FIG.1

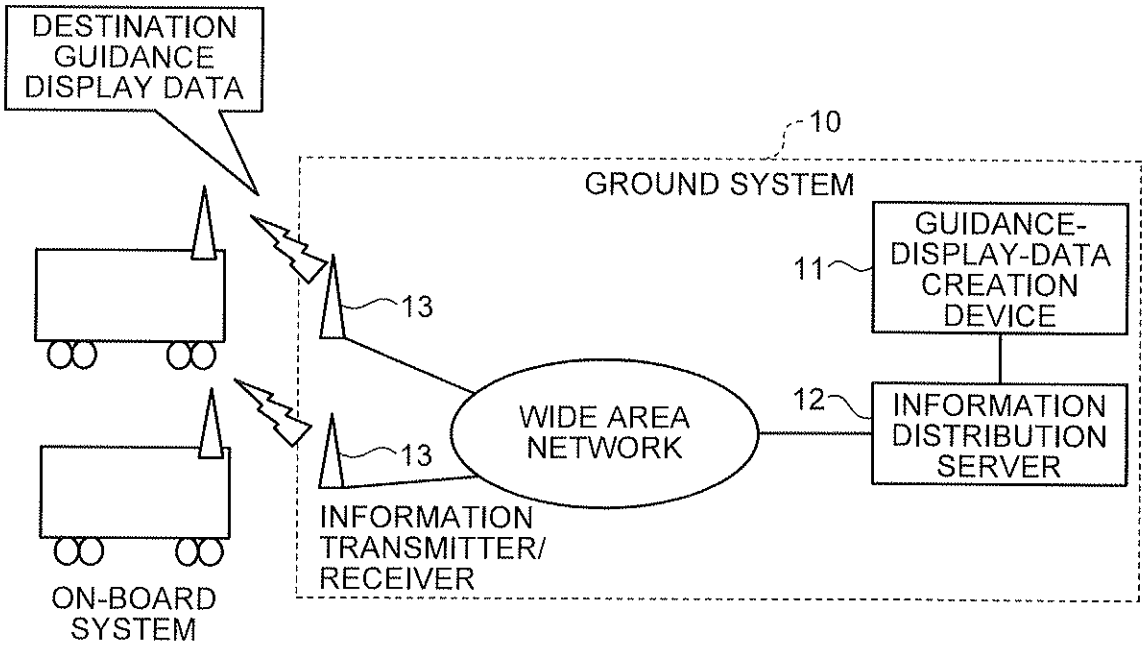

DESTINATION GUIDANCE DISPLAY DATA
10
GROUND SYSTEM
GUIDANCE-DISPLAY-DATA CREATION DEVICE
11
13
WIDE AREA NETWORK
12
INFORMATION DISTRIBUTION SERVER
13
INFORMATION TRANSMITTER/ RECEIVER
ON-BOARD SYSTEM

