

Title (en)  
SHOCK-ABSORBER DEVICE FOR A CLOCK MOVEMENT

Title (de)  
STOSSDÄMPFENDE VORRICHTUNG FÜR UHRWERK

Title (fr)  
DISPOSITIF ANTICHOC POUR UN MOUVEMENT HORLOGER

Publication  
**EP 3246764 B1 20190123 (FR)**

Application  
**EP 17167110 A 20170419**

Priority  
EP 16170213 A 20160518

Abstract (en)  
[origin: US2017336761A1] The timepiece movement comprises a pivoting element, a bearing for a pivot of this pivoting element and an anti-shock device associated with this bearing and including a resilient member arranged to exert a restoring force on at least one endstone. The anti-shock device further includes a magnetic system comprising two magnets having opposite polarities and a highly magnetically permeable element arranged between these two magnets and secured to one of them, the two magnets being respectively fixed to a support of the anti-shock device and to the resilient member and arranged to produce between them, in association with the highly magnetically permeable element, an overall force of magnetic attraction on a first section of a possible distance of displacement for the endstone in the event of a shock and an overall force of magnetic repulsion on a second section of this distance of displacement corresponding to greater distances of separation than those of the first section.

IPC 8 full level  
**G04B 31/04** (2006.01); **G04B 31/02** (2006.01)

CPC (source: CN EP US)  
**G04B 29/022** (2013.01 - US); **G04B 31/02** (2013.01 - CN EP US); **G04B 31/04** (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)  
**EP 3246764 A1 20171122; EP 3246764 B1 20190123**; CH 712502 A2 20171130; CN 107402511 A 20171128; CN 107402511 B 20190809; HK 1245425 A1 20180824; JP 2017207485 A 20171124; JP 6340114 B2 20180606; US 10222754 B2 20190305; US 2017336761 A1 20171123

DOCDB simple family (application)  
**EP 17167110 A 20170419**; CH 5222017 A 20170419; CN 201710347592 A 20170517; HK 18104614 A 20180409; JP 2017094417 A 20170511; US 201715591209 A 20170510