Title (en)

HOROLOGICAL HAIRSPRING MADE OF A NB-HF ALLOY

Title (de)

UHRSPIRALFEDER AUS NB-HF-LEGIERUNG

Title (fr)

SPIRAL HORLOGER EN ALLIAGE NB-HF

Publication

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Application

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Priority

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- EP 19173114 A 20190507

Abstract (en)

[origin: CN111913380A] A method for manufacturing a balance spring intended to equip a balance of a horological movement, including a step of producing a blank made of a niobium and hafnium alloy including between 5 and 60wt %, preferably between 5 and 30 wt %, and more preferably between 8 and 12 wt % hafnium, a step of annealing and cooling the blank, at least one step of deforming the annealed blank in order to forma wire. The method includes, before the deformation step, a step of depositing, on the blank, a layer of a ductile material chosen from the group consisting of copper, nickel, cupronickel, cupro-manganese, gold, silver, nickel-phosphorus Ni-P and nickel-boron Ni-B, in order to facilitate the wire shaping operation. The invention further relates to a balance spring which is produced by the manufacturing method.

IPC 8 full level

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CPC (source: CN EP US)

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