

Title (en)

Timepiece including a high-frequency mechanical movement

Title (de)

Uhr mit einem mechanischen Hochfrequenzuhrwerk

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)

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- 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 fonctionnalités pour pièces horlogères données 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=gIOd7Bpuw9U> [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)

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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