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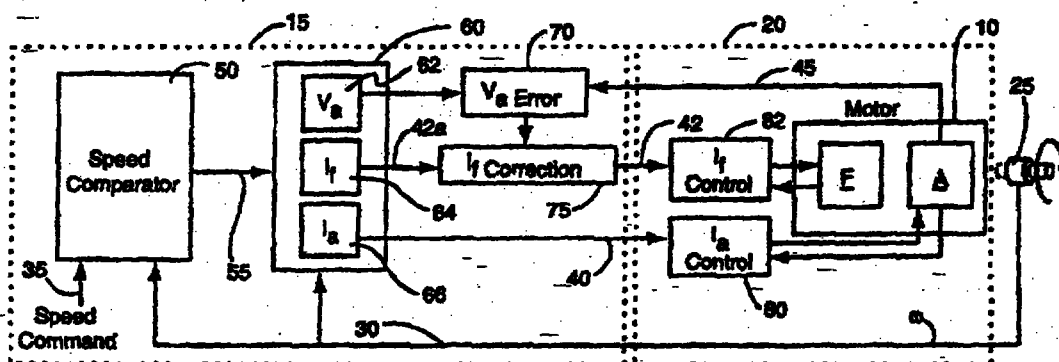
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(54) Title: CONTROL SYSTEM FOR SEPARATELY EXCITED DC MOTOR



(57) Abstract

A microprocessor based control system generates optimal field and armature currents for a separately excited DC motor. The current levels for the field and armature coils are set by feedback control. Armature and field current setpoints are established in accordance with tabulated values selected for providing a required torque and speed in an optimal fashion. A table of corresponding values of armature voltage is also maintained. If the actual armature voltage is below the calculated value, then the field current setpoint is boosted by an amount sufficient to optimize output torque.