

Title (en)
INTERNAL-COMBUSTION ENGINE, IN PARTICULAR SINGLE-LINE MULTICYLINDER INTERNAL-COMBUSTION ENGINE

Publication
EP 0052760 A3 19830216 (DE)

Application
EP 81108611 A 19811021

Priority
DE 3044253 A 19801125

Abstract (en)
[origin: US4436067A] An internal combustion engine includes a drive connection for auxiliary equipment. The equipment includes a step-down gear and a pump impeller of a coolant pump and a pump wheel of a lubricating oil gear pump situated on a common shaft. The drive connection of the engine is characterized in that pump wheels of the lubricating oil gear pump form the step-down gear for the coolant pump.

IPC 1-7
F02B 67/04

IPC 8 full level
F01M 1/02 (2006.01); **F01P 5/12** (2006.01); **F02B 67/04** (2006.01)

CPC (source: EP US)
F02B 67/04 (2013.01 - EP US)

Citation (search report)

- [A] DE 2705090 A1 19780810 - OPEL ADAM AG
- [A] CH 448613 A 19671215 - BAYERISCHE MOTOREN WERKE AG [DE]
- [A] GB 1272137 A 19720426 - PEUGEOT & RENAULT [FR]
- [APD] DE 2922695 A1 19801204 - BAYERISCHE MOTOREN WERKE AG

Cited by
EP0178782A1; WO2014059965A3; DE102021110123A1; DE102021110123B4

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 0052760 A2 19820602; EP 0052760 A3 19830216; EP 0052760 B1 19840926; DE 3044253 A1 19820624; DE 3166351 D1 19841031;
JP S57116116 A 19820720; JP S6042329 B2 19850921; US 4436067 A 19840313

DOCDB simple family (application)
EP 81108611 A 19811021; DE 3044253 A 19801125; DE 3166351 T 19811021; JP 18792581 A 19811125; US 32458081 A 19811124