FIG.1

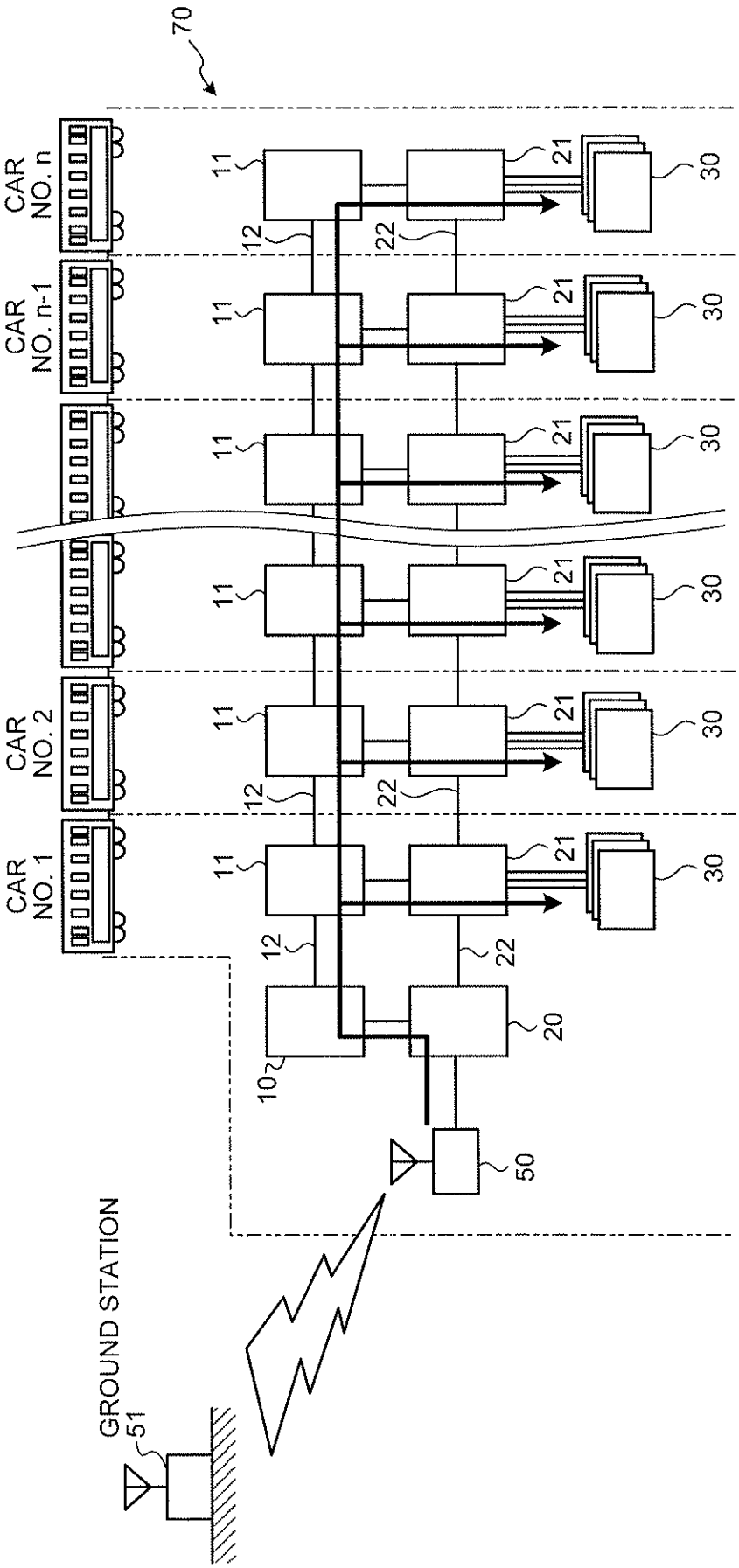

70
CAR NO. n
CAR NO. n-1
CAR NO. 2
CAR NO. 1
11
12
21
22
30
10
20
50
GROUND STATION
51

FIG.2

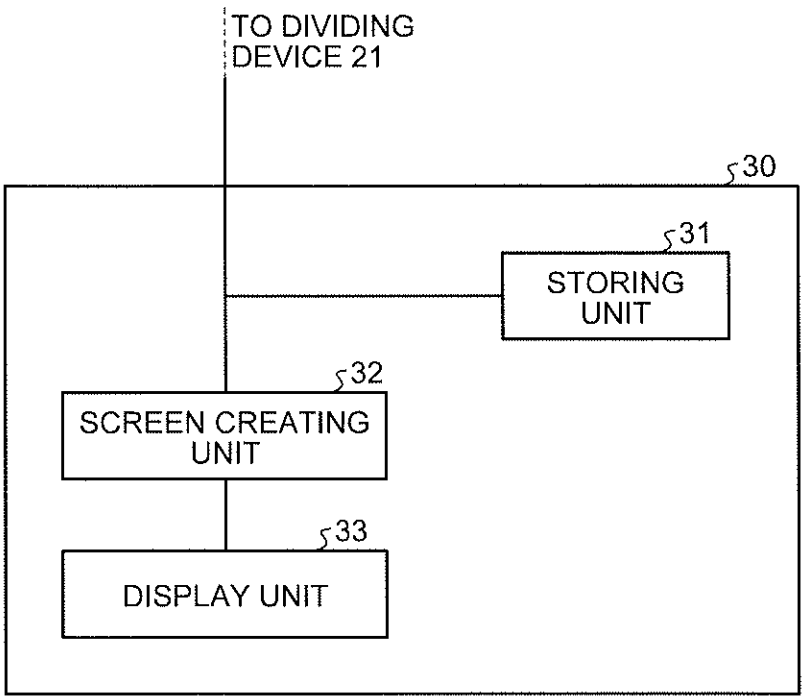

TO DIVIDING DEVICE 21
30
31
STORING UNIT
32
SCREEN CREATING UNIT
33
DISPLAY UNIT

FIG.3

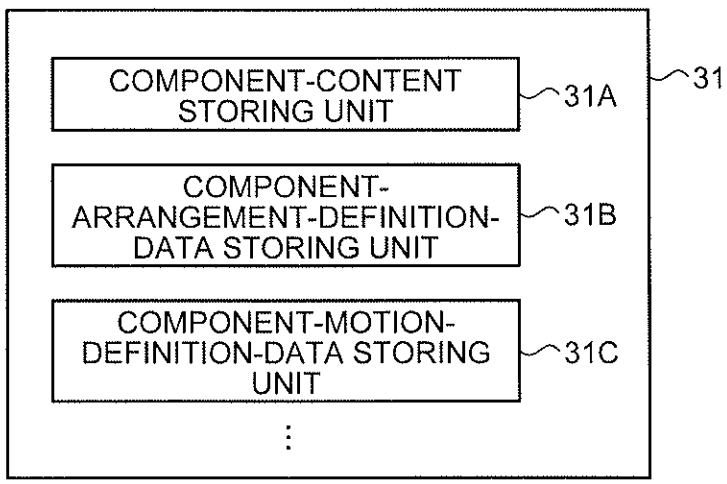

COMPONENT-CONTENT STORING UNIT
31A
31
COMPONENT-ARRANGEMENT-DEFINITION-DATA STORING UNIT
31B
COMPONENT-MOTION-DEFINITION-DATA STORING UNIT
31C

FIG.4

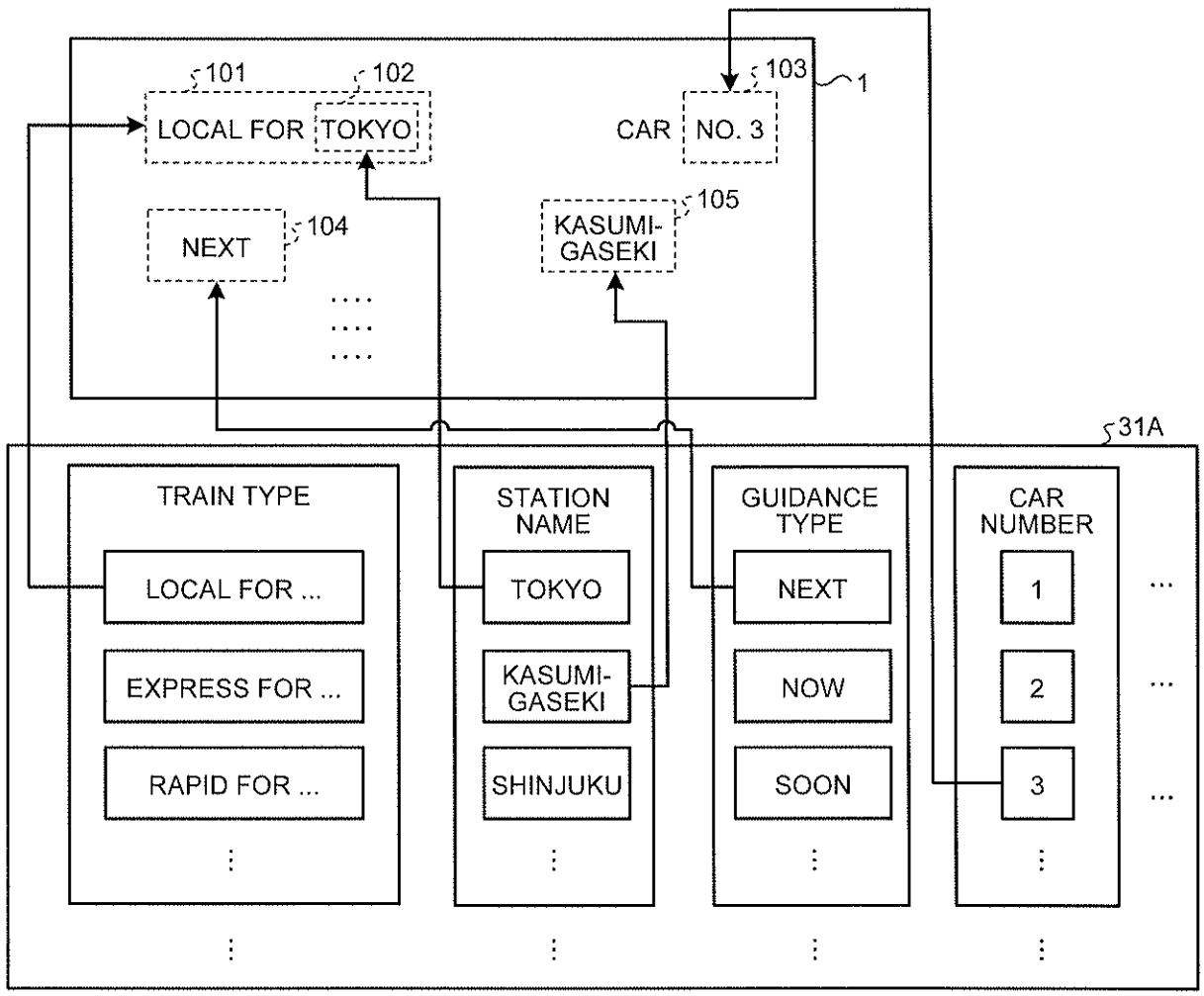

101
102
LOCAL FOR
TOKYO
103
1
CAR
NO. 3
NEXT
104
KASUMI-
GASEKI
105
31A
TRAIN TYPE
LOCAL FOR ...
EXPRESS FOR ...
RAPID FOR ...
STATION
NAME
TOKYO
KASUMI-
GASEKI
SHINJUKU
GUIDANCE
TYPE
NEXT
NOW
SOON
CAR
NUMBER
1
2
3

