

Title (en)
Cylinder head for a multi-cylinder internal combustion engine.

Title (de)
Zylinderkopf für mehrzylindrige Brennkraftmaschinen.

Title (fr)
Culasse pour moteur à combustion interne à multiples cylindres.

Publication
EP 0551805 A1 19930721 (DE)

Application
EP 92890261 A 19921214

Priority
AT 251291 A 19911218

Abstract (en)
In a cylinder head for multi-cylinder internal combustion engines with single cylinder heads of cast iron or steel to be fixed on the cylinder block, the single cylinder heads (1) are cast into a common light-alloy outer casing (18). In this way optimum cooling in the critical areas at the base of the cylinder head is achieved, thereby preventing valve seat distortions and suppressing the tendency to knocking in spark ignition engines. <IMAGE>

Abstract (de)
Bei einem Zylinderkopf für mehrzylindrige Brennkraftmaschinen mit am Zylinderblock zu befestigenden Einzylinderköpfen aus Gußeisen oder Stahl, sind die Einzylinderköpfe (1) in ein gemeinsames Mantelgehäuse (18) aus Leichtmetall eingegossen. Dadurch wird eine optimale Kühlung an den kritischen Bereichen des Zylinderkopfbodens erreicht und dadurch Ventil Sitzverzüge vermieden und die Klopfneigung bei Ottomotoren hintangehalten. <IMAGE>

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B22D 19/00; F02F 1/24; F02F 1/42

IPC 8 full level
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Citation (search report)
• [A] FR 2323018 A1 19770401 - LIST HANS [AT]
• [A] DE 966672 C 19570829 - KLOECKNER HUMBOLDT DEUTZ AG
• [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 111 (M-379)15. Mai 1985 & JP-A-59 231 163 (YAMAHA HATSUDOKI K.K.) 25. Dezember 1984
• [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 135 (M-386)11. Juni 1985 & JP-A-60 017 255 (NISSAN JIDOSHA K.K) 29. Januar 1985

Cited by
IT201900009474A1; AT523188A1; AT523188B1; CN1327123C; EP1522706A3; US7080612B2; WO2007137314A3; WO2006048111A1; WO0118375A1; JP2009538396A

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