

Title (en)
DEVICE FOR COOLING AN INTERNAL COMBUSTION ENGINE

Title (de)
VORRICHTUNG ZUM KÜHLEN EINER BRENNKRAFTMASCHINE

Title (fr)
DISPOSITIF DE REFROIDISSEMENT D'UN MOTEUR THERMIQUE

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Application
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Abstract (en)
[origin: WO0202917A1] The invention relates to a device (10) for cooling an internal combustion engine (11), preferably a four-cylinder engine, comprising coolant connections (13, 13', 14, 14'; 17, 17' - 24, 24') to a coolant circuit provided on the internal combustion engine (11), said coolant connections being connected to at least one cooling jacket region (12', 12", 12''') of the internal combustion engine (11). According to the invention, a group of inlets (17 - 24) and outlets (17' - 24') that are arranged in pairs, each having directions of flow, constitute the coolant connections. Each pair of inlets and outlets defines a flow path as a result of their respective flow direction and in each case, at least one flow path that traverses the respective cylinder is assigned to each cylinder (15, 15', 15'', 15'''). The flow directions of the inlets and outlets run transversally to the longitudinal direction of the crankshaft, which is defined by the sequential arrangement of the individual cylinders (15, 15', 15'', 15''') one behind the other. An additional group of inlets and outlets (13, 13'; 14, 14') is arranged parallel to the longitudinal direction of the crankshaft. In addition, as the respective inlets and outlets arranged transversally to said crankshaft direction have metering bores, a thermal cylinder equalisation for each operating point can be achieved by supplying coolant to each cylinder, said supply being adjusted by means of the bores.

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