FIG. 1

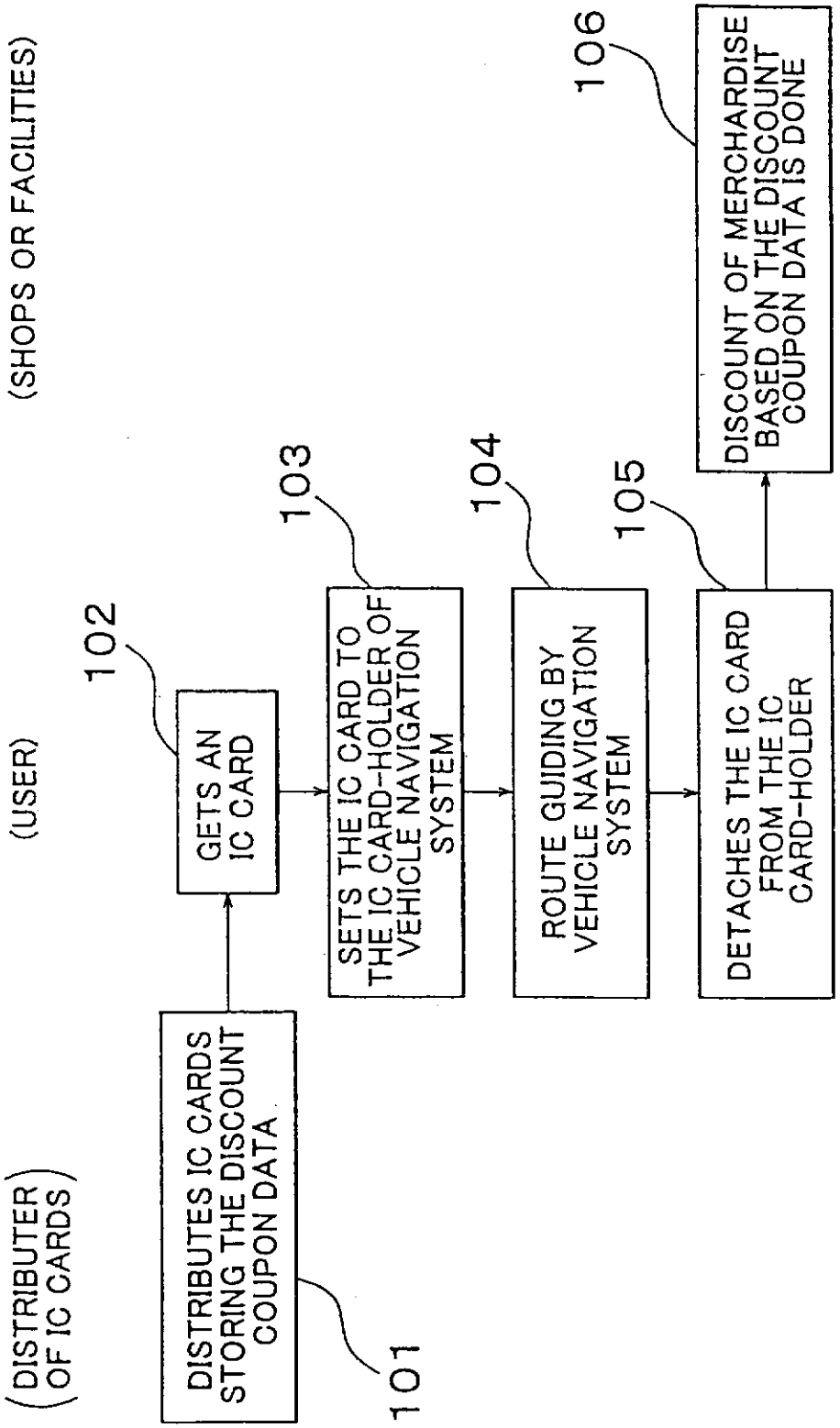

(DISTRIBUTER OF IC CARDS)
(USER)
(SHOPS OR FACILITIES)
DISTRIBUTES IC CARDS STORING THE DISCOUNT COUPON DATA
101
GETS AN IC CARD
102
SETS THE IC CARD TO THE IC CARD-HOLDER OF VEHICLE NAVIGATION SYSTEM
103
ROUTE GUIDING BY VEHICLE NAVIGATION SYSTEM
104
DETACHES THE IC CARD FROM THE IC CARD-HOLDER
105
DISCOUNT OF MERCHARDISE BASED ON THE DISCOUNT COUPON DATA IS DONE
106

