

Title (en)  
UNMACHINED CYLINDER HEAD CASTING, CAST CYLINDER HEAD FOR DIESEL INTERNAL COMBUSTION ENGINES, AND PROCESS FOR PRODUCING AN UNMACHINED CYLINDER HEAD CASTING

Title (de)  
ZYLINDERKOPF-GUSSROHTEIL, GEGOSSENER ZYLINDERKOPF FÜR DIESEL-VERBRENNUNGSMOTOREN UND VERFAHREN ZUR HERSTELLUNG EINES ZYLINDERKOPF-GUSSROHTEILS

Title (fr)  
EBAUCHE DE FONDERIE DE CULASSE, CULASSE COULEE POUR MOTEURS DIESEL ET PROCEDE DE PRODUCTION D'UNE EBAUCHE DE FONDERIE DE CULASSE

Publication  
**EP 1912754 B1 20091209 (DE)**

Application  
**EP 06792513 A 20060718**

Priority  
• EP 2006064363 W 20060718  
• DE 102005037735 A 20050805

Abstract (en)  
[origin: US2008202464A1] An unfinished cylinder head casting for producing a cylinder head for internal combustion engines powered with diesel fuel includes a sealing surface, intended for mounting in a finished state on a corresponding sealing surface of an engine block, and designed on a sealing surface section of the unfinished cylinder head casting. A thickness of the sealing surface section in a casting state exhibits a machining allowance in relation to its set thickness, obtained after a material-removing finishing of the sealing surface. The sealing surface includes a combustion chamber region, associated with a combustion chamber formed in the engine block. In the case of such a cylinder head, an optimum load-bearing capacity is achieved in a simple manner in that a combustion chamber region sealing surface section machining allowance amounts to a maximum of 15% of the machining allowance of the sealing surface section in the remaining region of the sealing surface.

IPC 8 full level  
**B22D 15/02** (2006.01); **F02F 1/38** (2006.01)

CPC (source: EP KR US)  
**B22D 15/02** (2013.01 - EP KR US); **F02F 1/24** (2013.01 - EP US); **F02F 1/38** (2013.01 - KR); **F02F 2001/249** (2013.01 - EP US); **Y10T 29/4927** (2015.01 - EP US)

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)  
**US 2008202464 A1 20080828; US 8127737 B2 20120306**; AT E451190 T1 20091215; BR PI0614300 A2 20110322; BR PI0614300 B1 20140617; CA 2615456 A1 20070215; CN 101237950 A 20080806; CN 101237950 B 20110302; DE 102005037735 A1 20070215; DE 102005037735 B4 20100701; DE 502006005599 D1 20100121; EP 1912754 A1 20080423; EP 1912754 B1 20091209; JP 2009503354 A 20090129; JP 2013064405 A 20130411; JP 5716003 B2 20150513; KR 101278719 B1 20130625; KR 20080036628 A 20080428; PL 1912754 T3 20100531; RU 2008108503 A 20090910; RU 2405653 C2 20101210; WO 2007017349 A1 20070215; ZA 200800620 B 20081231

DOCDB simple family (application)  
**US 99784906 A 20060718**; AT 06792513 T 20060718; BR PI0614300 A 20060718; CA 2615456 A 20060718; CN 200680028546 A 20060718; DE 102005037735 A 20050805; DE 502006005599 T 20060718; EP 06792513 A 20060718; EP 2006064363 W 20060718; JP 2008524473 A 20060718; JP 2012246703 A 20121108; KR 20087005484 A 20060718; PL 06792513 T 20060718; RU 2008108503 A 20060718; ZA 200800620 A 20080121