

## Title (en)

TIMEPIECE RESONATOR MECHANISM PROVIDED WITH A TRANSLATION FRAME

## Title (de)

RESONATORMECHANISMUS EINES UHRWERKS, DER MIT EINEM VERSCHIEBERAHMEN AUSGESTATTET IST

## Title (fr)

MÉCANISME RESONATEUR D'HORLOGERIE MUNI D'UNE TABLE DE TRANSLATION

## Publication

**EP 4012506 A1 20220615 (FR)**

## Application

**EP 20213737 A 20201214**

## Priority

EP 20213737 A 20201214

## Abstract (en)

[origin: CN114624982A] A timepiece resonator mechanism is provided with a translation stage. The invention relates to a rotary resonator mechanism (1) comprising an oscillating mass (2), a flexible guide comprising at least two flexible blades (4) connecting a fixed support (3) to the oscillating mass (2), the resonator mechanism (1) extending substantially in the same plane to allow rotational movement of the oscillating mass about a virtual pivot, the flexible guide (1) extends along a main axis of symmetry (14), characterized in that the mechanism (1) comprises a translation stage (5) arranged between the flexible guide and the oscillating mass (2), the translation stage (5) being joined to the flexible blade (4) and/or the oscillating mass (2). The invention also relates to a timepiece movement comprising such a resonator (1).

## Abstract (fr)

L'invention concerne un mécanisme résonateur (1) rotatif comprenant une masse oscillante (2), un guidage flexible comprenant au moins deux lames flexibles (4) reliant un support immobile (3) à la masse oscillante (2), le mécanisme résonateur (1) s'étendant sensiblement dans un même plan pour permettre à la masse oscillante d'effectuer un mouvement rotatif autour d'un pivot virtuel, le guidage flexible (1) s'étendant selon un axe de symétrie principal (14). Le mécanisme (1) comprend également une table de translation (5) agencée entre le guidage flexible et la masse oscillante (2), la table de translation (5) étant jointe aux lames flexibles (4) et/ou à la masse oscillante (2). L'invention concerne aussi un mouvement d'horlogerie comprenant un tel résonateur (1).

## IPC 8 full level

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## CPC (source: CN EP US)

**G04B 17/02** (2013.01 - CN); **G04B 17/045** (2013.01 - EP US); **G04B 17/10** (2013.01 - US); **G04B 17/28** (2013.01 - EP); **G04B 33/00** (2013.01 - CN)

## Citation (applicant)

- EP 2911012 A1 20150826 - SUISSE ELECTRONIQUE MICROTECH [CH]
- EP 14199039 A 20141218
- EP 16155039 A 20160210
- US 2020003805 A1 20200102 - MARET YANNICK [CH], et al

## Citation (search report)

- [X] EP 3324247 A1 20180523 - SWATCH GROUP RES & DEV LTD [CH]
- [X] US 2020033805 A1 20200130 - DI DOMENICO GIANNI [CH], et al
- [I] EP 3561607 A1 20191030 - ETA SA MFT HORLOGERE SUISSE [CH]
- [I] US 2017010586 A1 20170112 - DI DOMENICO GIANNI [CH], et al
- [A] EP 3476748 A1 20190501 - CSEM CT SUISSE DELECTRONIQUE MICROTECHNIQUE SA RECH DEVELOPPEMENT [CH]

## Designated contracting state (EPC)

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## DOCDB simple family (application)

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