

Title (en)

PROCESS FOR REDUCING THE CONSUMPTION OF A STEPPING MOTOR, AND DEVICE TO CARRY OUT THIS PROCESS

Publication

EP 0076780 B1 19851227 (FR)

Application

EP 82810396 A 19820923

Priority

CH 634081 A 19811002

Abstract (en)

[origin: US4468602A] The present invention concerns a method and a device for reducing the consumption of a stepping motor by automatically adapting the duration of each drive pulse supplied to said motor to the mechanical load that its rotor is to drive. The method comprises forming each drive pulse by a series of elementary pulses separated by interruption periods, and determining the mechanical load by measuring, during said interruption periods, a parameter which is representative of the variation in the voltage induced in the winding (11a) of the motor by the rotary movement of the rotor.

IPC 1-7

G04C 3/14

IPC 8 full level

H02P 8/02 (2006.01); **G04C 3/14** (2006.01); **H02P 8/00** (2006.01); **H02P 8/24** (2006.01)

CPC (source: EP US)

G04C 3/143 (2013.01 - EP US)

Citation (examination)

10e Congrès International de Chronométrie, Sept. 1979, No. 3, Genève "Adaptive controlled drive system of stepping motor for analog quartz watch" et "Amelioration de la fiabilité et de la consommation d'énergie de moteurs pas à pas par une technique d'auto-contrôle"

Cited by

EP0462241A4; EP0253153A1

Designated contracting state (EPC)

CH DE FR GB LI

DOCDB simple family (publication)

EP 0076780 A1 19830413; EP 0076780 B1 19851227; CH 646575G A3 19841214; DE 3268162 D1 19860206; JP H0564038 B2 19930913; JP S5869500 A 19830425; US 4468602 A 19840828

DOCDB simple family (application)

EP 82810396 A 19820923; CH 634081 A 19811002; DE 3268162 T 19820923; JP 17110282 A 19821001; US 42636182 A 19820929