

Title (en)  
MECHANICAL CLOCK MOVEMENT WITH RESONATOR HAVING TWO DEGREES OF FREEDOM WITH MAINTENANCE MECHANISM BY A WHEEL ROLLING ON A TRACK

Title (de)  
MECHANISCHES UHRWERK MIT RESONATOR MIT ZWEI FREIHEITSGRADEN UND WARTUNGSMECHANISMUS ÜBER EINE AUF EINER LAUFPISTE ROLLENDEN LAUFROLLE

Title (fr)  
MOUVEMENT MECANIQUE D'HORLOGERIE AVEC RESONATEUR A DEUX DEGRES DE LIBERTE AVEC MECANISME D'ENTRETIEN PAR GALET ROULANT SUR UNE PISTE

Publication  
**EP 3312683 B1 20190220 (FR)**

Application  
**EP 16194289 A 20161018**

Priority  
EP 16194289 A 20161018

Abstract (en)  
[origin: US2018107161A1] Timepiece movement for a mechanical watch, comprising, arranged on a main plate, a resonator mechanism with two degrees of freedom, and a maintaining mechanism subjected to the torque of driving means comprised in the movement, wherein this maintaining mechanism is a continuous maintaining mechanism, and includes a crank movable about a crank rotational axis, and which includes, on the crank rotational axis, an axial element subjected to the torque of driving means, and, off-centre relative to the crank rotational axis, a crankpin which is arranged to travel on a track of a stiff ring comprised in the resonator mechanism, this stiff ring being movable in the two degrees of freedom.

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 EP US); **G04B 15/14** (2013.01 - CH EP US); **G04B 17/04** (2013.01 - CH CN EP 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 EP US); **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)

Cited by  
EP3926412A1; CN113805456A; US11835925B2; EP3798740A1; WO2019106448A1; WO2018215284A1; WO2020016131A1

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 3312683 A1 20180425**; **EP 3312683 B1 20190220**; CH 713056 A2 20180430; CN 107957672 A 20180424; CN 107957672 B 20191108; HK 1253934 A1 20190705; JP 2018066738 A 20180426; JP 6420440 B2 20181107; RU 2017135224 A 20190405; RU 2017135224 A3 20210115; RU 2749944 C2 20210621; US 10671021 B2 20200602; US 2018107161 A1 20180419

DOCDB simple family (application)  
**EP 16194289 A 20161018**; CH 13922016 A 20161018; CN 201710962956 A 20171017; HK 18113083 A 20181012; JP 2017199152 A 20171013; RU 2017135224 A 20171005; US 201715785874 A 20171017