FIG. 1

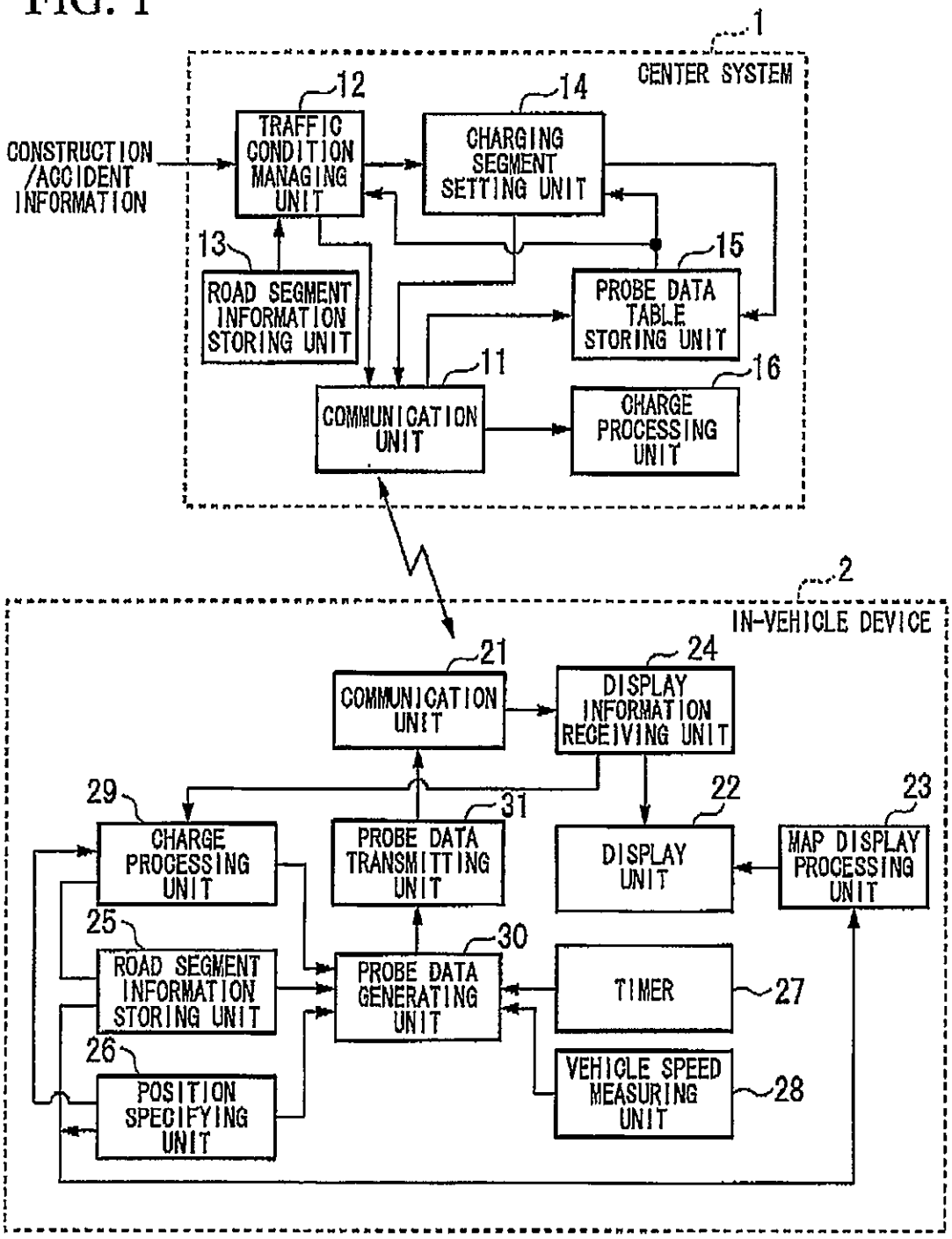

1
CENTER SYSTEM
12
TRAFFIC CONDITION MANAGING UNIT
14
CHARGING SEGMENT SETTING UNIT
CONSTRUCTION /ACCIDENT INFORMATION
13
ROAD SEGMENT INFORMATION STORING UNIT
15
PROBE DATA TABLE STORING UNIT
11
COMMUNICATION UNIT
16
CHARGE PROCESSING UNIT
2
IN-VEHICLE DEVICE
21
COMMUNICATION UNIT
24
DISPLAY INFORMATION RECEIVING UNIT
29
CHARGE PROCESSING UNIT
31
PROBE DATA TRANSMITTING UNIT
22
DISPLAY UNIT
23
MAP DISPLAY PROCESSING UNIT
25
ROAD SEGMENT INFORMATION STORING UNIT
30
PROBE DATA GENERATING UNIT
TIMER
27
26
POSITION SPECIFYING UNIT
VEHICLE SPEED MEASURING UNIT
28

