

Title (en)
RESONATOR WITH A HIGH QUALITY FACTOR FOR A MECHANICAL WATCH

Title (de)
QUALITATIV HOCHWERTIGER RESONATOR FÜR MECHANISCHE ARMBANDUHR

Title (fr)
RESONATEUR A HAUT FACTEUR DE QUALITE POUR MONTRE MECANIQUE

Publication
EP 3312682 B1 20190220 (FR)

Application
EP 16194286 A 20161018

Priority
EP 16194286 A 20161018

Abstract (en)
[origin: US2018107164A1] Movement including an escapement mechanism and a resonator including an inertial element subjected to the action of a flexible gimbal and cooperating with an escape wheel set pivoting about a main axis, which includes driving means cooperating in a continuous transmission of motion with complementary means of the inertial element in every angular position of the latter, the flexible gimbal tending to return these complementary means towards the main axis, and including elastic return means about axes orthogonal to the main axis and restricting the mobility of the inertial element in two rotational degrees of freedom, about a fixed position of the centre of inertia of the inertial element with respect to a plate.

IPC 8 full level
G04B 17/04 (2006.01)

CPC (source: CH CN EP RU US)
G04B 1/00 (2013.01 - RU); **G04B 15/00** (2013.01 - US); **G04B 15/02** (2013.01 - CH US); **G04B 15/14** (2013.01 - CH);
G04B 17/04 (2013.01 - CH CN US); **G04B 17/045** (2013.01 - CN EP US); **G04B 17/06** (2013.01 - CN); **G04B 17/063** (2013.01 - CN);
G04B 17/08 (2013.01 - CN); **G04B 17/26** (2013.01 - CN EP US); **G04B 17/28** (2013.01 - CN EP US); **G04B 17/32** (2013.01 - CH);
G04B 18/04 (2013.01 - CN); **G04B 31/02** (2013.01 - US); **G04C 3/08** (2013.01 - US); **G04B 17/045** (2013.01 - CH); **G04B 17/06** (2013.01 - US)

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 3312682 A1 20180425; **EP 3312682 B1 20190220**; CH 713055 A2 20180430; CN 107957671 A 20180424; CN 107957671 B 20200327;
HK 1252475 A1 20190524; JP 2018066732 A 20180426; JP 6484684 B2 20190313; RU 2017134933 A 20190405; RU 2017134933 A3 20210115;
RU 2749943 C2 20210621; US 10152025 B2 20181211; US 2018107164 A1 20180419

DOCDB simple family (application)
EP 16194286 A 20161018; CH 13912016 A 20161018; CN 201710966475 A 20171017; HK 18111783 A 20180913; JP 2017192455 A 20171002;
RU 2017134933 A 20171005; US 201715715728 A 20170926