

Title (en)

Cooling circuit pump with electromagnetic coupling

Title (de)

Kühlmittelpumpe mit Magnetkupplung

Title (fr)

Pompe de refroidissement à accouplement magnétique

Publication

EP 1785631 A2 20070516 (EN)

Application

EP 06021044 A 20061006

Priority

IT BS20050134 A 20051109

Abstract (en)

A pump for internal-combustion engine cooling circuits equipped with a equipped with a dimensional and absorbed power optimization device comprising an impeller (10) keyed onto a shaft (12) being rotatably constrained on a body (14), manufactured by casting an aluminium alloy, or another suitable material and onto which a pulley (22, 22') is keyed, with rated diameter smaller than 80 mm, which presents a hollow (24, 24') with a section that is basically circular and coaxial with the pulley itself, which lodges inside one or more radially polarized magnets (28, 28') and an electric winding (26, 26'), which are stabilized inside the said hollow by means of a plate (30, 30') made from a nonmagnetic material, where also a disc (18) from a metallic material, arranged coaxially as to a hub (16) and connected to it by means of one or more thin plates (20) of small thickness, can be found; the magnetic field produced by the magnet(s) (28, 28') saturates the pulley (22, 22') and gets linked together with the disc (18).

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