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Furutani et al.

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[54] POWER SUPPLY SYSTEM FOR HYBRID VEHICLES

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Oct. 2, 1992 [JP]	Japan	4-264798

[51] Int. Cl.⁵ B60L 11/10; B60L 11/18

[52] U.S. Cl. 180/65.4; 318/139

[58] Field of Search 180/65.2, 65.3, 65.4, 180/65.8; 318/139

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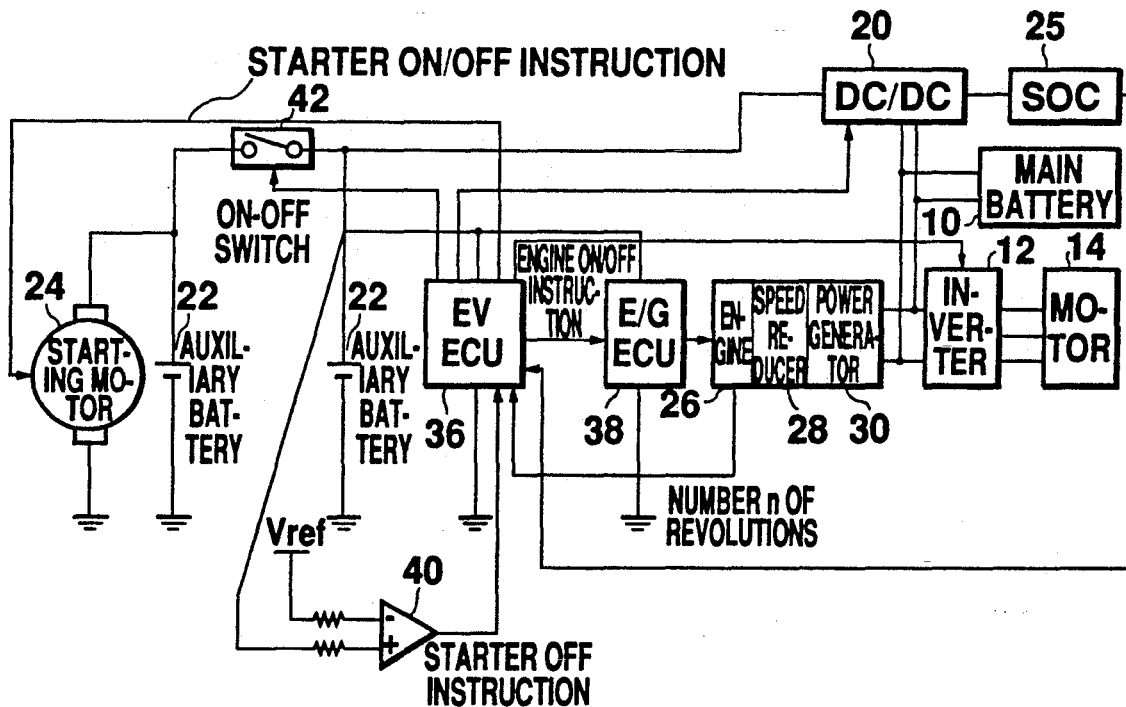
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Primary Examiner—Margaret A. Focarino
Assistant Examiner—Peter English
Attorney, Agent, or Firm—Finnegan, Henderson, Farabow, Garrett, Dunner

[57] ABSTRACT

When voltage at the main battery 10 is lowered, an EV-ECU 36 instructs a starting motor 24 to rotate to actuate an engine 26 for the initiation of power generation. At that time, the starting motor receives electric current mainly from a power capacitor 34, while an auxiliary battery 22 is connected to the ECU 36 and an ECU 38 so that supply voltages at the ECU's 36 and 38 can be kept at a predetermined level irrespective of the drive of the starting motor 24. Also, when the upstream voltage of the auxiliary battery 22 is found to be less than a predetermined value through a comparator 40, the drive of the starting motor is not effected. This configuration prevents the voltage at the auxiliary battery 22 from continuing to be lowered due to the drive of the starting motor 24 in the case where the power capacitor 34 is in a poorly charged state.

