

Title (en)

Oil supply apparatus for engine provided with two-stage relief valve

Title (de)

Ölzuführvorrichtung für Motor mit zweistufigem Überdruckventil

Title (fr)

Appareil d'alimentation en huile pour moteur et pourvue de soupape de surpression à deux étages

Publication

EP 2674583 A1 20131218 (EN)

Application

EP 12172117 A 20120615

Priority

EP 12172117 A 20120615

Abstract (en)

Provided is an oil supply apparatus for an engine provided with a two-stage relief valve, in which a sufficient amount of working fluid is supplied in proportion to an engine speed in a low speed range where sufficient lubrication is not performed and a flow rate of the working fluid is reduced in a medium and high speed range where smooth lubrication is performed to reduce a rotational load applied to a crankshaft, capable of reducing an engine load to decrease fuel consumption to improve fuel efficiency as well as improving a lubrication operation through supply of an appropriate flow rate.

IPC 8 full level

F01M 1/16 (2006.01); **F04B 49/08** (2006.01); **F04C 14/26** (2006.01); **F16N 13/00** (2006.01)

CPC (source: EP)

F01M 1/16 (2013.01); **F04B 49/08** (2013.01); **F04C 2/102** (2013.01); **F04C 14/26** (2013.01); **F04C 13/00** (2013.01)

Citation (search report)

- [X] DE 19952287 A1 20010322 - UNISIA JECS CORP [JP]
- [X] DE 19631296 A1 19980205 - FORD WERKE AG [DE]
- [X] DE 102004004055 A1 20040812 - AISIN SEIKI [JP]

Cited by

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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

Designated extension state (EPC)

BA ME

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