

Title (en)  
Piston for an internal combustion engine

Title (de)  
Kolben für einen Verbrennungsmotor

Title (fr)  
Piston pour un moteur à combustion interne

Publication  
**EP 1063409 B1 20040811 (DE)**

Application  
**EP 00111733 A 20000602**

Priority  
DE 19929102 A 19990624

Abstract (en)  
[origin: EP1063409A2] The piston has a ring-shaped cooling channel with at least three apertures (3,4,5). An outlet aperture (4) is positioned opposite to two alternately useable intake apertures (3,5) in such a way, that the intakes are positioned symmetrically relative to a central axis extending through the outlet. Intake and outlet channels (6,7,8) are rotary-symmetrical, and are conical in an area away from the cooling channel. The diameter of the apertures is approx. 1/25 to 1/5 of the piston diameter.

IPC 1-7  
**F02F 3/22**

IPC 8 full level  
**F02F 3/22** (2006.01)

CPC (source: EP)  
**F02F 3/22** (2013.01)

Cited by  
DE102008038324A1; CN104948338A; EP1790881A3; US10227948B2; USD886155S; WO2010020231A3; WO2006027157A1; US7748361B2; JP2012500354A; WO2024036547A1

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DOCDB simple family (publication)  
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