

Title (en)
Bi-material autocompensating hairspring

Title (de)
Spiralfeder aus zwei Materialien mit Selbstkompensation

Title (fr)
Spiral autocompensateur bi-matière

Publication
EP 1612627 A1 20060104 (FR)

Application
EP 04015580 A 20040702

Priority
EP 04015580 A 20040702

Abstract (en)
The hairspring has one assembly integrated with another assembly that comprises an inner curve (4). The curve is made of a material that is chosen for its mechanical properties and for facilitating the shapeability of the curve according to the most favorable contour for a concentric expansion of the hairspring. The curve has a contour of Grossman curve (14). The former assembly is made by utilizing a LIGA process. An independent claim is also included for a method for manufacturing an assembly of a hairspring.

IPC 8 full level
G04B 17/06 (2006.01)

CPC (source: EP KR US)
G04B 17/066 (2013.01 - EP KR US); **G04B 17/20** (2013.01 - KR)

Citation (applicant)
CH 327796 A 19580215 - HORLOGERIE SUISSE S A ASUAG [CH], et al

Citation (search report)

- [XA] CH 327796 A 19580215 - HORLOGERIE SUISSE S A ASUAG [CH], et al
- [XA] EP 1431844 A1 20040623 - SFT SERVICES SA [CH]
- [E] EP 1445670 A1 20040811 - ETA SA MFT HORLOGERE SUISSE [CH]

Cited by
RU2473947C2; EP3181515A1; RU2683118C2; WO2012127035A1; US8550699B2; EP2104007A1; US9323223B2; WO2014072781A3; EP2104008A1; WO2009115463A1; US8523426B2; EP2105807A1; US8296953B2; US8622611B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
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DOCDB simple family (application)
EP 04015580 A 20040702; AT 04015580 T 20040702; CN 200510080763 A 20050630; DE 602004020982 T 20040702; HK 06102729 A 20060302; JP 2005194992 A 20050704; KR 20050056399 A 20050628; RU 2005120604 A 20050701; TW 94121675 A 20050628; US 16991105 A 20050630