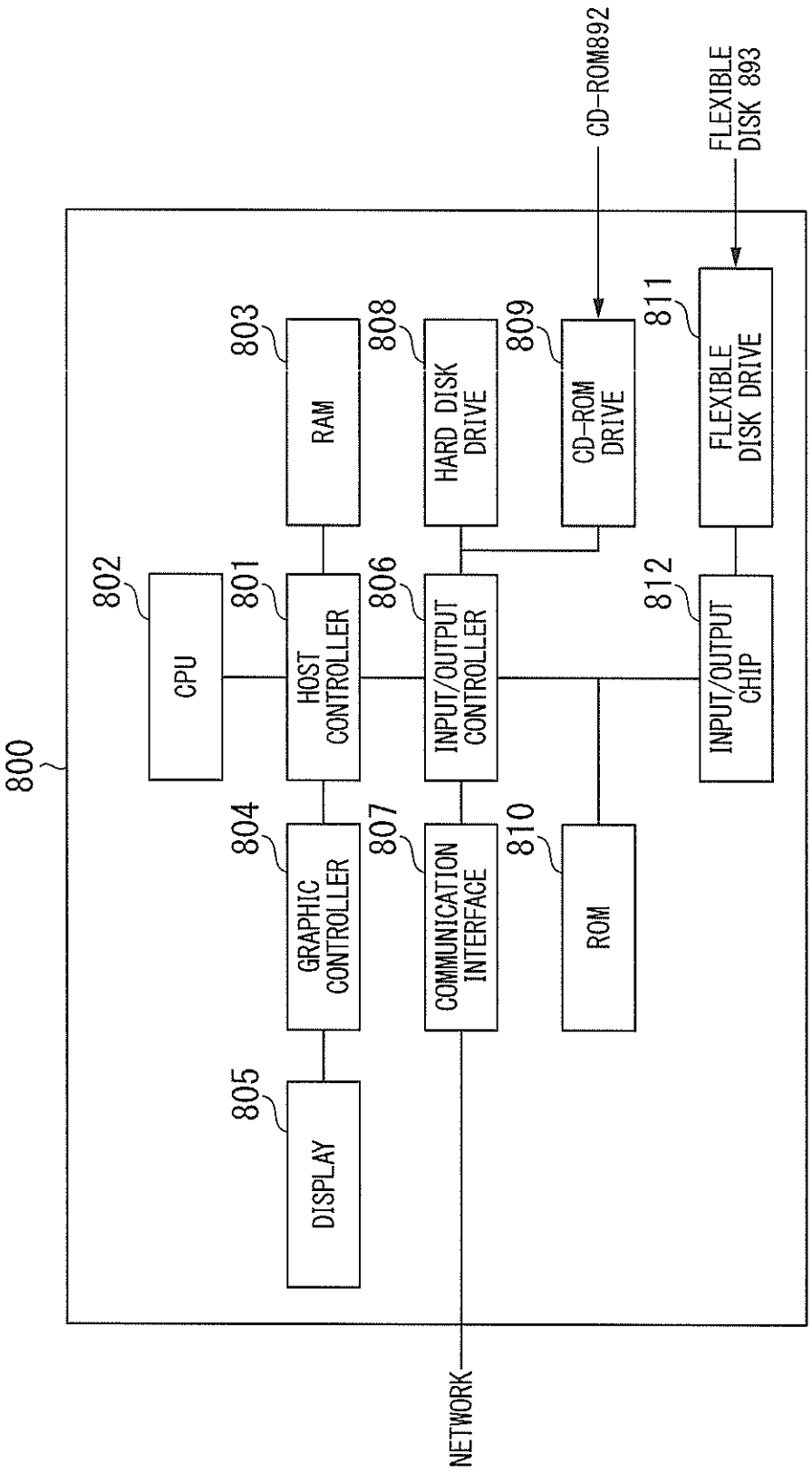
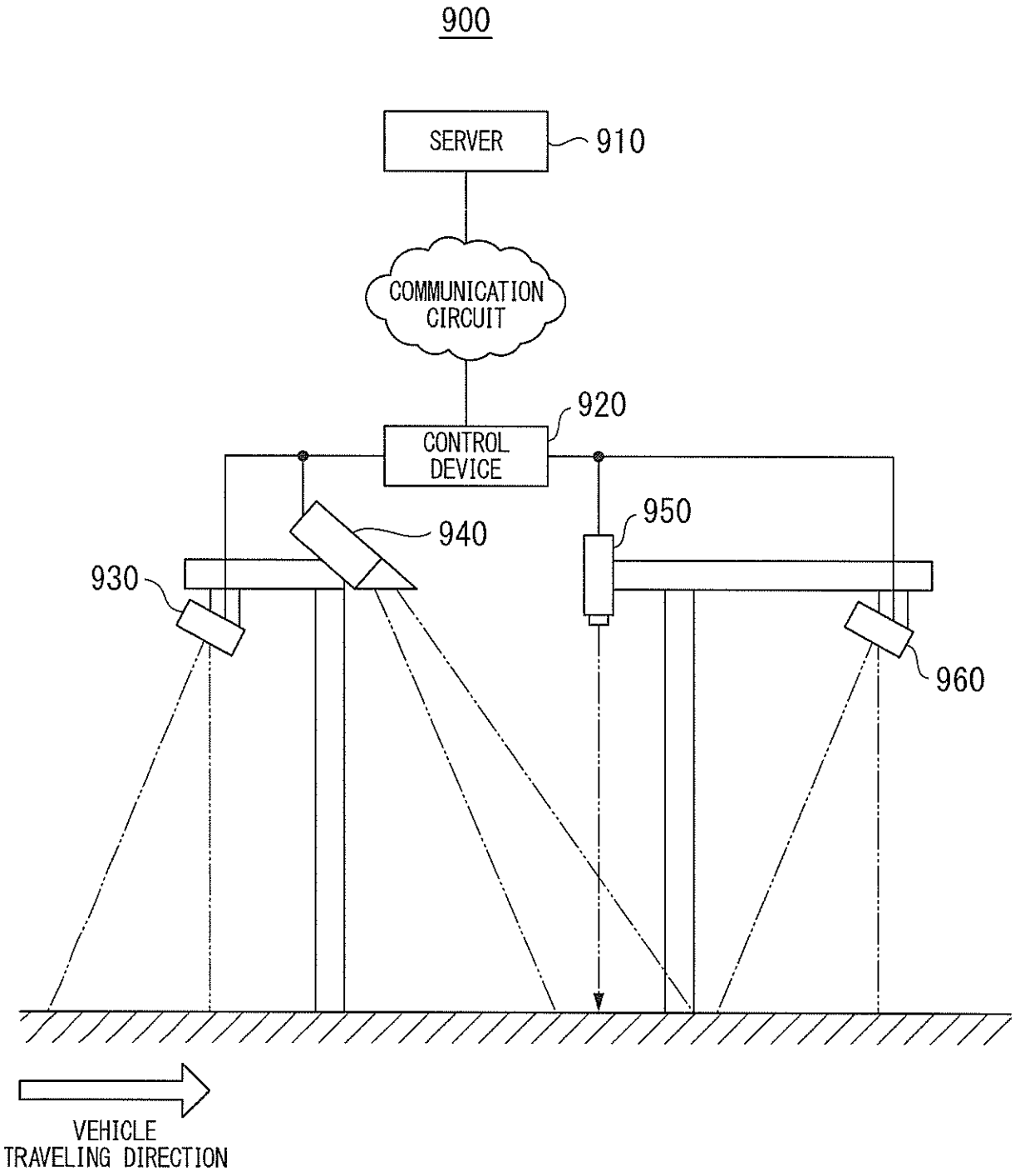

800
CPU
802
HOST CONTROLLER
801
RAM
803
INPUT/OUTPUT CONTROLLER
806
HARD DISK DRIVE
808
INPUT/OUTPUT CHIP
812
CD-ROM DRIVE
809
FLEXIBLE DISK DRIVE
811
GRAPHIC CONTROLLER
804
COMMUNICATION INTERFACE
807
ROM
810
DISPLAY
805
CD-ROM892
FLEXIBLE DISK 893
NETWORK

FIG. 14


900
SERVER
910
COMMUNICATION CIRCUIT
920
CONTROL DEVICE
940
950
930
960
VEHICLE TRAVELING DIRECTION