

Title (en)

Liquid cooled internal combustion engine with cylinder banks arranged in V form

Title (de)

Flüssigkeitsgekühlte Brennkraftmaschine mit zueinander geneigt angeordneten Zylinderbänken, insbesondere V-Motor

Title (fr)

Moteur à combustion refroidi par liquide avec les bancs-cylindres rangés en V

Publication

EP 1103704 B1 20041222 (DE)

Application

EP 00122748 A 20001019

Priority

DE 19956358 A 19991124

Abstract (en)

[origin: EP1103704A2] The engine has coolant going into the exhaust-side cooling jackets (6, 6') and via cross-flow cylinder heads to the induction-side cooling jackets (7, 7'), then via breaks in the cylinder bank boundaries to an outflow line (15) in the vee cavity (8). This line incorporates the inflow line (9), from which coolant goes via vertical channels to the exhaust-side cooling jackets.

IPC 1-7

F02B 75/22; F02F 1/40; F02F 7/00

IPC 8 full level

F02B 75/22 (2006.01); **F02F 1/40** (2006.01); **F02F 7/00** (2006.01); **F02F 1/24** (2006.01)

CPC (source: EP US)

F02B 75/22 (2013.01 - EP US); **F02F 7/0012** (2013.01 - EP US); **F02F 2001/245** (2013.01 - EP US)

Cited by

DE102006006121A1; DE102006006121B4

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

EP 1103704 A2 20010530; **EP 1103704 A3 20020515**; **EP 1103704 B1 20041222**; DE 19956358 A1 20010531; DE 50009021 D1 20050127; ES 2231097 T3 20050516; US 6418886 B1 20020716

DOCDB simple family (application)

EP 00122748 A 20001019; DE 19956358 A 19991124; DE 50009021 T 20001019; ES 00122748 T 20001019; US 71851700 A 20001124