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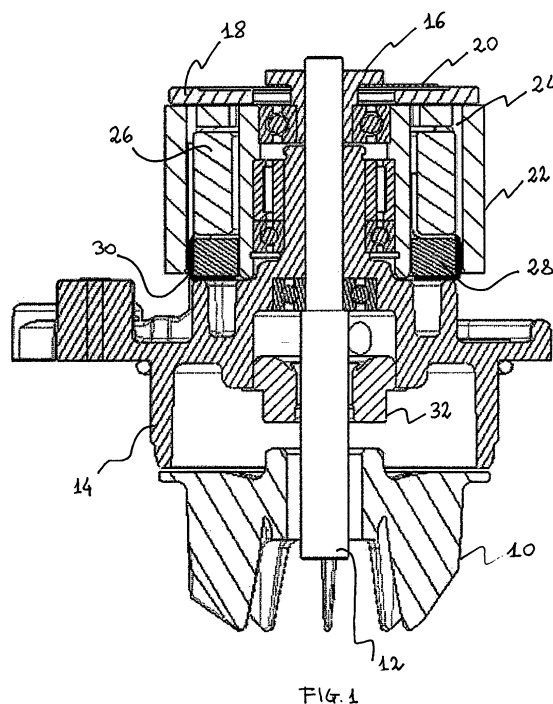
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(54) **Cooling circuit pump with electromagnetic coupling**

(57) A pump for internal-combustion engine cooling circuits 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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EUROPEAN SEARCH REPORT

Application Number
EP 06 02 1044

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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			TECHNICAL FIELDS SEARCHED (IPC)
			F04D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 2 December 2009	Examiner Ingelbrecht, Peter
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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