

Title (en)

Circuit for the impulse-rate feeding of armoured electromagnets and electromagnets fed by such circuit.

Title (de)

Schaltung zur pulsbetriebenen Erregung von Elektromagneten mit Rückschluss, und von einer solchen Schaltung erregte Elektromagnete.

Title (fr)

Circuit pour l'alimentation par impulsions d'électro-aimants cuirassés, et électro-aimants alimentés par un tel circuit.

Publication

**EP 0311998 A1 19890419 (EN)**

Application

**EP 88116901 A 19881012**

Priority

IT 8561787 A 19871013

Abstract (en)

According to the invention an armoured electromagnet is obtained, including a preferably cylinder-shaped metal structure made of solid iron, within which there is a coil fed by a pulsating current with variable intensity, said current being at a maximum at start-off and at a minimum during the holding period, and being generated by an electronic circuit fed by alternate current by means of a normally closed electronic switch (40) with a delayed opening, and placed parallel to a capacitor (31), said bridge being fed at a reduced voltage when the electronic switch opens. The invention is particularly efficient when applied to electromagnets with medium and small fields of force and traction. In the electromagnet according to the invention the ratio reached between the closing current and the current with the electromagnet in open position can even acquire a value of 1 to 30.

IPC 1-7

**H01F 7/18**

IPC 8 full level

**H01F 7/18** (2006.01)

CPC (source: EP)

**H01F 7/1838** (2013.01)

Citation (search report)

- [A] DE 2545878 A1 19770421 - PHILIPS PATENTVERWALTUNG
- [A] EP 0177215 A1 19860409 - VENT AXIA LTD [GB]
- [A] GB 1476102 A 19770610 - TELEMECANIQUE ELECTRIQUE
- [X] PATENT ABSTRACTS OF JAPAN, vol. 6, no. 170 (E-128)[1048], 3rd September 1982; & JP-A-57 88 707 (MITSUBISHI DENKI K.K.) 02-06-1982

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