FIG.5

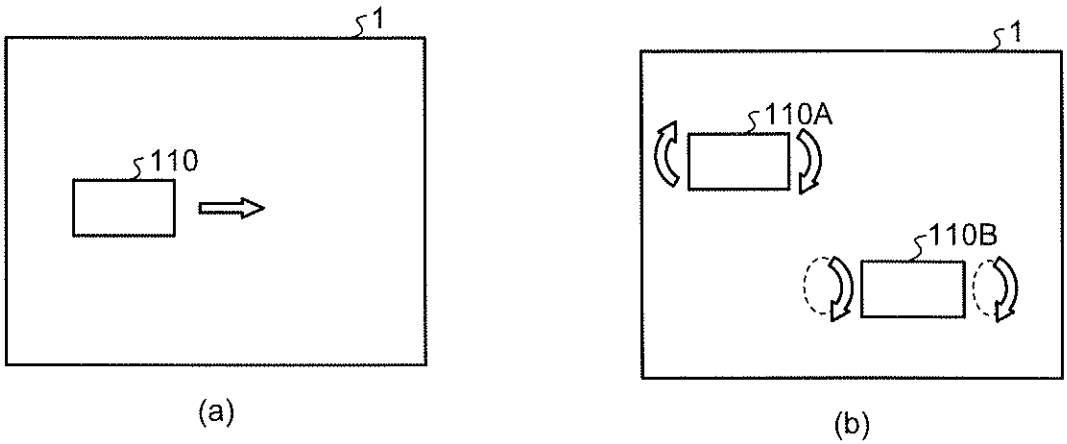


FIG.6

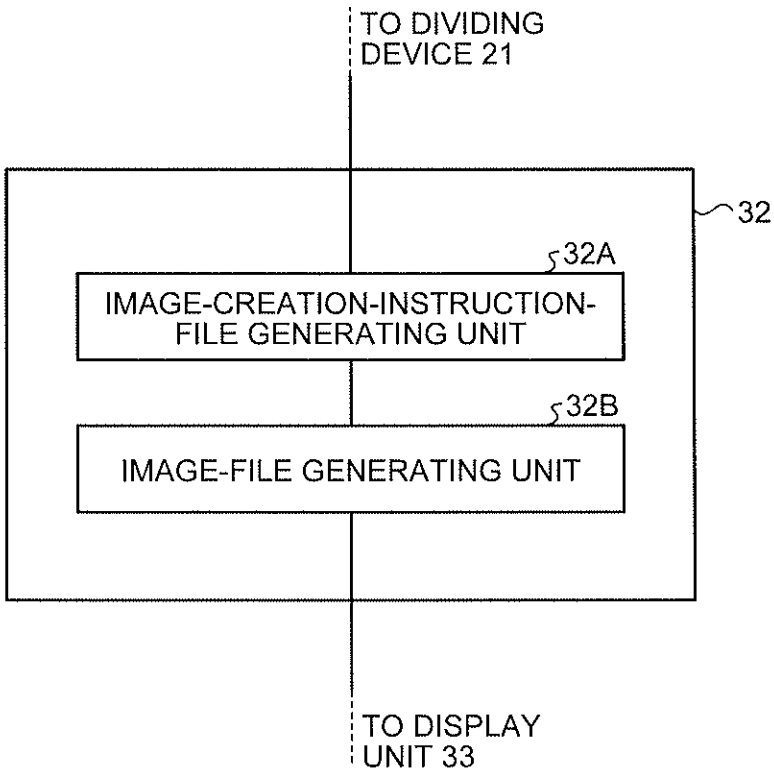

TO DIVIDING DEVICE 21
32
32A
IMAGE-CREATION-INSTRUCTION-FILE GENERATING UNIT
32B
IMAGE-FILE GENERATING UNIT
TO DISPLAY UNIT 33

FIG.7

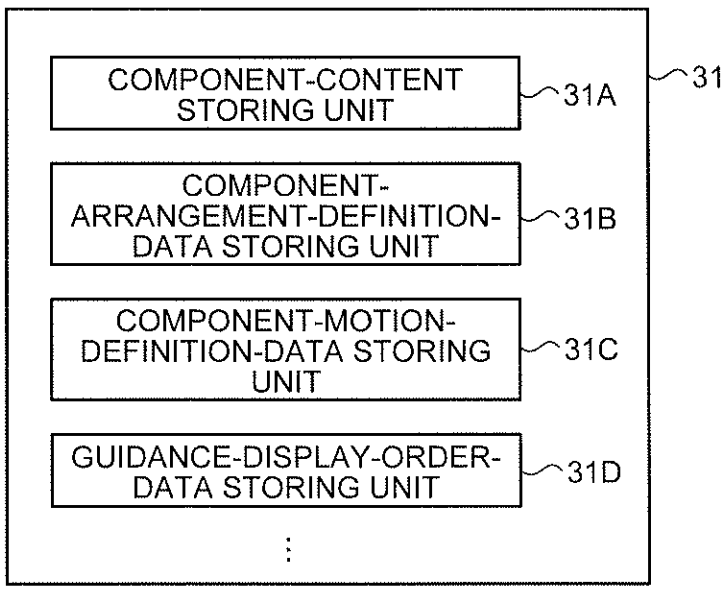

COMPONENT-CONTENT STORING UNIT
31A
31
COMPONENT-ARRANGEMENT-DEFINITION-DATA STORING UNIT
31B
COMPONENT-MOTION-DEFINITION-DATA STORING UNIT
31C
GUIDANCE-DISPLAY-ORDER-DATA STORING UNIT
31D