FIG. 2

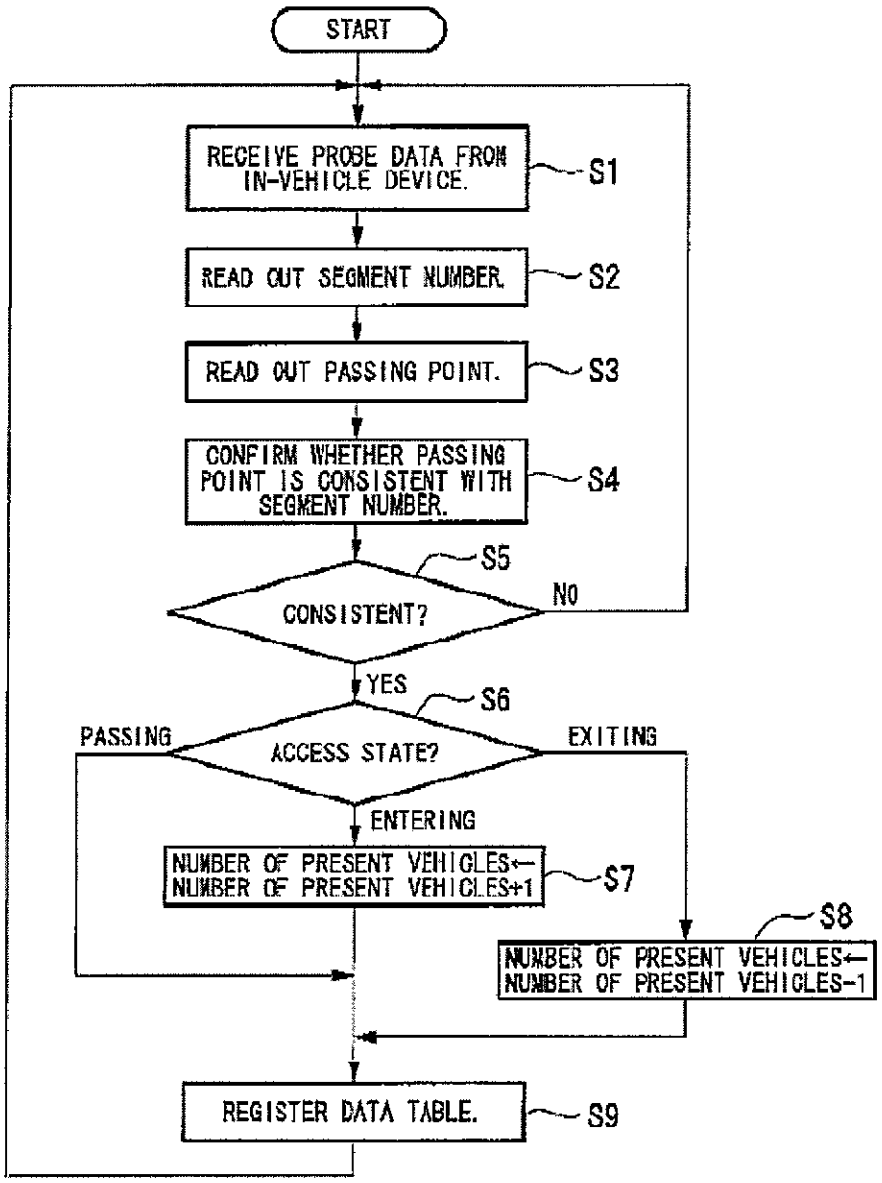

START
RECEIVE PROBE DATA FROM IN-VEHICLE DEVICE.
S1
READ OUT SEGMENT NUMBER.
S2
READ OUT PASSING POINT.
S3
CONFIRM WHETHER PASSING POINT IS CONSISTENT WITH SEGMENT NUMBER.
S4
S5
CONSISTENT?
NO
YES
S6
PASSING
ACCESS STATE?
EXITING
ENTERING
NUMBER OF PRESENT VEHICLES←NUMBER OF PRESENT VEHICLES+1
S7
S8
NUMBER OF PRESENT VEHICLES←NUMBER OF PRESENT VEHICLES-1
