Title (en)
   Crankcase breather device

Title (de)
   Kurbelwellenraum Entlüftungsvorrichtung

Title (fr)
   Systéme de degasage pour une chambre de villebrequin

Publication
   EP 1956204 A1 20080813 (EN)

Application
   EP 08250439 A 20080206

Priority
   JP 2007031186 A 20070209

Abstract (en)
   A straddle-type vehicle includes: a swing type engine unit (40) that has a crankcase (90), a cylinder (80), and a cylinder head (70) in which a cam shaft (73) is disposed; a cooling water pump (74) that is provided in the cylinder head (70) and includes an impeller (74a) that is rotatably connected to the cam shaft (73) and supplies cooling water to cooling water channels; and a breather device (75) which is disposed adjacent to the cooling water pump (74) and through which an impeller shaft (74b) passes. The breather device (75) includes a breather housing (S1) that has a length along the cylinder center line (C1) that is larger than that of the cooling water pump (74). The breather housing (S1) is positioned further toward the crankcase (90) with respect to the cam shaft (73).

IPC 8 full level
   B62J 99/00 (2009.01); **F01M 13/04** (2006.01)

CPC (source: EP)
   F01M 13/0416 (2013.01); F01M 2013/0422 (2013.01); F02N 15/04 (2013.01)

Citation (applicant)
   • JP H03199609 A 19910830 - YAMAHA MOTOR CO LTD
   • GB 2321507 A 19980729 - NISSAN MOTOR [JP], et al

Citation (search report)
   • [X] JP H03199609 A 19910830 - YAMAHA MOTOR CO LTD
   • [DA] JP H04237831 A 19920826 - YAMAHA MOTOR CO LTD
   • [A] US 2003010311 A1 20030116 - KURIHARA KATSUMI [JP], et al
   • [A] US 4922881 A 19900508 - TAMBA SHINICHI [JP], et al

Designated contracting state (EPC)
   AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
   AL BA MK RS

DOCDB simple family (publication)
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   CN 101239636 A 20080813; CN 101239636 B 20110119; DE 602008002448 D1 20101028; EP 2112346 A1 20091028;
   ES 2350305 T3 20110120; JP 2008196355 A 20080828; TW 200846546 A 20081201; TW I342359 B 20110521

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   EP 08250439 A 20080206; AT 08250439 T 20080206; BR PI0800124 A 20080207; CN 200810004798 A 20080213;
   DE 602008002448 T 20080206; EP 09010754 A 20080206; ES 08250439 T 20080206; JP 2007031186 A 20070209; TW 97102379 A 20080122