

Title (en)  
Front structure of engine

Title (de)  
Frontaufbau einer Brennkraftmaschine

Title (fr)  
Structure avant d'un moteur

Publication  
**EP 1752645 A3 20110928 (EN)**

Application  
**EP 06016156 A 20060802**

Priority  
JP 2005229031 A 20050808

Abstract (en)  
[origin: EP1752645A2] Disclosed is a front structure of an engine, which is provided with: a lower camshaft driving chain (14) which is arranged behind the upper camshaft driving chain (20); a chain cover (31) which covers chains (14, 20, 26) and has upper and lower front parts formed such that the lower front part is depressed toward a cylinder block (2) relative to the upper front part in a longitudinal direction of the engine (1); an auxiliary-devices driving belt (43) disposed in front of the chain cover (31); and a cantilevered arm (46) holding a belt tensioner (42) at a free end thereof, associated with the auxiliary-devices driving belt (43), and is disposed in front of the chain cover (31) in such a manner as to overlap with a looped area formed by the lower camshaft driving chain (14) in front view of the engine (1).

IPC 8 full level  
**F02F 7/00** (2006.01); **F02B 67/06** (2006.01)

CPC (source: EP)  
**F02B 67/06** (2013.01); **F02F 7/0073** (2013.01)

Citation (search report)  
• [A] JP H0932521 A 19970204 - SUZUKI MOTOR CO [JP]  
• [A] GB 2228045 A 19900815 - NISSAN MOTOR [JP]

Cited by  
CN107795376A; US11047454B2; FR2944562A1; US2013005523A1; CN102852637A; CN104350256A; US9121474B2; US10167775B2; WO2014023601A1; US9683486B2; DE102012214235B4; US8181621B2

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

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**EP 1752645 A2 20070214; EP 1752645 A3 20110928; EP 1752645 B1 20170726;** JP 2007046480 A 20070222; JP 4544088 B2 20100915

DOCDB simple family (application)  
**EP 06016156 A 20060802;** JP 2005229031 A 20050808