FIG.8

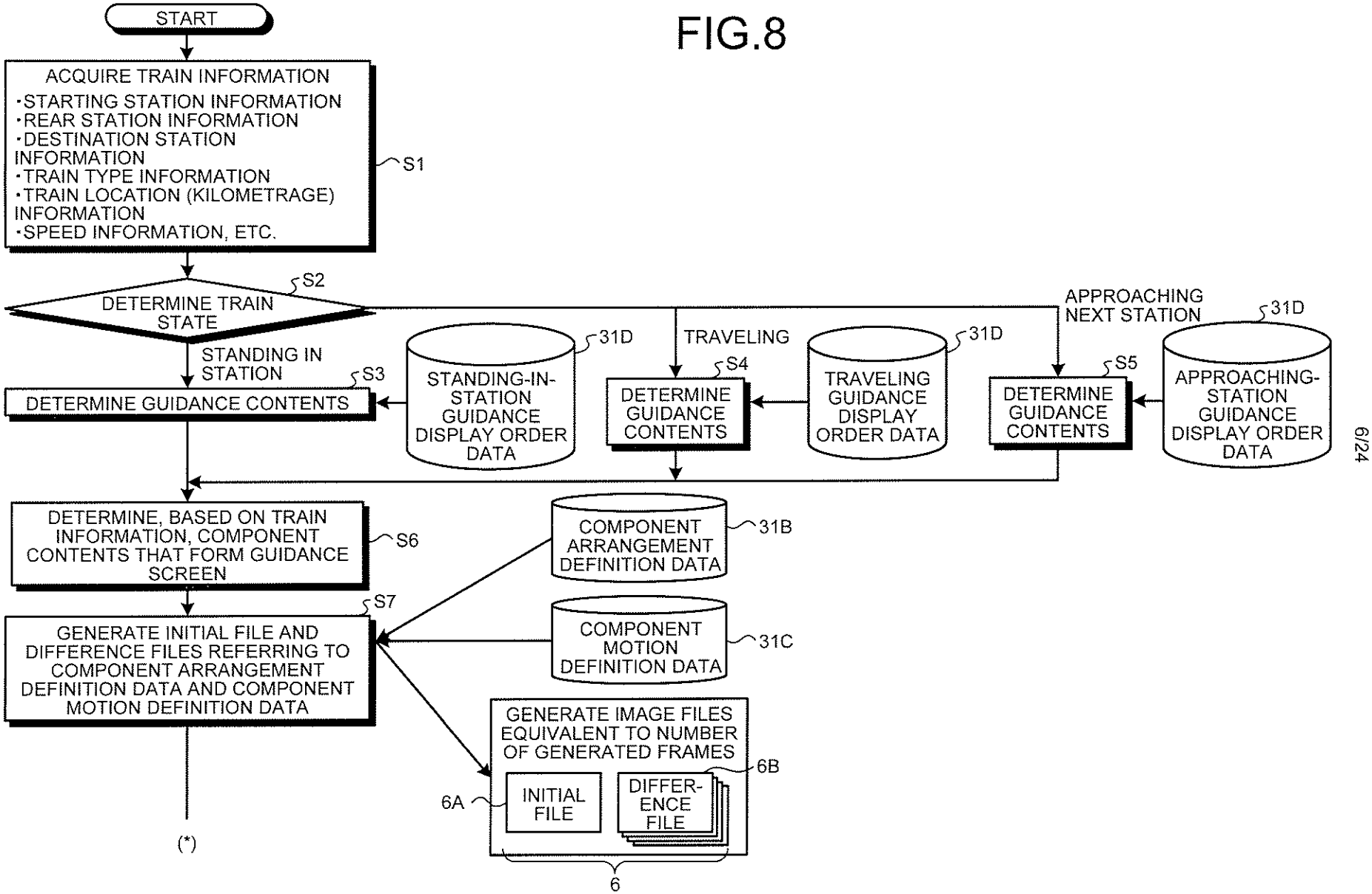

START
ACQUIRE TRAIN INFORMATION
・STARTING STATION INFORMATION
・REAR STATION INFORMATION
・DESTINATION STATION INFORMATION
・TRAIN TYPE INFORMATION
・TRAIN LOCATION (KILOMETRAGE) INFORMATION
・SPEED INFORMATION, ETC.
S1
DETERMINE TRAIN STATE
S2
STANDING IN STATION
TRAVELING
APPROACHING NEXT STATION
DETERMINE GUIDANCE CONTENTS
S3
STANDING-IN-STATION GUIDANCE DISPLAY ORDER DATA
31D
DETERMINE GUIDANCE CONTENTS
S4
TRAVELING GUIDANCE DISPLAY ORDER DATA
31D
DETERMINE GUIDANCE CONTENTS
S5
APPROACHING-STATION GUIDANCE DISPLAY ORDER DATA
31D
DETERMINE, BASED ON TRAIN INFORMATION, COMPONENT CONTENTS THAT FORM GUIDANCE SCREEN
S6
COMPONENT ARRANGEMENT DEFINITION DATA
31B
GENERATE INITIAL FILE AND DIFFERENCE FILES REFERRING TO COMPONENT ARRANGEMENT DEFINITION DATA AND COMPONENT MOTION DEFINITION DATA
S7
COMPONENT MOTION DEFINITION DATA
31C
GENERATE IMAGE FILES EQUIVALENT TO NUMBER OF GENERATED FRAMES
6B
6A
INITIAL FILE
DIFFER-ENCE FILE
6
(*)

FIG.9

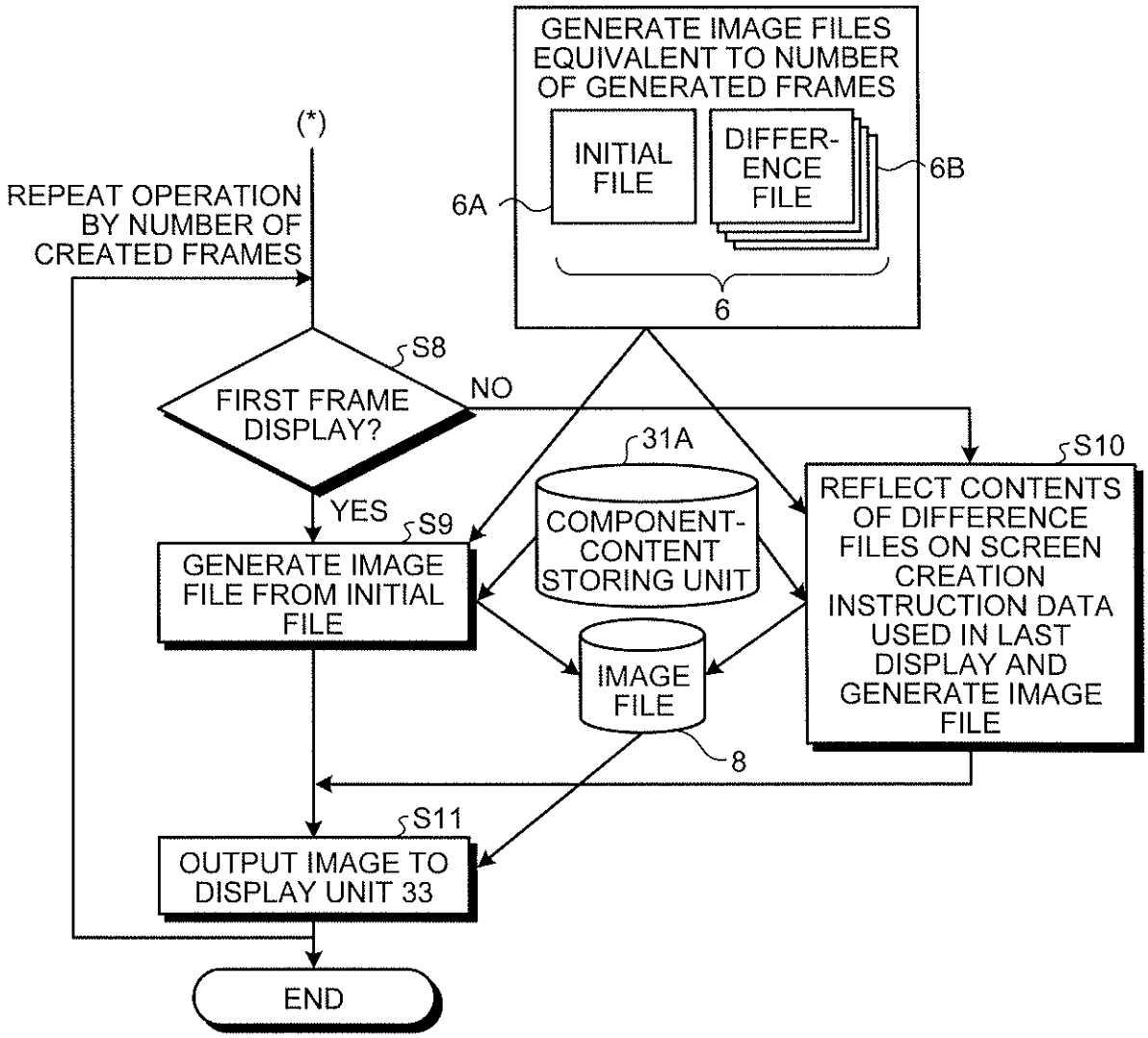

GENERATE IMAGE FILES EQUIVALENT TO NUMBER OF GENERATED FRAMES
INITIAL FILE
DIFFER-ENCE FILE
6A
6B
6
(*)
REPEAT OPERATION BY NUMBER OF CREATED FRAMES
S8
FIRST FRAME DISPLAY?
NO
YES
S9
GENERATE IMAGE FILE FROM INITIAL FILE
31A
COMPONENT-CONTENT STORING UNIT
S10
REFLECT CONTENTS OF DIFFERENCE FILES ON SCREEN CREATION INSTRUCTION DATA USED IN LAST DISPLAY AND GENERATE IMAGE FILE
IMAGE FILE
8
S11
OUTPUT IMAGE TO DISPLAY UNIT 33
END

