

Title (en)
HEAT EXCHANGER FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
WÄRMEÜBERTRAGER FÜR EINE VERBRENNUNGSKRAFTMASCHINE

Title (fr)
ÉCHANGEUR DE CHALEUR POUR MOTEUR À COMBUSTION INTERNE

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Application
EP 22735167 A 20220624

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Abstract (en)
[origin: WO2023001487A1] The invention relates to a heat exchanger (10) for an internal combustion engine for transmitting heat between at least two fluids (12, 14). The heat exchanger comprises at least one housing (20), which has at least one housing wall (22) and a housing interior (24) at least partially delimited by means of the housing wall, and a fluid inlet region (26) for introducing a first fluid (12) of the at least two fluids into the housing interior and a fluid outlet region (28) for discharging the first fluid from the housing interior. The heat exchanger also comprises at least one fluid conduit device (40) which is disposed in an interior sub-region (25) of the housing interior and which has a fluid conduit device wall (42) to separate the first fluid from a second fluid (14). The fluid conduit device wall delimits a plurality of fluid conduits (50, 52, 54, 56, 58, 60, 62, 64, 66, 68) for guiding the first fluid between the fluid inlet region and the fluid outlet region at least in part, at least parts of one of the fluid conduits having an undulating shape (110) in the longitudinal extension direction (x) of the fluid conduit device. The fluid conduit device comprises at least one support element (80) which is disposed between a first fluid conduit wall (51), at least parts of which have the undulating shape and at least parts of which delimit a first outer fluid conduit (50) of the plurality of fluid conduits, and the fluid conduit device wall and has a first support element region (82) supported against the first fluid conduit wall. At least parts of the first support element region are complementary to the undulating shape, and the at least one support element is provided for sealing the first outer fluid conduit to prevent the first fluid from passing through it.

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