REGISTER DATA TABLE.
S9

FIG. 3

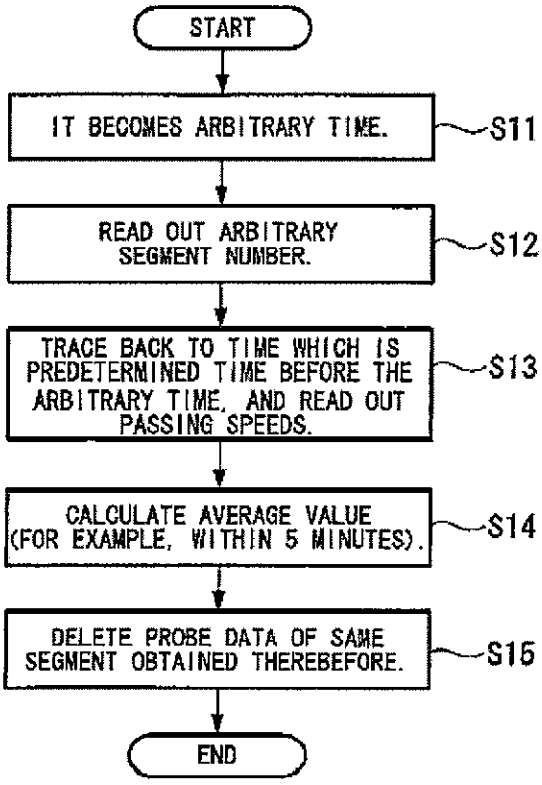

START
IT BECOMES ARBITRARY TIME.
S11
READ OUT ARBITRARY SEGMENT NUMBER.
S12
TRACE BACK TO TIME WHICH IS PREDETERMINED TIME BEFORE THE ARBITRARY TIME, AND READ OUT PASSING SPEEDS.
S13
CALCULATE AVERAGE VALUE (FOR EXAMPLE, WITHIN 5 MINUTES).
S14
DELETE PROBE DATA OF SAME SEGMENT OBTAINED THEREBEFORE.
S15
END

