Title (en)

ROTARY RESONATOR WITH A FLEXIBLE GUIDE SYSTEM BASED ON A DETACHED LEVER ESCAPEMENT

Title (de)

ROTIERENDER RESONATOR MIT FLEXIBLEM FÜHRUNGSSYSTEM AUF BASIS EINER ABGELÖSTEN ANKERHEMMUNG

Title (fr)

RÉSONATEUR ROTATIF À GUIDAGE FLEXIBLE ENTRETENU PAR UN ÉCHAPPEMENT LIBRE À ANCRE

Publication

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Application

EP 17752312 A 20170727

Priority

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- EP 2017069037 W 20170727

Abstract (en)

[origin: WO2018095592A1] Timepiece regulating member (300) comprising a detached escapement mechanism (200) with a lever (7), and a resonator (100) of quality factor Q, comprising an inertial element (2) with a pin (6) cooperating with a fork (8) of the lever (7), and subjected to the elastic return of two flexible blades (5), attached to the plate (1), which define together a virtual pivot with a main axis (DP), the lever (7) pivoting about a secondary axis (DS), wherein the resonator lift angle (β), when the pin (6) contacts the fork (8), is less than 10° and the ratio IB/IA between the inertia IB of the inertial element (2) relative to the main axis (DP), and the inertia IA of the lever (7) relative to the secondary axis (DS) is greater than 2Q.α2/(0.1.ττ.β2), α being the lift angle of the lever corresponding to the maximum angular stroke of the fork (8).

IPC 8 full level

G04B 15/08 (2006.01); **G04B 17/04** (2006.01); **G04B 17/28** (2006.01)

CPC (source: CH EP US)

G04B 15/08 (2013.01 - CH EP US); **G04B 15/14** (2013.01 - EP US); **G04B 17/045** (2013.01 - CH EP); **G04B 17/28** (2013.01 - EP US); **G04B 18/02** (2013.01 - EP US); **G04B 31/00** (2013.01 - EP); G04B 17/045 (2013.01 - US); G04B 17/26 (2013.01 - EP 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

Designated extension state (EPC)

BA ME

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