

Title (en)

Internal combustion multi-cylinder piston engine

Title (de)

Kolbenbrennkraftmaschine, insbesondere mehrzylindrige Kolbenbrennkraftmaschine

Title (fr)

Moteur multi-cylindres à pistons à combustion interne

Publication

**EP 0921297 A3 20000621 (DE)**

Application

**EP 98121886 A 19981118**

Priority

DE 19754007 A 19971205

Abstract (en)

[origin: DE19754007C1] The engine has a lower crankcase section (1) with tubular reinforcing beams (4,5) extending parallel to the crankshaft axis. The beams are connected by a bearing trunnion integral with the crankcase.

IPC 1-7

**F02F 7/00**; **F01M 1/02**; **F01M 1/12**

IPC 8 full level

**F01M 1/02** (2006.01); **F01M 1/12** (2006.01); **F01M 11/03** (2006.01); **F01M 13/02** (2006.01); **F02F 7/00** (2006.01); **F02B 75/18** (2006.01)

CPC (source: EP)

**F01M 1/02** (2013.01); **F01M 1/12** (2013.01); **F01M 11/03** (2013.01); **F01M 13/02** (2013.01); **F02F 7/0007** (2013.01); **F01M 2001/123** (2013.01); **F02B 2075/1812** (2013.01)

Citation (search report)

- [Y] EP 0076474 A1 19830413 - NISSAN MOTOR [JP]
- [Y] EP 0038560 A1 19811028 - NISSAN MOTOR [JP]
- [YA] FR 2410135 A1 19790622 - NISSAN MOTOR [JP]
- [A] DE 29609950 U1 19971002 - BRUEHL EISENWERK [DE]
- [A] GB 1294766 A 19721101 - BIRIMID QUALCAST FOUNDRIES LTD

Cited by

FR3087496A1; FR3035451A1; CN108105059A

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**DE 19754007 C1 19990520**; DE 59810543 D1 20040212; EP 0921297 A2 19990609; EP 0921297 A3 20000621; EP 0921297 B1 20040107

DOCDB simple family (application)

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