7 Claims, 7 Drawing Sheets



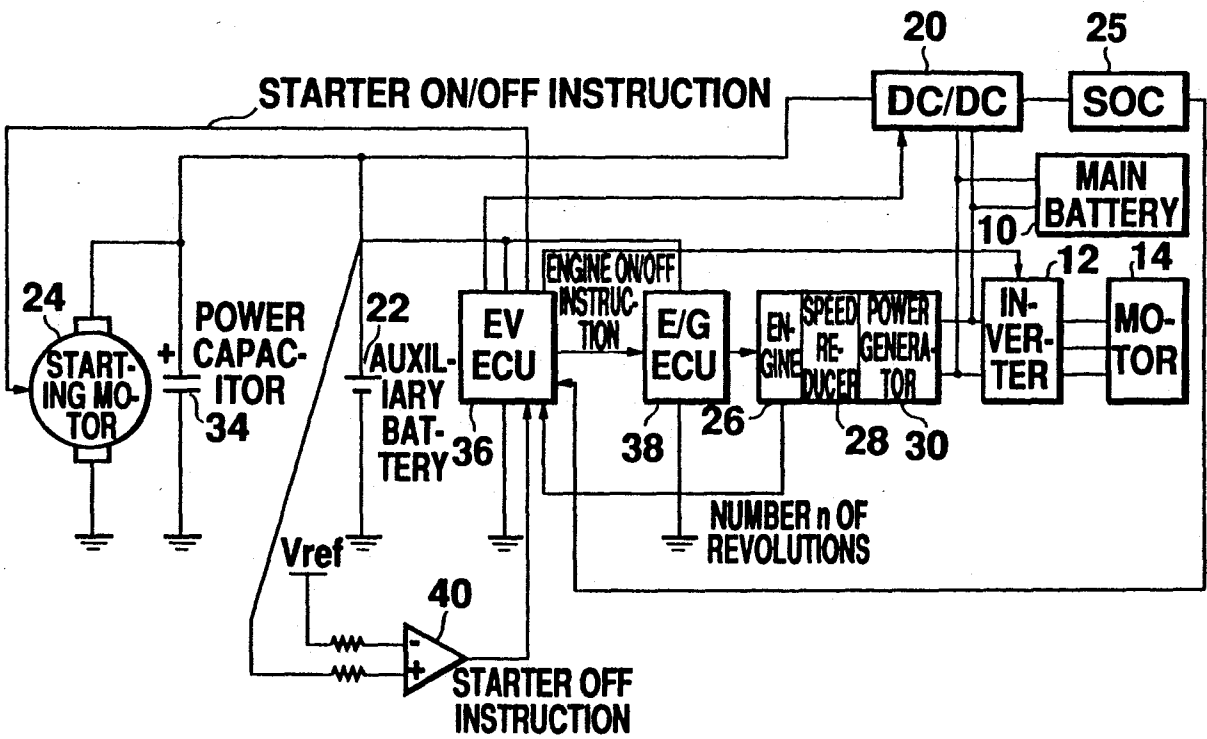


Fig. 1

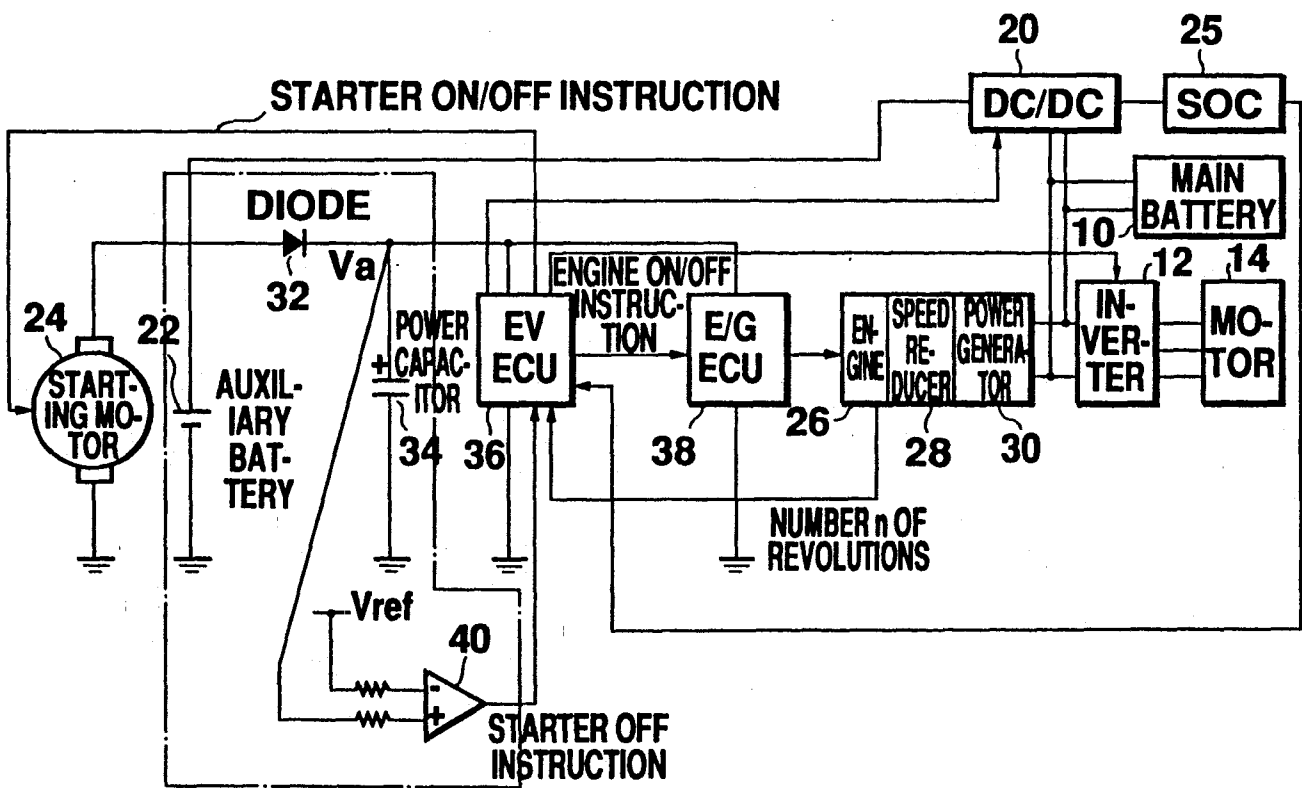


Fig. 2

POWER GENERATION ON/OFF TIMING

