Title (en)

Temperature compensated hairspring-balance oscillator

Title (de)

Unruh-Spiralfeder-Oszillator mit Temperaturkompensation

Title (fr)

Oscillateur balancier-spiral compensé en température

Publication

**EP 1605182 A1 20051214 (FR)**

Application

**EP 04405355 A 20040608**

Priority

EP 04405355 A 20040608

Abstract (en)

The oscillator has a balance and a hairspring that is made of quartz substrate whose cut is determined in order to compensate thermal drifts of the hairspring, where the thickness of spring coils is modulated. The modulation of the thickness is linearly varied from the center of the hairspring to a balance-spring stud. The cut of the substrate is a cut with single or double rotation.

Abstract (fr)

L'invention concerne les oscillateurs mécaniques pour montre qui comportent un ensemble, formé d'un spiral et d'un balancier, compensé en température. Le spiral est réalisé dans un substrat de quartz dont la coupe est choisie de manière à compenser thermiquement les dérives du spiral lui-même ainsi que celles du balancier qui lui est associé. La coupe du substrat peut être une coupe à simple ou double rotation. L'invention s'applique dans le domaine horloger. <IMAGE>

IPC 1-7

**F16F 1/10**; G04B 17/06

IPC 8 full level

**F16F 1/10** (2006.01); **G04B 17/06** (2006.01)

CPC (source: EP US)

**G04B 17/066** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**EP 1605182 A1 20051214**; **EP 1605182 B1 20100602**; **EP 1605182 B8 20100714**; AT E470086 T1 20100615; CN 100564927 C 20091202; CN 1985103 A 20070620; DE 602004027471 D1 20100715; HK 1106570 A1 20080314; JP 2008501967 A 20080124; US 2008008050 A1 20080110; US 7682068 B2 20100323; WO 2005124184 A1 20051229

DOCDB simple family (application)

**EP 04405355 A 20040608**; AT 04405355 T 20040608; CN 200580023374 A 20050602; DE 602004027471 T 20040608; EP 2005052520 W 20050602; HK 07111842 A 20071101; JP 2007526416 A 20050602; US 62883105 A 20050602