FIG.2

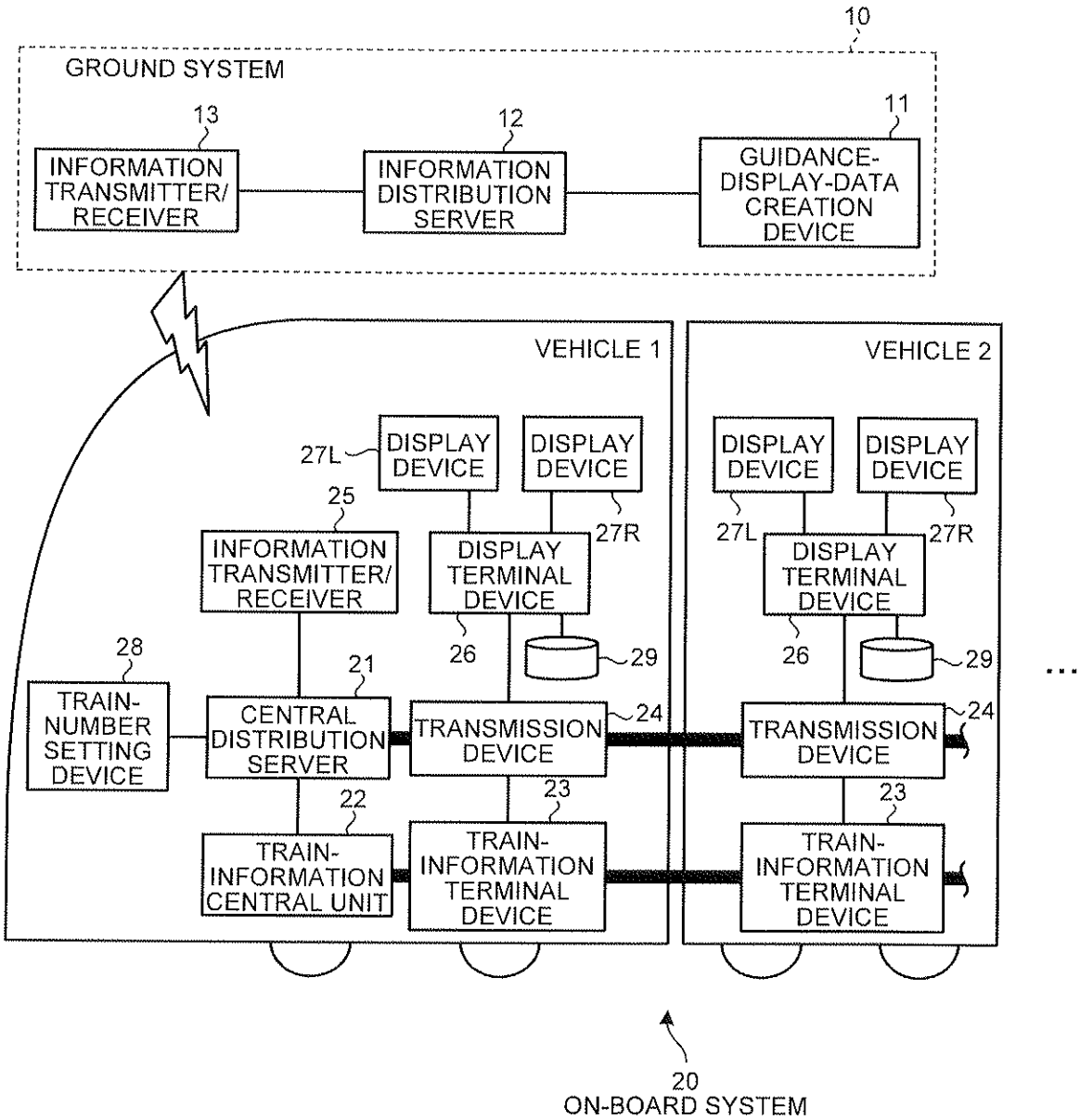

10
GROUND SYSTEM
13
INFORMATION TRANSMITTER/ RECEIVER
12
INFORMATION DISTRIBUTION SERVER
11
GUIDANCE-DISPLAY-DATA CREATION DEVICE
VEHICLE 1
VEHICLE 2
27L
DISPLAY DEVICE
DISPLAY DEVICE
27R
25
INFORMATION TRANSMITTER/ RECEIVER
DISPLAY TERMINAL DEVICE
26
29
28
TRAIN-NUMBER SETTING DEVICE
21
CENTRAL DISTRIBUTION SERVER
TRANSMISSION DEVICE
24
22
TRAIN-INFORMATION CENTRAL UNIT
23
TRAIN-INFORMATION TERMINAL DEVICE
20
ON-BOARD SYSTEM