FIG. 4

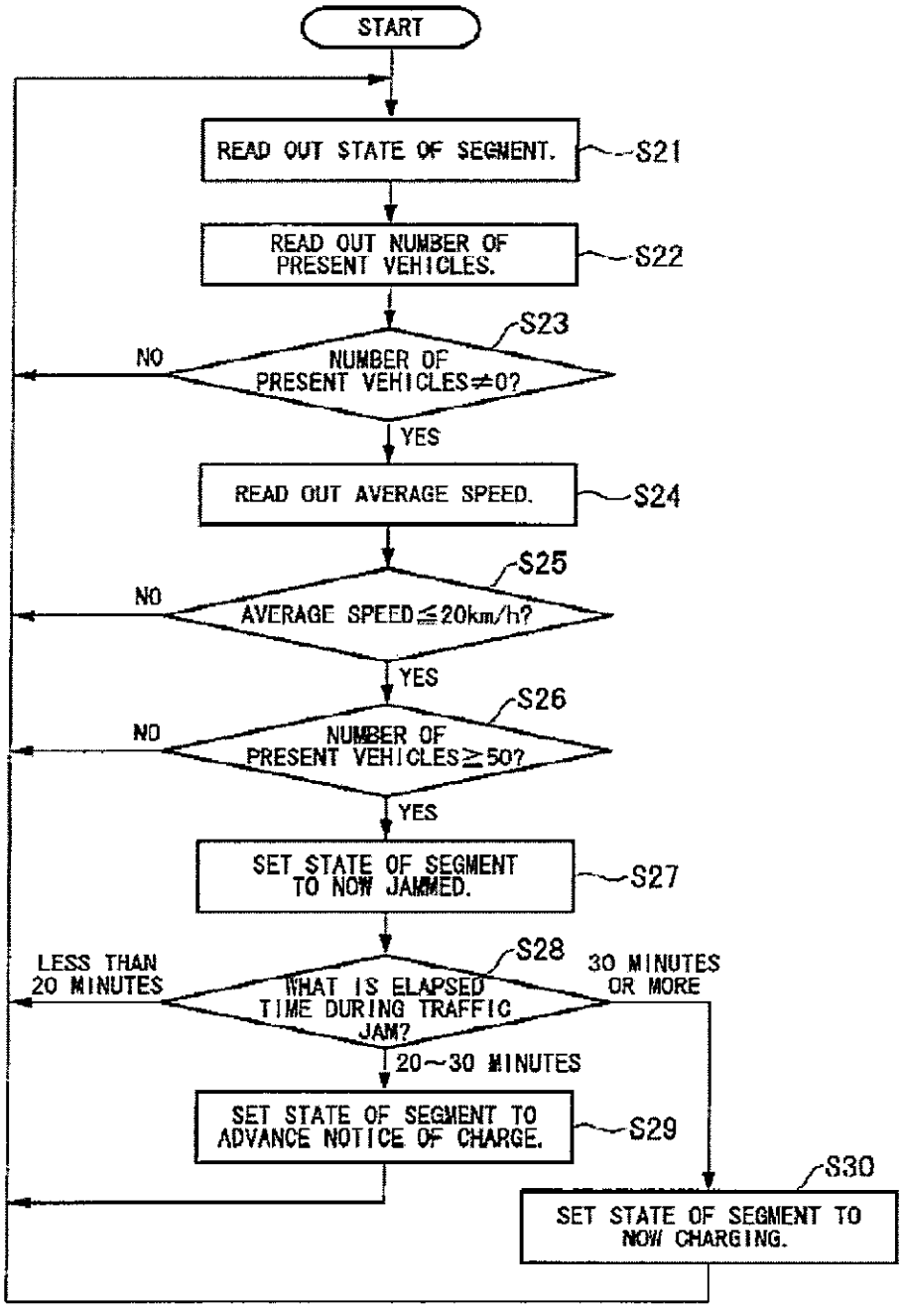

START
READ OUT STATE OF SEGMENT.
S21
READ OUT NUMBER OF PRESENT VEHICLES.
S22
S23
NUMBER OF PRESENT VEHICLES≠0?
NO
YES
READ OUT AVERAGE SPEED.
S24
S25
AVERAGE SPEED≦20km/h?
NO
YES
S26
NUMBER OF PRESENT VEHICLES≧50?
NO
YES
SET STATE OF SEGMENT TO NOW JAMMED.
S27
S28
WHAT IS ELAPSED TIME DURING TRAFFIC JAM?
LESS THAN 20 MINUTES
30 MINUTES OR MORE
20~30 MINUTES
SET STATE OF SEGMENT TO ADVANCE NOTICE OF CHARGE.
S29
S30
SET STATE OF SEGMENT TO NOW CHARGING.

