

Title (en)

An internal combustion engine, particularly for motor vehicles.

Title (de)

Brennkraftmaschine, insbesondere für Kraftwagen.

Title (fr)

Moteur à combustion interne notamment pour véhicule automobile.

Publication

EP 0376901 A1 19900704 (EN)

Application

EP 89830554 A 19891219

Priority

IT 6817988 A 19881230

Abstract (en)

An internal combustion engine for motor vehicles, in which the oil pump (17) and the pulley (21) for driving the auxiliary equipment are driven by the crankshaft (11) through an auxiliary shaft (19) which is coupled torsionally within a hollow end portion (11a) of the crankshaft, in axial correspondence with the respective main bearing (12).

IPC 1-7

F01M 1/02; **F04C 11/00**

IPC 8 full level

F01M 1/02 (2006.01); **F04C 11/00** (2006.01)

CPC (source: EP)

F01M 1/02 (2013.01); **F04C 11/00** (2013.01)

Citation (search report)

- [X] GB 2019505 A 19791031 - BBC BROWN BOVERI & CIE
- [A] FR 2075753 A5 19711008 - ALFIERI MASERATI OFFICIN
- [A] DE 3142458 A1 19820609 - LIST HANS [AT]
- [A] US 3879154 A 19750422 - DIXON KENNETH RAYMOND, et al
- [A] DE 3506928 A1 19860828 - SCHWAEBISCHE HUETTENWERKE GMBH [DE]
- [A] GB 2047349 A 19801126 - GILARDINI SPA
- [A] FR 1352410 A 19640214 - AUTO UNION GMBH

Cited by

US5314319A; EP0984143A3; WO9215773A1; EP2507496A1

Designated contracting state (EPC)

DE ES FR GB SE

DOCDB simple family (publication)

EP 0376901 A1 19900704; BR 8906872 A 19900925; IT 1224053 B 19900926; IT 8868179 A0 19881230

DOCDB simple family (application)

EP 89830554 A 19891219; BR 8906872 A 19891227; IT 6817988 A 19881230