FIG.3

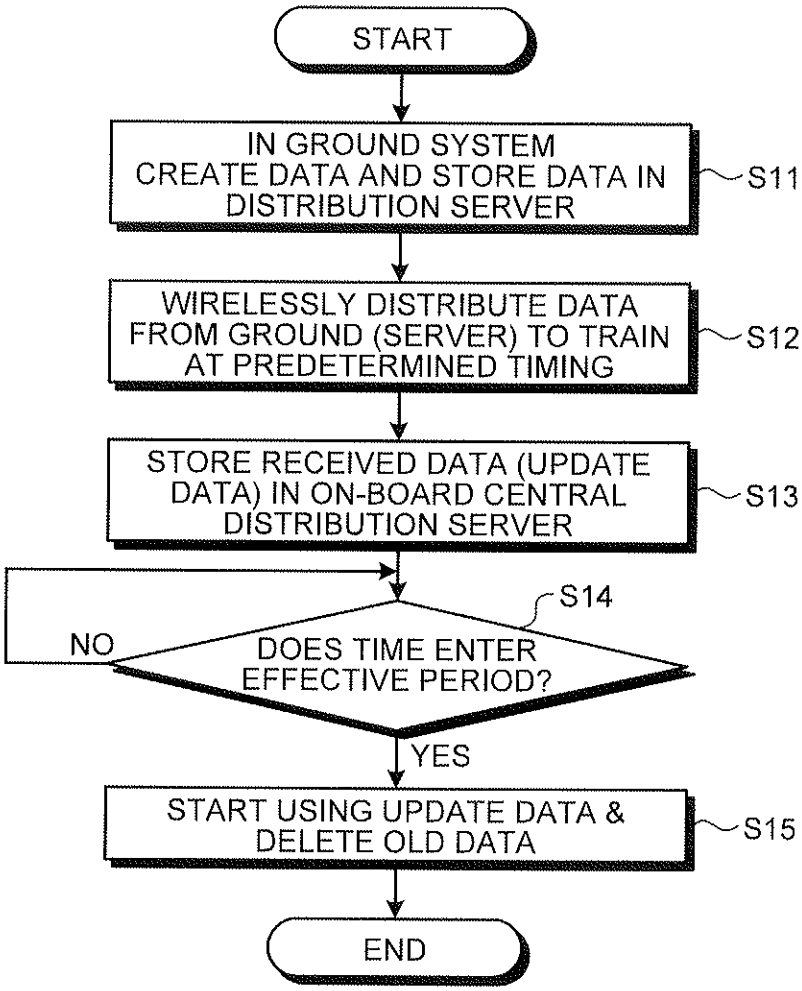

START
IN GROUND SYSTEM CREATE DATA AND STORE DATA IN DISTRIBUTION SERVER
S11
WIRELESSLY DISTRIBUTE DATA FROM GROUND (SERVER) TO TRAIN AT PREDETERMINED TIMING
S12
STORE RECEIVED DATA (UPDATE DATA) IN ON-BOARD CENTRAL DISTRIBUTION SERVER
S13
S14
DOES TIME ENTER EFFECTIVE PERIOD?
NO
YES
START USING UPDATE DATA & DELETE OLD DATA
S15
END

FIG.4

No.	OPERATING DAY	WORK NUMBER	TRAIN ORDER	TRAIN NUMBER	START STATION	LAST STATION	TRAIN TYPE	PATTERN CODE
1	SATURDAYS AND HOLIDAYS	101	1	3209M	A	B	RAPID C	30
2	SATURDAYS AND HOLIDAYS	102	1	3204M	C	D	RAPID C	30
3	SATURDAYS AND HOLIDAYS	102	2	3104M	D	E	RAPID C	30
4	SATURDAYS AND HOLIDAYS	102	3	3139M	E	D	RAPID C	30
5	SATURDAYS AND HOLIDAYS	102	4	3239M	D	B	RAPID C	30
6	SATURDAYS AND HOLIDAYS	102	5	3264M	B	D	RAPID C	30
7	SATURDAYS AND HOLIDAYS	102	6	3164M	D	E	RAPID C	30
8	SATURDAYS AND HOLIDAYS	102	7	8301M	E	D	LOCAL	1
9	SATURDAYS AND HOLIDAYS	102	8	3301M	F	G	RAPID C	30
10	SATURDAYS AND HOLIDAYS	102	9	3301M	G	C	RAPID C	30
11	SATURDAYS AND HOLIDAYS	103	1	3224M	C	H	RAPID C	30
12	SATURDAYS AND HOLIDAYS	103	2	3224M	H	D	RAPID C	30
13	SATURDAYS AND HOLIDAYS	103	3	3124M	D	E	RAPID C	30
14	SATURDAYS AND HOLIDAYS	103	4	3155M	E	D	RAPID C	30
15	SATURDAYS AND HOLIDAYS	103	5	3255M	D	B	RAPID C	30
16	SATURDAYS AND HOLIDAYS	103	6	806T	B	G	RAPID	40
17	SATURDAYS AND HOLIDAYS	103	7	3228F	G	I	LOCAL	1
18	SATURDAYS AND HOLIDAYS	104	1	3203F	I	G	LOCAL	1
19	SATURDAYS AND HOLIDAYS	104	2	731T	G	B	RAPID	40
20	SATURDAYS AND HOLIDAYS	104	3	758T	B	G	RAPID	40
21	SATURDAYS AND HOLIDAYS	104	4	783T	G	B	RAPID	40
22	SATURDAYS AND HOLIDAYS	104	5	3310M	B	G	RAPID C	30
23	SATURDAYS AND HOLIDAYS	104	6	923K	G	H	LOCAL	1
24	SATURDAYS AND HOLIDAYS	105	1	3247M	D	B	RAPID C	30
25	SATURDAYS AND HOLIDAYS	105	2	3296M	B	A	RAPID C	30
26	SATURDAYS AND HOLIDAYS	105	3	3313M	A	C	RAPID C	30
27	SATURDAYS AND HOLIDAYS	106	4	3214M	C	G	RAPID C	30
28	SATURDAYS AND HOLIDAYS	106	5	3281M	G	B	RAPID C	30
29	SATURDAYS AND HOLIDAYS	106	6	3281M	B	J	RAPID C	30
30	SATURDAYS AND HOLIDAYS	106	7	370M	J	B	LOCAL	1
31	SATURDAYS AND HOLIDAYS	106	8	317M	B	K	LOCAL	1
32	SATURDAYS AND HOLIDAYS	106	9	316M	K	B	LOCAL	1
33	SATURDAYS AND HOLIDAYS	107	1	7227	B	G	RAPID	40
34	SATURDAYS AND HOLIDAYS	107	2	3233M	G	B	RAPID C	30
35	SATURDAYS AND HOLIDAYS	107	3	3278M	B	G	RAPID C	30
36	SATURDAYS AND HOLIDAYS	107	4	3305M	G	B	RAPID C	30
37	SATURDAYS AND HOLIDAYS	107	5	3322M	B	A	RAPID C	30
38	SATURDAYS AND HOLIDAYS	108	1	743T	A	L	RAPID	40
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG.5

