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United States Patent [19]

Koide et al.

[52]

[58]

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[54]	TWO MO	VEHICLE DRIVE SYSTEM HAVING DTOR/GENERATOR UNITS AND STARTING MEANS		
[75]	Inventors:	Takeharu Koide, Toyota; Hideaki Matsui, Aichi-ken; Mitsuhiro Nada, Toyota, all of Japan		
[73]	Assignee:	Toyota Jidosha Kabushiki Kaisha, Toyota-shi, Japan		
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[51]	Int. Cl. ⁶	B60K 6/04		

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Field of Search 180/65.2, 65.3,

180/65.4, 65.6; 123/3

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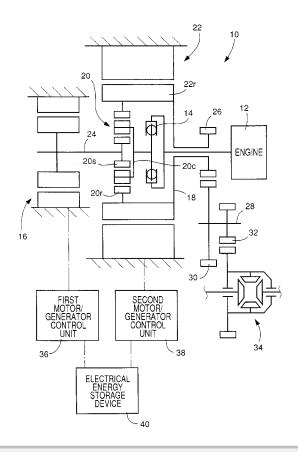
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Primary Examiner—J. J. Swann Assistant Examiner—Frank Vanaman Attorney, Agent, or Firm-Oliff & Berridge, PLC

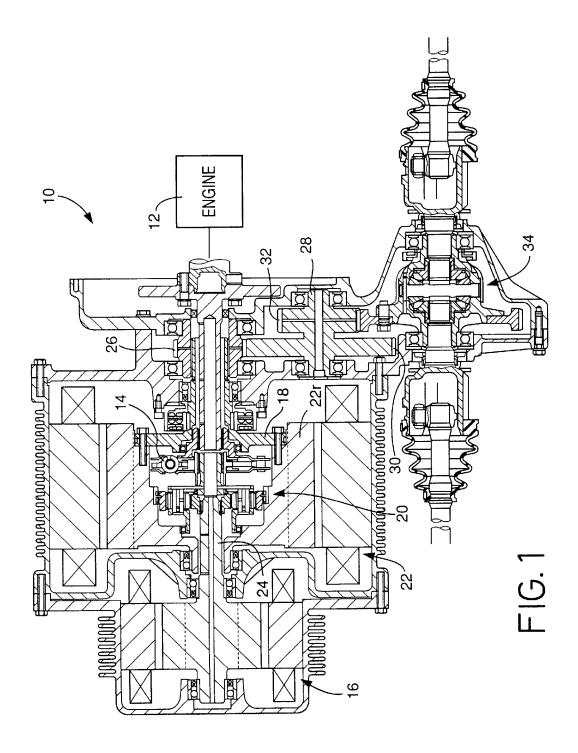
[57] **ABSTRACT**

A hybrid drive system for a motor vehicle, including an engine operated by combustion of a fuel, a first motor/ generator, a distributing mechanism for mechanically distributing an output of the engine to the first motor/generator and an output member, a second motor/generator whose rotary force is transferred to a power transmitting path between the output member and a drive wheel of the motor vehicle, and wherein an engine starting device is provided for operating the first motor/generator to crank the engine through the distributing mechanism, for thereby starting the engine.

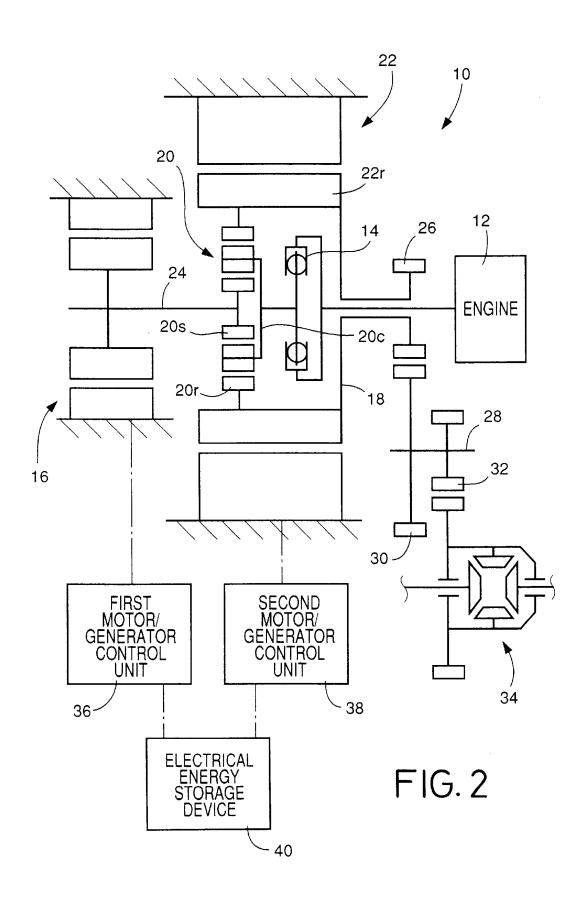
7 Claims, 16 Drawing Sheets











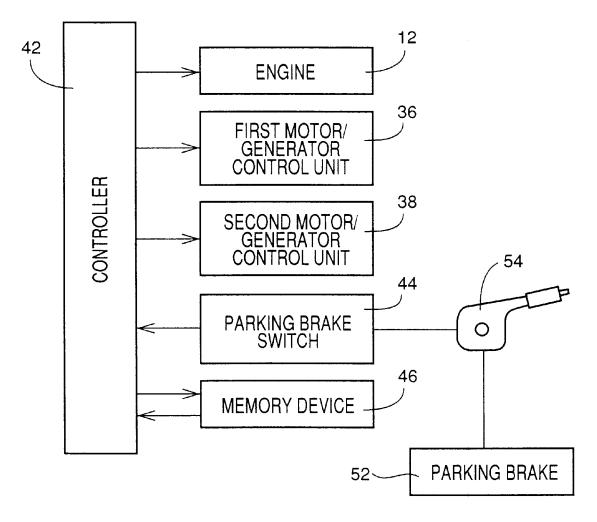
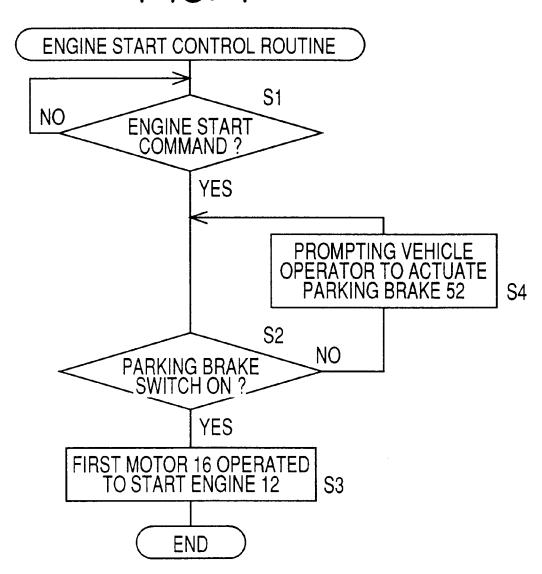


FIG. 3

FIG. 4





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