

Title (en)
SHOCKPROOF BEARING FOR A TIMEPIECE

Title (de)
STOSSSICHERES LAGER FÜR UHR

Title (fr)
PALIER ANTICHOC POUR PIECE D'HORLOGERIE

Publication
EP 2791739 B1 20160309 (FR)

Application
EP 12806345 A 20121207

Priority
• EP 11193058 A 20111212
• EP 2012005050 W 20121207
• EP 12806345 A 20121207

Abstract (en)
[origin: WO2013087173A1] The invention relates to a shock-proof bearing for a timepiece, comprising a resilient structure (10) and a central part (14) borne by the resilient structure, said central part including a blind hole (16A) intended to receive a pivot of a rotary mobile element of the timepiece. The resilient structure and the central part are formed by a single one-piece plate (6) made from monocrystalline quartz and the blind hole is at least partially in the shape of a truncated or non-truncated trigonal pyramid, against which the end of the pivot butts. The invention also relates to a method for producing such a shock-proof bearing, in which the one-piece plate is machined in a chemical bath to allow the anisotropic etching of the monocrystalline quartz. Preferably, two masks (20, 26) are positioned respectively on the two sides of the plate so that the quartz can be etched on both sides simultaneously.

IPC 8 full level
G04B 31/004 (2006.01); **G04B 31/02** (2006.01); **G04B 31/06** (2006.01)

CPC (source: EP RU US)
G04B 31/004 (2013.01 - EP RU US); **G04B 31/016** (2013.01 - EP US); **G04B 31/02** (2013.01 - EP US); **G04B 31/06** (2013.01 - EP US)

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)
WO 2013087173 A1 20130620; CH 705861 A2 20130614; CN 103988133 A 20140813; CN 103988133 B 20170301; EP 2791739 A1 20141022; EP 2791739 B1 20160309; HK 1200927 A1 20150814; JP 2015505961 A 20150226; JP 5848461 B2 20160127; RU 2014128595 A 20160210; RU 2603236 C2 20161127; US 2014341005 A1 20141120; US 9292005 B2 20160322

DOCDB simple family (application)
EP 2012005050 W 20121207; CH 27292012 A 20121207; CN 201280061202 A 20121207; EP 12806345 A 20121207; HK 15101202 A 20150204; JP 2014545136 A 20121207; RU 2014128595 A 20121207; US 201214364550 A 20121207