FIG.10

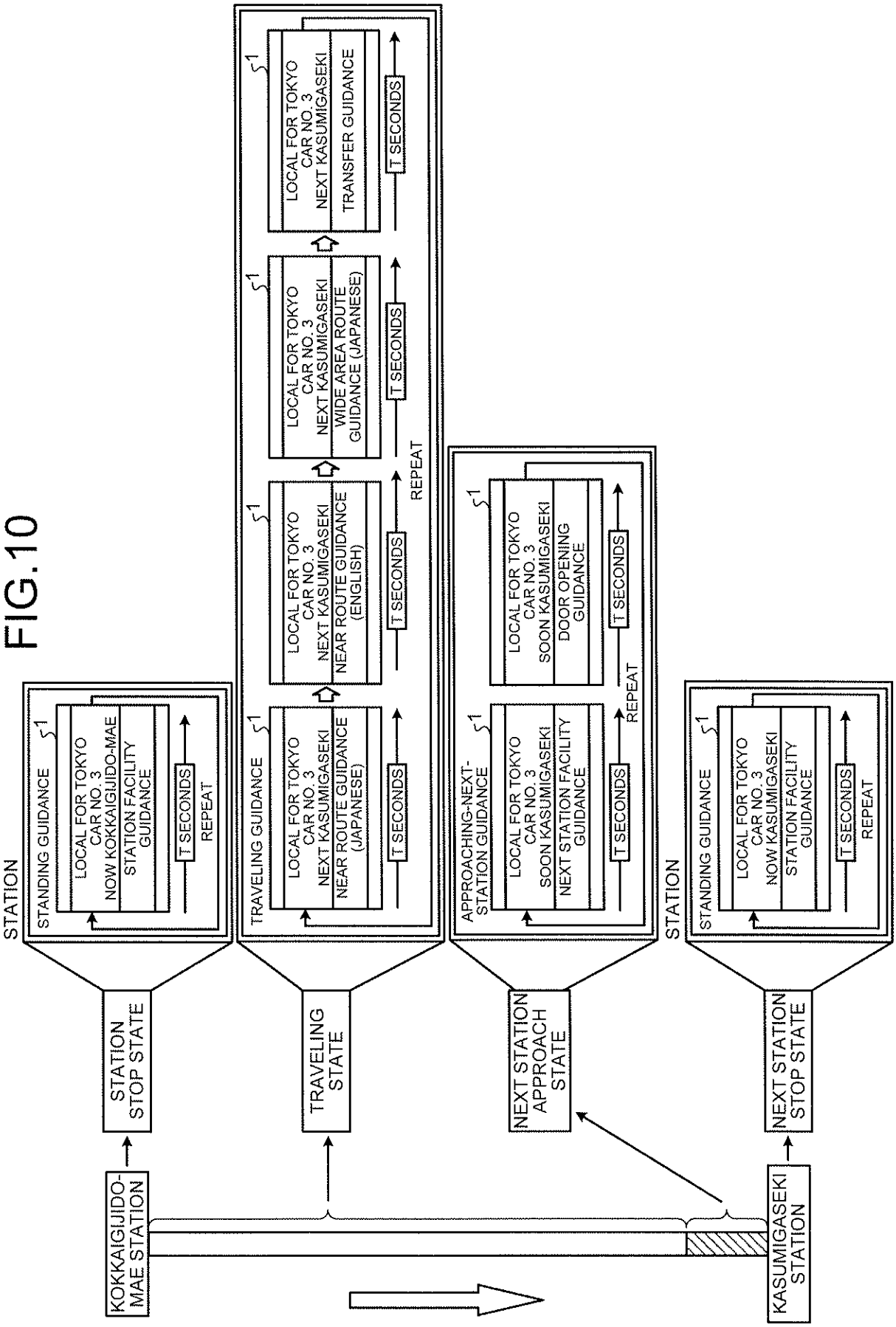

KOKKAIGIJIDO-MAE STATION
STATION STOP STATE
STATION
STANDING GUIDANCE
S1
LOCAL FOR TOKYO CAR NO. 3 NOW KOKKAIGIJIDO-MAE STATION FACILITY GUIDANCE
T SECONDS
REPEAT
TRAVELING STATE
TRAVELING GUIDANCE
S1
LOCAL FOR TOKYO CAR NO. 3 NEXT KASUMIGASEKI NEAR ROUTE GUIDANCE (JAPANESE)
T SECONDS
LOCAL FOR TOKYO CAR NO. 3 NEXT KASUMIGASEKI NEAR ROUTE GUIDANCE (ENGLISH)
T SECONDS
LOCAL FOR TOKYO CAR NO. 3 NEXT KASUMIGASEKI WIDE AREA ROUTE GUIDANCE (JAPANESE)
T SECONDS
LOCAL FOR TOKYO CAR NO. 3 NEXT KASUMIGASEKI TRANSFER GUIDANCE
T SECONDS
REPEAT
NEXT STATION APPROACH STATE
APPROACHING-NEXT-STATION GUIDANCE
S1
LOCAL FOR TOKYO CAR NO. 3 SOON KASUMIGASEKI NEXT STATION FACILITY GUIDANCE
T SECONDS
LOCAL FOR TOKYO CAR NO. 3 SOON KASUMIGASEKI DOOR OPENING GUIDANCE
T SECONDS
REPEAT
NEXT STATION STOP STATE
STATION
STANDING GUIDANCE
S1
LOCAL FOR TOKYO CAR NO. 3 NOW KASUMIGASEKI STATION FACILITY GUIDANCE
T SECONDS
REPEAT
KASUMIGASEKI STATION

FIG.11

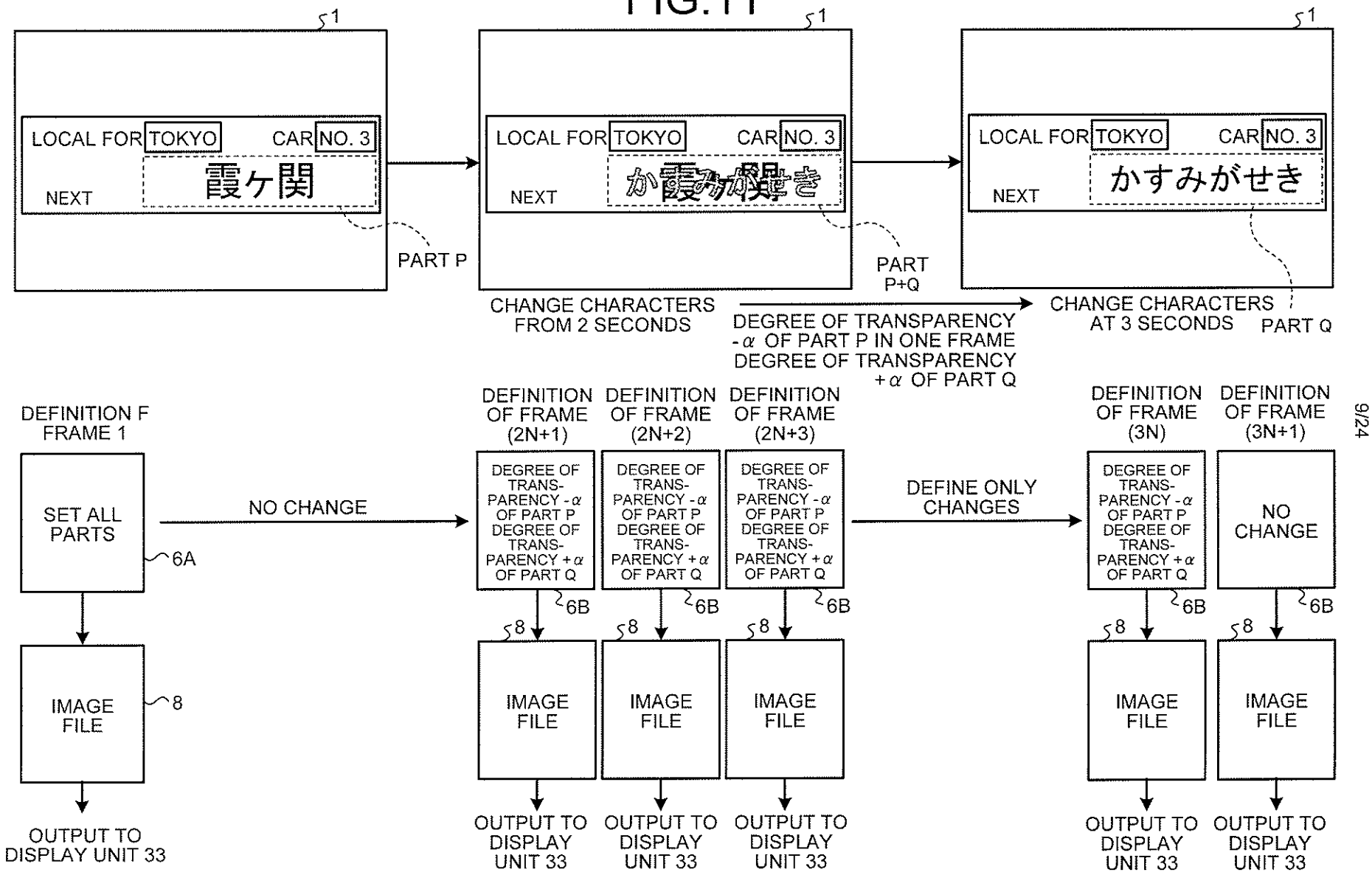

1
LOCAL FOR TOKYO CAR NO. 3
NEXT
霞ケ関
PART P
か霞みが関き
PART P+Q
かすみがせき
PART Q
CHANGE CHARACTERS FROM 2 SECONDS
DEGREE OF TRANSPARENCY -α OF PART P IN ONE FRAME
DEGREE OF TRANSPARENCY +α OF PART Q
CHANGE CHARACTERS AT 3 SECONDS
DEFINITION F FRAME 1
SET ALL PARTS
6A
NO CHANGE
DEFINITION OF FRAME (2N+1)
DEFINITION OF FRAME (2N+2)
DEFINITION OF FRAME (2N+3)
DEGREE OF TRANS-PARENCY -α OF PART P DEGREE OF TRANS-PARENCY +α OF PART Q
6B
8
IMAGE FILE
OUTPUT TO DISPLAY UNIT 33
DEFINE ONLY CHANGES
DEFINITION OF FRAME (3N)
DEFINITION OF FRAME (3N+1)
NO CHANGE

FIG.12

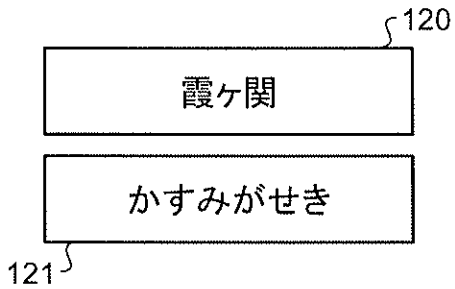

120
霞ヶ関
かすみがせき
121

FIG.13

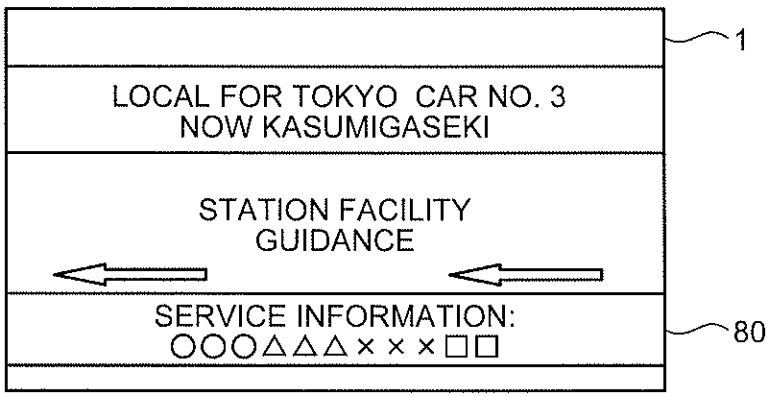
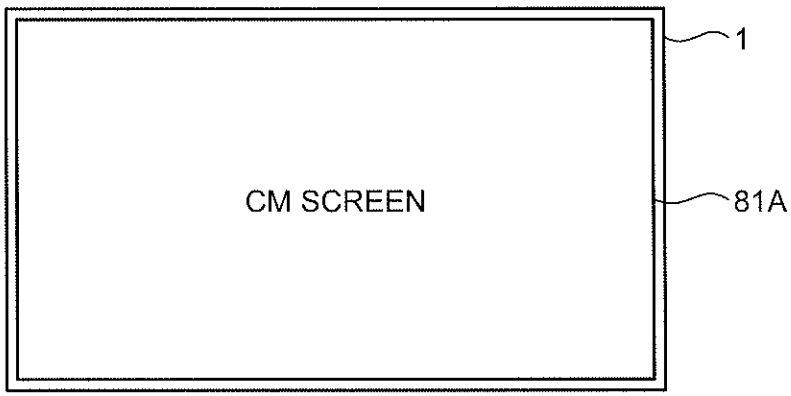

