

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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See references of WO 2012019650A1

Citation (examination)
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