

US005757289A

# United States Patent [19]

#### Nimura et al. **Date of Patent:** May 26, 1998 [45]

## [54] VEHICULAR NAVIGATION SYSTEM [75] Inventors: Mitsuhiro Nimura, Okazaki; Akimasa Nanba, Chiryu; Kazuteru Maekawa, Nishikamo-gun, all of Japan [73] Assignee: Aisin Aw Co., Ltd., Japan [21] Appl. No.: 466,193 [22] Filed: Jun. 6, 1995 [30] Foreign Application Priority Data Sep. 14, 1994 Japan ..... 6-247293 Oct. 3, 1994 [JP] Japan ...... 6-264584 [52] U.S. Cl. ...... 340/995; 340/990; 364/449.3; 364/449.4 340/988; 364/449.3, 444, 449.2, 449.4, 449.5; 73/178 R [56] References Cited

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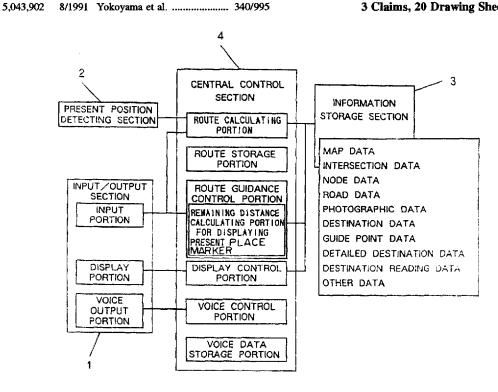
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**Patent Number:** 

#### ABSTRACT

A vehicular navigation system includes a central control unit which determines when a present position deviates from a searched route along which guidance is being provided from a starting point to a destination and determines whether or not the detected deviating present position is on a guidable road prior to re-searching the route and providing guidance based upon the re-searched route. A guidable road is a road upon which the navigation system contains sufficient map information and guide information for the navigation system to search a route and provide guidance. Additionally, system determines whether the vehicle has traveled a predetermined distance after re-search of the route prior to providing travel guidance based upon the re-searched route. Otherwise travel guidance continues to be provided based upon the previously searched route. A driver, after making a short deviation, may thus return to the previous route without travel guidance being interrupted by a re-searched route.

## 3 Claims, 20 Drawing Sheets





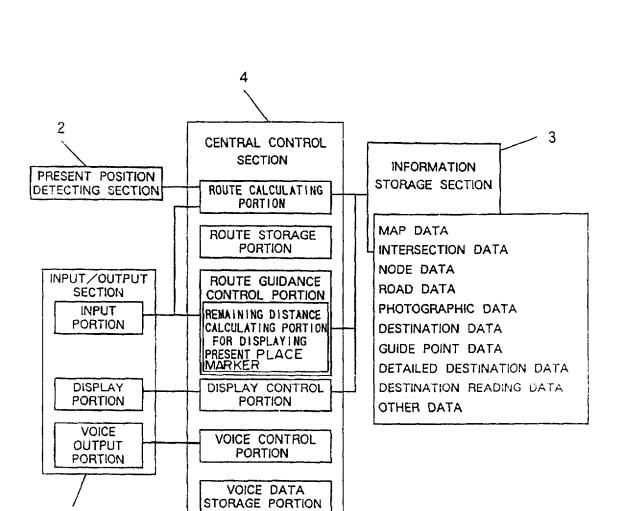


Fig. I



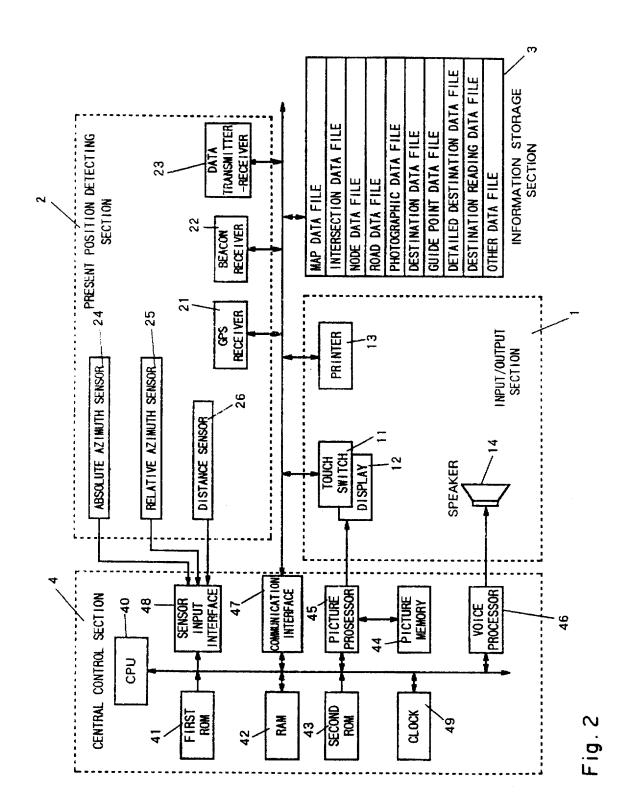




Fig.3

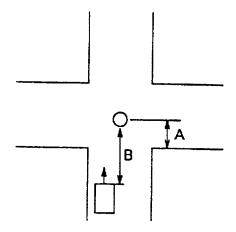


Fig.4

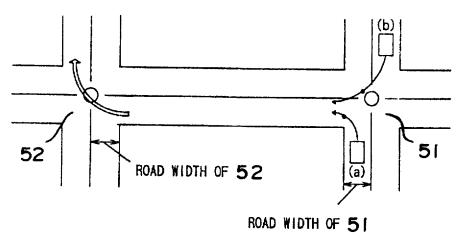


Fig.5

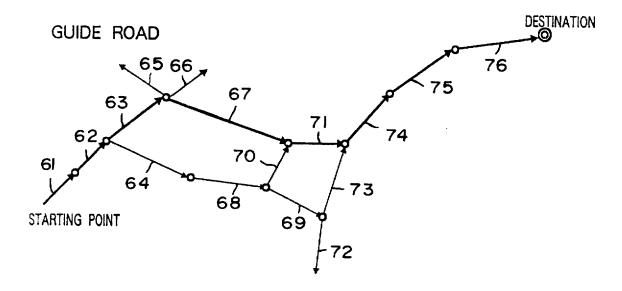


Fig.6

## GUIDE ROAD STRING DATA

NO.OF GUIDE ROADS
61
62
63
67
71
74
75
76

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