FIG. 2

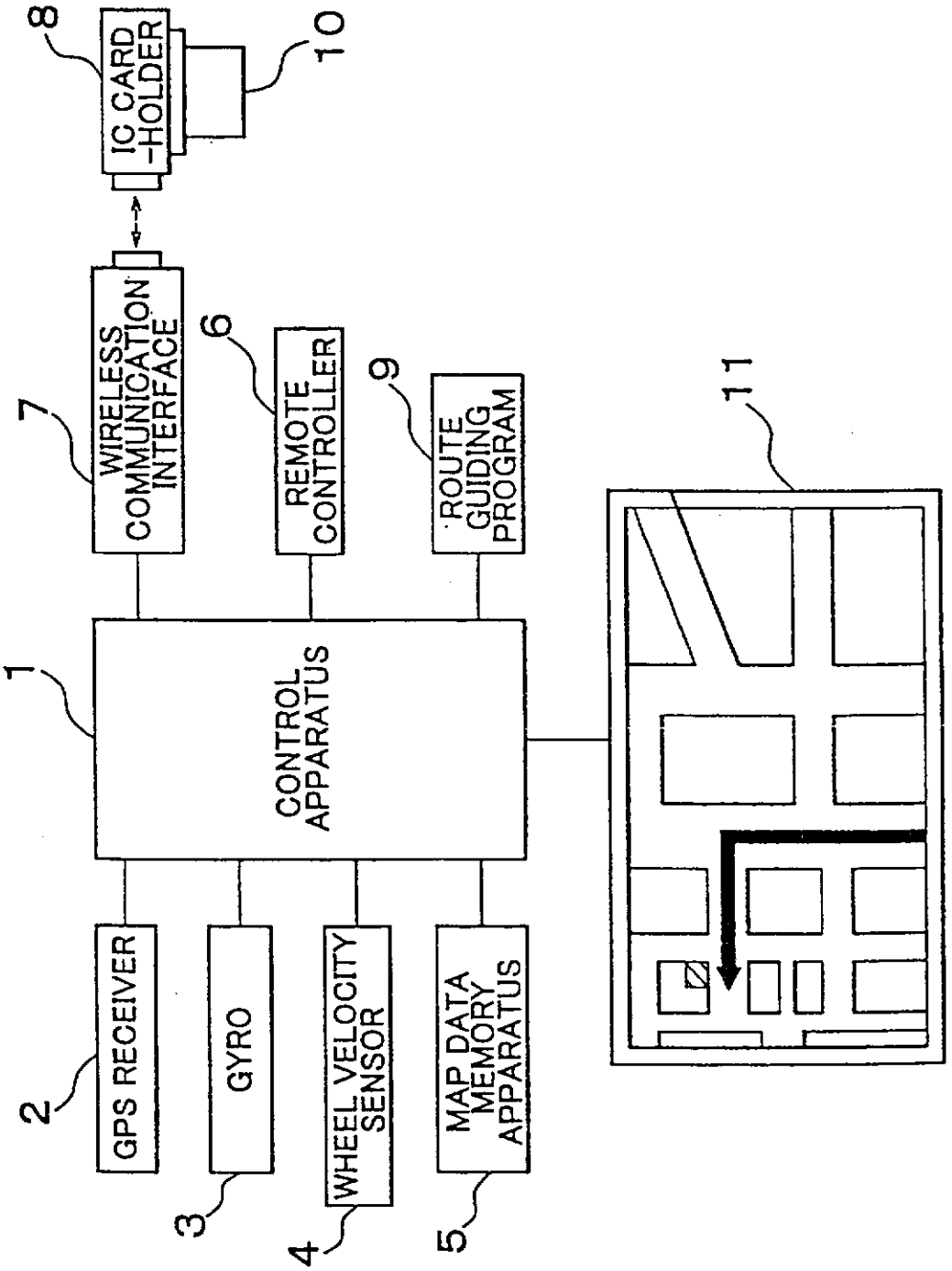

8
IC CARD -HOLDER
10
WIRELESS COMMUNICATION INTERFACE
7
6
REMOTE CONTROLLER
9
ROUTE GUIDING PROGRAM
11
1
CONTROL APPARATUS
2
GPS RECEIVER
3
GYRO
4
WHEEL VELOCITY SENSOR
5
MAP DATA MEMORY APPARATUS

