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Kondou et al.

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(54) **METHOD AND SYSTEM FOR PROVIDING INFORMATION FOR A MOBILE TERMINAL AND A MOBILE TERMINAL**

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Related U.S. Application Data

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(30) **Foreign Application Priority Data**

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(51) **Int. Cl.**^{7} **G06F 165/00**
(52) **U.S. Cl.** **701/203**; 701/208; 701/211; 340/989
(58) **Field of Search** .... 701/200, 202, 701/201, 203, 207, 208, 209, 210, 211, 213; 340/990, 995, 998; 73/178 R

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(57) **ABSTRACT**

A mobile terminal, and an information providing method and system which immediately provides information, which the user of the mobile terminal desires, for the mobile terminal. Area and related service information are stored in corresponding relationship in a database. An information server which includes means for calculating the area of the destination of the mobile terminal loads information on the destination area from the database to the mobile terminal which moves toward the destination area, using radio communication means before the mobile terminal arrives at the destination area.
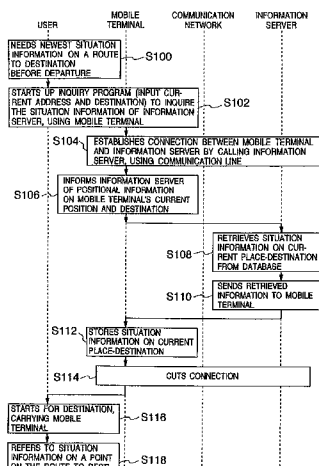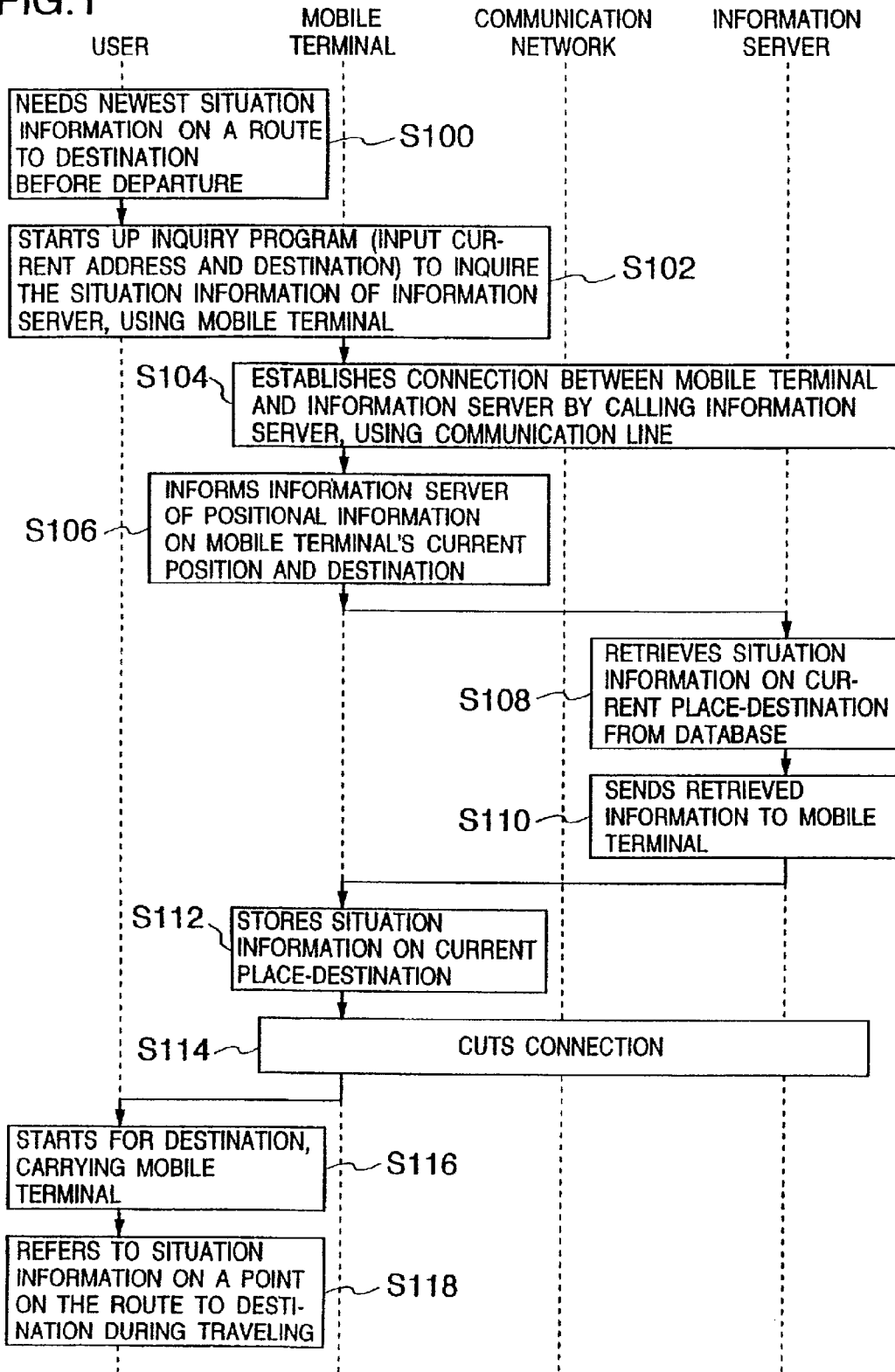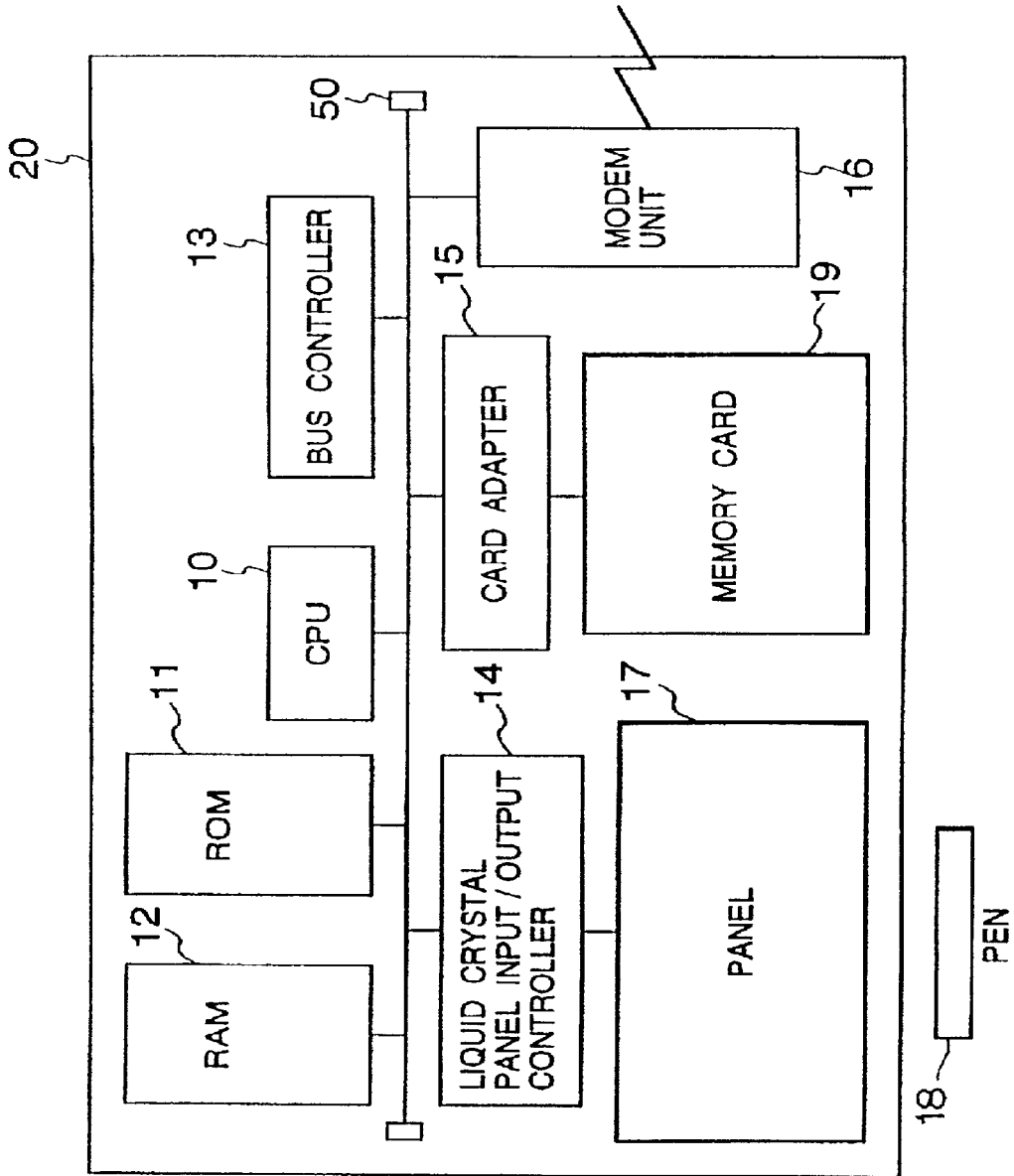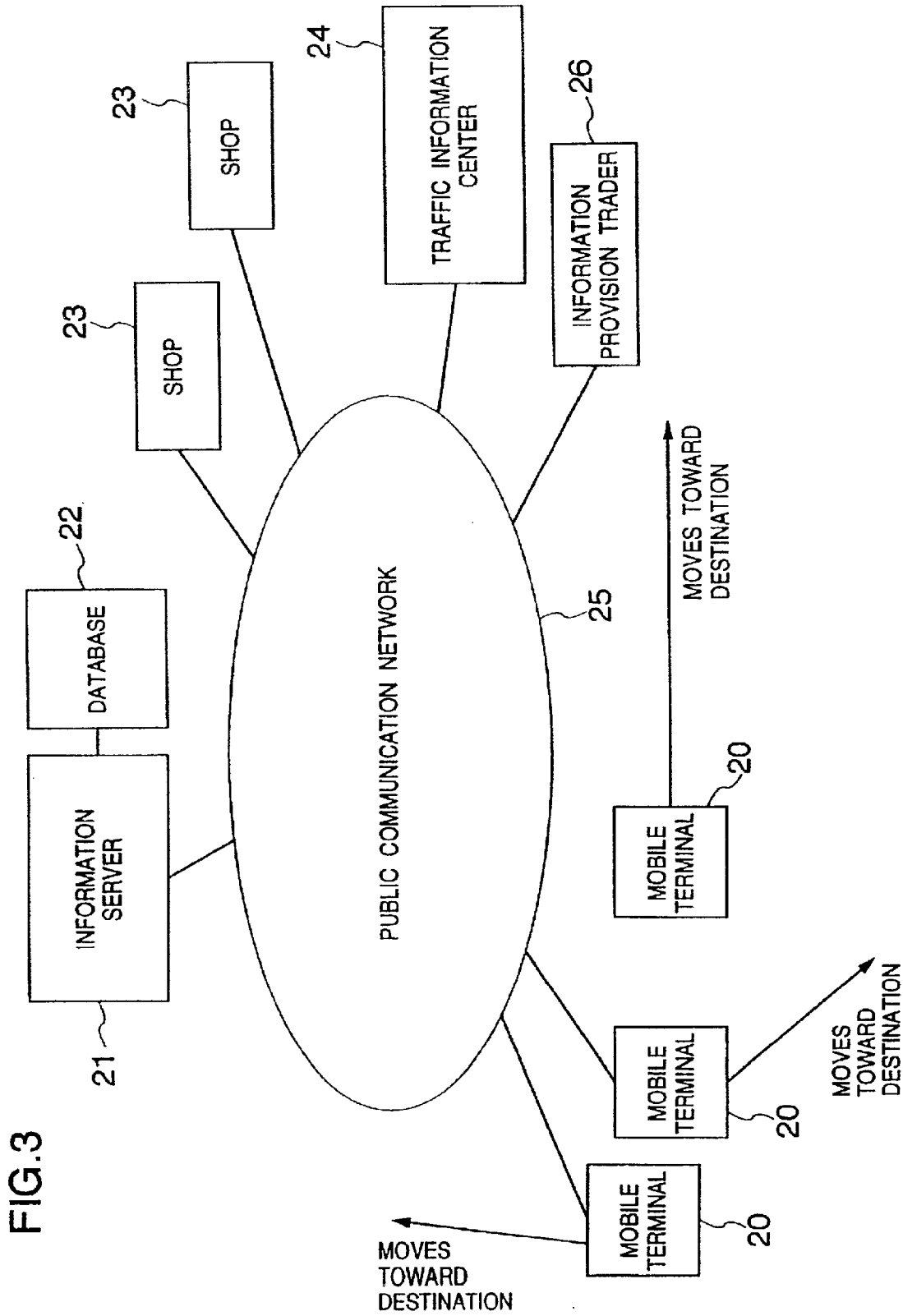
5 Claims, 19 Drawing Sheets

