

Title (en)

PROCESS FOR INTERNALLY COATING FUNCTIONAL LAYERS WITH A THROUGH-HARDENED MATERIAL

Title (de)

VERFAHREN ZUR INNENBESCHICHTUNG VON FUNKTIONSSCHICHTEN MIT EINEM VERGÜTUNGSMATERIAL.

Title (fr)

PROCÉDÉ POUR LE REVÊTEMENT INTÉRIEUR DE COUCHES FONCTIONNELLES PAR UN MATÉRIAU DE TRAITEMENT

Publication

**EP 2558611 A1 20130220 (DE)**

Application

**EP 11724528 A 20110405**

Priority

- DE 102010015470 A 20100416
- DE 2011000370 W 20110405

Abstract (en)

[origin: WO2011127896A1] The invention has involved the development of a process for internally coating the pores of a porous functional layer made of a base material with a through-hardened material, which reduces the diffusion of the base material and/or the reactivity of the base material with its surroundings. According to the invention, the through-hardened material is deposited from the vapour phase on the inner surfaces of the pores. It has been recognized that, owing to the deposition from the vapour phase, the through-hardened material can be introduced into the pore system of the functional layer to a considerably greater depth than was possible according to the present prior art. This is applicable particularly when it is not the through-hardened material itself which is introduced into the pore system, but rather one or two precursors thereof, from which the actual through-hardened material arises only on the inner surfaces of the pores.

IPC 8 full level

**C23C 16/04** (2006.01); **C23C 16/40** (2006.01); **C23C 16/455** (2006.01); **F01D 5/28** (2006.01); **H01L 21/768** (2006.01)

CPC (source: EP US)

**B28B 19/00** (2013.01 - US); **C23C 16/045** (2013.01 - EP US); **C23C 16/403** (2013.01 - EP US); **C23C 16/45525** (2013.01 - EP US); **C23C 16/45555** (2013.01 - EP US); **F01D 5/288** (2013.01 - EP US); **Y10T 428/249969** (2015.04 - EP US); **Y10T 428/24997** (2015.04 - EP US)

Citation (search report)

See references of WO 2011127896A1

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 102010015470 A1 20111020**; CN 102844461 A 20121226; EP 2558611 A1 20130220; JP 2013525599 A 20130620; US 2013196141 A1 20130801; WO 2011127896 A1 20111020

DOCDB simple family (application)

**DE 102010015470 A 20100416**; CN 201180019325 A 20110405; DE 2011000370 W 20110405; EP 11724528 A 20110405; JP 2013504118 A 20110405; US 201113640401 A 20110405