

Title (en)

DEVICE FOR REWINDING THE MAIN SPRING OF A CLOCKWORK COMPRISING A PHOTO-ELECTRIC CELL

Publication

**EP 0320754 B1 19910703 (FR)**

Application

**EP 88120330 A 19881206**

Priority

CH 485687 A 19871211

Abstract (en)

[origin: EP0320754A1] The rewinding device consists of a photoelectric cell (3) placed so as to receive ambient light, a capacitor (4) connected to the terminals of the cell, a stepping motor (6), and a control circuit (5). The input to the circuit is connected to the capacitor terminals and its output is connected to the terminals of the motor whose rotor is coupled to the clockwork spring, e.g. of a watch, in order to rewind it. <??>The cell (3) charges the capacitor (4) and when its voltage, measured by a differential amplifier (23), reaches a reference voltage (Vr), the capacitor is connected to the motor terminals by a switching transistor (27). The discharge of the capacitor supplies a driving pulse to the motor. The duration of the pulse is determined by a monostable flip-flop (25). After the pulse, the capacitor is once again charged by the cell. <??>In order to prevent the motor from receiving a driving pulse before being stopped, in the event of intense illumination of the cell, another monostable flip-flop (29) prevents the control of the switching transistor (27) for a period of time corresponding to the time required for the rotor to perform a complete step. <IMAGE>

IPC 1-7

**G04C 10/02**

IPC 8 full level

**G04C 1/06** (2006.01); **G04C 10/00** (2006.01); **G04C 10/02** (2006.01)

CPC (source: EP KR US)

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