

Title (en)  
HAIRSPRING-STUD ASSEMBLY FOR TIMEPIECE

Title (de)  
SPIRALFEDER-SPIRALKLÖTZCHEN-EINHEIT FÜR UHRWERK

Title (fr)  
ENSEMBLE SPIRAL-PITON D'HORLOGERIE

Publication  
**EP 2881804 B1 20170802 (FR)**

Application  
**EP 14194961 A 20141126**

Priority  
• EP 13196153 A 20131209  
• EP 14194961 A 20141126

Abstract (en)  
[origin: US2016147196A1] Balance spring stud including, around a housing receiving a balance spring of reference thickness, a one-piece component made of a shape memory alloy and including two lugs, each arranged to rest on one of the surfaces of the balance spring, and wherein, in the free state, the minimum width of the air gap of the lugs is greater than the maximum value of the reference thickness when the component is in an open position corresponding to a martensitic structure, and wherein the maximum width of the air gap is less than the minimum value of the reference thickness when the component is in a closed position corresponding to an austenitic structure, and the balance spring includes an area of lesser thickness having a minimum thickness equal to the reference thickness, surrounded by areas of large thickness having a minimum thickness greater than the reference thickness.

IPC 8 full level  
**G04B 18/06** (2006.01)

CPC (source: CN EP US)  
**G04B 13/02** (2013.01 - EP US); **G04B 15/06** (2013.01 - EP US); **G04B 17/06** (2013.01 - EP US); **G04B 17/325** (2013.01 - CN EP US); **G04B 19/044** (2013.01 - EP US); **G04B 18/026** (2013.01 - EP US); **Y10T 29/49581** (2015.01 - EP US)

Cited by  
EP3432083A1; EP4411489A1; US12045013B2; US2022155726A1; US11507021B2; EP3252542B1

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)  
**US 2016147196 A1 20160526**; **US 9367038 B1 20160614**; CN 105629698 A 20160601; CN 105629698 B 20180403; EP 2881804 A2 20150610; EP 2881804 A3 20150826; EP 2881804 B1 20170802; JP 2016099345 A 20160530; JP 6018686 B2 20161102

DOCDB simple family (application)  
**US 201514873533 A 20151002**; CN 201510829127 A 20151125; EP 14194961 A 20141126; JP 2015216431 A 20151104