

Title (en)
VARIABLE GEOMETRY TURBOCHARGER

Title (de)
TURBOLADER MIT VARIABLER GEOMETRIE

Title (fr)
TURBOCOMPRESSEUR À GÉOMÉTRIE VARIABLE

Publication
EP 2171219 A4 20130814 (EN)

Application
EP 08772084 A 20080626

Priority
• US 2008068433 W 20080626
• US 94620807 P 20070626

Abstract (en)
[origin: WO2009003144A2] A variable geometry turbocharger is provided. The turbocharger improves efficiency by controlling flow to the rotor (230) via movable vanes (260). The vanes (260) can be rotated using a pin (380, 480) and groove (385, 485) system. The vanes (260) can be multiple structures (710, 730) that are movable with respect to each other to increase the length of each of the vanes (260). The turbocharger also improves efficiency by creating a better seal in the area between the vanes (260) and the adjustment ring (240). The seal can be provided by biasing the adjustment ring (240) towards each of the vanes (260). The seal can be provided by expanding each of the vanes (260). The seal can be provided by having a movable portion (1150) of the adjustment ring (240) that is actuated by a pressure source or the like and axially moves towards the vanes (260). The plurality of vanes (260) can be low solidity vanes.

IPC 8 full level
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CPC (source: EP US)
F01D 5/146 (2013.01 - EP US); **F01D 11/16** (2013.01 - EP US); **F01D 17/165** (2013.01 - EP US); **F04D 29/462** (2013.01 - EP US); **F05D 2220/40** (2013.01 - EP US); **F05D 2240/12** (2013.01 - EP US); **F05D 2250/36** (2013.01 - EP US); **F05D 2250/411** (2013.01 - EP US); **F05D 2250/52** (2013.01 - EP)

Citation (search report)
• [X] WO 2007018529 A1 20070215 - HONEYWELL INT INC [US], et al
• [I] WO 2004083606 A1 20040930 - HONEYWELL INT INC [US], et al
• [I] GB 861630 A 19610222 - JOSEF CAMEK
• [I] JP S60175707 A 19850909 - NISSAN MOTOR
• [A] US 4844690 A 19890704 - DELAURIER WILLIAM S [US], et al
• See references of WO 2009003144A2

Designated contracting state (EPC)
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DOCDB simple family (publication)
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