

Title (en)
SELF-LUBRICATED COATING AND METHOD

Title (de)
SELBSTGESCHMIERTE BESCHICHTUNG UND VERFAHREN

Title (fr)
REVÊTEMENT AUTOLUBRIFIANT ET PROCÉDÉ ASSOCIÉ

Publication
EP 2556179 A1 20130213 (EN)

Application
EP 11713239 A 20110401

Priority
• IT CO20100014 A 20100406
• EP 2011055123 W 20110401

Abstract (en)
[origin: WO2011124534A1] Coating and method for providing a self-lubricated coating on a substrate. The method includes spraying with an inert gas at least a layer of liquid metal on the substrate; adding a compound to the liquid metal while being sprayed on the substrate; forming a porous layer on the substrate that includes the metal and the compound, where the porous layer has plural pores; heating the porous layer to open the pores; flooding the open pores with a greasing substance such that part of the greasing substance is stored in one or more pores; and cooling the porous layer to close the pores and trap the greasing substance inside the pores.

IPC 8 full level
C23C 4/12 (2006.01); **C23C 4/02** (2006.01); **C23C 4/06** (2006.01); **C23C 4/18** (2006.01); **F16C 33/10** (2006.01); **F16C 33/12** (2006.01)

CPC (source: EP KR US)
C23C 4/02 (2013.01 - EP KR US); **C23C 4/06** (2013.01 - EP KR US); **C23C 4/12** (2013.01 - KR); **C23C 4/123** (2016.01 - EP US); **C23C 4/18** (2013.01 - EP KR US); **F04D 29/06** (2013.01 - US); **F16C 33/103** (2013.01 - EP US); **F16C 33/12** (2013.01 - EP US); **F16C 2204/60** (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 2011124534 A1 20111013; AU 2011237981 A1 20121018; BR 112012025269 A2 20160621; CA 2794792 A1 20111013; CN 102812147 A 20121205; CN 102812147 B 20150617; EP 2556179 A1 20130213; IT 1399157 B1 20130411; IT CO20100014 A1 20111007; JP 2013530303 A 20130725; JP 5820463 B2 20151124; KR 20130040790 A 20130424; MX 2012011628 A 20121130; RU 2012142135 A 20140527; US 2013202405 A1 20130808

DOCDB simple family (application)
EP 2011055123 W 20110401; AU 2011237981 A 20110401; BR 112012025269 A 20110401; CA 2794792 A 20110401; CN 201180016628 A 20110401; EP 11713239 A 20110401; IT CO20100014 A 20100406; JP 2013503070 A 20110401; KR 20127024860 A 20110401; MX 2012011628 A 20110401; RU 2012142135 A 20110401; US 201113639573 A 20110401