1
LOCAL FOR TOKYO CAR NO. 3
NOW KASUMIGASEKI
STATION FACILITY
GUIDANCE
SERVICE INFORMATION:
○○○△△△×××□□
80

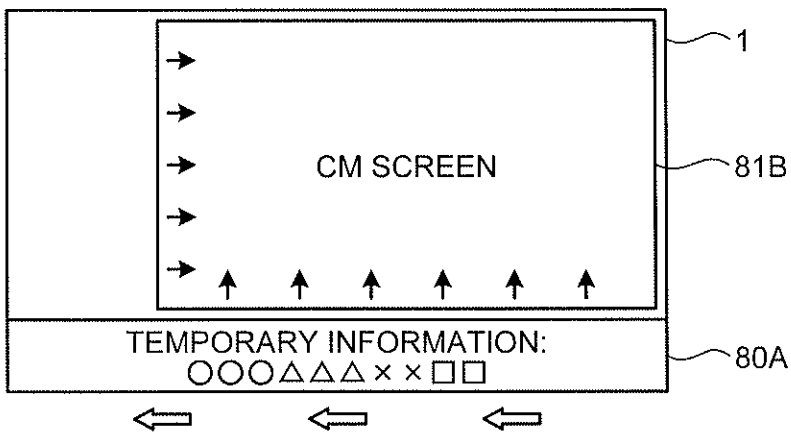
FIG.14



FIG.15



(a)



(b)

FIG.16

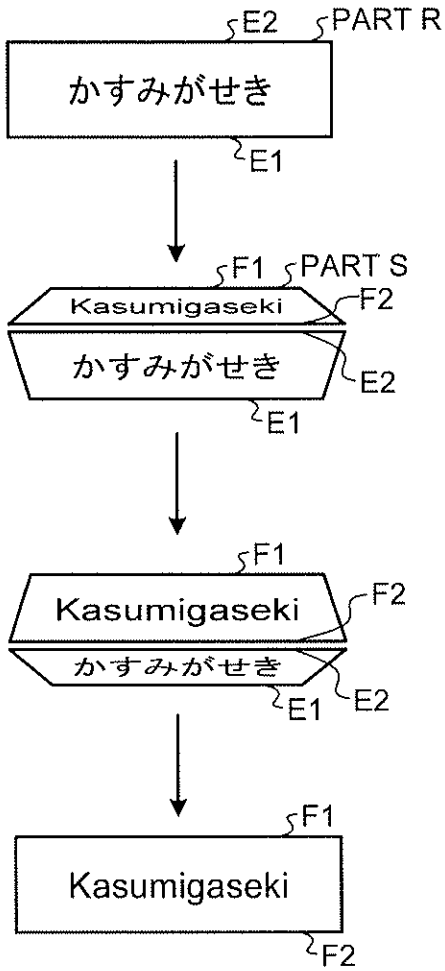

E2
PART R
かすみがせき
E1
F1
PART S
Kasumigaseki
F2
かすみがせき
E2
E1
F1
Kasumigaseki
F2
かすみがせき
E1
E2
F1
Kasumigaseki
F2

FIG.17



FIG.18

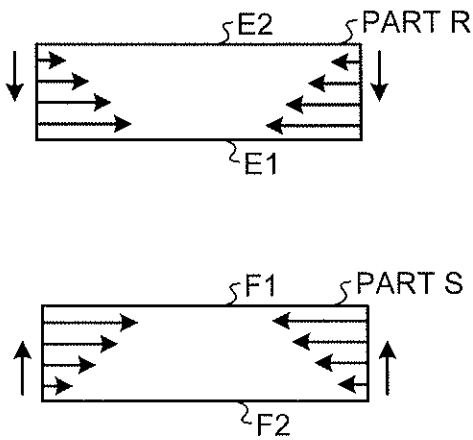


FIG.19

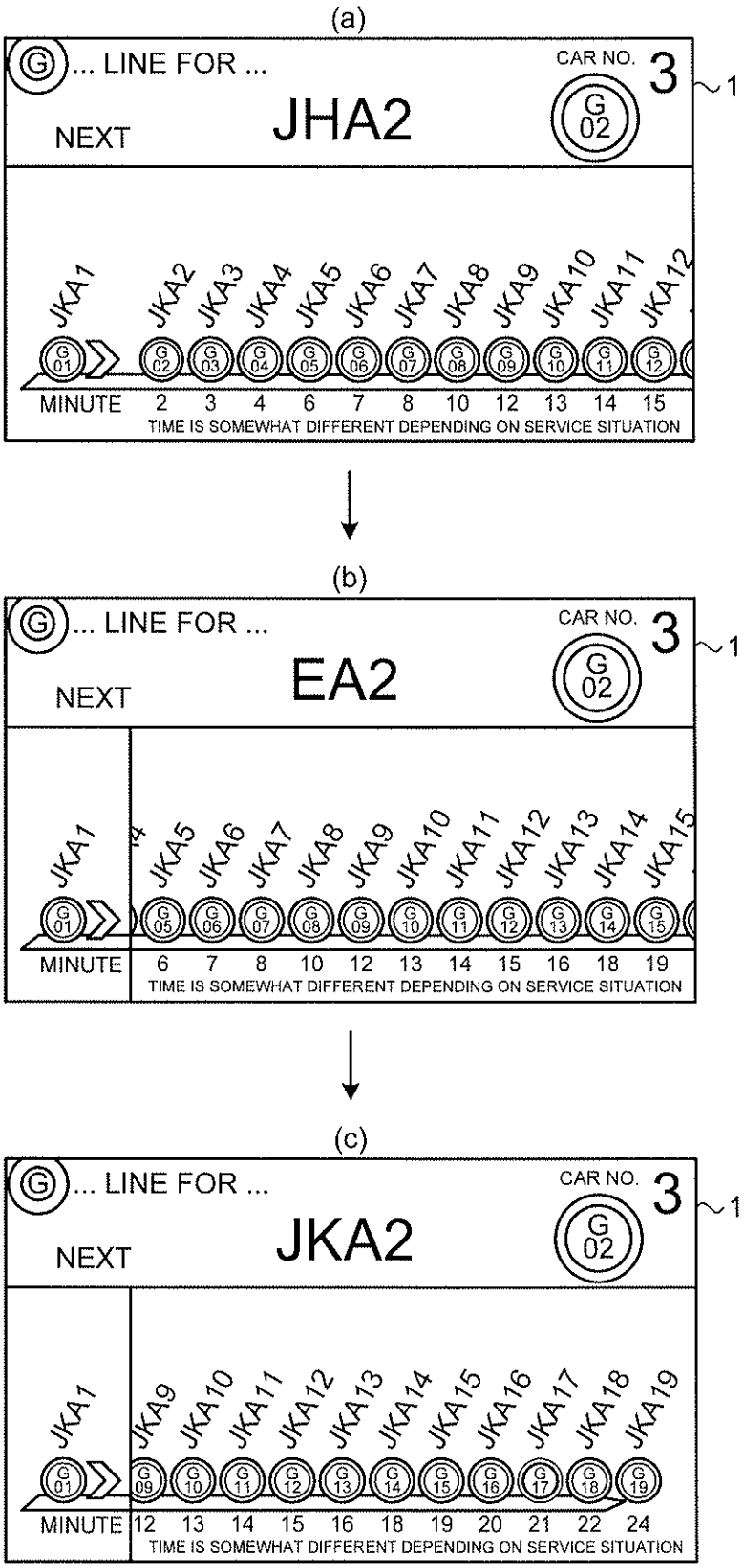
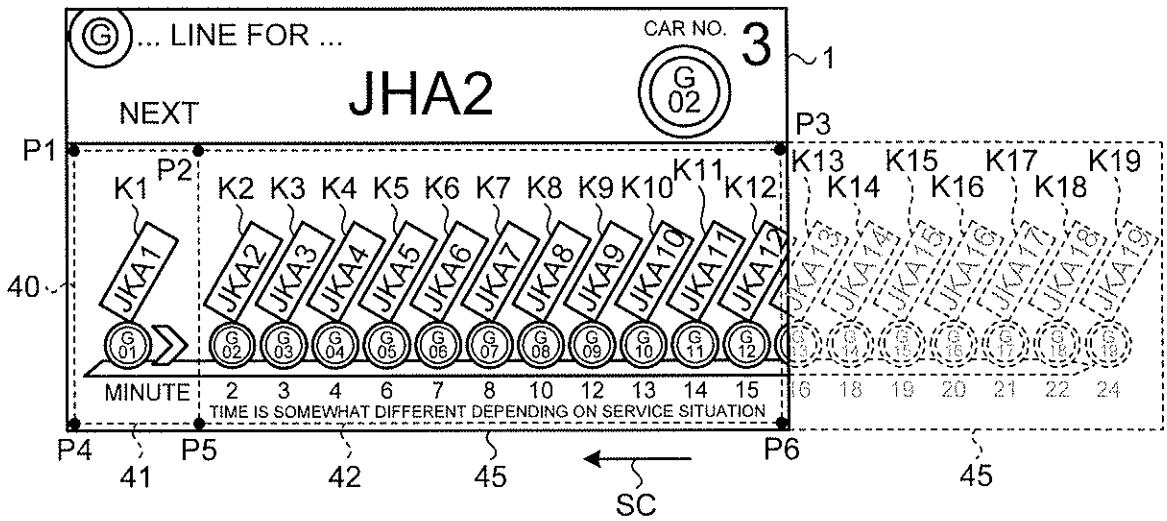
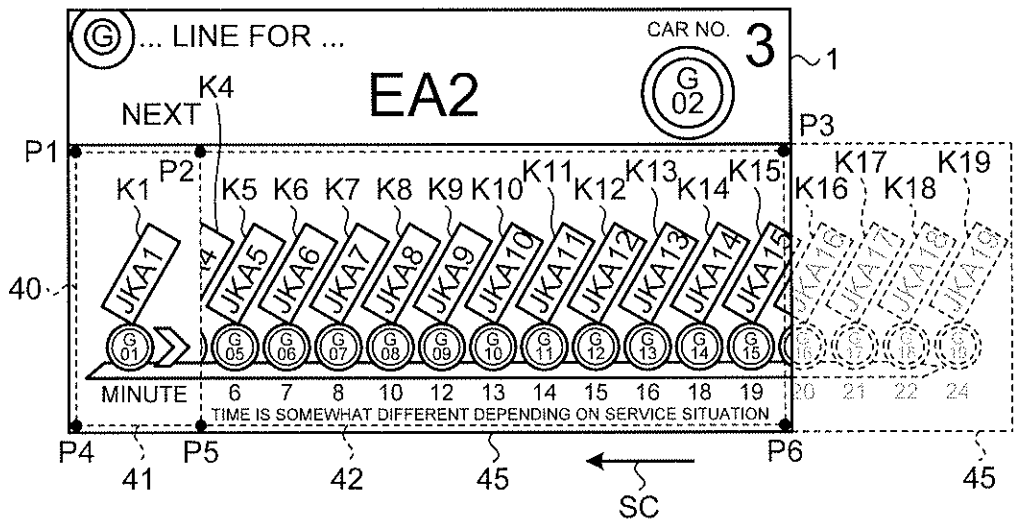

