

Title (en)

SOURCE OF MECHANICAL ENERGY FOR A CLOCK MOVEMENT WITH PRESET OUTPUT TORQUE

Title (de)

MECHANISCHE ENERGIEQUELLE FÜR EIN UHRWERK MIT VOREINGESTELLTEM ABTRIEBSDREHMOMENT

Title (fr)

SOURCE D'ENERGIE MECANIQUE POUR MOUVEMENT HORLOGER A COUPLE DE SORTIE PREDEFINI

Publication

**EP 2718769 B1 20160406 (FR)**

Application

**EP 12732989 A 20120608**

Priority

- CH 9872011 A 20110610
- EP 2012060920 W 20120608

Abstract (en)

[origin: WO2012168443A2] The present invention relates to a mechanism designed to deliver mechanical energy to a finishing gear train of a clock movement in the form of a predefined output torque transmitted to a first mobile (20, 120) of the finishing gear train. The mechanism comprises a barrel (1) mainspring (3), one end of which is secured to a shaft (5, 105) and the other end of which is secured to a drum (2, 102), one of these being intended to be connected kinematically to the finishing gear train, and a set of gears designed to provide a kinematic connection between the ends of the spring and allow the transfer of mechanical energy between them. The set of gears comprises a planetary gear set (24, 26, 28, 30, 32, 34, 102, 126, 128, 130, 132, 134) having a first input - output (24, 134) intended to be connected to a winding mechanism (7) that resets said main spring (3), a second input - output (34, 102) connected to one end of the main spring and a third input - output (30, 130) connected to the other end of the main spring. In addition, the planetary gear set comprises a planet gear (26, 126) comprising a first non-circular gear wheel (28, 128) set in mesh with a first non-circular sun gear (30, 130).

IPC 8 full level

**G04B 1/22** (2006.01)

CPC (source: EP)

**G04B 1/22** (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2012168443 A2 20121213; WO 2012168443 A3 20130131**; CH 705079 A1 20121214; EP 2718769 A2 20140416; EP 2718769 B1 20160406

DOCDB simple family (application)

**EP 2012060920 W 20120608**; CH 9872011 A 20110610; EP 12732989 A 20120608