

Title (en)  
ENGINE PART

Title (de)  
MOTORTEIL

Title (fr)  
PIECE DE MOTEUR

Publication  
**EP 1845176 A4 20110629 (EN)**

Application  
**EP 05793486 A 20051017**

Priority  
• JP 2005019037 W 20051017  
• JP 2004302479 A 20041018

Abstract (en)  
[origin: EP1845176A1] An engine part according to the present invention includes: a metal substrate; a chromium plating layer covering at least a portion of a surface of the metal substrate, the chromium plating layer being formed from a trivalent chromium plating solution. The chromium plating layer includes a boron content of no less than 0.05 mass% and no more than 0.3 mass%, and the chromium plating layer has a thickness of 0.7  $\mu$  m or less.

IPC 8 full level  
**C25D 3/06** (2006.01); **C25D 5/12** (2006.01); **C25D 5/14** (2006.01); **C25D 5/26** (2006.01); **C25D 7/00** (2006.01); **C25D 7/04** (2006.01); **F01N 13/08** (2010.01); **F01N 13/16** (2010.01); **F01N 13/18** (2010.01); **F02F 1/00** (2006.01); **F02F 1/24** (2006.01)

CPC (source: EP US)  
**C25D 3/56** (2013.01 - EP US); **F01N 13/16** (2013.01 - EP US); **C25D 3/06** (2013.01 - EP US); **F01N 2530/02** (2013.01 - EP US); **Y10T 428/12847** (2015.01 - EP US)

Citation (search report)  
• [IA] GB 1378883 A 19741227 - ALBRIGHT & WILSON  
• [IA] GB 1388693 A 19750326 - BRITISH NON FERROUS METALS RES  
• [AP] "Elektrolyte auf Chrom(III)basis", GALVANOTECHNIK, EUGEN G.LEUZE VERLAG, SAULGAU/WURTT, DE, vol. 100, no. 12, 1 December 2009 (2009-12-01), pages 2781 - 2783, XP001554026, ISSN: 0016-4232  
• See references of WO 2006043507A1

Cited by  
EP3859053A1; CN105177649A; CN114729463A; WO2010092622A1; US10266957B2; US11248300B2; WO2021084103A1; EP2396455B1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1845176 A1 20071017**; **EP 1845176 A4 20110629**; JP 4691029 B2 20110601; JP WO2006043507 A1 20080522; US 2008274373 A1 20081106; WO 2006043507 A1 20060427

DOCDB simple family (application)  
**EP 05793486 A 20051017**; JP 2005019037 W 20051017; JP 2006520446 A 20051017; US 57017205 A 20051017