

Title (en)

SECTOR-DIVIDED TURBINE ASSEMBLY WITH AXIAL PISTON VARIABLE-GEOMETRY MECHANISM

Title (de)

ABGASTURBOLADER MIT VARIABLER GEOMETRIE UND EINEM RINGSCHIEBER

Title (fr)

ENSEMBLE TURBINE DIVISE EN SECTEURS, EQUIPE D'UN MECANISME A GEOMETRIE VARIABLE ET A PISTON AXIAL

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Application

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Priority

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Abstract (en)

[origin: WO2005040560A1] A turbine (40) for a turbocharger (10) has a turbine housing (41) defining a generally annular chamber (43) surrounding a turbine wheel (44), the chamber receiving exhaust gas for driving the turbine wheel. The chamber has dividing walls (46) that divide the chamber into a plurality of angular sectors (43a,43b), each fed with exhaust gas separately from the other sector(s). Vanes (52,53) located radially inwardly of the sectors for guiding flow into the turbine wheel include at least dividing vanes (52) that form extensions of the dividing walls (46) so as to extend the sector-division of the exhaust gas flow path all the way to the trailing edges of the dividing vanes. An axially slidable piston (48) is disposed radially inwardly of the sectors, and radially overlaps with the dividing vanes (52). The vanes either are mounted on fixed structure and are received in slots (49) in the piston, or are mounted on the piston and received in slots in fixed structure.

IPC 8 full level

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