

Title (en)

Method for coating a component in a working connection with fuel as fuel injection components and assembly of two components

Title (de)

Verfahren zum Beschichten eines in Wirkverbindung mit Kraftstoff angeordneten, als Kraftstoffeinspritzkomponente ausgebildeten Bauteils und Anordnung zweier Bauteile

Title (fr)

Procédé de revêtement d'un composant développé en tant que composant d'injection de carburant et agencé en relation active avec du carburant, ainsi qu'agencement des deux composants

Publication

EP 2439307 B1 20180221 (DE)

Application

EP 11180417 A 20110907

Priority

DE 102010042249 A 20101011

Abstract (en)

[origin: EP2439307A1] The method of coating a fuel injection component (1, 2), comprises forming the coating after manufacture of the component on a surface of the component, where the coating is formed as an oxide layer (11, 13) and acts as an anti-stick coating against aging and/or deposition components of the fuel. The formation of the oxide layer is carried out at the component by exposing the component at an elevated temperature of greater than 50[deg] C in an oxygen-containing atmosphere. A water vapor is exposed during or after formation of the oxide layer. The method of coating a fuel injection component (1, 2), comprises forming the coating after manufacture of the component on a surface of the component, where the coating is formed as an oxide layer (11, 13) and acts as an anti-stick coating against aging and/or deposition components of the fuel. The formation of the oxide layer is carried out at the component by exposing the component at an elevated temperature of greater than 50[deg] C in an oxygen-containing atmosphere. A water vapor is exposed during or after formation of the oxide layer. A chromium-containing steel (100Cr6) is used as a material for the component. The oxide layer is formed in form of a grind after a cutting surface treatment of the component. An independent claim is included for an arrangement.

IPC 8 full level

C23C 8/10 (2006.01); **C23C 8/12** (2006.01); **C23C 8/14** (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP)

C23C 8/10 (2013.01); **C23C 8/12** (2013.01); **C23C 8/14** (2013.01); **C23C 8/80** (2013.01); **F02M 61/166** (2013.01); **F02M 2200/9038** (2013.01)

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)

EP 2439307 A1 20120411; EP 2439307 B1 20180221; DE 102010042249 A1 20120412

DOCDB simple family (application)

EP 11180417 A 20110907; DE 102010042249 A 20101011