

Title (en)

Cooled piston for an internal combustion engine and the engine fitted with such a piston

Title (de)

Gekühlter Kolben für Verbrennungskraftmaschinen und Verbrennungskraftmaschine mit derartigen Kolben

Title (fr)

Piston refroidi pour un moteur à combustion interne et moteur avec ce piston

Publication

**EP 0913566 A3 20000223 (DE)**

Application

**EP 98118319 A 19980928**

Priority

DE 19747746 A 19971029

Abstract (en)

[origin: DE19747746C1] The piston has a reduced diameter for the waist and lower section to provide an overhang (5) for the piston head, which is shaped with ring grooves (3) for the piston rings. The underside of the overhang has an oil duct (9) into which a vertical jet of oil is directed by a jet (10) in the lower part of the engine block. The oil jet is fed from the engine lubricant supply and cools the head of the piston. The cooling duct has an inlet at one side of the piston head and runs across the piston head to an outlet back into the bore diametrically opposite to the inlet. The return flow (12) oil drops into the crankcase for recirculation.

IPC 1-7

**F02F 3/14**; **F02F 3/22**

IPC 8 full level

**F02F 3/22** (2006.01)

CPC (source: EP)

**F02F 3/22** (2013.01); **F05C 2201/0448** (2013.01)

Citation (search report)

- [AD] DE 4438703 A1 19960502 - MAHLE GMBH [DE]
- [DA] DE 4340891 A1 19950608 - MAHLE GMBH [DE]
- [A] EP 0705968 A1 19960410 - PORSCHE AG [DE]
- [PA] EP 0855499 A1 19980729 - ALCAN GMBH [DE]

Cited by

EP1558864A4; DE102011002653A1; WO2012095445A1; US8955488B2

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