

Title (en)
Large uniflow two-stroke diesel engine of the crosshead type

Title (de)
Grosser Zweitakt-Kreuzkopfdieselmotor mit Gleichstromspülung

Title (fr)
Gros moteur diesel à deux temps à balayage continu et à crosse

Publication
EP 2138703 B1 20100922 (EN)

Application
EP 09011142 A 20060412

Priority
• EP 2006003367 W 20060412
• EP 06742569 A 20060412

Abstract (en)
[origin: WO2007115580A1] A large uniflow two-stroke diesel engine of the crosshead type with a plurality of cylinders with at least one exhaust valve (11) per cylinder and one or more fuel injectors (23) per cylinder. The fuel injection is performed under the influence of a source of high-pressure fluid. Potential energy is accumulated by compression in a volume (67) of the high-pressure fluid. Electro-hydraulic valves (39) control the fuel injection that is primarily driven by energy accumulated in the volume (67) of high pressure. The engine has a camshaft (28) for actuation of the exhaust valves (11). Hydraulic piston pumps (37) are driven by the cams (29) on the camshaft. Hydraulic actuators (21) move the exhaust valves (11) in the opening direction with hydraulic fluid received via conduits from the hydraulic piston pumps (37) .

IPC 8 full level
F02M 39/00 (2006.01); **F01L 9/10** (2021.01); **F01L 9/11** (2021.01); **F02F 7/00** (2006.01); **F02M 41/04** (2006.01); **F02M 55/02** (2006.01); **F02M 57/04** (2006.01); **F02M 59/10** (2006.01); **F02M 63/00** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP KR US)
F01L 1/38 (2013.01 - KR); **F01L 9/10** (2021.01 - EP); **F01L 9/11** (2021.01 - EP); **F01M 1/08** (2013.01 - EP); **F01M 11/02** (2013.01 - KR); **F02F 7/0007** (2013.01 - EP); **F02M 39/00** (2013.01 - EP US); **F02M 39/02** (2013.01 - EP); **F02M 41/047** (2013.01 - EP); **F02M 55/02** (2013.01 - KR); **F02M 55/025** (2013.01 - EP); **F02M 59/105** (2013.01 - EP US); **F02M 63/0007** (2013.01 - EP); **F02M 63/0047** (2013.01 - EP); **F02M 63/0225** (2013.01 - EP); **F02M 63/027** (2013.01 - EP); **F01L 1/08** (2013.01 - EP); **F01L 1/38** (2013.01 - EP); **F01L 2001/34446** (2013.01 - EP); **F01L 2305/00** (2020.05 - EP); **F01M 2011/022** (2013.01 - EP); **F02B 2075/025** (2013.01 - EP); **F02M 53/02** (2013.01 - EP); **F02M 2200/24** (2013.01 - EP); **F02M 2200/28** (2013.01 - EP)

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)
WO 2007115580 A1 20071018; AT E444442 T1 20091015; AT E471451 T1 20100715; AT E482335 T1 20101015; CN 101415936 A 20090422; CN 101415936 B 20110727; DE 602006009563 D1 20091112; DE 602006015007 D1 20100729; DE 602006017128 D1 20101104; EP 1977106 A1 20081008; EP 1977106 B1 20090930; EP 2071177 A1 20090617; EP 2071177 B1 20100616; EP 2138703 A1 20091230; EP 2138703 B1 20100922; JP 2009532615 A 20090910; JP 4597255 B2 20101215; KR 101099675 B1 20111228; KR 101195441 B1 20121030; KR 20080106343 A 20081204; KR 20110112445 A 20111012

DOCDB simple family (application)
EP 2006003367 W 20060412; AT 06742569 T 20060412; AT 09002173 T 20060412; AT 09011142 T 20060412; CN 200680054192 A 20060412; DE 602006009563 T 20060412; DE 602006015007 T 20060412; DE 602006017128 T 20060412; EP 06742569 A 20060412; EP 09002173 A 20060412; EP 09011142 A 20060412; JP 2009503419 A 20060412; KR 20087024755 A 20060412; KR 20117020105 A 20060412