

Title (en)

Exhaust diffuser for a gas turbine, and method thereof

Title (de)

Abgasdiffusor für eine Gasturbine und Verfahren dafür

Title (fr)

Diffuseur d'échappement pour une turbine à gaz et procédé correspondant

Publication

EP 2412941 A1 20120201 (EN)

Application

EP 10007757 A 20100726

Priority

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Abstract (en)

The present invention relates to an exhaust diffuser assembly (1), particularly for a stationary gas turbine, and a method incorporating the same. The proposed exhaust diffuser assembly (1) comprises a longitudinal axis (2), a diffuser inlet (3) for receiving a turbine mainflow gas (5), a diffuser outlet (4), and a diverging diffuser wall (7) having an adjustable geometry and forming a conduit for flow of said gas (5) therethrough from said diffuser inlet (3) to said diffuser outlet (4). The diffuser wall (7) has a divergence angle '±' with respect to said longitudinal axis (2). The proposed diffuser assembly (1) further comprises diffuser geometry control means (9,10) for controlling a recovery of pressure from said gas (5) between said diffuser inlet (3) and said diffuser outlet (4) by adjusting said divergence angle '±' of said diffuser wall (7) to cause a resultant flow field of said gas (5) that is attached to said diffuser wall (7).

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X1] US 4398865 A 19830816 - GARKUSHA ANATOLY V [SU], et al
- [X1] US 2009068006 A1 20090312 - HARDIN JAMES R [US]
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EP 10007757 A 20100726; CN 201180036687 A 20110718; EP 11740594 A 20110718; EP 2011062246 W 20110718; JP 2013521061 A 20110718; US 201113811943 A 20110718