

Title (en)
HAIRSPRING INTENDED FOR BEING CLAMPED BY A SPRING WASHER

Title (de)
SPIRALE, DIE MIT EINER FEDERSCHEIBE GESICHERT WERDEN MUSS

Title (fr)
SPIRAL DESTINÉ À ÊTRE SERRÉ PAR UNE RONDELLE ÉLASTIQUE

Publication
EP 2985659 A3 20160323 (FR)

Application
EP 15176591 A 20150206

Priority
• EP 14157858 A 20140305
• EP 15154081 A 20150206
• EP 15176591 A 20150206

Abstract (en)
[origin: CN104898398A] The present invention discloses a hairspring (1) comprising hair band (3). The hair band is wrapped to form plural rings (PI PE), inner rings (PI) and inner pile (5), all in one body. The inner pile comprises a loop (7) that extends in a nearly hexagonal shape. According to the embodiments, the top points of the hexagonal shape are provided with protruding parts (2, 4, 8) and two axially extending wall parts (21-22, 41-42, 81-82) and wall parts (21-22, 41-42, 81-82). All are in parallel. Further, in responding to the center (C) of the inner pile (5), the end parts (S1, S2, S3) of the protruding parts (2, 4, 8) are parallel in some sections.

IPC 8 full level
G04B 17/06 (2006.01); **G04B 17/32** (2006.01); **G04B 17/34** (2006.01)

CPC (source: EP RU US)
G04B 17/06 (2013.01 - EP US); **G04B 17/066** (2013.01 - US); **G04B 17/32** (2013.01 - US); **G04B 17/34** (2013.01 - EP US);
G04B 17/345 (2013.01 - EP US); **G04B 99/00** (2013.01 - RU)

Citation (search report)
• [Y] EP 1868045 A1 20071219 - PATEK PHILIPPE SA [CH]
• [Y] FR 1471748 A 19670303 - VIROLA SA

Cited by
CN109478035A

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2916177 A1 20150909; EP 2916177 B1 20181107; CN 104898398 A 20150909; CN 104898398 B 20170915; EP 2985659 A2 20160217; EP 2985659 A3 20160323; EP 2985659 B1 20200429; EP 3098669 A1 20161130; HK 1214658 A1 20160729; JP 2015169656 A 20150928; JP 6026576 B2 20161116; RU 2015107678 A 20160927; RU 2015107678 A3 20181023; RU 2681226 C2 20190305; TW 201541203 A 20151101; TW I659278 B 20190511; US 2015253733 A1 20150910; US 9983548 B2 20180529

DOCDB simple family (application)
EP 15154081 A 20150206; CN 201510096737 A 20150304; EP 15176591 A 20150206; EP 16172457 A 20150206; HK 16102564 A 20160307; JP 2015032511 A 20150223; RU 2015107678 A 20150304; TW 104105346 A 20150216; US 201514631087 A 20150225