Title (en)
   IMPELLER

Title (de)
   LAUFRAD

Title (fr)
   ROUE À AUBES

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   EP 1977114 A1 20081008 (DE)

Application
   EP 07702382 A 20070120

Priority
   • DE 2007000104 W 20070120
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Abstract (en)
   [origin: US2009016895A1] The invention relates to closed impellers (1) for centrifugal pumps used for conveying homogeneous liquids, especially in cooling systems of motor vehicles. The aim of the invention is to develop a novel design of closed impellers (1) for centrifugal pumps used for conveying homogeneous liquids, especially in coolant pumps, such that closed impellers comprising single-curved blades (3) as well as closed impellers comprising three-dimensionally curved blades (3) can be produced at a low cost while the effect of cavitation wear is minimized on the parts/subassemblies that are mounted downstream of the impeller and the hydraulic efficiency as well as the suction behavior of the respective impeller design is significantly improved. The aim is achieved by a closed impeller (1) for centrifugal pumps which is characterized in that the width of the blade channel continuously increases from the feeding point of the flow into the impeller to the discharge point of the flow from the impeller (1) from a perspective of the meridian section such that the ratio between the width (b2) at the discharge point and the width (b1) at the feeding point ranges from 1.01 to 1.2.

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CPC (source: EP US)
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Citation (search report)
   See references of WO 2007085231A1

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