FIG. 1

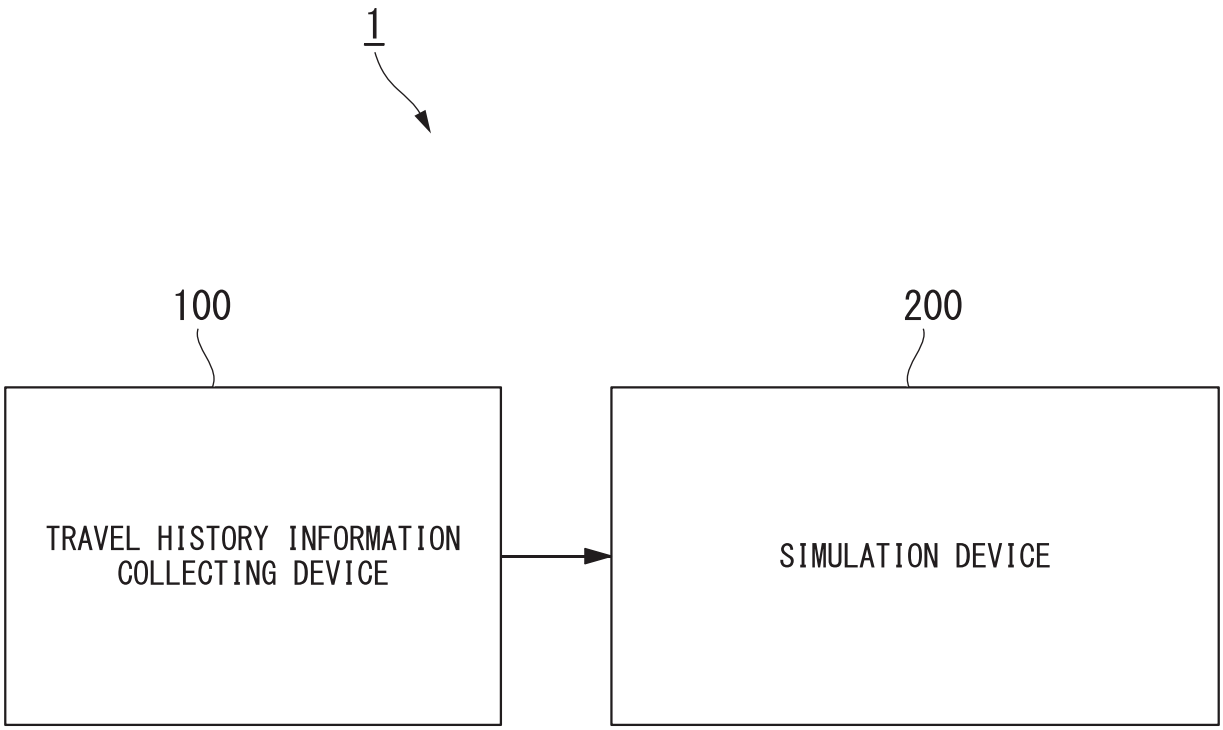

1
100
200
TRAVEL HISTORY INFORMATION COLLECTING DEVICE
SIMULATION DEVICE

FIG. 2

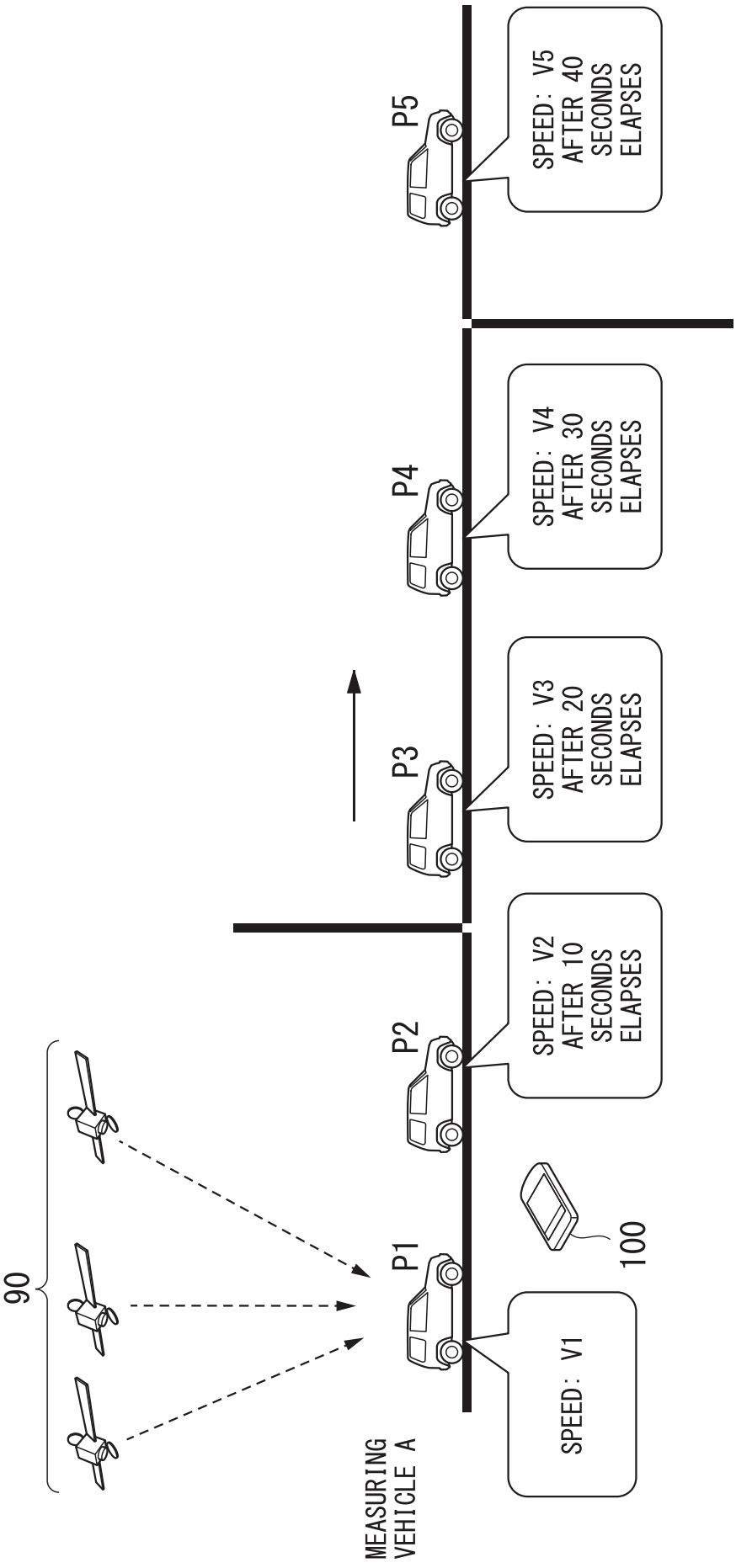

90
MEASURING VEHICLE A
P1
SPEED: V1
100
P2
SPEED: V2 AFTER 10 SECONDS ELAPSES
P3
SPEED: V3 AFTER 20 SECONDS ELAPSES
P4
SPEED: V4 AFTER 30 SECONDS ELAPSES
P5
SPEED: V5 AFTER 40 SECONDS ELAPSES

