

Title (en)
Combustion engine

Title (de)
Brennkraftmaschine

Title (fr)
Moteur à combustion interne

Publication
EP 1892390 A3 20100915 (DE)

Application
EP 07010762 A 20070531

Priority
DE 102006035888 A 20060731

Abstract (en)
[origin: EP1892390A2] Oil scrapers (8) scrape off oil from the crankshaft and/or from the connecting rods (6). An oil pan (7) is arranged below the crankcase to hold the oil scraped off by the oil scrapers. Air/oil separators (9) separate air from the returned oil. Each oil scraper is designed in one piece with its associated air/oil separator and is guided to the oil inlet opening of each air/oil separator. An oil outlet opening is assigned to each air/oil separator so that the oil outlet opening is located above an oil level in the oil pan in each driving state of a motor vehicle.

IPC 8 full level
F01M 11/00 (2006.01)

CPC (source: EP US)
F01M 11/0004 (2013.01 - EP US); **F01M 13/00** (2013.01 - EP US); **F01M 2011/0033** (2013.01 - EP US); **F01M 2011/005** (2013.01 - EP US)

Citation (search report)

- [I] DE 10029844 A1 20020103 - PORSCHE AG [DE]
- [XY] JP 2005171777 A 20050630 - NISSAN MOTOR
- [Y] JP H057917 U 19930202
- [X] DE 4012415 A1 19911024 - AUDI AG [DE]
- [X] JP H0332110 U 19910328
- [X] DE 4204522 C1 19930415

Cited by
CN107429583A; US10502105B2; EP3106635A1; WO2016119768A1

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 MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
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DOCDB simple family (application)
EP 07010762 A 20070531; CN 200710138201 A 20070731; DE 102006035888 A 20060731; JP 2007194147 A 20070726; US 82679407 A 20070718