FIG. 1

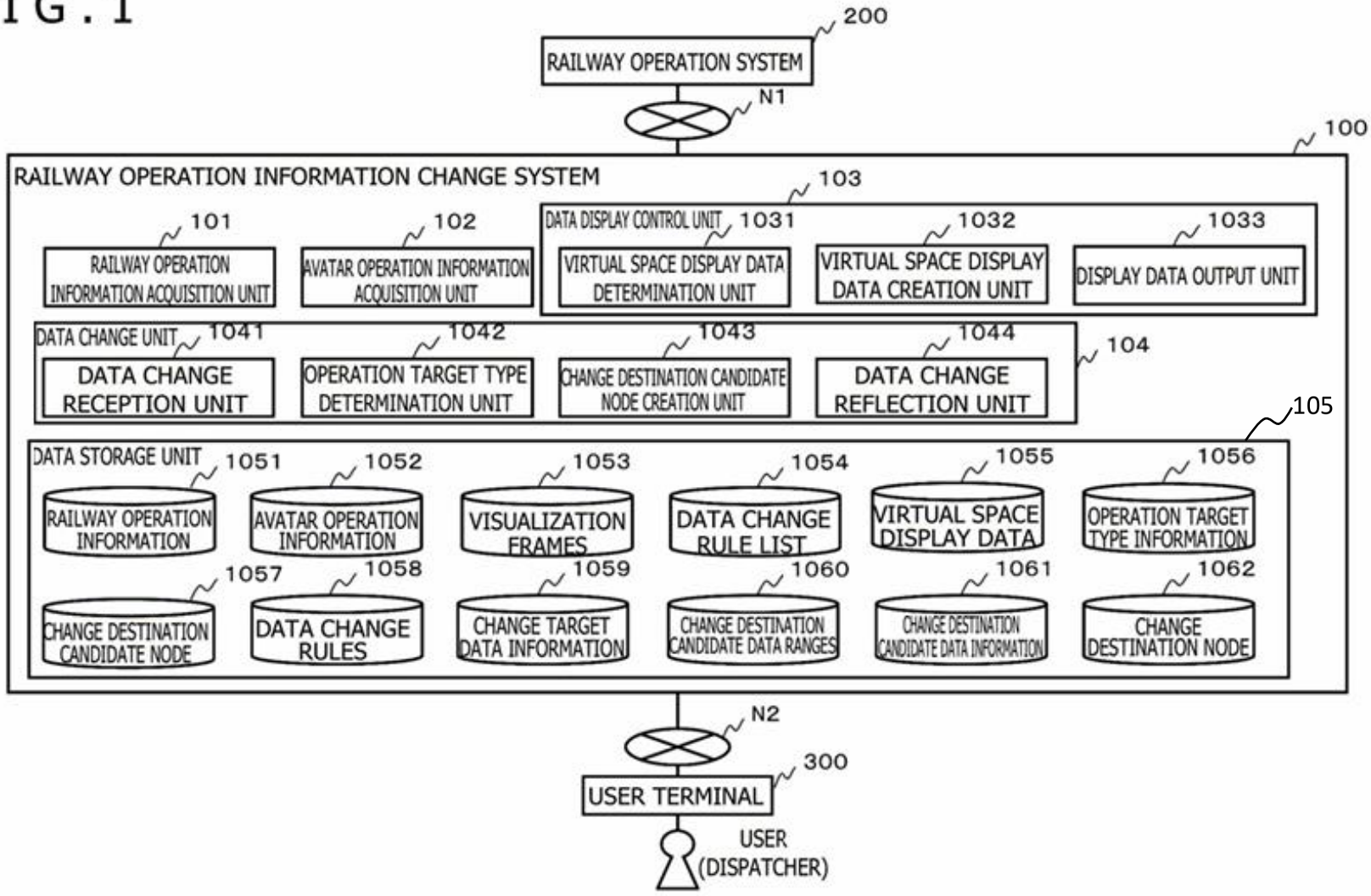
200
RAILWAY OPERATION SYSTEM
N1
100
RAILWAY OPERATION INFORMATION CHANGE SYSTEM
103
101
RAILWAY OPERATION INFORMATION ACQUISITION UNIT
102
AVATAR OPERATION INFORMATION ACQUISITION UNIT
DATA DISPLAY CONTROL UNIT
1031
VIRTUAL SPACE DISPLAY DATA DETERMINATION UNIT
1032
VIRTUAL SPACE DISPLAY DATA CREATION UNIT
1033
DISPLAY DATA OUTPUT UNIT
DATA CHANGE UNIT
1041
DATA CHANGE RECEPTION UNIT
1042
OPERATION TARGET TYPE DETERMINATION UNIT
1043
CHANGE DESTINATION CANDIDATE NODE CREATION UNIT
1044
DATA CHANGE REFLECTION UNIT
104
105
DATA STORAGE UNIT
1051
RAILWAY OPERATION INFORMATION
1052
AVATAR OPERATION INFORMATION
1053
VISUALIZATION FRAMES
1054
DATA CHANGE RULE LIST
1055
VIRTUAL SPACE DISPLAY DATA
1056
OPERATION TARGET TYPE INFORMATION
1057
CHANGE DESTINATION CANDIDATE NODE
1058
DATA CHANGE RULES
1059
CHANGE TARGET DATA INFORMATION
1060
CHANGE DESTINATION CANDIDATE DATA RANGES
1061
CHANGE DESTINATION CANDIDATE DATA INFORMATION
1062
CHANGE DESTINATION NODE
N2
300
USER TERMINAL
USER (DISPATCHER)