FIG. 3

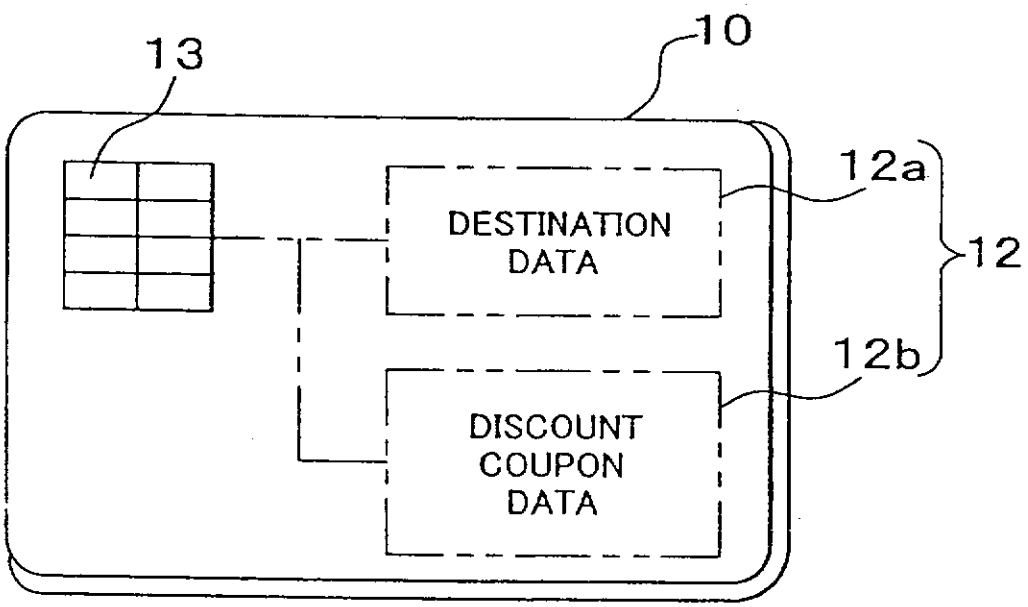


FIG. 4

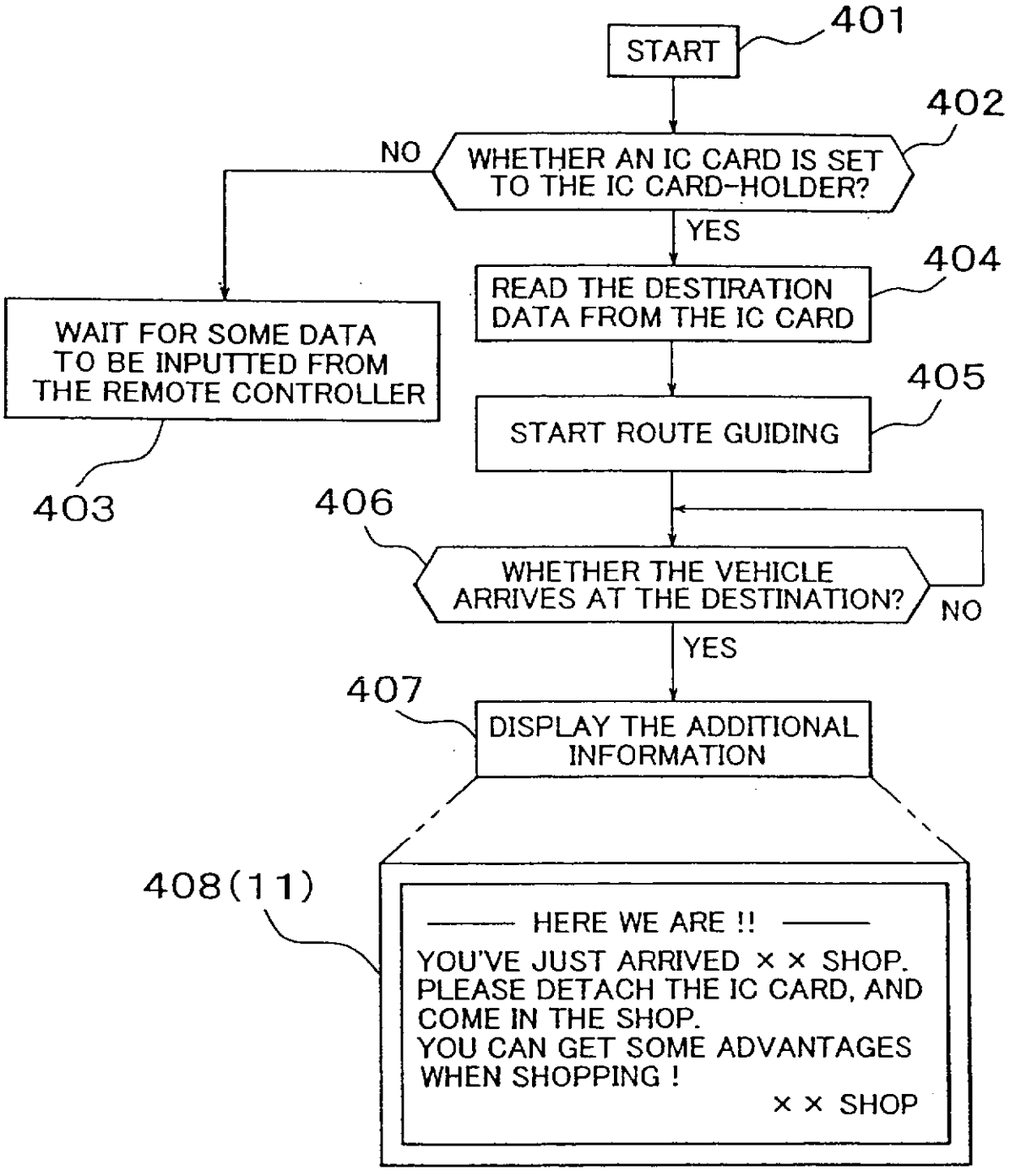
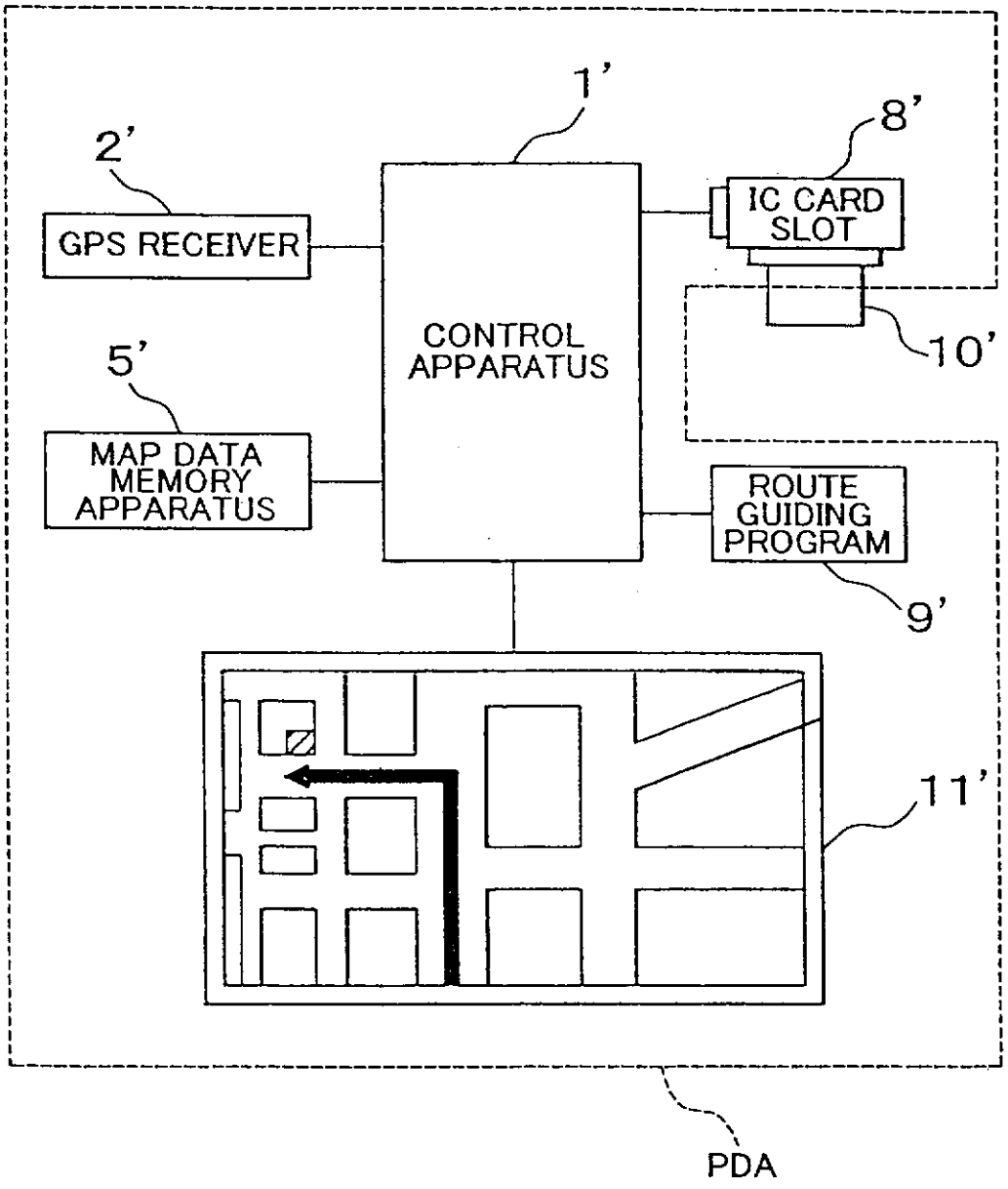

401
START
402
NO
WHETHER AN IC CARD IS SET TO THE IC CARD-HOLDER?
YES
404
READ THE DESTIRATION DATA FROM THE IC CARD
405
START ROUTE GUIDING
WAIT FOR SOME DATA TO BE INPUTTED FROM THE REMOTE CONTROLLER
403
406
WHETHER THE VEHICLE ARRIVES AT THE DESTINATION?
NO
YES
407
DISPLAY THE ADDITIONAL INFORMATION
408(11)
HERE WE ARE !!
YOU'VE JUST ARRIVED × × SHOP.
PLEASE DETACH THE IC CARD, AND COME IN THE SHOP.
YOU CAN GET SOME ADVANTAGES WHEN SHOPPING !
× × SHOP

FIG. 5


1'
2'
GPS RECEIVER
8'
IC CARD SLOT
10'
CONTROL APPARATUS
5'
MAP DATA MEMORY APPARATUS
ROUTE GUIDING PROGRAM
9'
11'
PDA