

Title (en)

CHOPPER CIRCUIT FOR THE CONTROL OF COILS OF ELECTROMAGNETS OR STEP MOTORS, PARTICULARLY FOR A MATRIX PRINTER

Publication

EP 0306437 A3 19901017 (DE)

Application

EP 88730168 A 19880728

Priority

DE 3727283 A 19870812

Abstract (en)

[origin: EP0306437A2] Such a chopper circuit is used for controlling electromagnetic and/or stepping motor coils (8; 26), particularly for a matrix printer, whose inductance, in conjunction with the applied voltage, generates a maximum current which is, however, adjusted to be reduced by a desired factor, it being possible to generate the current ripples (7a) by chopping. <??>These current ripples (7a) can now be varied as a function of the frequency, inductance and resistance of an electromagnetic coil (8) or of a magnetic coil winding (26), i.e. they can be optimised. <??>For this purpose, it is proposed that a current measuring device (10) with a current switch-off capability (11) be allocated in each case to a driver circuit (9) for the electromagnetic coil (8) and to a bridge circuit (27) for the stepping motor coil (26) and that digital control logic (12) be provided which generates a control signal (2), synchronised to a frequency transmitter (3) connected upstream, which control signal (2), alternately with the current switch-off device (11), acts as an on or off signal at the input (13) of the driver circuit (9) and of the bridge circuit (27). <IMAGE>

IPC 1-7

H01H 47/32

IPC 8 full level

H02P 8/12 (2006.01); **H01H 47/32** (2006.01)

CPC (source: EP US)

H01H 47/325 (2013.01 - EP US)

Citation (search report)

- [Y] GB 2081942 A 19820224 - EXPLORATION LOGGING INC
- [X] EP 0087583 A1 19830907 - IBM [US]
- [A] EP 0212462 A2 19870304 - BSO STEUERUNGSTECHNIK GMBH [DE]
- [X] IBM TECHNICAL DISCLOSURE BULLETIN. vol. 27, no. 2, Juli 1984, NEW YORK US Seiten 1057 - 1058; W. Renz and H. Virag: "CLOCKED MAGNET DRIVER"

Cited by

FR2663174A1; EP0472407A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL

DOCDB simple family (publication)

EP 0306437 A2 19890308; **EP 0306437 A3 19901017**; DE 3727283 A1 19890223; DE 3727283 C2 19930617; JP S6464598 A 19890310; US 4989116 A 19910129

DOCDB simple family (application)

EP 88730168 A 19880728; DE 3727283 A 19870812; JP 20184388 A 19880812; US 23231188 A 19880812