

Title (en)

METHOD FOR COATING AT LEAST THE INNER FACE OF A PISTON RING

Title (de)

VERFAHREN ZUR BESCHICHTUNG ZUMINDEST DER INNENFLÄCHE EINES KOLBENRINGS

Title (fr)

PROCÉDÉ POUR APPLIQUER UN REVÊTEMENT AU MOINS SUR LA SURFACE INTÉRIEURE D'UN SEGMENT DE PISTON

Publication

**EP 2545195 A2 20130116 (DE)**

Application

**EP 11704068 A 20110217**

Priority

- DE 102010002687 A 20100309
- EP 2011052342 W 20110217

Abstract (en)

[origin: WO2011110411A2] In a method for coating at least part of the inner face of a piston ring, said ring preferably consisting of cast iron or steel, a PVD and/or DLC coating is applied by means of at least one of the following methods: PA-CVD, glow discharge and/or HIPIMS. A piston ring has a coating that is formed at least on part of the inner face of said ring, said coating being a PVD and/or DLC coating that preferably has been applied by means of PA-CVD, glow discharge and/or HIPIMS.

IPC 8 full level

**C23C 16/02** (2006.01); **F16J 9/00** (2006.01)

CPC (source: EP KR US)

**C23C 16/0272** (2013.01 - EP KR US); **F16J 9/26** (2013.01 - EP KR US); **H01J 37/3467** (2013.01 - EP KR US)

Citation (search report)

See references of WO 2011110411A2

Citation (examination)

- WO 2006125683 A1 20061130 - BEKAERT SA NV [BE], et al
- JP 2008241032 A 20081009 - NIPPON PISTON RING CO LTD
- EP 0988406 A1 20000329 - BEKAERT SA NV [BE]

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)

**DE 102010002687 A1 20110915**; **DE 102010002687 B4 20120216**; **DE 102010002687 C5 20150910**; BR 112012022013 A2 20170207; BR 112012022013 B1 20191224; CN 103620085 A 20140305; CN 103620085 B 20161012; EP 2545195 A2 20130116; JP 2013529249 A 20130718; JP 5855026 B2 20160209; KR 101781618 B1 20170925; KR 20130005282 A 20130115; RU 2012142814 A 20140420; US 2013136861 A1 20130530; WO 2011110411 A2 20110915; WO 2011110411 A3 20150625

DOCDB simple family (application)

**DE 102010002687 A 201100309**; BR 112012022013 A 20110217; CN 201180012801 A 20110217; EP 11704068 A 20110217; EP 2011052342 W 20110217; JP 2012556430 A 20110217; KR 20127026365 A 20110217; RU 2012142814 A 20110217; US 201113583715 A 20110217