FIG. 17

1701

VIRTUAL SPACE OBJECT ID	DISPLAY ASSET	RELATING VIRTUAL SPACE OBJECT ID	OBJECT DATA	RAILWAY OPERATION INFORMATION TO WHICH THE OBJECT BELONGS	VIRTUAL SPACE DISPLAY POSITION
Obj001	Null	-	LINE L2	OPERATION PLAN INFORMATION (LINE L2)	(0,1,0)
Obj002	Null	Obj001	TRAIN Tr02	OPERATION PLAN INFORMATION (LINE L2)	(0,1,0)
Obj003	Line	Obj002	TRAIN Tr02 DEPARTURE FROM STATION A AT 08:00:30 ARRIVAL AT STATION E AT 08:05:20	OPERATION PLAN INFORMATION (LINE L2)	(5, 1.3, 0)
Obj004	Point	Obj002	TRAIN Tr02 ARRIVAL AT STATION E AT 08:05:20	OPERATION PLAN INFORMATION (LINE L2)	(5.1, 1.2, 0)
Obj005	Line	Obj002	TRAIN Tr02 ARRIVAL AT STATION E AT 08:05:20 DEPARTURE FROM STATION E AT 08:06:10	OPERATION PLAN INFORMATION (LINE L2)	(5.2, 1.2, 0)
...	...	...	...	...	...

FIG. 18

1801

TARGET VIRTUAL SPACE OBJECT ID	OPERATION METHOD	OPERATION POSITION
Obj003	TRIGGER PRESSING	(5.1, 1.25, 0.3)

FIG. 19

1901

OPERATION TARGET TYPE	OPERATION TARGET DATA	RAILWAY OPERATION INFORMATION TO WHICH THE OPERATION TARGET BELONGS
TRAIN (STATION DEPARTURE - STATION ARRIVAL)	LINE L2, TRAIN Tr2, DEPARTURE FROM STATION A AT 08:00:30 ARRIVAL AT STATION E AT 08:05:20	OPERATION PLAN INFORMATION (LINE L2)

FIG. 21

2101

TARGET RAILWAY OPERATION INFORMATION	OPERATION TARGET TYPE	CHANGEABLE PORTION	CHANGEABLE RANGE
OPERATION PLAN INFORMATION	TRAIN (STATION ARRIVAL - STATION DEPARTURE), TRAIN (STATION DEPARTURE - STATION ARRIVAL), TRAIN (ARRIVAL STATION)	ARRIVAL TIME AT ARRIVAL SATION	WITHIN ±300 SECONDS OF ARRIVAL TIME, EVERY 10 SECONDS
OPERATION PLAN INFORMATION	TRAIN (STATION ARRIVAL - STATION DEPARTURE), TRAIN (STATION DEPARTURE - STATION ARRIVAL), TRAIN (DEPARTURE STATION)	DEPARTURE TIME FROM DEPARTURE STATION	WITHIN ±300 SECONDS OF DEPARTURE TIME, EVERY 10 SECONDS
OPERATION PLAN INFORMATION	TRAIN (STATION DEPARTURE - STATION ARRIVAL)	TRAVEL SECTION	IN CASE OF PRESENCE OF PARALLEL TRAVEL SECTION

2102
2103
2104

FIG. 22

2201

CHANGE TARGET DATA	CHANGE TARGET DATA TYPE	RAILWAY OPERATION INFORMATION TO WHICH THE CHANGE TARGET BELONGS
DEPARTURE FROM STATION A AT 08:00:30	DEPARTURE TIME FROM DEPARTURE STATION	OPERATION PLAN INFORMATION (LINE L2)
ARRIVAL AT STATION E AT 08:05:20	ARRIVAL TIME AT ARRIVAL SATION	OPERATION PLAN INFORMATION (LINE L2)
STATION A - STATION E	TRAVEL SECTION	OPERATION PLAN INFORMATION (LINE L2)

