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United States Patent [19]

Uchida et al.

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Oct. 3, 2000

[54]	VEHICLE INFORMATION			
	COMMUNICATION DEVICE AND VEHICLE			
	INFORMATION COMMUNICATION SYSTEM			

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PCT Pub. Date: May 22, 1998

[30] Foreign Application Priority Data

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[52]	U.S. Cl.		 . 340/999 ; 340/439; 340/539;
			701/24; 455/420
[58]	Field of S	Search	

340/531, 999; 73/116; 701/24; 770/338; 455/420; 702/122

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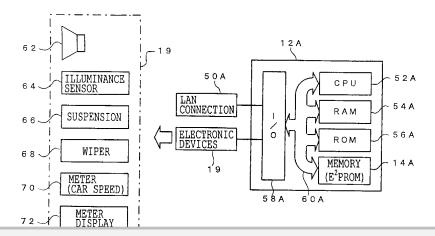
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Primary Examiner—Benjamin C. Lee Attorney, Agent, or Firm—Burns, Doane, Swecker & Mathis, LLP

[57] ABSTRACT

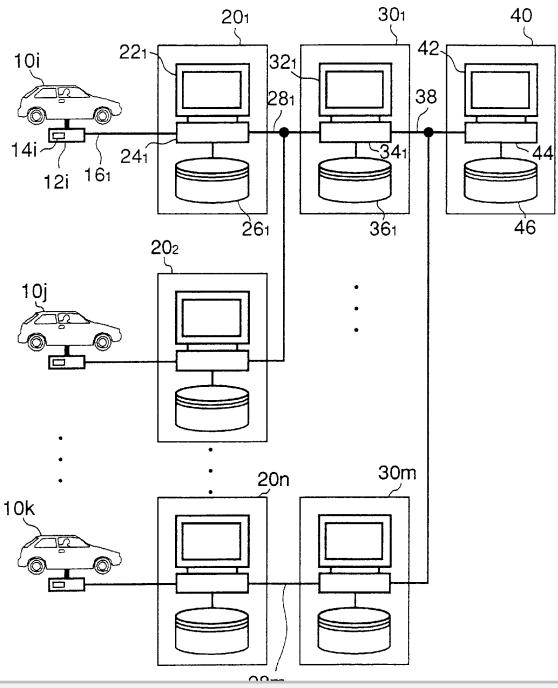
A vehicle onboard device having characteristics capable of being changed communicates with a vehicle to set a characteristic value to an optimum value. Parameters for setting conditions of an electronic device are called out of an E^2 PROM $\mathbf{14}_i$ of the vehicle $\mathbf{10}_i$ and are transmitted to a technology center 40 via a dealer 201, and an information center 30_1 . Each dealer 20_1 , the information center 30_1 , and the technology center 40 accumulate the parameters. The technology center 40 can collect the parameters of numerous vehicles and characteristic values for electronic control of each of the vehicles and can calculate newest and optimum parameters. The technology center 40 transmits this newest and optimum vehicle information to the vehicle 10, and each vehicle updates the parameters thereof to these newest and optimum parameters. Accordingly, the parameters of the vehicle are set as the newest parameters.

13 Claims, 15 Drawing Sheets

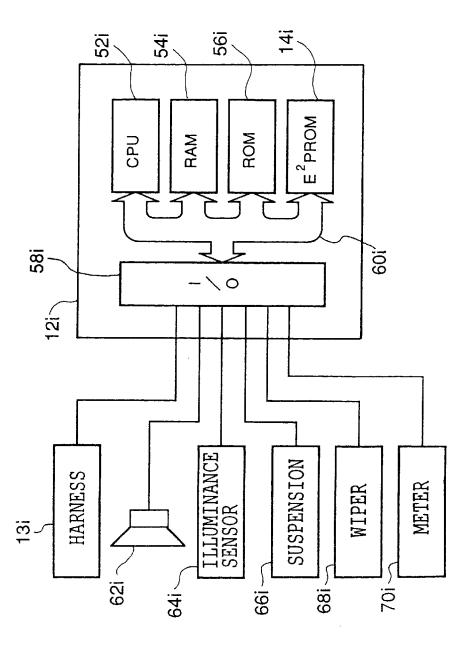




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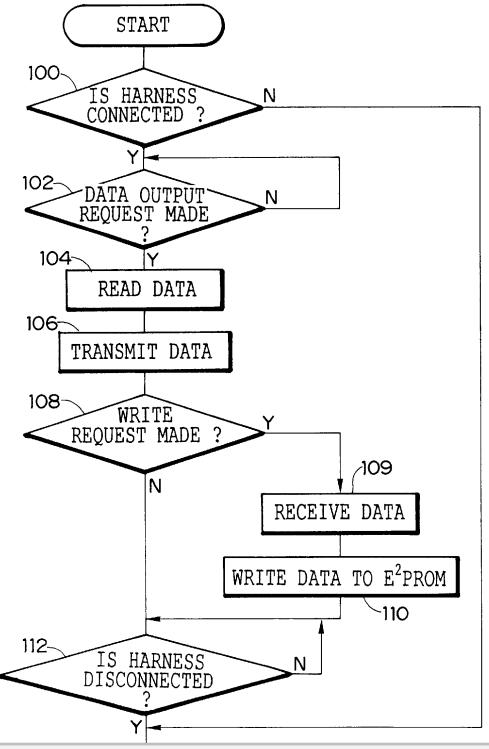




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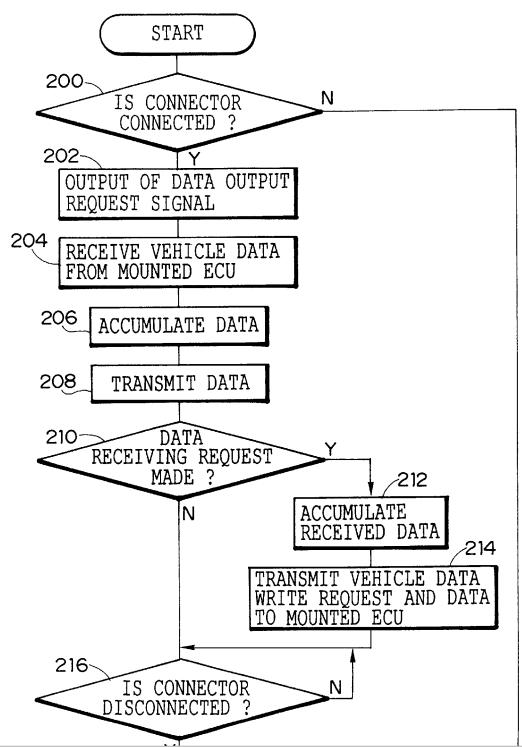




F I G. 4

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