

Title (en)

Ancillary rotary equipment for engines.

Title (de)

Rotierende Hilfsgeräte für Brennkraftmaschinen.

Title (fr)

Équipement auxiliaire rotatif pour un moteur à combustion interne.

Publication

**EP 0059086 A1 19820901 (EN)**

Application

**EP 82300856 A 19820219**

Priority

GB 8105211 A 19810219

Abstract (en)

A rotary exhauster, preferably a vane type vacuum pump and a water pump are arranged in a common housing and the rotary of the exhauster and the rotor of the water pump are mounted on and driven by a common shaft. The housing is adapted for flange mounting to an engine crankcase and this mounting includes drilling by means of which a supply of oil under pressure is led to the shaft bearings and to the vacuum pump chamber in order to provide a seal and lubricate the shaft and the vanes of the rotor. This invention has the advantage not only of a reduction in water and cost as compared with separate pumps, but also enables a much simplified belt drive associated with the engine, also plain bearings may be used instead of conventional ball bearings and leaked oil can be despatched to the engine pump by the vacuum pump exhaust.

IPC 1-7

**F02B 67/06; F04C 21/00**

IPC 8 full level

**F01P 5/04** (2006.01); **F02B 67/06** (2006.01)

CPC (source: EP)

**F01P 5/04** (2013.01); **F02B 67/06** (2013.01); **F02B 2275/06** (2013.01)

Citation (search report)

- [X] US 2662481 A 19531215 - GRISE ALFRED L
- [Y] GB 2026612 A 19800206 - BARMAG BARMER MASCHF
- [X] US 3082694 A 19630326 - ALEXANDER BRKICH
- [A] FR 1352410 A 19640214 - AUTO UNION GMBH

Cited by

CN103306799A; EP2232079A4; DE3639944A1; DE3809566A1; US2014023477A1; DE102014212550B4; FR2993606A1; FR2998002A1; US6189318B1; WO2009088733A2; WO2004092588A1; WO9728360A1; WO2014072637A1; WO0118361A1; WO2014014637A1

Designated contracting state (EPC)

DE FR IT SE

DOCDB simple family (publication)

**EP 0059086 A1 19820901**; BR 8200938 A 19830104; GB 2093530 A 19820902

DOCDB simple family (application)

**EP 82300856 A 19820219**; BR 8200938 A 19820219; GB 8204965 A 19820219