

Title (en)

THERMOCOMPENSATED HOROLOGY RESONATOR AND METHOD FOR PRODUCING SUCH A RESONATOR

Title (de)

THERMOKOMPENSIERTE RESONATOR FÜR UHRWERK UND VERFAHREN ZUR HERSTELLUNG EINER SOLCHEN RESONATOR

Title (fr)

RÉSONATEUR HORLOGER THERMOCOMPENSÉ ET MÉTHODE POUR RÉALISER UN TEL RÉSONATEUR

Publication

**EP 3304216 B1 20220427 (FR)**

Application

**EP 16728737 A 20160608**

Priority

- CH 8162015 A 20150608
- IB 2016053369 W 20160608

Abstract (en)

[origin: WO2016199039A1] The invention relates to a resonator that is intended for equipping a timepiece control member and comprises a body (1) that is used when deformed. The body (1) is made of a glass material having a first thermoelastic coefficient ( $\beta_1$ ). Said glass material comprises a portion (3) that is locally modified such that said modified portion (3) has a second thermoelastic coefficient ( $\beta_2$ ) that is different from the first thermoelastic coefficient ( $\beta_1$ ), such that the resonator is temperature-compensated. The present invention also relates to a method for manufacturing said resonator. The invention also relates to a balance spring made of a material that is not necessarily glass but that is transparent at laser wavelengths.

IPC 8 full level

**G04B 17/22** (2006.01)

CPC (source: EP)

**G04B 17/227** (2013.01)

Citation (examination)

- EP 2597536 A1 20130529 - SUISSE ELECTRONIQUE MICROTECH [CH]
- EP 1791039 A1 20070530 - SWATCH GROUP RES & DEV LTD [CH]

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)

**WO 2016199039 A1 20161215**; EP 3304216 A1 20180411; EP 3304216 B1 20220427

DOCDB simple family (application)

**IB 2016053369 W 20160608**; EP 16728737 A 20160608