Title (en)

Watch with improved power reserve

Title (de)

Armbanduhr mit verbesserter Gangreserve

Title (fr)

Montre à réserve de marche améliorée

Publication

EP 2871537 A1 20150513 (FR)

Application

EP 13191775 A 20131106

Priority

EP 13191775 A 20131106

Abstract (en)

[origin: CN204270011U] Provided in the utility model is a mechanical clock movement (1) comprising at least one energy storage device (2). The energy of the energy storage device (2) is provided by a ratchet wheel (3) driven by at least one winding mechanism (4) at the input end of the energy storage device; and power is provided for an operation gear train (5) at the output end of the energy storage device. The movement includes a first energy absorption device (6) that is connected to at least one wheel set of the operation gear train (5) by at least one first elastic connecting element (7); the first energy absorption device (6) cooperates with at least one driving wheel set (8) driving the ratchet wheel (3); the driving wheel set (8) and the ratchet wheel (3) are engaged; and thus one part of energy absorbed by the energy absorption device (6) is injected and is provided for the energy storage device (2). The driving wheel set (8) of the ratchet wheel (3) is driven to be separated under the effect of at least one separation mechanism (9); and the separation mechanism (9) plays a role during the work period of the winding mechanism (4). In addition, the utility model also provides a clock containing the mechanical clock movement.

Abstract (fr)

Mouvement mécanique (1) d'horlogerie, comportant au moins un moyen de stockage d'énergie (2) alimenté en entrée par un rochet (3) entraîné par au moins un mécanisme de remontage (4) et alimentant en sortie un rouage de finissage (5). Il comporte des premiers moyens de captage d'énergie (6) reliés à au moins un mobile dudit rouage de finissage (5) par au moins une première liaison élastique (7), lesdits premiers moyens de captage d'énergie (6) coopérant avec au moins un mobile d'entraînement de rochet (8) en prise avec ledit rochet (3) pour alimenter ledit moyen de stockage d'énergie (2) par réinjection d'une partie de l'énergie prélevée par lesdits moyens de captage d'énergie (6), ledit au moins un mobile d'entraînement de rochet (8) étant débrayable sous l'action d'au moins un mécanisme de débrayage (9) actif lors du fonctionnement dudit au moins un mécanisme de remontage (4).

IPC 8 full level

G04B 33/12 (2006.01); **G04B 1/10** (2006.01); **G04B 5/02** (2006.01)

CPC (source: EP US)

G04B 1/10 (2013.01 - EP US); **G04B 3/04** (2013.01 - EP US); **G04B 5/002** (2013.01 - EP US); **G04B 5/02** (2013.01 - EP US); **G04B 11/022** (2013.01 - EP US); **G04B 13/02** (2013.01 - US); **G04B 13/025** (2013.01 - EP US); **G04B 33/12** (2013.01 - EP US)

Citation (search report)

- [X] FR 1155071 A 19580422 - NICOLET WATCH S A, et al
- [XA] WO 2012168443 A2 20121213 - HAUTE ECOLE ARC [CH], et al
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- [A] FR 661811 A 19290730

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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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2871537 A1 20150513; **EP 2871537 B1 20170104**; CN 104635466 A 20150520; CN 104635466 B 20170412; CN 204270011 U 20150415; HK 1208917 A1 20160318; JP 2015090367 A 20150511; JP 5844873 B2 20160120; US 2015124572 A1 20150507; US 9063515 B2 20150623

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EP 13191775 A 20131106; CN 201410638497 A 20141106; CN 201420679993 U 20141106; HK 15109565 A 20150929; JP 2014222322 A 20141031; US 201414514574 A 20141015