FIG. 3

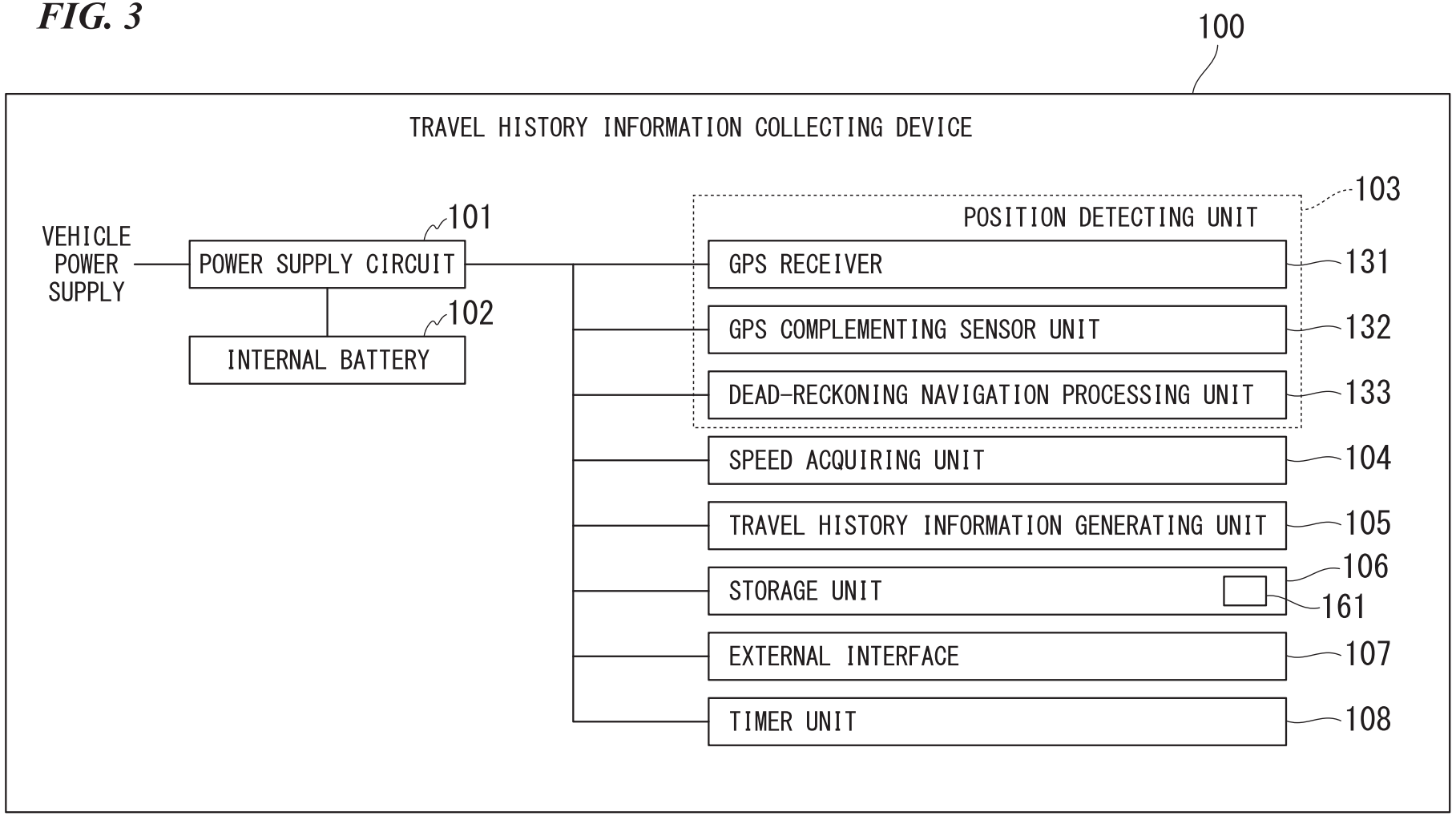

100
TRAVEL HISTORY INFORMATION COLLECTING DEVICE
VEHICLE POWER SUPPLY
101
POWER SUPPLY CIRCUIT
102
INTERNAL BATTERY
103
POSITION DETECTING UNIT
GPS RECEIVER
131
GPS COMPLEMENTING SENSOR UNIT
132
DEAD-RECKONING NAVIGATION PROCESSING UNIT
133
SPEED ACQUIRING UNIT
104
TRAVEL HISTORY INFORMATION GENERATING UNIT
105
STORAGE UNIT
106
161
EXTERNAL INTERFACE
107
TIMER UNIT
108

