

Title (en)
COMPRESSOR AND TURBOMACHINE WITH OPTIMIZED EFFICIENCY

Title (de)
VERDICHTER UND TURBOMASCHINE MIT OPTIMIERTER EFFIZIENZ

Title (fr)
COMPRESSEUR ET TURBOMACHINE A RENDEMENT OPTIMISE.

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Application
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Priority
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Abstract (en)
[origin: WO2011157927A1] Turbomachine compressor (10) comprising a casing (12) of which an inner wall defines an aerodynamic reference surface delimiting a gas flow duct, and in which there is mounted a bladed wheel (14) equipped with radial blades (18). A circumferential groove is formed in the inner wall of the casing. Its shape is defined from upstream to downstream by three substantially conical surfaces, an upstream surface, a central surface and a downstream surface, respectively. The upstream surface extends upstream of the leading edge of the blades. The central surface is substantially parallel to said aerodynamic reference surface. The downstream surface extends downstream at least as far as the trailing edge of the blades. The junction between the central and downstream surfaces is situated between 30% and 80%, preferably between 50 and 65%, of the axial length of the blades (18) starting from the leading edge.

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