

Title (en)

APPARATUS FOR CONTROLLING THE RECIPROCATING DISPLACEMENT OF MOBILE EQUIPMENT SUCH AS AN ELECTROSTATIC SPRAYER CARRIAGE, BY MEANS OF AN ASYNCHRONOUS MOTOR WITH SQUIRREL CAGE ROTOR

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Application

EP 79401037 A 19791219

Priority

FR 7836615 A 19781222

Abstract (en)

[origin: US4335342A] A reciprocating drive system moves a body of defined inertia, such as a carriage supporting electrostatic spraying means, at full speed between two points at which the direction of movement is reversed. The drive system includes an electric motor with polyphase stator windings and a squirrel cage rotor. Transducers responsive to the arrival of the moving body at the aforementioned points produce output signals controlling a phase switching system which reverses the direction of rotation of the motor. Reversal of the motor torque reverses the direction of movement of the moving body within a given travel and within a given time interval to full speed in the opposite direction. A stator current limiter provides positive coupling in an operative condition and no coupling in an inoperative condition with the motor running at full speed. The motor is selected so that the inertia of its rotor closely matches that of the moving body. The current limiting means are arranged to be in the operative condition irrespective of the position of the moving body.

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Cited by

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