

Title (en)  
Lubrication apparatus for engines

Title (de)  
Schmiervorrichtung für Motoren

Title (fr)  
Appareil de lubrification pour moteurs

Publication  
**EP 2103786 A3 20101215 (EN)**

Application  
**EP 09155281 A 20090316**

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Abstract (en)  
[origin: EP2103786A2] A lubrication apparatus for an engine includes a crankshaft chamber (11), a camshaft chamber (12), and an oil reservoir chamber (13), wherein an oil-suction piping path is provided in the oil reservoir chamber (13), and is communicated between the crankshaft chamber (11) and the oil reservoir chamber (13). The oil-suction piping path includes, among others, a rotatable pipe (15) including a plurality of oil-suction orifices (152) located at wall of the rotatable pipe (15). No matter the engine is situated at any state of declination, at least one of the oil-suction orifices (152) and an air-suction vent (151) is kept under the surface of the lubricant, so that the engine can be appropriately lubricated. Further, a one-way valve (19) is arranged between the crankshaft chamber (11) and the oil reservoir chamber (13), where most of the lubricant can flow back to the oil reservoir chamber (13) during the descending stroke of a piston, so that a lubricant supply can be reduced.

IPC 8 full level  
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**F01M 1/04** (2013.01 - EP US); **F01M 11/02** (2013.01 - EP US); **F01M 11/065** (2013.01 - EP US)

Citation (search report)  
• [Y] EP 0887520 A1 19981230 - ISHIKAWAJIMA SHIBAURA MACH [JP]  
• [YD] US 2005274349 A1 20051215 - LEE SHIN-CHANG [TW]  
• [A] DE 202007009478 U1 20070906 - JENN FENG IND CO LTD [TW]  
• [A] JP 2004068799 A 20040304 - FUJITEC KK  
• [A] EP 0962630 A2 19991208 - FUJI ROBIN KK [JP]

Cited by  
EP2333258A1; EP2428657A1

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