

Title (en)

CLOCK MOVEMENT WITH EXTENDED POWER RESERVE

Title (de)

UHRWERK MIT ERWEITERTER GANGRESERVE

Title (fr)

MOUVEMENT D'HORLOGERIE À RÉSERVE DE MARCHE ÉTENDUE

Publication

EP 2701013 B1 20190612 (FR)

Application

EP 12181455 A 20120823

Priority

EP 12181455 A 20120823

Abstract (en)

[origin: EP2701013A1] The movement has a spiral spring accommodated in a barrel as an energy storage, where the barrel transmits energy of the spiral spring to an oscillator by using a gear train. The oscillator includes a balance as a regulating device. A mechanism is configured to reduce torque generated by the barrel so as to reduce loss of energy. Multiple planetary gears are arranged between the barrel and the gear train, where the reduction rate of gearing of the planetary gears is modifiable to reduce the torque provided by blocking the planetary gears. An independent claim is also included for a method for ensuring prolonged operation of a mechanical timepiece movement.

IPC 8 full level

G04B 1/16 (2006.01); **G04B 1/22** (2006.01); **G04B 9/00** (2006.01)

CPC (source: EP US)

G04B 1/16 (2013.01 - US); **G04B 1/22** (2013.01 - EP US); **G04B 9/00** (2013.01 - EP US)

Cited by

EP3182217A1; CN106979284A; US10222744B2; WO2023242756A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 2701013 A1 20140226; EP 2701013 B1 20190612; CN 103631126 A 20140312; CN 103631126 B 20170531; ES 2744586 T3 20200225; JP 2014041127 A 20140306; JP 6180231 B2 20170816; US 2014056113 A1 20140227; US 8956042 B2 20150217

DOCDB simple family (application)

EP 12181455 A 20120823; CN 201310371611 A 20130823; ES 12181455 T 20120823; JP 2013171910 A 20130822; US 201313973067 A 20130822