

Title (en)
TURBOCHARGER WITH BEARING HOUSING HAVING AN AERODYNAMICALLY ENHANCED COMPRESSOR WHEEL POCKET GEOMETRY

Title (de)
TURBOLADER MIT LAGERGEHÄUSE MIT EINER AERODYNAMISCH VERBESSERTEN RADTASCHENGEOMETRIE

Title (fr)
POCHE DE LOGEMENT DE ROULEMENT A L'AERODYNAMISME AMELIORE

Publication
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Application
EP 06813929 A 20060829

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Abstract (en)
[origin: US2007059188A1] A turbocharger unit having an aerodynamically enhanced pocket, comprising a turbine having a turbine housing and a turbine wheel connected to a shaft along with a compressor having a compressor housing and a compressor wheel mounted on the same shaft. There is an intermediate housing disposed between the turbine housing and the compressor housing, circumscribing the shaft, and having a compressor wheel pocket. There is a series of bearings located in the intermediate housing for supporting the shaft. There is also a series of fluid passages located in the intermediate housing which provide fluid to lubricate the bearings. A seal is used for the prevention of oil from entering the compressor wheel pocket. The compressor wheel pocket has an aerodynamically enhanced pocket for the improvement of pressure balance behind the compressor wheel, preventing the oil in the intermediate housing from entering the compressor housing.

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