FIG. 4

< TRAVEL HISTORY INFORMATION TABLE>

TIME	・・・	9:39:00	9:39:10	9:39:20	・・・	9:40:20	9:40:30	・・・
LATITUDE		+35.25.33.135	+35.25.44.456	+35.25.45.222		+35.35.10.123	+35.35.22.234	
LONGITUDE		+139.40.20.234	+139.40.50.123	+139.40.55.111		+139.45.10.567	+139.45.15.432	
SPEED		45.5	56.5	60.0		52.0	63.5	

FIG. 5

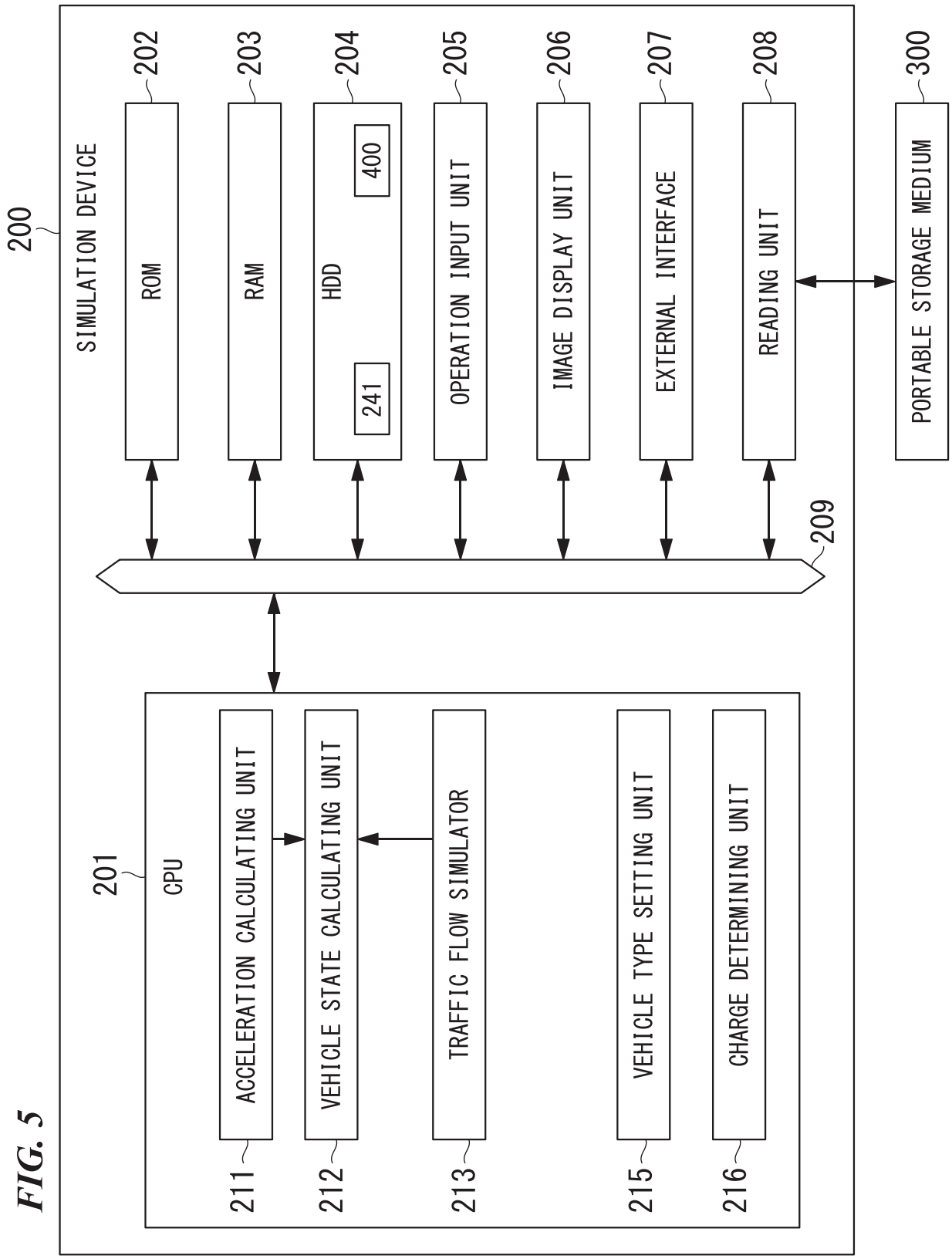

200
SIMULATION DEVICE
ROM
202
RAM
203
HDD
204
400
241
OPERATION INPUT UNIT
205
IMAGE DISPLAY UNIT
206
EXTERNAL INTERFACE
207
READING UNIT
208
PORTABLE STORAGE MEDIUM
300
209
201
CPU
ACCELERATION CALCULATING UNIT
211
VEHICLE STATE CALCULATING UNIT
212
TRAFFIC FLOW SIMULATOR
213
VEHICLE TYPE SETTING UNIT
215
CHARGE DETERMINING UNIT
216

FIG. 6

<POWER CONSUMPTION CALCULATING MODEL>

POWER CONSUMPTION CALCULATING MODEL 1	POWER CONSUMPTION PER TIME UNIT=a×ACCELERATION+b×SPEED +c×LIGHT ON STATE+d×AIR-CONDITIONING OPERATION STATE+ e×EXTERNAL AIR TEMPERATURE+f×GRADIENT+g (a TO g ARE FIXED PARAMETERS)
POWER CONSUMPTION CALCULATING MODEL 2	POWER CONSUMPTION PER TIME UNIT=FUNCTION f (ACCELERATION, SPEED, LIGHT ON STATE, AIR-CONDITIONING OPERATION STATE, EXTERNAL AIR TEMPERATURE, GRADIENT)

