

Title (en)  
FLEXIBLY GUIDED ROTARY RESONATOR MAINTAINED BY A FREE ESCAPEMENT WITH PALLETS

Title (de)  
SICH DREHENDER RESONATOR MIT EINER FLEXIBLEN FÜHRUNG, DER VON EINER FREIEN ANKERHEMMUNG GEHALTEN WIRD

Title (fr)  
RÉSONATEUR ROTATIF À GUIDAGE FLEXIBLE ENTRETENU PAR UN ÉCHAPPEMENT LIBRE À ANCRE

Publication  
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Application  
**EP 17745179 A 20170727**

Priority  
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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 ( $\beta$ ), when the pin (6) contacts the fork (8), is less than  $10^\circ$  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  $2Q \cdot \alpha^2 / (0.1 \cdot \tau \cdot \beta^2)$ ,  $\alpha$  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 17/26** (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)

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