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6. Andt A 9-274 10-1-01
11/15 7. Reg 3 11.19.01
8. Andt B 2/19/02
9/18 9. Notice of Alhw -
10. Notice of Alhw about 3/18/02
11. Chg. of addr. Customer# 4-2-02
5-7-02
7/18/02 12. Change of Address to Customer Number 6/17/02

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Class	Sub.	Date	Exmr.
701	200	20 June 2001	YB
	201		
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	211		
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	214		
340	988		
	995		
342	357.01		
	357.06		
	357.08		
	443		
	147		
367	118		
Updated		7 Nov. 2001	YB
Updated		11 Mar 2002	YB

	Date	Exmr.
WEST	20 June 2001	YB

INTERFERENCE SEARCHED			
Class	Sub.	Date	Exmr.
701	200 201	12 Mar 2002	YB
342	357.01 357.08		
340	988		

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* cited by examiner

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Primary Examiner—Yonel Beaulieu

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(74) Attorney, Agent, or Firm—Mattingly, Stanger & Malur, P.C.

(57) **ABSTRACT**

(21) Appl. No.: **09/613,634**

A portable terminal has a function of walking navigation. The direction of the destination is displayed by an indicating arrow that always points in the direction of the destination. In the navigation processing, the user enters data to select a menu and/or set retrieving conditions on the setup screen. At first, the user gets the location information of the portable terminal, represented by a latitude/longitude or coordinates and an altitude, for example. Then, the user gets the direction information of the portable terminal, which is the direction of the tip of the portable terminal as determined by a compass, a gyro, or a clinometer. The location information and the direction information are set as terminal information for the retrieving conditions. The system controls retrieving of the database and retrieves the information corresponding to the selected menu, such as route guidance.

(22) Filed: **Jul. 11, 2000**

(30) **Foreign Application Priority Data**

Jul. 12, 1999 (JP) 11-197010

(51) Int. Cl.⁷ **G01C 21/00**

(52) U.S. Cl. **701/200; 701/201; 342/357.01; 342/357.08; 340/980**

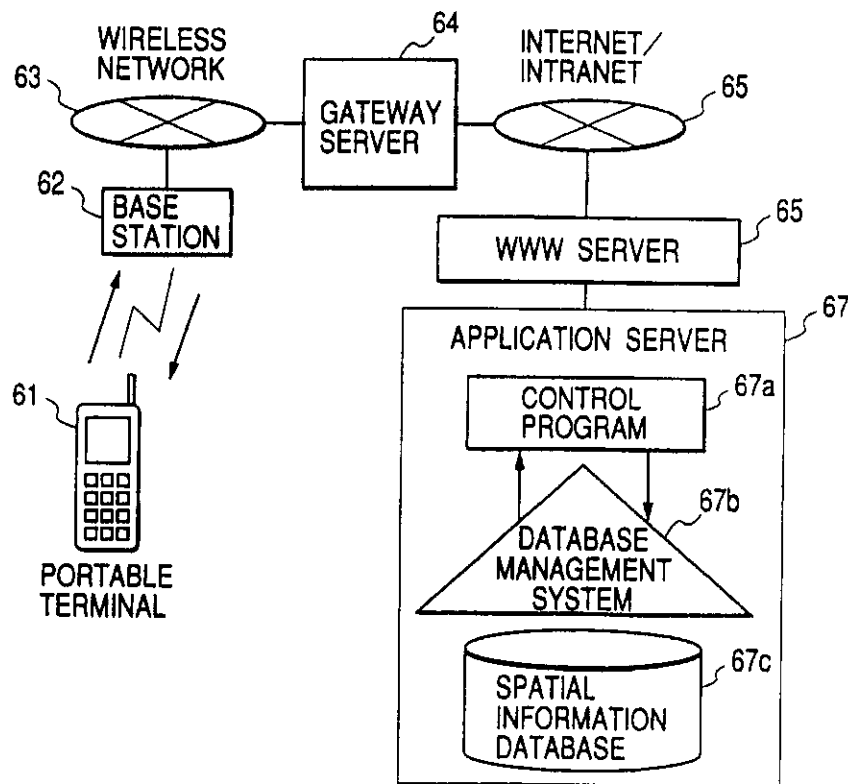
(58) Field of Search **701/200, 201, 701/202, 211, 212, 213, 214; 340/988, 995; 342/357.01, 357.06, 357.08, 443, 147; 367/118**

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13 Claims, 10 Drawing Sheets



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