FIG. 7

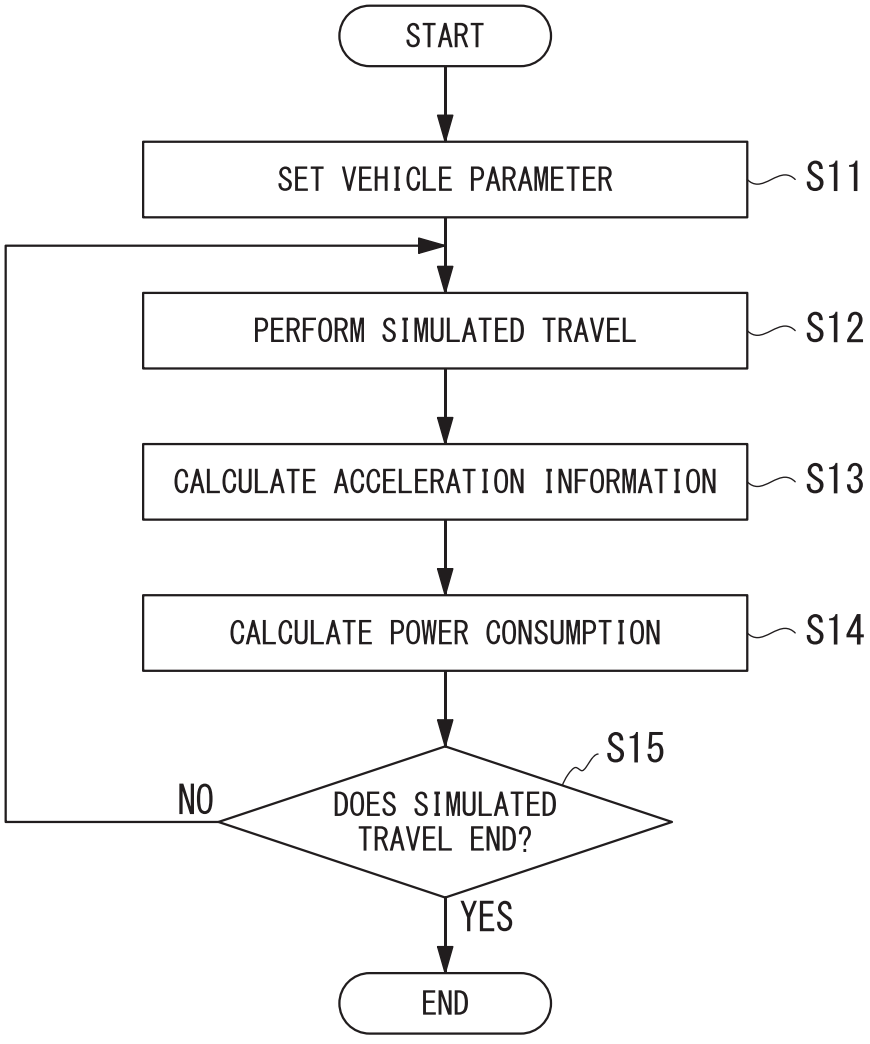


FIG. 8

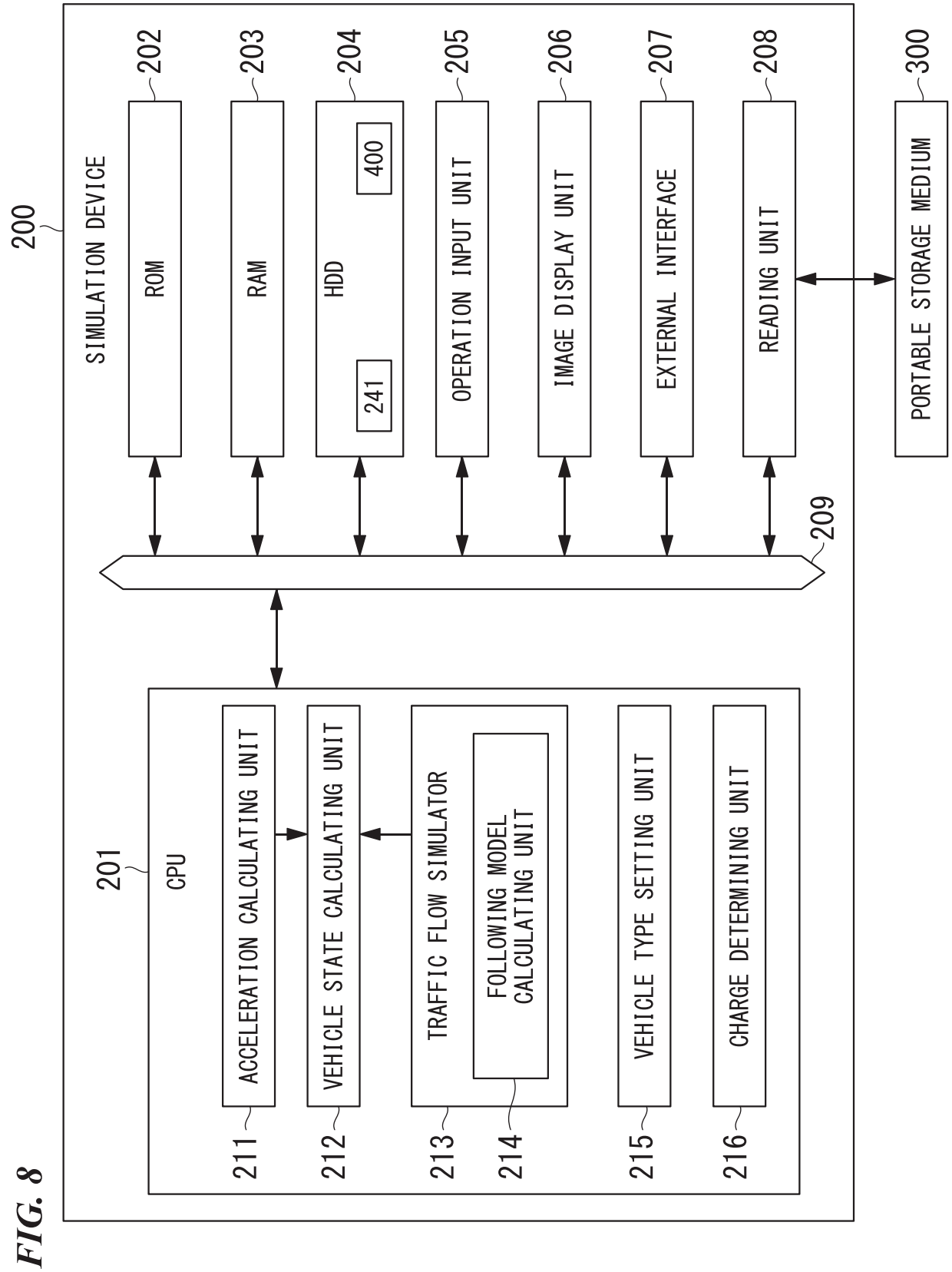
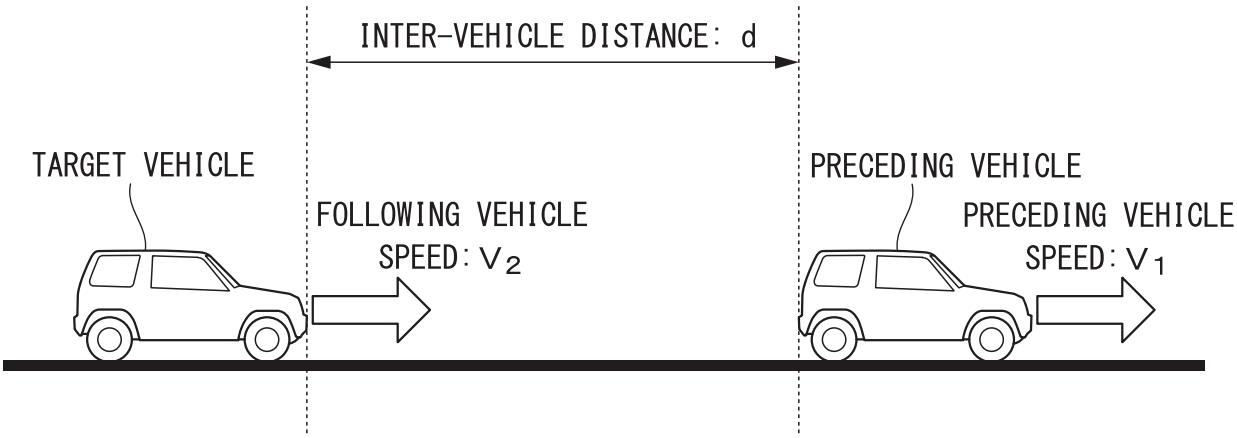

200
SIMULATION DEVICE
202
ROM
203
RAM
204
HDD
400
241
205
OPERATION INPUT UNIT
206
IMAGE DISPLAY UNIT
207
EXTERNAL INTERFACE
208
READING UNIT
300
PORTABLE STORAGE MEDIUM
209
201
CPU
211
ACCELERATION CALCULATING UNIT
212
VEHICLE STATE CALCULATING UNIT
213
TRAFFIC FLOW SIMULATOR
214
FOLLOWING MODEL CALCULATING UNIT
215
VEHICLE TYPE SETTING UNIT
216
CHARGE DETERMINING UNIT

FIG. 9


INTER-VEHICLE DISTANCE: d
TARGET VEHICLE
FOLLOWING VEHICLE
SPEED: V2
PRECEDING VEHICLE
PRECEDING VEHICLE
SPEED: V1