

Title (en)

FLEXIBLY GUIDED ROTARY RESONATOR MAINTAINED BY A FREE ESCAPEMENT WITH PALLET

Title (de)

DURCH EINE FREIE HEMMUNG MIT PALETTE AUFRECHTERHALTENER FLEXIBEL GEFÜHRTER ROTIERENDER RESONATOR

Title (fr)

RESONATEUR ROTATIF A GUIDAGE FLEXIBLE ENTRETENU PAR UN ECHAPPEMENT LIBRE A ANCRE

Publication

EP 3545369 A2 20191002 (FR)

Application

EP 17794727 A 20171107

Priority

- EP 16200152 A 20161123
- EP 2017078497 W 20171107

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 $2Q.\alpha^2/(0.1.\tau.\beta^2)$, 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)

Citation (search report)

See references of WO 2018103978A2

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BA ME

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