

Title (en)

RADIAL DIFFUSER VANE FOR CENTRIFUGAL COMPRESSORS

Title (de)

RADIALDIFFUSORSCHAUFEL FÜR RADIALVERDICHTER

Title (fr)

AUBE DE DIFFUSEUR RADIALE DESTINÉE À DES COMPRESSEURS CENTRIFUGES

Publication

EP 2603703 A1 20130619 (EN)

Application

EP 10744692 A 20100812

Priority

EP 2010061788 W 20100812

Abstract (en)

[origin: WO2012019650A1] Devices, systems and methods according to exemplary embodiments provide diffusers, e.g., as part of a turbo machine 300, with diffuser vanes having S-shaped camber lines 408. Such S-shaped camber lines 408 are defined by functions having an inflection point. Using diffuser vanes 400 having such shapes results in, among other things, an operation characteristic wherein a portion of the diffuser vanes 400 disposed near a leading edge 402 is substantially unloaded when operating at design conditions and wherein the load gradually increases to a maximum loading value towards a middle portion of the diffuser vanes.

IPC 8 full level

F04D 29/44 (2006.01)

CPC (source: EP KR US)

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Citation (search report)

See references of WO 2012019650A1

Citation (examination)

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