

Title (en)

Balance wheel - hairspring resonator for clock piece

Title (de)

Spiralunruh-Schwinger für eine Uhr

Title (fr)

Résonateur balancier - spiral pour une pièce d'horlogerie

Publication

EP 2322996 B1 20160629 (FR)

Application

EP 10187974 A 20101019

Priority

CH 17622009 A 20091113

Abstract (en)

[origin: EP2322996A1] The resonator (11) has a balance (13) and a hairspring mounted on a staff (17), where the hairspring comprises a hairspring part (12) formed as a single piece with a collet (14). The collet has a protuberance (16) forming a pin that co-operates with an escapement system, where the protuberance is mounted parallel to the staff. An assembly constituted of the hairspring and the protuberance is made of silicon such as single-crystal silicon. The protuberance is mounted through a recess of the balance. An independent claim is also included for a method for fabricating a hairspring.

IPC 8 full level

G04B 17/06 (2006.01); **G04B 17/34** (2006.01)

CPC (source: EP KR US)

G04B 17/066 (2013.01 - EP KR US); **G04B 17/345** (2013.01 - EP KR US)

Citation (examination)

FR 2234592 A1 19750117 - TISSOT HORLOGERIE [CH]

Cited by

EP2579105A3; EP2570868A1

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 2322996 A1 20110518; EP 2322996 B1 20160629; CH 702156 A1 20110513; CH 702156 B1 20170831; CN 102063048 A 20110518; CN 102063048 B 20150708; HK 1157884 A1 20120706; JP 2011107133 A 20110602; JP 5280424 B2 20130904; KR 20110053205 A 20110519; RU 2010146178 A 20120520; RU 2545486 C2 20150410; TW 201140260 A 20111116; TW I501054 B 20150921; US 2011116347 A1 20110519; US 8491182 B2 20130723

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EP 10187974 A 20101019; CH 17622009 A 20091113; CN 201010548563 A 20101112; HK 11112368 A 20111116; JP 2010252625 A 20101111; KR 20100113080 A 20101115; RU 2010146178 A 20101112; TW 99136541 A 20101026; US 94604210 A 20101115