Title (en)
Method for manufacturing an horological hairsping

Title (de)
Verfahren zur Herstellung eines Spiralfeders für Uhren

Title (fr)
Méthode de fabrication d'un spiral d'horlogerie

Publication
EP 2546705 B1 20170906 (FR)

Application
EP 12175239 A 20120706

Priority
CH 11782011 A 20110714

Abstract (en)
[origin: EP2546705A1] The method involves characterizing length of a spiral shape that passes through a curve representing three points set by position and geometry of attachment units of a hairspring. The three points are defined by an attachment of the spring to a ring, a penultimate turn intended to be located next to a stud, and a last turn that is to be attached to the stud. A function defining thickness of the spiral shape is defined, and coefficients of a polynomial function and the function are optimized by calculations and simulations.

IPC 8 full level
G04B 17/06 (2006.01); **G04B 17/22** (2006.01)

CPC (source: EP)
G04B 17/066 (2013.01); **G04B 17/222** (2013.01)

Citation (examination)
- US 3154912 A 19641103 - DAVID PINKAS
- EP 1473604 A1 20041103 - PATEK PHILIPPE SA [CH]
- DE 102009048733 A1 20110414 - DAMASKO KONRAD [DE]
- EP 1515200 A1 20050316 - PATEK PHILIPPE SA [CH]
- PERUCCHI M N: "Problèmes concernant le spiral, rôle de petites déformations", 19660101; 19660000, 1 January 1966 (1966-01-01), pages 344 - 347, XP001219046

Cited by
EP4372479A1

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

DOCDB simple family (publication)
EP 2546705 A1 20130116; **EP 2546705 B1 20170906**; CH 705234 A1 20130115; CH 705234 B1 20171013

DOCDB simple family (application)
EP 12175239 A 20120706; CH 11782011 A 20110714