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Avitan

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[54] SPEED REGULATION OF DC MOTOR USING CURRENT SENSING MEANS

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[57] ABSTRACT

[51] Int. Cl.⁶ **H03P 5/16**

[52] U.S. Cl. **318/493; 388/806**

[58] Field of Search **318/766, 539,**
318/139, 493; 388/803-807

A system for controlling a separately excited dc motor, where control is achieved through a microprocessor-based independent PWM control of a chopper (armature) and an H-bridge (field), and where mechanical speed sensors are not used. Connected to the armature is an armature voltage amplifier for varying the applied armature voltage. A field current amplifier is also provided for determining the direction of motor rotation and varying the voltage applied to the field winding. A decoupling controller adjusts the armature voltage and the field current.

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14 Claims, 3 Drawing Sheets

