

Title (en)
HEAVILY DOPED SILICON HAIRSPRING FOR TIMEPIECE

Title (de)
HOCHDOTIERTE SILIZIUMFEDER FÜR UHR

Title (fr)
SPIRAL EN SILICIUM FORTEMENT DOPÉ POUR PIÈCE D'HORLOGERIE

Publication
EP 3159746 B1 20180606 (FR)

Application
EP 15190441 A 20151019

Priority
EP 15190441 A 20151019

Abstract (en)
[origin: US2017108831A1] A balance spring for an oscillator of a timepiece, wherein it comprises a component part, in particular at least a coil or a portion of a coil, provided with heavily doped silicon having an ion density greater than or equal to 10¹⁸ at/cm³, in order to permit the thermo-compensation of the oscillator.

IPC 8 full level
G04B 17/06 (2006.01); **G04B 17/22** (2006.01)

CPC (source: CN EP US)
G04B 17/06 (2013.01 - CN); **G04B 17/063** (2013.01 - US); **G04B 17/066** (2013.01 - CN EP US); **G04B 17/22** (2013.01 - EP US);
G04B 17/227 (2013.01 - EP US)

Cited by
WO2021170473A1; EP4212965A1; EP4212966A1

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 3159746 A1 20170426; EP 3159746 B1 20180606; CN 106597828 A 20170426; CN 106597828 B 20210212; JP 2017083434 A 20170518; JP 6869689 B2 20210512; US 10539926 B2 20200121; US 2017108831 A1 20170420

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EP 15190441 A 20151019; CN 201611078699 A 20161019; JP 2016204033 A 20161018; US 201615295449 A 20161017