

METHOD AND APPARATUS FOR CLEANING A DC MOTOR

COMMUTATOR-BRUSH INTERFACE

ABSTRACT

Commutators on a direct current motor running at low speed for an extended period of time get covered with a coating that makes the interface between the commutator and the brushes unreliable, especially with the low speed, low current operation. This is especially true for drive motors (16, 21) in a data processing tape drive unit (10) where speed control is critical. The brush to commutator interface can be cleaned by applying a very high electrical current to the motors (16, 21) and varying the polarity of the current with a variable duty cycle to obtain the maximum cleaning currents in a relatively short time without dismantling the motors (16, 21).

FIG 1