

Title (en)

METHOD FOR MAINTAINING AND ADJUSTING A CLOCK PIECE RESONATOR

Title (de)

WARTUNGS- UND REGULIERUNGSVERFAHREN EINES UHRENRESONATORS

Title (fr)

PROCEDE D'ENTRETIEN ET DE REGULATION D'UN RESONATEUR D'HORLOGERIE

Publication

EP 3108305 A1 20161228 (FR)

Application

EP 15700569 A 20150114

Priority

- EP 14155425 A 20140217
- EP 2015050588 W 20150114

Abstract (en)

[origin: WO2015121014A1] Method for servicing and regulating the frequency of an horology resonator mechanism (1) about its natural frequency (ω_0), characterized in that use is made of at least one regulator device (2) acting on said resonator mechanism (1) with a periodic movement. Said periodic movement imposes a periodic modulation of the resonant frequency and/or of the Q factor/or of the position of the quiescent point of said resonator mechanism (1), with a regulating frequency (ω_R) that is comprised between 0.9 and 1.1 times the value of an integer multiple of said natural frequency (ω_0), said integer being greater than or equal to 2 and less than or equal to 10. Said periodic movement imposes a periodic modulation of the Q factor of said resonator mechanism (1) by acting on the losses and/or the damping and/or the friction of said resonator mechanism (1).

IPC 8 full level

G04B 17/26 (2006.01)

CPC (source: EP RU US)

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G04B 17/066 (2013.01 - US); **G04B 17/26** (2013.01 - EP RU US); **G04B 17/32** (2013.01 - US); **G04B 17/325** (2013.01 - EP US)

Citation (search report)

See references of WO 2015121014A1

Designated contracting state (EPC)

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BA ME

DOCDB simple family (publication)

EP 2908184 A1 20150819; **EP 2908184 B1 20171018**; CH 709281 A2 20150828; CN 105659168 A 20160608; CN 105659168 B 20180406;
EP 3108305 A1 20161228; EP 3108305 B1 20180314; JP 2016536578 A 20161124; JP 6166843 B2 20170719; RU 2663089 C1 20180801;
US 10241473 B2 20190326; US 10324416 B2 20190618; US 2016216693 A1 20160728; US 2017277124 A1 20170928;
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EP 14155425 A 20140217; CH 2052014 A 20140217; CN 201580002223 A 20150114; EP 15700569 A 20150114; EP 2015050588 W 20150114;
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