

Title (en)

PROCESS AND DEVICE FOR CONTROLLING A STEPPING MOTOR IN A CLOCK MECHANISM

Publication

**EP 0077293 B1 19870415 (FR)**

Application

**EP 82810397 A 19820923**

Priority

CH 634181 A 19811002

Abstract (en)

[origin: US4467256A] The present invention concerns a method and a device for controlling a stepping motor of a timepiece, which permit the power of each drive pulse to be adapted to the value of the electromotive force (V) and/or the internal resistance (R\*) of the power supply source (10). In accordance with the invention, at a given moment, a value of a chopping rate (Ha) is determined in dependence on the value of the electromotive force V and/or the internal resistance R\* of the power supply source (10), said value being stored, and the chopping rate of each control pulse being adjusted to the stored value. The control device comprises means (13) for supplying a chopping signal (M) to a drive circuit (12) of the motor (11). The chopping rate is determined by information contained in a memory (14). The stored information is periodically corrected in dependence on the value of the electromotive force (V) and/or the internal resistance (R\*) of the power supply source (10).

IPC 1-7

**G04C 3/14**

IPC 8 full level

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

CPC (source: EP US)

**G04C 3/143** (2013.01 - EP US)

Citation (examination)

- IBM TECHNICAL DISCLOSURE BULLETIN, vol.23, no.4, septembre 1980, New York (US) C.H. CRIDER et al.: "Current tracking chopper motor driver", pages 1303-1304
- "Theory and Application of Step Motors" B.C. Kuo, West Publishing CO, 1974, p. 173-180

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EP0241202A3; EP0171635A1; CH656776GA3; EP0345224A1; CH672572GA3; EP0140089A1; CH653206GA3

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