No.		code	1	30	40	41	・
	LINE NAME	TRAIN TYPE / STATION NAME	LOCAL	RAPID C	RAPID A	RAPID B	⋮
⋮	XXX MAINLINE	⋮	⋮	⋮	⋮	⋮	⋮
281		STATION #1	○	○	○	○	・
282		STATION #2	○	○	○	○	・
283		STATION #3	○	|	○	○	・
284		STATION #4	○	|	○	○	・
285		STATION #5	○	|	○	○	・
286		STATION #6	○	○	○	○	・
287		STATION #7	○	|	○	○	・
288		STATION #8	○	○	○	○	・
289		STATION #9	○	|	○	○	・
290		STATION #10	○	○	○	○	・
⋮		⋮	⋮	⋮	⋮	⋮	⋮
314		STATION #34	○	○	○	○	・
315		STATION #35	○	○	○	○	・
316		STATION #36	○	|	|	|	・
317		STATION #37	○	○	○	○	・
318		STATION #38	○	|	|	|	・
319		STATION #39	○	|	|	|	・
320		STATION #40	○	|	○	○	・
321		STATION #41	○	|	|	|	・
322		STATION #42	○	○	○	○	・
323		STATION #43	○	|	|	|	・
324		STATION #44	○	|	|	|	・
325		STATION #45	○	|	○	○	・
326		STATION #46	○	|	○	○	・
327		STATION #47	○	|	|	|	・
328		STATION #48	○	○	○	○	・
329		STATION #49	○	|	○	○	・
330		STATION #50	○	○	○	○	・
331		STATION #51	○	|	○	○	・
332		STATION #52	○	|	|	|	・
333		STATION #53	○	|	|	|	・
334		STATION #54	○	|	|	|	・
335		STATION #55	○	|	○	○	・
336		STATION #56	○	|	|	|	・
337		STATION #57	○	|	○	○	・
338		STATION #58	○	|	○	○	・
339		STATION #59	○	|	|	|	・
340		STATION #60	○	○	○	○	・
⋮		⋮	⋮	⋮	⋮	⋮	⋮

