

Title (en)
METHOD FOR ADJUSTING A FLEXIBLY PIVOTED CLOCK OSCILLATOR

Title (de)
VERFAHREN ZUR EINSTELLUNG EINES FLEXIBEL SCHWENKBAREN TAKTOSZILLATORS

Title (fr)
PROCÉDÉ DE RÉGLAGE D'UN OSCILLATEUR HORLOGER À PIVOT FLEXIBLE

Publication
EP 3997525 A1 20220518 (FR)

Application
EP 20737596 A 20200707

Priority
• EP 19185980 A 20190712
• IB 2020056370 W 20200707

Abstract (en)
[origin: WO2021009613A1] The invention relates to a method for adjusting a clock oscillator (1) comprising a balance wheel (2), a support (3) and a flexible pivot (4) which connects the balance wheel (2) to the support (3) and which guides the balance wheel (2) in terms of rotation relative to the support (3) about a virtual rotation axis, the flexible pivot (4) having, as an orthogonal projection in a plane perpendicular to the virtual rotation axis, an axis of symmetry (Y) which is also an axis of symmetry for the points (5a, 6a) connecting the flexible pivot (4) to the balance wheel (2). According to this method, the imbalance of the balance wheel (2) is adjusted so that, as an orthogonal projection in the above-mentioned plane, the centre of mass (M) of the balance wheel (2) is substantially in the axis of symmetry (Y) and at a different position from the position (O) of the virtual rotation axis and is selected so as to reduce and preferably to minimise the dependence of the oscillation frequency with respect to the orientation of gravitational force for a predetermined oscillation amplitude.

IPC 8 full level
G04B 17/04 (2006.01); **G04B 17/28** (2006.01)

CPC (source: CN EP US)
G04B 17/045 (2013.01 - EP US); **G04B 17/06** (2013.01 - CN); **G04B 17/063** (2013.01 - CN US); **G04B 17/20** (2013.01 - US); **G04B 17/28** (2013.01 - CN EP); **G04B 17/32** (2013.01 - CN)

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

DOCDB simple family (publication)
WO 2021009613 A1 20210121; CN 114127641 A 20220301; CN 114127641 B 20240322; EP 3997525 A1 20220518; JP 2022539880 A 20220913; US 2022317628 A1 20221006

DOCDB simple family (application)
IB 2020056370 W 20200707; CN 202080045111 A 20200707; EP 20737596 A 20200707; JP 2022500954 A 20200707; US 202017626303 A 20200707