

Title (en)  
HAIRSPRING FOR MECHANICAL CLOCK MOVEMENT

Title (de)  
SPIRALFEDER FÜR MECHANISCHES UHRWERK

Title (fr)  
SPIRAL POUR MOUVEMENT D'HORLOGERIE MECANIQUE

Publication  
**EP 3432083 A1 20190123 (FR)**

Application  
**EP 18183176 A 20160225**

Priority  
• EP 18183176 A 20160225  
• EP 16157390 A 20160225

Abstract (en)  
[origin: JP2017151080A] PROBLEM TO BE SOLVED: To provide a method of attaching a balance spring so that it does not deviate from its static position without inducing a mechanical stress in the balance spring.SOLUTION: A method of attaching a final outer coil (12) of a balance spring (4) for timepiece to an inside of a groove (70) disposed in a stud (14) is provided. This method includes a step of adhesively bonding the final outer coil (12) of the balance spring (4) for timepiece using a fluent adhesive having a viscosity of 200-400 mPa s.SELECTED DRAWING: Figure 2B

Abstract (fr)  
Spiral pour mouvement d'horlogerie formé d'un enroulement de spires concentriques et comprenant une dernière spire à l'extérieur (12) qui se termine par une plaquette (72) qui est plus épaisse que les autres spires du spiral (4), la plaquette (72) étant munie d'au moins une encoche (74) pour favoriser l'accrochage de la colle une fois celle-ci durcie.

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

CPC (source: CN EP US)  
**G04B 17/063** (2013.01 - US); **G04B 17/325** (2013.01 - EP US); **G04B 17/34** (2013.01 - CN US)

Citation (search report)  
• [X] JP 2015179071 A 20151008 - CITIZEN HOLDINGS CO LTD  
• [Y] CH 704016 A2 20120430 - ETA SA MFT HORLOGERE SUISSE [CH]  
• [Y] DE 2333446 A1 19750116 - JUNGHANS GMBH GEB  
• [A] EP 2881804 A2 20150610 - MONTRES BREGUET SA [CH]  
• [A] WO 2014023584 A1 20140213 - ETA SA MFT HORLOGERE SUISSE [CH]  
• [A] CH 571733 B5 19760115 - AUGSBURGER JEAN JACQUES

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 3211486 A1 20170830; EP 3211486 B1 20180926**; CN 107121918 A 20170901; CN 107121918 B 20190917; EP 3432083 A1 20190123; JP 2017151080 A 20170831; JP 6259056 B2 20180110; TW 201732466 A 20170916; TW I701528 B 20200811; US 10018965 B2 20180710; US 2017248918 A1 20170831

DOCDB simple family (application)  
**EP 16157390 A 20160225**; CN 201611121756 A 20161208; EP 18183176 A 20160225; JP 2016237311 A 20161207; TW 105134437 A 20161025; US 201615298498 A 20161020