FIG.6

TRAIN NUMBER DATA
<EFFECTIVE PERIOD data>
  <DATE>
    START=14th March, 2010 3:00
    END=14th March, 2011 2:59
  </DATE>
</EFFECTIVE PERIOD data>
<TRAIN NUMBER DATA>
  <TRAIN NUMBER LIST>
    <TRAIN NUMBER TYPE=1> 1=WEEKDAY
      WORK NUMBER=101, TRAIN NUMBER=3407, TYPE CODE=5, START STATION CODE=290,
      TERMINAL STATION CODE=354, PATTERN CODE=30
      WORK NUMBER=102, TRAIN NUMBER=3410, TYPE CODE=5, START STATION CODE=354,
      TERMINAL STATION CODE=300, PATTERN CODE=30
      WORK NUMBER =102, TRAIN NUMBER=3800, TYPE CODE=5, START STATION CODE=300,
      TERMINAL STATION CODE=234, PATTERN CODE=30
      WORK NUMBER=102, TRAIN NUMBER=3890, TYPE CODE=5, START STATION CODE=234,
      TERMINAL STATION CODE=211, PATTERN CODE=30
        .
        .
        .
    </TRAIN NUMBER TYPE>
  </TRAIN NUMBER LIST>
</TRAIN NUMBER DATA>

FIG.7

DESTINATION GUIDANCE-DISPLAY CONTROL DATA

<STOP STATION CODE>
<STOP STATION CODE_LIST>
<STOP STATION_code=1>
•
STATION #35=315
STATION #36=316
STATION #37=317
•
</STOP STATION_code>
<STOP STATION_code=30>
•
STATION #35=315
STATION #37=317
STATION #42=322
•
</STOP STATION_code>
<STOP STATION_code=40>
•
STATION #35=315
STATION #37=317
STATION #40=320
•
</STOP STATION_code>
<STOP STATION_code=41>
•
STATION #35=315
STATION #37=317
STATION #40=320
•
</STOP STATION_code>
•
•
</STOP STATION CODE_LIST>
</STOP STATION CODE>