(a)
... LINE FOR ...
NEXT
JHA2
CAR NO.
3
G 02
1
JKA1
JKA2
JKA3
JKA4
JKA5
JKA6
JKA7
JKA8
JKA9
JKA10
JKA11
JKA12
G 01
G 02
G 03
G 04
G 05
G 06
G 07
G 08
G 09
G 10
G 11
G 12
MINUTE 2 3 4 6 7 8 10 12 13 14 15
TIME IS SOMEWHAT DIFFERENT DEPENDING ON SERVICE SITUATION
(b)
... LINE FOR ...
NEXT
EA2
CAR NO.
3
G 02
1
JKA1
JKA5
JKA6
JKA7
JKA8
JKA9
JKA10
JKA11
JKA12
JKA13
JKA14
JKA15
G 01
G 05
G 06
G 07
G 08
G 09
G 10
G 11
G 12
G 13
G 14
G 15
MINUTE 6 7 8 10 12 13 14 15 16 18 19
TIME IS SOMEWHAT DIFFERENT DEPENDING ON SERVICE SITUATION
(c)
... LINE FOR ...
NEXT
JKA2
CAR NO.
3
G 02
1
JKA1
JKA9
JKA10
JKA11
JKA12
JKA13
JKA14
JKA15
JKA16
JKA17
JKA18
JKA19
G 01
G 09
G 10
G 11
G 12
G 13
G 14
G 15
G 16
G 17
G 18
G 19
MINUTE 12 13 14 15 16 18 19 20 21 22 24
TIME IS SOMEWHAT DIFFERENT DEPENDING ON SERVICE SITUATION

FIG.20

(a)


... LINE FOR ...
JHA2
NEXT
CAR NO. 3
G 02
1
P1
P2
P3
K1
K2 K3 K4 K5 K6 K7 K8 K9 K10 K11 K12
K13 K14 K15 K16 K17 K18 K19
JKA1
JKA2 JKA3 JKA4 JKA5 JKA6 JKA7 JKA8 JKA9 JKA10 JKA11 JKA12
JKA13 JKA14 JKA15 JKA16 JKA17 JKA18 JKA19
40
MINUTE
2 3 4 6 7 8 10 12 13 14 15
16 18 19 20 21 22 24
TIME IS SOMEWHAT DIFFERENT DEPENDING ON SERVICE SITUATION
P4
P5
P6
41
42
45
45
SC

(b)


... LINE FOR ...
EA2
NEXT
K4
CAR NO. 3
G 02
1
P1
P2
P3
K1
K5 K6 K7 K8 K9 K10 K11 K12 K13 K14 K15
K16 K17 K18 K19
JKA1
JKA5 JKA6 JKA7 JKA8 JKA9 JKA10 JKA11 JKA12 JKA13 JKA14 JKA15
JKA16 JKA17 JKA18 JKA19
40
MINUTE
6 7 8 10 12 13 14 15 16 18 19
20 21 22 24
TIME IS SOMEWHAT DIFFERENT DEPENDING ON SERVICE SITUATION
P4
P5
P6
41
42
45
45
SC

(c)

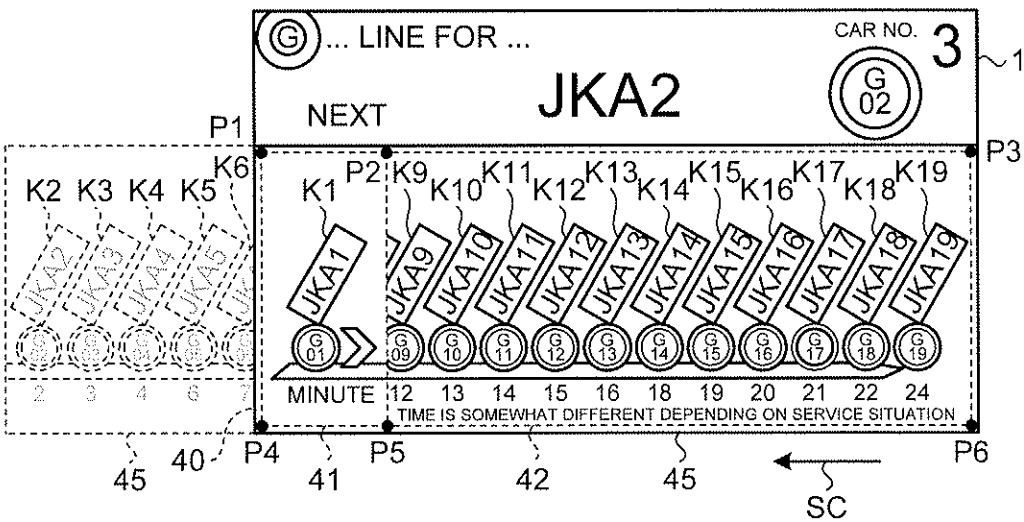

... LINE FOR ...
JKA2
NEXT
CAR NO. 3
G 02
1
P1
P2
P3
K6
K1
K9 K10 K11 K12 K13 K14 K15 K16 K17 K18 K19
K2 K3 K4 K5
JKA1
JKA9 JKA10 JKA11 JKA12 JKA13 JKA14 JKA15 JKA16 JKA17 JKA18 JKA19
MINUTE
12 13 14 15 16 18 19 20 21 22 24
TIME IS SOMEWHAT DIFFERENT DEPENDING ON SERVICE SITUATION
45
40
P4
P5
P6
41
42
45
SC

FIG.21

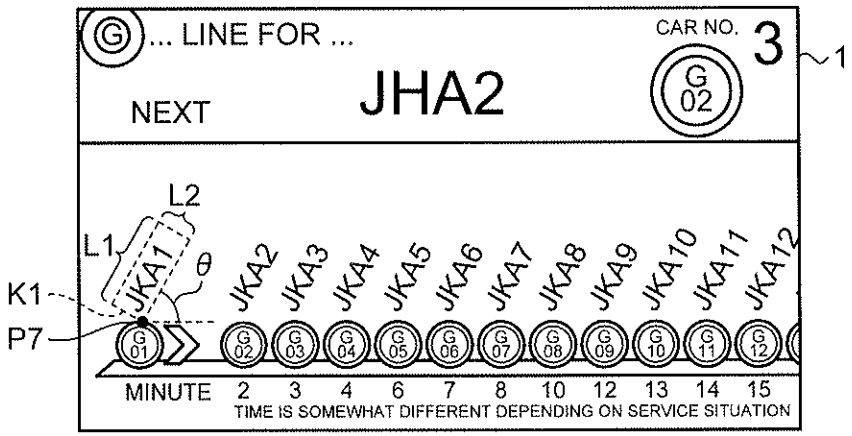

... LINE FOR ...
NEXT
JHA2
CAR NO.
3
G 02
1
L2
L1
θ
K1
P7
JKA1
JKA2
JKA3
JKA4
JKA5
JKA6
JKA7
JKA8
JKA9
JKA10
JKA11
JKA12
G 01
G 02
G 03
G 04
G 05
G 06
G 07
G 08
G 09
G 10
G 11
G 12
MINUTE
2 3 4 6 7 8 10 12 13 14 15
TIME IS SOMEWHAT DIFFERENT DEPENDING ON SERVICE SITUATION

FIG.22

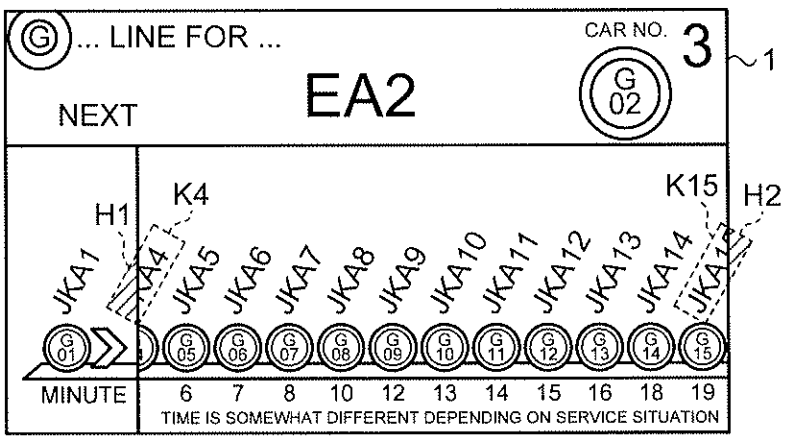

... LINE FOR ...
NEXT
EA2
CAR NO.
3
G 02
1
H1
K4
K15
H2
JKA1
JKA4
JKA5
JKA6
JKA7
JKA8
JKA9
JKA10
JKA11
JKA12
JKA13
JKA14
JKA15
G 01
G 05
G 06
G 07
G 08
G 09
G 10
G 11
G 12
G 13
G 14
G 15
MINUTE
6 7 8 10 12 13 14 15 16 18 19
TIME IS SOMEWHAT DIFFERENT DEPENDING ON SERVICE SITUATION