FIG.1

	USER	MOBILE TERMINAL	COMMUNICATION NETWORK	INFORMATION SERVER

NEEDS NEWEST SITUATION INFORMATION ON A ROUTE TO DESTINATION BEFORE DEPARTURE ~ S100

STARTS UP INQUIRY PROGRAM (INPUT CURRENT ADDRESS AND DESTINATION) TO INQUIRE THE SITUATION INFORMATION OF INFORMATION SERVER, USING MOBILE TERMINAL ~ S102

S104 ~ ESTABLISHES CONNECTION BETWEEN MOBILE TERMINAL AND INFORMATION SERVER BY CALLING INFORMATION SERVER, USING COMMUNICATION LINE

S106 ~ INFORMS INFORMATION SERVER OF POSITIONAL INFORMATION ON MOBILE TERMINAL'S CURRENT POSITION AND DESTINATION

S108 ~ RETRIEVES SITUATION INFORMATION ON CURRENT PLACE-DESTINATION FROM DATABASE

S110 ~ SENDS RETRIEVED INFORMATION TO MOBILE TERMINAL

S112 ~ STORES SITUATION INFORMATION ON CURRENT PLACE-DESTINATION

S114 ~ CUTS CONNECTION

STARTS FOR DESTINATION, CARRYING MOBILE TERMINAL ~ S116

REFERS TO SITUATION INFORMATION ON A POINT ON THE ROUTE TO DESTINATION DURING TRAVELING ~ S118

FIG.2

FIG.3

FIG.4

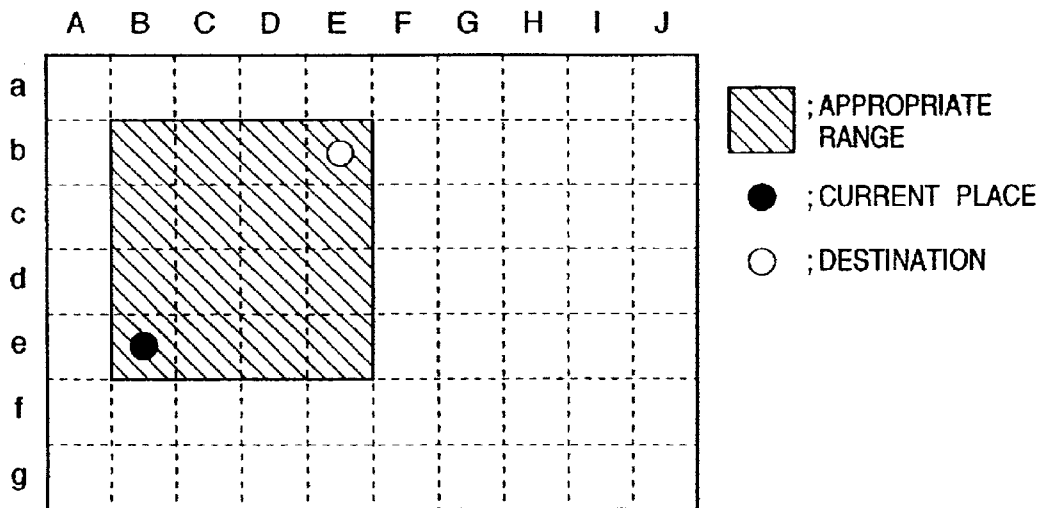|				
DATA 1	ADDRESS	RETRIEVAL KEY	SERVICE CLASSIFICATION	SERVICE INFORMATION
DATA 2	ADDRESS	RETRIEVAL KEY	SERVICE CLASSIFICATION	SERVICE INFORMATION
DATA 3	ADDRESS	RETRIEVAL KEY	SERVICE CLASSIFICATION	SERVICE INFORMATION
DATA 4	ADDRESS	RETRIEVAL KEY	SERVICE CLASSIFICATION	SERVICE INFORMATION
DATA 5	ADDRESS	RETRIEVAL KEY	SERVICE CLASSIFICATION	SERVICE INFORMATION
	⋮	⋮	⋮	⋮
DATA N	ADDRESS	RETRIEVAL KEY	DERVICE CLASSIFICATION	SERVICE INFORMATION

FIG.5

; APPROPRIATE RANGE

● ; CURRENT PLACE

○ ; DESTINATION

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