Title (en)

OPTIMISED ESCAPEMENT

Title (de)

OPTIMIERTE UHRHEMMUNG

Title (fr)

ECHAPPEMENT OPTIMISÉ

Publication

EP 2887157 B1 20180207 (FR)

Application

EP 13199427 A 20131223

Priority

EP 13199427 A 20131223

Abstract (en)

[origin: CN104730897A] Timepiece escapement mechanism (10) including a stopper (30) between a resonator (20) and an escape wheel set (40). This wheel set (40) includes a magnetized track (50) with an angular period of travel (PD) over which its magnetic characteristics are repeated, this stopper (30) includes a magnetized or ferromagnetic pole shoe (3), mobile in a transverse direction (DT) relative to the direction of travel (DD) of an element of a surface (4) of this track (50), and this pole shoe (3) or this track (50) creates a magnetic field in a pole gap (5) between this pole shoe (3) and this surface (4), and this pole shoe (3) is opposite a magnetic field barrier (46) on this track (50) just before each transverse motion of this stopper (30) commanded by the periodic action of this resonator (20), this stopper (30) being multistable, arranged to occupy at least two stable positions.

IPC 8 full level

G04C 3/10 (2006.01); **G04B 17/06** (2006.01); **G04B 17/32** (2006.01); **G04C 5/00** (2006.01)

CPC (source: EP RU US)

G04B 15/00 (2013.01 - RU); **G04B 15/14** (2013.01 - US); **G04B 17/06** (2013.01 - EP US); **G04B 17/32** (2013.01 - EP US); **G04C 3/105** (2013.01 - EP US); **G04C 5/005** (2013.01 - EP US)

Cited by

EP3128379A1; EP3208667A1; CN111290231A; EP3182225A1; US11507022B2; US10558170B2; US10054908B2; US10095187B2; EP3767397A1; EP3757682A1; EP2990885A1; EP3217227A1; EP3079024A1

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)

EP 2887157 A1 20150624; **EP 2887157 B1 20180207**; CN 104730897 A 20150624; CN 104730897 B 20170630; HK 1209495 A1 20160401; JP 2015121538 A 20150702; JP 6027602 B2 20161116; RU 2014152039 A 20160710; RU 2014152039 A3 20180807; RU 2665845 C2 20180910; US 2015177690 A1 20150625; US 2016209811 A1 20160721; US 9292002 B2 20160322

DOCDB simple family (application)

EP 13199427 A 20131223; CN 201410815924 A 20141223; HK 15110061 A 20151014; JP 2014257425 A 20141219; RU 2014152039 A 20141222; US 201414560433 A 20141204; US 201614994887 A 20160113