

Title (en)

WASTEGATE ARRANGEMENT FOR A TURBINE, TURBOCHARGER AND METHOD TO OPERATE A TURBOCHARGER

Title (de)

WASTEGATE-ANORDNUNG FÜR EINE TURBINE, ABGASTURBOLADER UND VERFAHREN ZUM BETREIBEN EINES ABGASTURBOLADERS

Title (fr)

DISPOSITIF DE SOUPAPE "WASTEGATE", TURBO COMPRESSEUR ET PROCÉDÉ POUR OPERER UN TURBO COMPRESSEUR

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Application

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Abstract (en)

[origin: WO2011039102A1] The present invention relates to a waste gate arrangement (1) for a turbine (2), particularly for an exhaust gas turbocharger (3), having a waste gate valve (4) configured for bypassing exhaust gas past the turbine (2), having a waste gate shaft (5) having a first bearing location (6) and having a second bearing location (7) serving for rotatably supporting the waste gate shaft (5), having a lever arm (8) rotationally fixedly mounted on the waste gate shaft (5) and configured for placing the waste gate shaft (5) in rotation when a lever arm force (9) is applied to the lever arm (8), and having a waste gate flap (10) rotationally fixedly mounted on the waste gate shaft (5) and controlling the amount of exhaust gas flowing through the valve (4), and disposed relative to the first and the second bearing locations (6, 7) such that a lever arm normal force (11) resulting from the lever arm force (9) when opening O and/or closing S the waste gate valve (4), and an exhaust gas normal force (13) resulting from the exhaust gas force (12) acting on the waste gate flap (10), comprise opposite force action directions at at least one of the bearing locations (6, 7). The present invention further relates to a turbine (2), an exhaust gas turbocharger (3), a motor vehicle having such an exhaust gas turbocharger (3), and a method for operating such an exhaust gas turbocharger (3).

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