FIG.8

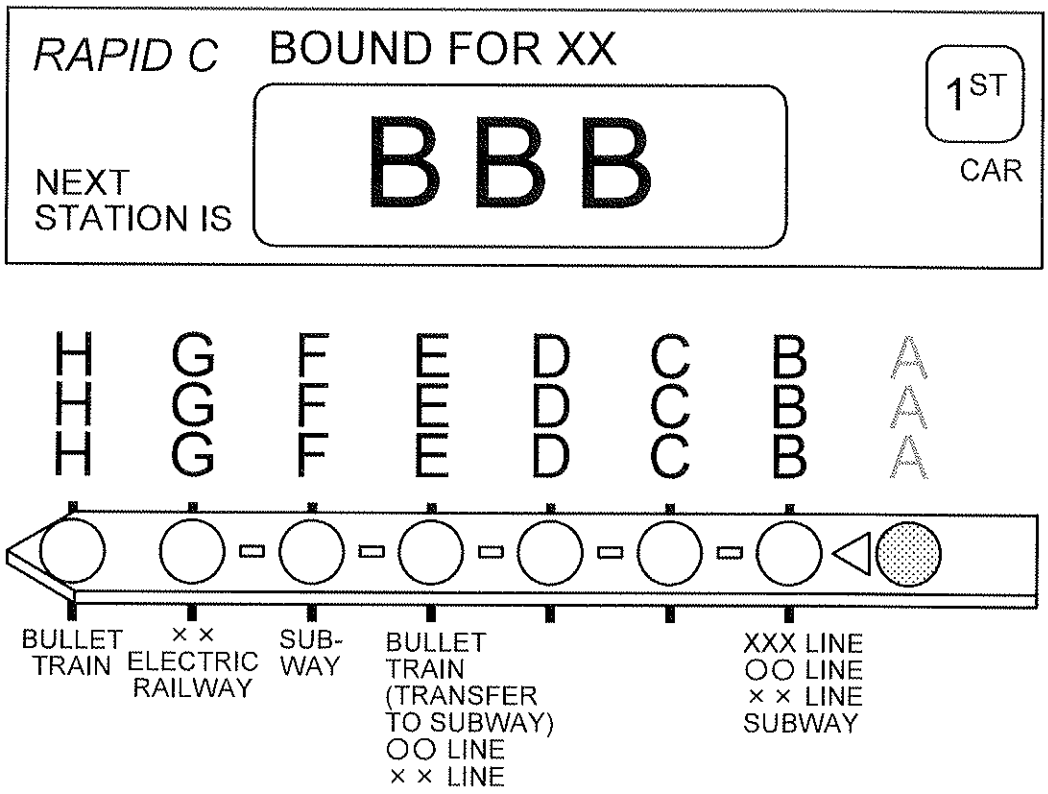
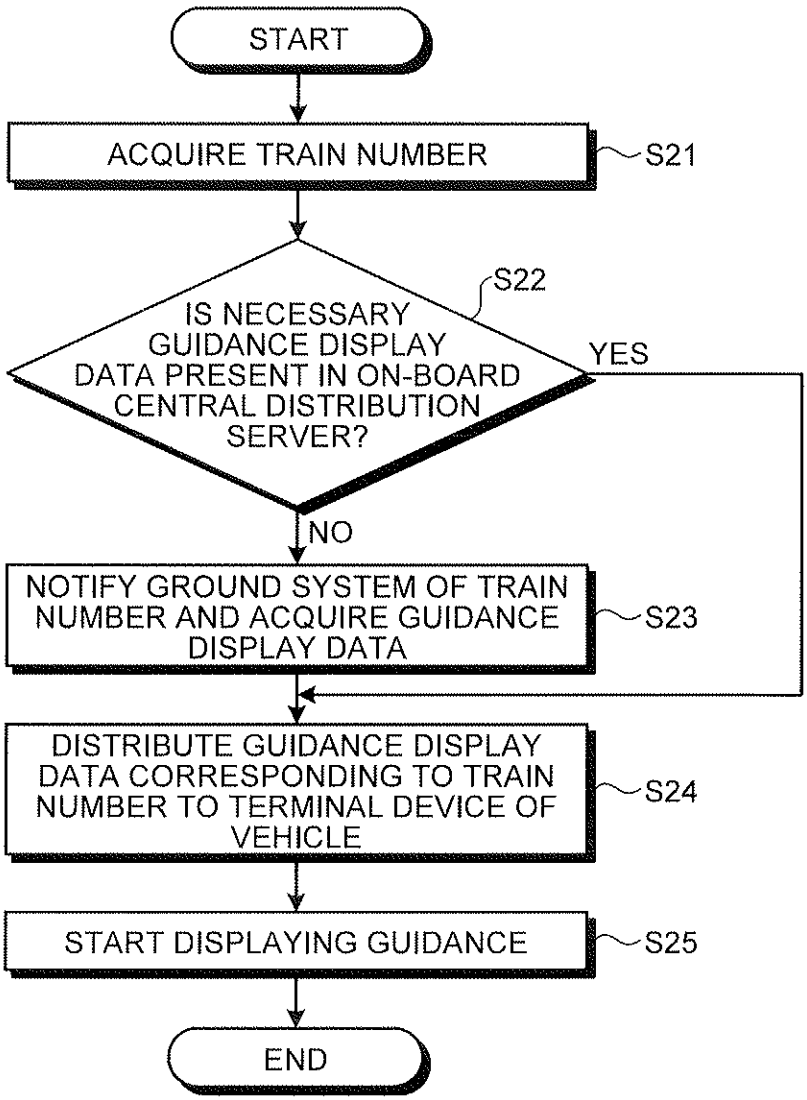

RAPID C
BOUND FOR XX
NEXT STATION IS
BBB
1ST CAR
H HH H
G GG G
F FF F
E EE E
D DD D
C CC C
B BB B
A AA A
BULLET TRAIN
×× ELECTRIC RAILWAY
SUB-WAY
BULLET TRAIN (TRANSFER TO SUBWAY)
OO LINE
×× LINE
XXX LINE
OO LINE
×× LINE
SUBWAY

FIG.9


START
ACQUIRE TRAIN NUMBER
S21
S22
IS NECESSARY GUIDANCE DISPLAY DATA PRESENT IN ON-BOARD CENTRAL DISTRIBUTION SERVER?
YES
NO
NOTIFY GROUND SYSTEM OF TRAIN NUMBER AND ACQUIRE GUIDANCE DISPLAY DATA
S23
DISTRIBUTE GUIDANCE DISPLAY DATA CORRESPONDING TO TRAIN NUMBER TO TERMINAL DEVICE OF VEHICLE
S24
START DISPLAYING GUIDANCE
S25
END