Title (en)
> Prewhirl generator for radial compressor

Title (de)
> Drallerzeuger für radialen Verdichter

Title (fr)
> Générateur de tourbillons pour compresseur radial

Publication
> **EP 1420146 A1 20040519 (EN)**

Application
> **EP 02025323 A 20021113**

Priority
> EP 02025323 A 20021113

Abstract (en)
> A prewhirl generating apparatus (26) is provided that employs deformable air deflecting vanes (46) adjacent the inlet (18) of a radial air compressor (12-22), which vanes (46) can be mechanically deformed to generate positive, neutral, or negative prewhirl flow to the compressor. A minimum number of parts are used to position one or more thin, deformable vanes (46) in the intake channel (34) leading to the compressor inlet (18). In their undeformed position, the vanes (46) do not deflect the incoming air, thereby causing little or no flow restriction. To achieve the desired positive or negative prewhirl of flow to the compressor (12-22), the trailing edge (62) of the vanes (46) are deflected transverse to the direction of flow in the channel (34) in either the positive or negative direction. <IMAGE>

IPC 1-7
> **F01D 17/16**; F04D 27/02; F04D 29/42; F01D 17/14

IPC 8 full level
> **F01D 17/14** (2006.01); **F01D 17/16** (2006.01); **F04D 27/02** (2006.01); **F04D 29/42** (2006.01)

CPC (source: EP)
> **F01D 17/141** (2013.01); **F01D 17/162** (2013.01); **F04D 27/0246** (2013.01); **F04D 29/4213** (2013.01); F05D 2220/40 (2013.01);
> F05D 2250/51 (2013.01); F05D 2260/4031 (2013.01); F05D 2260/70 (2013.01); F05D 2260/74 (2013.01); F05D 2260/76 (2013.01);
> F05D 2270/101 (2013.01)

Citation (search report)
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