

Title (en)

Electronic timepiece powered by a generator driven by a mechanical energy source

Title (de)

Elektronisches Uhrwerk gespeist von einem Generator, der durch eine mechanische Energiequelle angetrieben wird

Title (fr)

Pièce d'horlogerie électronique alimentée par un générateur entraîné par une source d'énergie mécanique

Publication

**EP 0875807 B1 20020417 (FR)**

Application

**EP 97110538 A 19970627**

Priority

CH 98397 A 19970428

Abstract (en)

[origin: EP0875807A1] The spring (2) drives a two pole permanent magnet (3a) through a gear train (4) which is also linked to the timepiece hands (6). A stator coil (3b) generates an alternating potential (Ug) which supplies a rectifier (5) to produce a direct potential (Ua) to supply electronic regulating circuits (7) and charge a battery (28). The electronic regulating circuits (7) include a comparator (8) which produces an output signal (SM) synchronised with the rotor voltage (Ug) and an oscillator (9) which supplies a reference signal (SR). A series of electronic units and gates cause either one transistor (16) to short circuit the rotor (3b) and slow the clock or another transistor (27) to conduct pulses and speed it up as required by the comparison between actual speed and oscillator reference speed.

IPC 1-7

**G04C 10/00**; **G04C 11/00**

IPC 8 full level

**G04C 10/00** (2006.01); **G04C 11/00** (2006.01)

CPC (source: EP)

**G04C 10/00** (2013.01); **G04C 11/00** (2013.01)

Cited by

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