

Title (en)
Four-cycle engine

Title (de)
Viertakt-Brennkraftmaschine

Title (fr)
Moteur à combustion interne à quatretemps

Publication
EP 0651141 B1 19980729 (EN)

Application
EP 94117108 A 19941028

Priority
JP 29411893 A 19931029

Abstract (en)
[origin: EP0651141A1] The present invention relates to a four-cycle engine, specifically to a cooling arrangement thereof, said engine comprising a cylinder block (15) and a cylinder head (14), a chain drive means for driving at least one camshaft from a primary drive shaft and a chain cover (16) extending along a side of the engine (1) wherein in said chain cover (16) forms part of a case for the water pump (5) which, therefore, can be integrated smoothly into the engine allowing to drive the water pump (5) in common to the other auxiliary equipment and to avoid hoses or the like for cooling other components of the engine (1). <IMAGE>

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IPC 8 full level
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Citation (examination)
US 4957077 A 19900918 - OKITSU NOBUYUKI [JP], et al

Cited by
CN100342122C; EP0705964A3; US5647315A; US5809963A; US6176204B1; WO9810950A1

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DOCDB simple family (application)
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