

Title (en)
AIR-COOLED ENGINE UNIT

Title (de)
LUFTGEKÜHLTE MOTOREINHEIT

Title (fr)
ENSEMBLE MOTEUR REFROIDI À L'AIR

Publication
EP 3239505 A4 20180103 (EN)

Application
EP 15872729 A 20151210

Priority
• JP 2014258916 A 20141222
• JP 2015084619 W 20151210

Abstract (en)
[origin: EP3239505A1] An air-cooled engine unit is provided, in which deterioration of a catalyst is minimized even when the catalyst is provided close to an engine main body. An air-cooled engine unit (11) has a compression ratio of 10 or higher, and includes a close-to-combustion-chamber catalyst (53) provided in an exhaust passage member (51). A path length of a first portion of the exhaust passage member (51), the first portion being from an exhaust port to the catalyst (53), is shorter than a path length of a second portion of the exhaust passage member (51), the second portion being from the catalyst (53) to an atmosphere discharge port (64a).

IPC 8 full level
F02D 45/00 (2006.01); **F01N 3/20** (2006.01); **F01N 3/28** (2006.01); **F02D 9/10** (2006.01); **F02D 17/00** (2006.01); **F02D 29/02** (2006.01); **F02D 41/14** (2006.01); **F02D 43/00** (2006.01); **F02P 5/152** (2006.01)

CPC (source: EP)
F01N 3/28 (2013.01); **F01N 13/08** (2013.01); **F01P 1/02** (2013.01); **F02D 29/02** (2013.01); **F02D 41/0002** (2013.01); **F02D 41/2454** (2013.01); **F01N 9/00** (2013.01); **F01N 2340/02** (2013.01); **F01N 2560/025** (2013.01); **F01N 2590/04** (2013.01); **F01N 2900/08** (2013.01); **F02D 9/1055** (2013.01); **F02D 35/027** (2013.01); **F02P 5/152** (2013.01)

Citation (search report)
• [Y] US 6397585 B2 20020604 - KITAJIMA SHINICHI [JP], et al
• [Y] EP 1403480 A2 20040331 - HITACHI LTD [JP]
• [Y] US 7823561 B2 20101102 - OMURO YOSHIYA [JP], et al
• [XYI] ANONYMOUS: "The 2005 BMW R 1200 GS motorcycle.", 16 November 2004 (2004-11-16), XP055427982, Retrieved from the Internet <URL:https://web.archive.org/web/20041116114445/https://www.bikez.com/motorcycles/bmw_r_1200_gs_2005.php> [retrieved on 20171123]
• [XP] ANONYMOUS: "Katalog - Katalog - BMW Motorrad Original Ersatzteile online", 23 November 2017 (2017-11-23), XP055427997, Retrieved from the Internet <URL:https://www.online-teile.com/bmw-motorrad-ersatzteile/Teilekatalog_14000.html?fztyp=0307&catalog_cat=18&fztyp_mospid=51555&year=2005&month=02#sub> [retrieved on 20171123]
• [A] ANONYMOUS: "Standard OE BMW R1200GS exhaust headers (down pipes) with integral CAT (Catalytic converter) from a 2005 bike - AndyW-inuk's Photos", 21 January 2010 (2010-01-21), XP055428002, Retrieved from the Internet <URL:https://web.archive.org/web/20100121160736/http://andyw-inuk.smugmug.com:80/Motorcycles/R1200GS-BMW-Motorcycle-Photo/R1200GS-Exhaust-Exhaust-Mods/6658303_8WcPJ/1/480519034_eH5fF> [retrieved on 20171123]
• [YP] ANONYMOUS: "Katalog - Katalog - BMW Motorrad Original Ersatzteile online", 23 November 2017 (2017-11-23), XP055428044, Retrieved from the Internet <URL:https://www.online-teile.com/bmw-motorrad-ersatzteile/Teilekatalog_14000.html?fztyp=0307&catalog_cat=13&fztyp_mospid=51555&year=2005&month=02#sub> [retrieved on 20171123]
• See references of WO 2016104160A1

Cited by
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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

Designated extension state (EPC)
BA ME

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