

Title (en)

Adjustment of a clock piece resonator by changing the active length of a hairspring

Title (de)

Regulierung eines Resonators einer Uhr durch Einwirkung auf die aktive Länge einer Spiralfeder

Title (fr)

Régulation d'un résonateur d'horlogerie par action sur la longueur active d'un spiral

Publication

EP 2908187 A1 20150819 (FR)

Application

EP 14155431 A 20140217

Priority

EP 14155431 A 20140217

Abstract (en)

[origin: CN104850000A] The invention relates to a frequency regulation of a timepiece resonator, a movement and a timepiece including the said movement. Method for maintaining and regulating the frequency of a timepiece resonator mechanism (1) around its natural frequency ($[\omega]_0$). A regulator device (2) acts on said resonator (1) with a periodic motion which requires a periodic modulation of at least the resonant frequency of said resonator (1), by requiring at least a modulation of the active length of a spring comprised in said resonator mechanism (1), with a regulation frequency ($[\omega]_R$) which is comprised between 0.9 times and 1.1 times the value of an integer multiple of said natural frequency ($[\omega]_0$), said integer being greater than or equal to 2 and less than or equal to 10.

Abstract (fr)

Procédé d'entretien et de régulation d'un résonateur (1) d'horlogerie autour de sa fréquence propre ($\dot{E}0$). Un dispositif régulateur (2) agit sur ledit résonateur (1) avec un mouvement périodique qui impose une modulation périodique au moins de la fréquence de résonance dudit résonateur (1), en imposant au moins une modulation de la longueur active d'un ressort que comporte ledit mécanisme résonateur (1), avec une fréquence de régulation ($\dot{E}R$) qui est comprise entre 0.9 fois et 1.1 fois la valeur d'un multiple entier de ladite fréquence propre ($\dot{E}0$), ledit entier étant supérieur ou égal à 2.

IPC 8 full level

G04B 17/26 (2006.01)

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G04B 17/00 (2013.01 - US); **G04B 17/063** (2013.01 - US); **G04B 17/26** (2013.01 - EP US); **G04B 18/02** (2013.01 - US)

Citation (applicant)

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