FIG.23

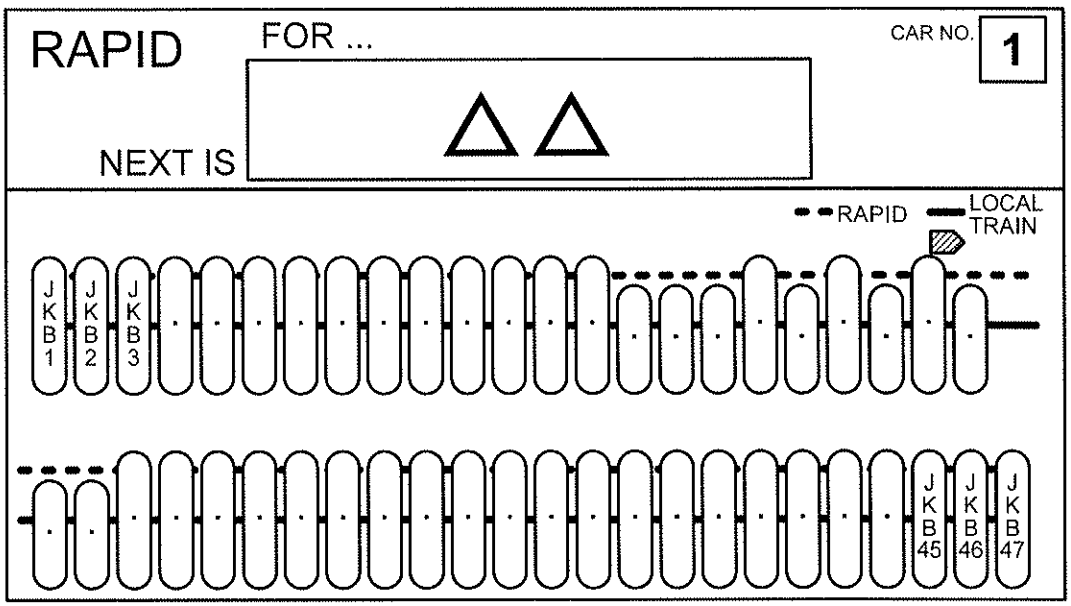

RAPID
FOR ...
CAR NO.
1
NEXT IS
RAPID
LOCAL TRAIN
JKB1
JKB2
JKB3
JKB45
JKB46
JKB47

FIG.24

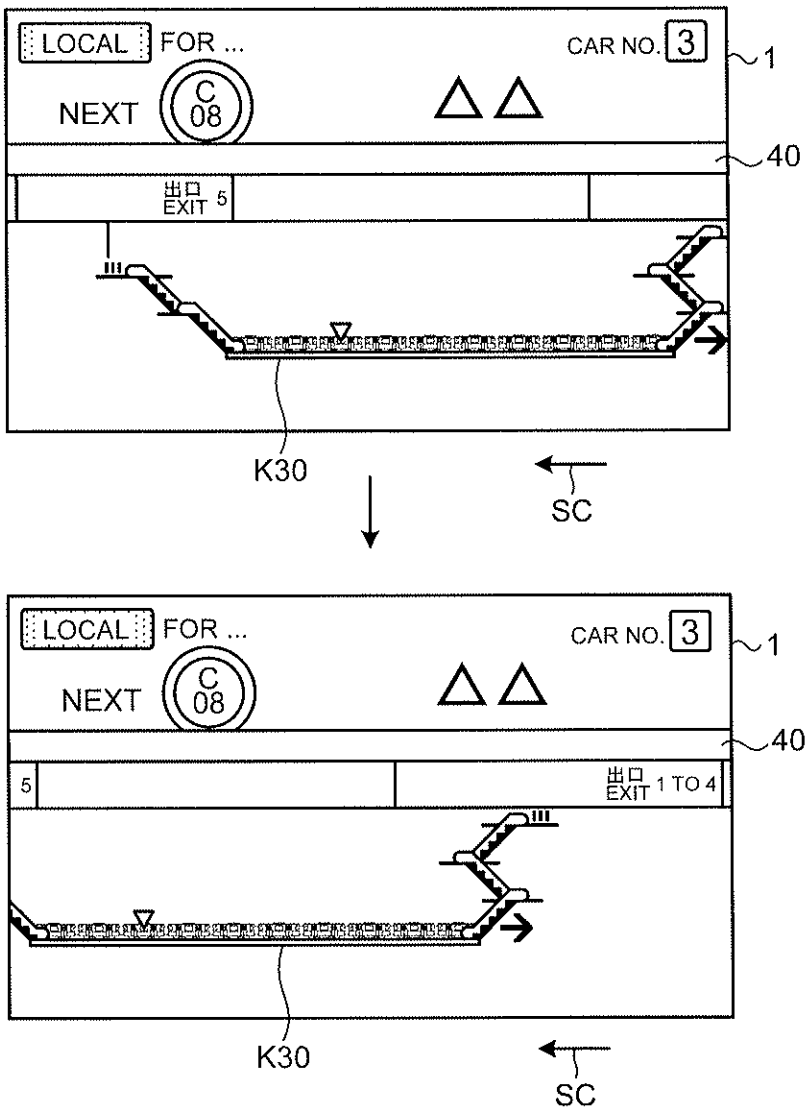

LOCAL
FOR ...
CAR NO. 3
1
NEXT
C
08
40
出口
EXIT 5
K30
SC
LOCAL
FOR ...
CAR NO. 3
1
NEXT
C
08
40
5
出口
EXIT 1 TO 4
K30
SC

FIG.25

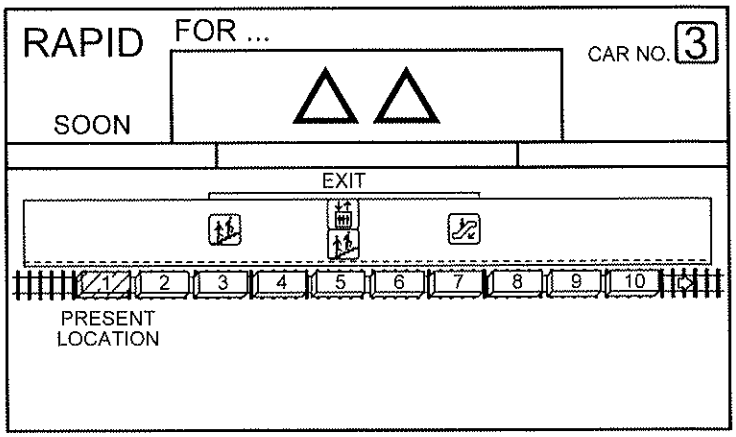

RAPID
FOR ...
CAR NO. 3
SOON
EXIT
1
2
3
4
5
6
7
8
9
10
PRESENT
LOCATION

FIG.26

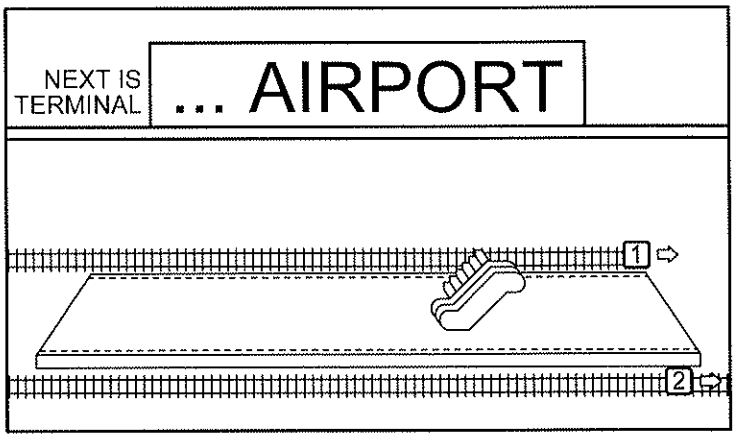

NEXT IS
TERMINAL
... AIRPORT
1
2

FIG.27

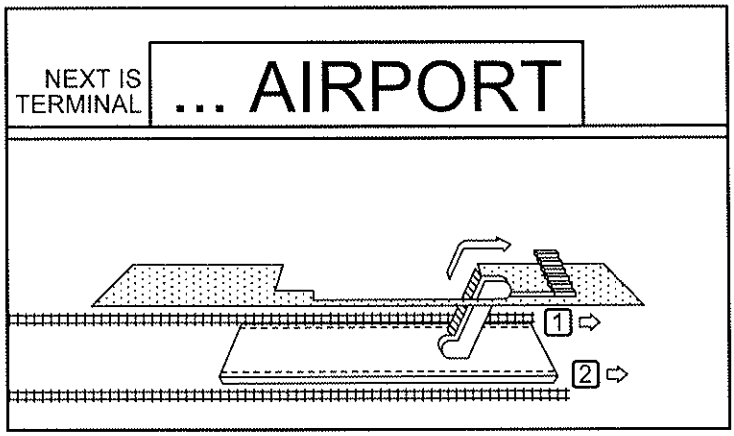


FIG.28

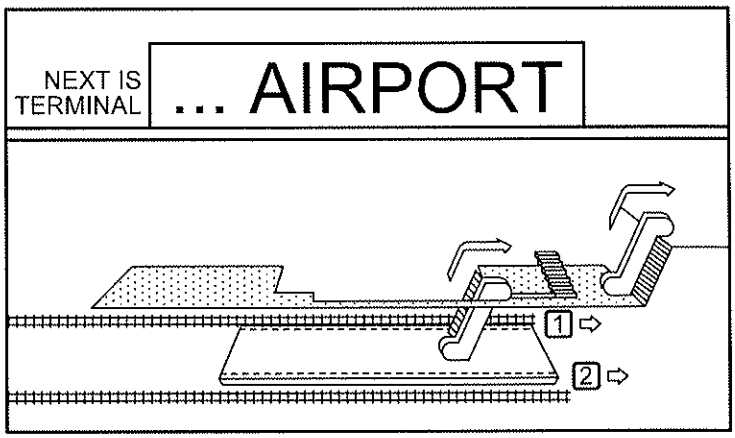


