

Title (en)

Timepiece including a high-frequency mechanical movement

Title (de)

Uhr mit einem mechanischen Hochfrequenzuhwerk

Title (fr)

Pièce d'horlogerie comportant un mouvement mécanique à haute fréquence

Publication

EP 2363762 B1 20171122 (FR)

Application

EP 10155490 A 20100304

Priority

EP 10155490 A 20100304

Abstract (en)

[origin: EP2363762A1] The timepiece has a movement (5) comprising a resonator (9) constituted of a variable inertia type balance (8) and a balance spring (10), and an escape system (7) constituted of an escape wheel (11) and Swiss lever (13). The balance oscillates at 72,000 vibrations per hour. The escape system is partially pierced to reduce inertia of the escape system. The escape wheel is provided with 20 teeth, where the wheel is made of monocrystalline silicon coated with silicon dioxide. The lever has pallet stones made of ruby.

IPC 8 full level

G04B 13/02 (2006.01); **G04B 15/08** (2006.01); **G04F 7/08** (2006.01)

CPC (source: EP US)

G04B 13/022 (2013.01 - EP US); **G04B 13/027** (2013.01 - EP US); **G04B 15/08** (2013.01 - EP US); **G04F 7/0866** (2013.01 - EP US)

Citation (examination)

- EP 2230570 A2 20100922 - MHVJ MANUFACTURE HORLOGERE VAL [CH]
- EP 2251746 A2 20101117 - SEIKO INSTR INC [JP]
- EP 1736838 A1 20061227 - SUISSE ELECTRONIQUE MICROTECH [CH]
- DE 7009540 U 19720113 - UHREN FEINGERAETE FORSCH [DE]
- GENOLET G ET AL: "Nouvelles fonctionnalites pour pieces horlogeres donnees par la technologie LiG(A)", TECHNICAL REPORT SSC, XX, XX, no. 46, 1 September 2004 (2004-09-01), pages 19 - 22, XP003028694
- 31 January 2008 (2008-01-31), Retrieved from the Internet <URL:<http://www.youtube.com/watch?v=gI0d7Bpuw9U>> [retrieved on 20140509]

Cited by

EP2784600A3; EP2363763A3; WO2015056114A1; EP2860591A1; US9488961B2; EP2860592A1; US9671755B2

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

EP 2363762 A1 20110907; EP 2363762 B1 20171122; CN 102193485 A 20110921; CN 102193485 B 20131016; EP 2363763 A2 20110907; EP 2363763 A3 20111116; HK 1162695 A1 20120831; JP 2011185932 A 20110922; JP 5576320 B2 20140820; TW 201144954 A 20111216; TW I531880 B 20160501; US 2011216629 A1 20110908; US 8500323 B2 20130806

DOCDB simple family (application)

EP 10155490 A 20100304; CN 201110052406 A 20110304; EP 11153258 A 20110203; HK 12102706 A 20120319; JP 2011047421 A 20110304; TW 100104925 A 20110215; US 201113039917 A 20110303