

Title (en)

Manufacturing method for a hairspring assembly of a timepiece made of micro-machinable material or silicon

Title (de)

Herstellungsverfahren einer Spiralfederanordnung einer Uhr aus mikro-bearbeitbarem Material oder Silizium

Title (fr)

Procédé de fabrication d'un ensemble spiral de pièce d'horlogerie en matériau micro-usinable ou en silicium

Publication

**EP 2397919 B1 20171108 (FR)**

Application

**EP 10166685 A 20100621**

Priority

EP 10166685 A 20100621

Abstract (en)

[origin: EP2397919A1] The method involves breaking volume of a balance spring assembly (1) into elementary volumes that are perpendicular to each other and that form same number of sub-components. One sub-component is realized to form a component forming a terminal curve (4) e.g. Phillips curve, of the assembly and directly joining a flat hairspring (2) at a point in space, where the projection of the curve into a base plane (P) is located external to the hairspring. The curve is in a plane orthogonal to that of the hairspring. The sub-components are assembled at junction areas by an assembling unit. Independent claims are also included for the following: (1) a balance spring assembly comprising a flat hairspring and a terminal curve (2) a time piece comprising a point of attachment.

IPC 8 full level

**G04B 17/06** (2006.01); **G04D 3/00** (2006.01)

CPC (source: EP US)

**G04B 17/066** (2013.01 - EP US); **G04D 3/0041** (2013.01 - EP US); **Y10T 29/49609** (2015.01 - US)

Cited by

CN109739075A; US11703804B2; TWI796444B

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DOCDB simple family (application)

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