

Title (en)

USE OF PRODUCTS MADE FROM ALUMINIUM COPPER MAGNESIUM ALLOY THAT PERFORM WELL AT HIGH TEMPERATURE

Title (de)

VERWENDUNG VON PRODUKTEN AUS EINER BEI HOHER TEMPERATUR GUT AUSBILDENDEN ALUMINIUM-KUPFER-MAGNESIUM-LEGIERUNG

Title (fr)

UTILISATION DE PRODUITS EN ALLIAGE ALUMINIUM CUIVRE MAGNESIUM PERFORMANTS A HAUTE TEMPERATURE

Publication

EP 4162089 A1 20230412 (FR)

Application

EP 21734420 A 20210531

Priority

- FR 2005856 A 20200604
- FR 2021050981 W 20210531

Abstract (en)

[origin: CA3184620A1] The invention relates to the use of a wrought T8 aluminium alloy product with the following composition, in wt%, Cu: 3.6 4.4; Mg: 1.2 1.4; Mn: 0.5 0.8; Zr: = 0.15; Ti: 0.01 0.15; Si = 0.20; Fe = 0.20; Zn = 0.25; other elements < 0.05; the remainder being aluminium, in an application in which the product is kept at temperatures of between 80°C and 250°C for a significant period of at least 200 hours. The products intended for the use according to the invention are particularly useful in an application such as a rotor or another component of an air suction pump such as, in particular, a vacuum pump.

IPC 8 full level

C22C 21/14 (2006.01); **C22C 21/16** (2006.01); **C22C 21/18** (2006.01); **C22F 1/057** (2006.01); **F04D 19/04** (2006.01); **F04D 29/02** (2006.01)

CPC (source: EP KR US)

C22C 21/14 (2013.01 - EP US); **C22C 21/16** (2013.01 - EP KR US); **C22C 21/18** (2013.01 - EP US); **C22F 1/057** (2013.01 - EP KR US); **F04D 19/042** (2013.01 - EP KR); **F04D 29/023** (2013.01 - EP KR); **F05D 2300/173** (2013.01 - EP KR)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

FR 3111143 A1 20211210; **FR 3111143 B1 20221118**; BR 112022023160 A2 20221220; CA 3184620 A1 20211209; CN 115698356 A 20230203; EP 4162089 A1 20230412; EP 4162089 B1 20240320; JP 2023533152 A 20230802; KR 20230019884 A 20230209; US 2023220530 A1 20230713; WO 2021245345 A1 20211209

DOCDB simple family (application)

FR 2005856 A 20200604; BR 112022023160 A 20210531; CA 3184620 A 20210531; CN 202180039800 A 20210531; EP 21734420 A 20210531; FR 2021050981 W 20210531; JP 2022574346 A 20210531; KR 20227046352 A 20210531; US 202118000322 A 20210531