FIG. 5

PROBE DATA TABLE

TIME	SEGMENT NUMBER	ACCESS STATE	PASSING POINT	PASSING SPEED
·	11	PASSING	·····	20km/h
15:00:01	10	·	·····	30km/h
15:00:01	10	ENTERING	·····	30km/h
15:00:03	10	EXITING	·····	50km/h
·	·	·	·	·
·	·	·	·	·
·	·	·	·	·
·	·	·	·	·

FIG. 6

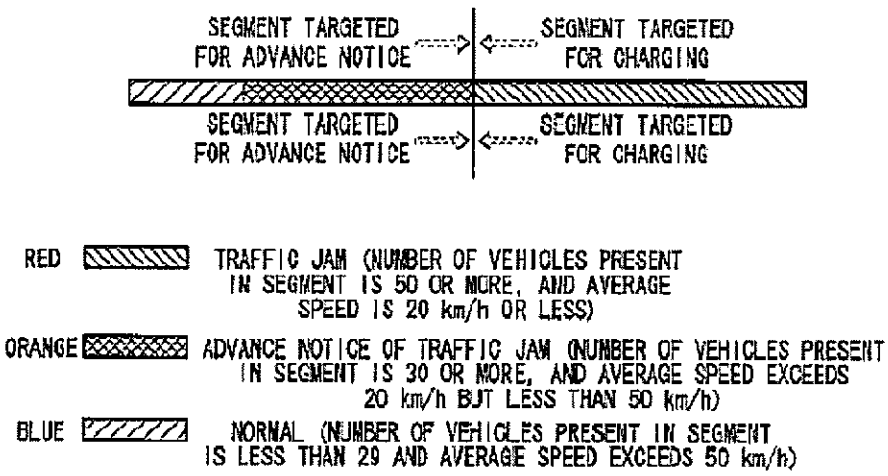
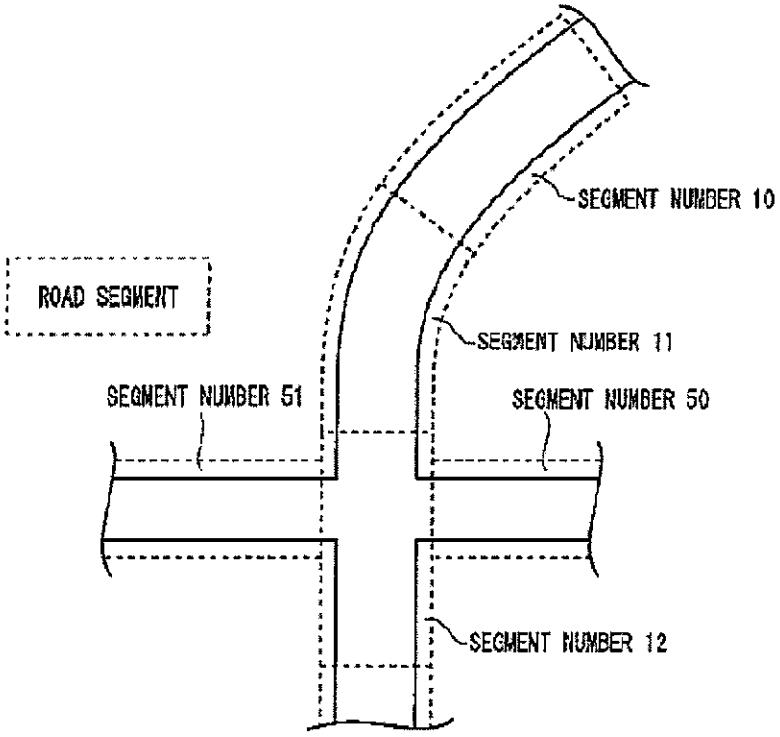


FIG. 7


ROAD SEGMENT
SEGMENT NUMBER 10
SEGMENT NUMBER 11
SEGMENT NUMBER 51
SEGMENT NUMBER 50
SEGMENT NUMBER 12