

Title (en)
INTERNAL COMBUSTION ENGINE HEAD-COVER STRUCTURE

Title (de)
KOPFABDECKUNGSSTRUKTUR FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)
STRUCTURE DE COUVRE-CULASSE DE MOTEUR À COMBUSTION INTERNE

Publication
EP 2679792 B1 20160120 (EN)

Application
EP 12749912 A 20120222

Priority
• JP 2011035549 A 20110222
• JP 2012054185 W 20120222

Abstract (en)
[origin: EP2679792A1] The goal of the present invention is to provide an internal combustion engine head-cover structure capable of suppressing an increase in the wall thickness and size of a head cover and enhancing the rigidity of the head cover. An internal combustion engine (E) head-cover structure is provided with the following: a covering part (11) which is disposed on a cylinder head (2) and which covers, from above, a valve gear (3) that includes cam shafts (31, 32); an outer peripheral edge part (12) which is provided along the outer peripheral edge of the covering part (11) and is fastened to the cylinder head (2); and a plurality of upper bearing parts (13) which are provided integrally with the covering part (11) and the outer peripheral edge part (12) and rotatably hold the cam shafts (31, 32) in cooperation with a plurality of lower bearing parts (23) provided on the cylinder head (2). The internal combustion engine (E) head-cover structure is characterized by the following: the upper bearing parts (13) are fastened and fixed to the lower bearing parts (23); and the covering part (11) has an expansion part (111) expanding in a substantially hemispherical shape between adjacent upper bearing parts (13).

IPC 8 full level
F02F 7/00 (2006.01)

CPC (source: EP)
F02F 7/006 (2013.01); **F01L 2001/0476** (2013.01)

Cited by
EP3002441A1; FR3026789A1; US10690015B2

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 2679792 A1 20140101; EP 2679792 A4 20141119; EP 2679792 B1 20160120; CN 103403332 A 20131120; CN 103403332 B 20151125; JP 5581438 B2 20140827; JP WO2012115123 A1 20140707; WO 2012115123 A1 20120830

DOCDB simple family (application)
EP 12749912 A 20120222; CN 201280010029 A 20120222; JP 2012054185 W 20120222; JP 2013501082 A 20120222