2202
2203
2204

FIG. 23

2301

RANGE ID	CHANGE DESTINATION CANDIDATE DATA RANGE
Rn01	STATION A, RANGE OF 07:55:30 - 08:05:30, EVERY 10 SECONDS
Rn02	STATION B, RANGE OF 08:00:20 - 08:10:20, EVERY 10 SECONDS
Rn03	PARALLEL TRAVEL SECTION WITH LINE L2: BETWEEN STATION A AND STATION E

FIG. 24

2401

CHANGE DESTINATION CANDIDATE DATA	CHANGE DESTINATION CANDIDATE DATA TYPE	RAILWAY OPERATION INFORMATION TO WHICH THE CHANGE DESTINATION CANDIDATE BELONGS
DEPARTURE FROM STATION A AT 07:55:30	DEPARTURE TIME FROM DEPARTURE STATION	OPERATION PLAN INFORMATION (LINE L2)
DEPARTURE FROM STATION A AT 07:55:40	DEPARTURE TIME FROM DEPARTURE STATION	OPERATION PLAN INFORMATION (LINE L2)
...	...	...
ARRIVAL AT STATION E AT 08:00:20	ARRIVAL TIME AT ARRIVAL SATION	OPERATION PLAN INFORMATION (LINE L2)
ARRIVAL AT STATION E AT 08:00:30	ARRIVAL TIME AT ARRIVAL SATION	OPERATION PLAN INFORMATION (LINE L2)
...	...	...
STATION A - STATION B	TRAVEL SECTION	OPERATION PLAN INFORMATION (LINE L1)

2402

2403

2404

DATA ON ANOTHER LINE L1 BETWEEN STATION A AND STATION B

FIG. 25

2501

VIRTUAL SPACE OBJECT ID	DISPLAY ASSET	RELATING VIRTUAL SPACE OBJECT ID	VIRTUAL SPACE DISPLAY POSITION	CHANGE TARGET DATA	CHANGE TARGET DATA TYPE	RAILWAY OPERATION INFORMATION TO WHICH THE CHANGE TARGET BELONGS	CHANGE DESTINATION CANDIDATE DATA	CHANGE DESTINATION CANDIDATE DATA TYPE	RAILWAY OPERATION INFORMATION TO WHICH THE CHANGE DESTINATION CANDIDATE BELONGS
Obj0X1	Point	Obj001	(4.9, 1.3, 0)	DEPARTURE FROM STATION A AT 08:00:30	DEPARTURE TIME FROM DEPARTURE STATION	OPERATION PLAN INFORMATION (LINE L2)	DEPARTURE FROM STATION A AT 07:55:30	DEPARTURE TIME FROM DEPARTURE STATION	OPERATION PLAN INFORMATION (LINE L2)
...	...	...	...	...	...	...	...	...	...
Obj0Y1	Point	Obj001	(5.0, 1.2, 0)	ARRIVAL AT STATION E AT 08:05:20	ARRIVAL TIME AT ARRIVAL SATION	LINE OPERATION INFORMATION (LINE L2)	ARRIVAL AT STATION E AT 08:00:20	ARRIVAL TIME AT ARRIVAL SATION	LINE OPERATION INFORMATION (LINE L2)
...	...	...	...	...	...	...	...	...	...
Obj0Z1	Point	Obj0XX	(5.0, 1.3, -0.4)	STATION A - STATION B	TRAVEL SECTION	LINE OPERATION INFORMATION (LINE L2)	STATION A - STATION B	TRAVEL SECTION	LINE OPERATION INFORMATION (LINE L1)

2502

2503

2504

FIG. 26

2601

VIRTUAL SPACE OBJECT ID	DISPLAY ASSET	RELATING VIRTUAL SPACE OBJECT ID	VIRTUAL SPACE DISPLAY POSITION	CHANGE TARGET DATA	CHANGE TARGET DATA TYPE	RAILWAY OPERATION INFORMATION TO WHICH THE CHANGE TARGET BELONGS	CHANGE DESTINATION CANDIDATE DATA	CHANGE DESTINATION CANDIDATE DATA TYPE	RAILWAY OPERATION INFORMATION TO WHICH THE CHANGE DESTINATION CANDIDATE BELONGS
Obj0Y1	Point	Obj001	(5.0, 1.2, 0)	ARRIVAL AT STATION E AT 08:05:20	ARRIVAL TIME AT ARRIVAL SATION	LINE OPERATION INFORMATION (LINE L2)	ARRIVAL AT STATION E AT 08:00:20	ARRIVAL TIME AT ARRIVAL SATION	LINE OPERATION INFORMATION (LINE L2)