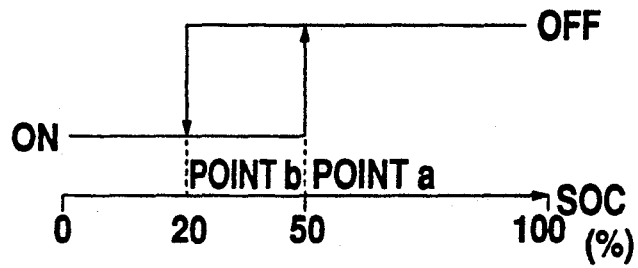


Fig. 3

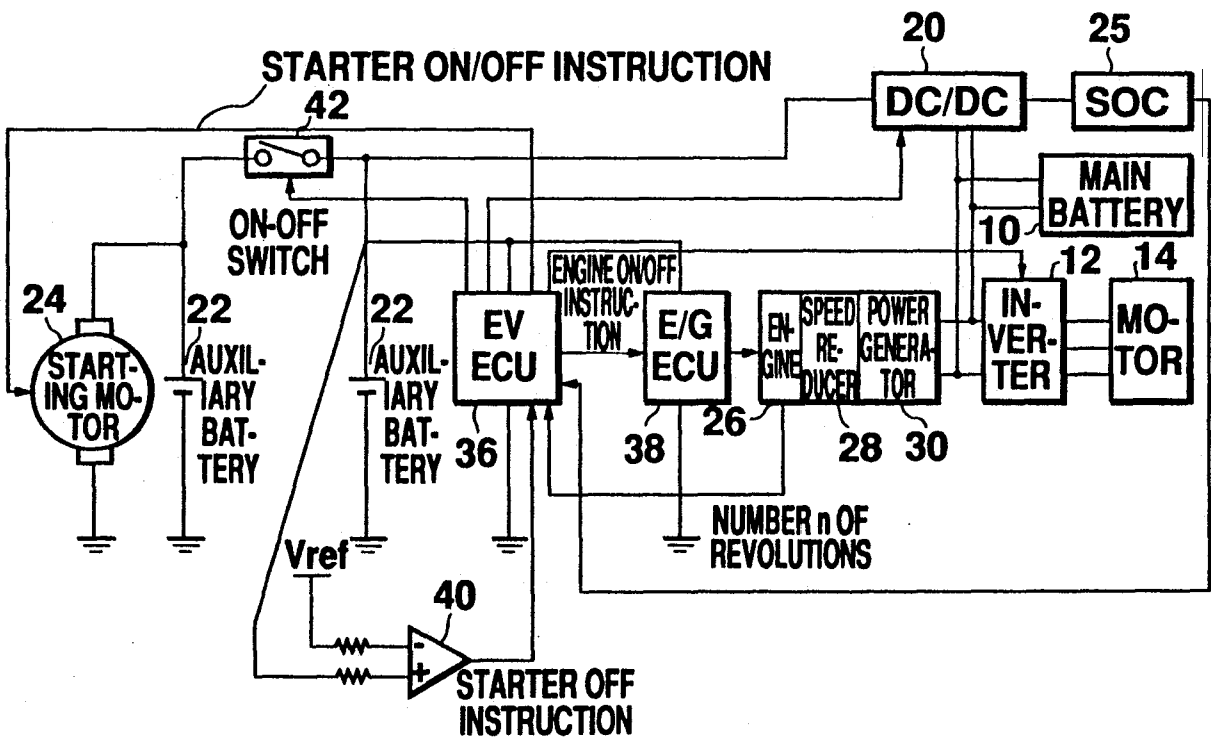


Fig. 4

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