

Title (en)

THREE-MATERIAL ROLL-BONDED SLIDING BEARING HAVING TWO ALUMINIUM LAYERS

Title (de)

DREISTOFFIGES WALZPLATTIERTES GLEITLAGER MIT ZWEI ALUMINIUMSCHICHTEN

Title (fr)

PALIER LISSE À TROIS MATÉRIAUX PLAQUÉ PAR LAMINAGE, DOTÉ DE DEUX COUCHES D'ALUMINUM

Publication

EP 3601821 A1 20200205 (DE)

Application

EP 18716535 A 20180323

Priority

- DE 102017205338 A 20170329
- EP 2018057427 W 20180323

Abstract (en)

[origin: WO2018177919A1] The present invention relates to a sliding bearing element having a steel supporting layer onto which a 2-layer composite is applied which consists of an aluminium-based substrate having a layer thickness hS of 0.2 to 0.4 mm and an aluminium-based sliding layer having a layer thickness hG of 0.005 to 0.1 mm, wherein the substrate and the sliding layer are joined by roll bonding, and a sliding bearing made from two sliding bearing elements of this kind, which are predominantly used for applications in high-performance engines, principally for connecting-rod bearings, crankshaft main bearings and connecting rod bushes, but also in applications in mounting camshafts and counterbalance shafts as well as transmissions.

IPC 8 full level

C22C 21/00 (2006.01); **C22C 21/14** (2006.01); **C22C 21/16** (2006.01); **F16C 9/02** (2006.01); **F16C 9/04** (2006.01); **F16C 33/12** (2006.01);
F16C 33/14 (2006.01)

CPC (source: EP KR US)

C22C 21/00 (2013.01 - EP); **C22C 21/003** (2013.01 - EP KR); **C22C 21/14** (2013.01 - US); **C22C 21/16** (2013.01 - EP KR US);
C22C 21/18 (2013.01 - US); **F16C 9/02** (2013.01 - KR); **F16C 9/04** (2013.01 - KR); **F16C 33/121** (2013.01 - EP KR US);
F16C 33/124 (2013.01 - EP KR); **F16C 33/127** (2013.01 - EP KR US); **F16C 33/14** (2013.01 - EP KR); **F16C 9/02** (2013.01 - EP);
F16C 9/04 (2013.01 - EP); **F16C 2202/04** (2013.01 - EP KR); **F16C 2202/06** (2013.01 - EP KR US); **F16C 2204/20** (2013.01 - EP KR US);
F16C 2223/32 (2013.01 - EP KR US); **F16C 2240/60** (2013.01 - EP KR US); **F16C 2360/00** (2013.01 - EP); **F16C 2360/18** (2013.01 - EP KR);
Y10T 428/12757 (2015.01 - US); **Y10T 428/12764** (2015.01 - US)

Citation (search report)

See references of WO 2018177919A1

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)

WO 2018177919 A1 20181004; BR 112019017943 A2 20200519; CN 110418904 A 20191105; DE 102017205338 A1 20181004;
EP 3601821 A1 20200205; JP 2020516818 A 20200611; KR 20190127812 A 20191113; US 2020109744 A1 20200409

DOCDB simple family (application)

EP 2018057427 W 20180323; BR 112019017943 A 20180323; CN 201880017430 A 20180323; DE 102017205338 A 20170329;
EP 18716535 A 20180323; JP 2019553516 A 20180323; KR 20197029796 A 20180323; US 201816497545 A 20180323