FIG.29

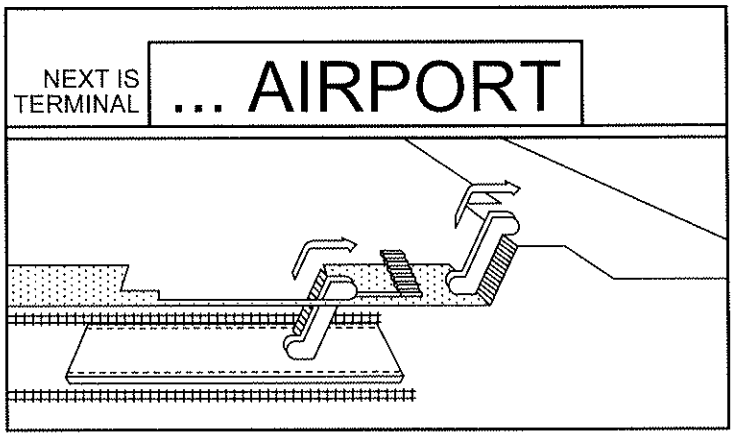


FIG.30

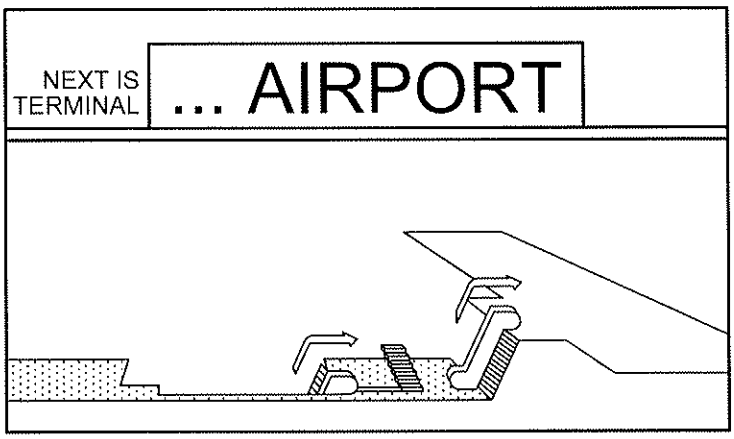
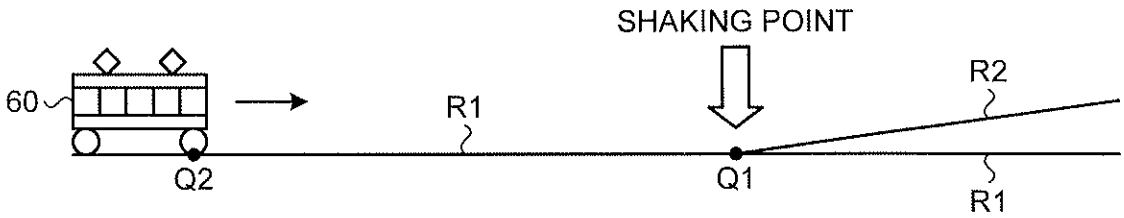
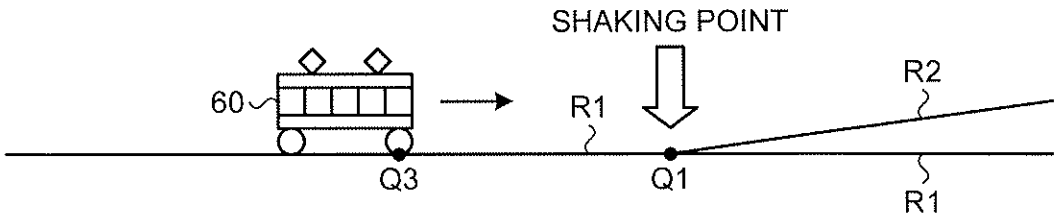


FIG.31



(a)



(b)

FIG.32

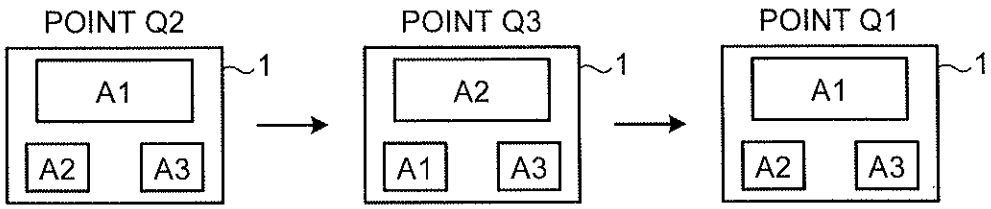
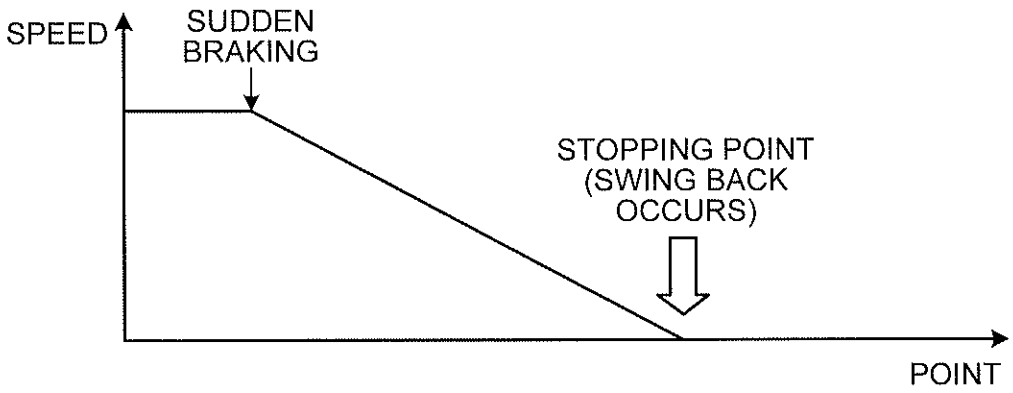
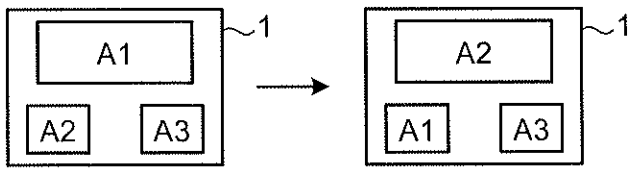


FIG.33



(a)



(b)

FIG.34

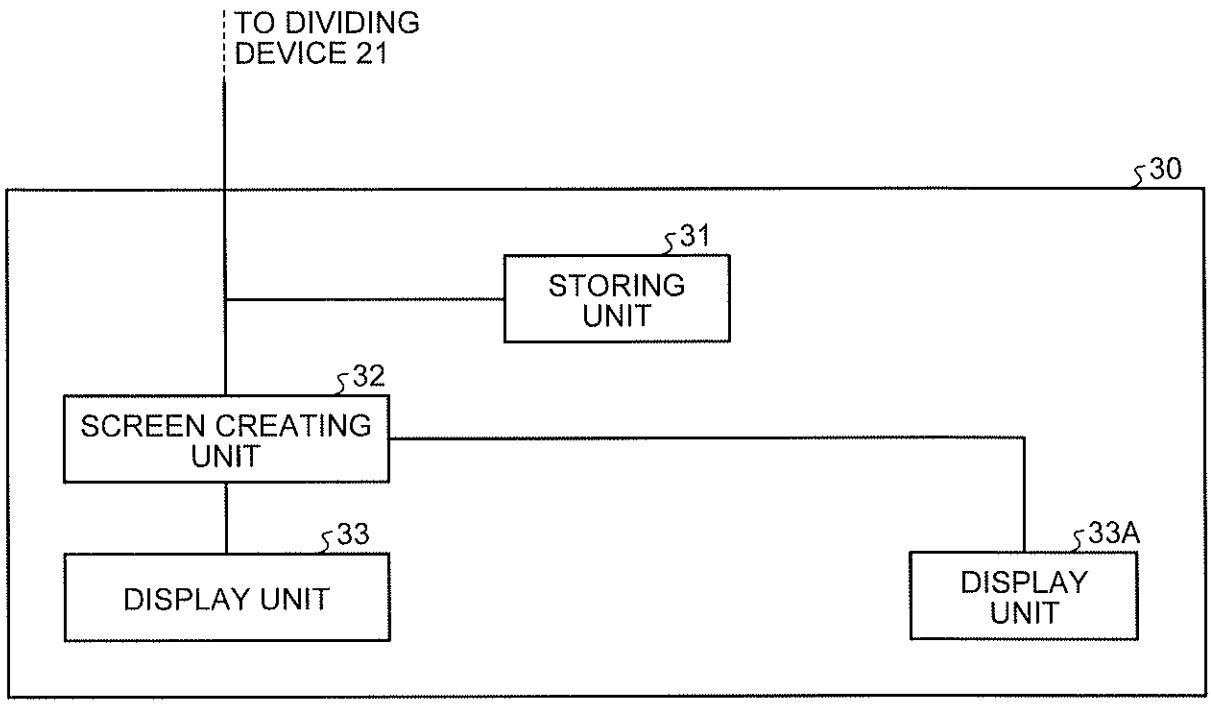
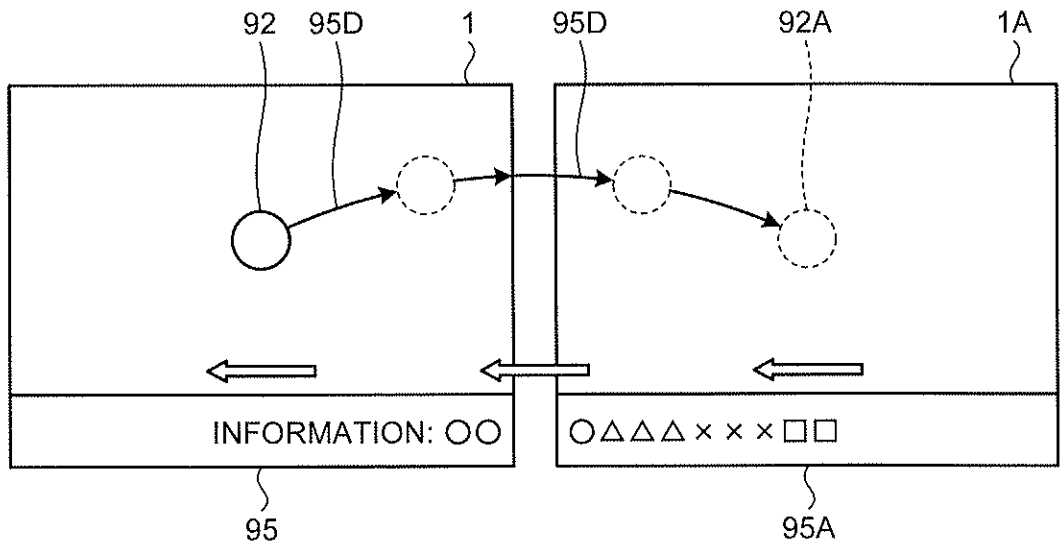

TO DIVIDING DEVICE 21
30
31
STORING UNIT
32
SCREEN CREATING UNIT
33
DISPLAY UNIT
33A
DISPLAY UNIT

FIG.35


92
95D
1
95D
92A
1A
INFORMATION: ○○
○△△△××××□□
95
95A