Title (en)

METHOD FOR PRODUCING A SPRAYED CYLINDER RUNNING SURFACE OF A CYLINDER CRANKCASE OF AN INTERNAL COMBUSTION ENGINE AND SUCH A CYLINDER CRANKCASE

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER GESPRITZTEN ZYLINDERLAUFFLÄCHE EINES ZYLINDERKURBELGEHÄUSES EINER VERBRENNUNGSKRAFTMASCHINE SOWIE DERARTIGES ZYLINDERKURBELGEHÄUSE

Title (fr)

PROCÉDÉ DE RÉALISATION PAR PROJECTION D'UNE SURFACE DE CYLINDRE D'UN BLOC-MOTEUR DE MOTEUR À COMBUSTION INTERNE ET UN TEL BLOC MOTEUR

Publication

EP 3071724 A1 20160928 (DE)

Application

EP 14750237 A 20140812

Priority

• DE 102013112809 A 20131120
• EP 2014067246 W 20140812

Abstract (en)

[origin: WO2015074775A1] There are known methods for producing a cylinder running surface of a cylinder crankcase of an internal combustion engine in which a coating (30) is produced on a cylinder inner wall (24) of a cast cylinder crankcase by thermal spraying, and wherein an inert gas is used as the atomizer gas. However, the layers created are often susceptible to corrosion. In order to prevent this, it is proposed that the mass throughput of the coating material (15) in the thermal spraying is 8 to 22.5 kg/h. This provides a cylinder crankcase for an internal combustion engine with a cylinder running surface in which the sprayed-on coating (30) has a layer porosity of 4.5 to 25% and an oxide content of 0.5 to 5%. This coating has a high corrosion resistance.

IPC 8 full level

C23C 4/12 (2006.01); F02F 1/16 (2006.01)

CPC (source: EP KR RU US)

C23C 4/06 (2013.01 - RU US); C23C 4/131 (2016.01 - EP KR US); C23C 4/134 (2016.01 - KR RU US); F02F 1/004 (2013.01 - US); F02F 1/20 (2013.01 - KR); F02F 1/20 (2013.01 - EP US); F02F 2001/008 (2013.01 - US)

Citation (examination)

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DOCDB simple family (application)

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