

Title (en)
Mixed-flow compressor.

Title (de)
Diagonal-Verdichter.

Title (fr)
Compresseur à écoulement mixte.

Publication
EP 0446900 A1 19910918 (EN)

Application
EP 91103850 A 19910313

Priority
JP 6097390 A 19900314

Abstract (en)
A compressor is disclosed wherein a diffuser flow path is curved in a radial direction in the vicinity of an outlet of a mixed-flow turbine (1), and guide vanes (7) each having a height larger than a maximum radius (rb) at the outlet of the mixed-flow turbine (1) are arranged in the form of a circular wing row at the curved portion on a flow path surface of the diffuser plate (4) located toward a side plate. Thus, it is possible to keep uniform the flow within the diffuser (6) and to enhance the performance of the compressor. In addition, the axial length of the compressor may be shortened to thereby make the compressor compact in size. <IMAGE>

IPC 1-7
F04D 17/06; **F04D 29/44**; **F04D 29/62**

IPC 8 full level
F04D 17/06 (2006.01); **F04D 23/00** (2006.01); **F04D 29/44** (2006.01); **F04D 29/62** (2006.01)

CPC (source: EP)
F04D 17/06 (2013.01); **F04D 29/444** (2013.01); **F04D 29/624** (2013.01); **F05D 2250/52** (2013.01)

Citation (search report)

- [A] US 4850795 A 19890725 - BANDUKWALLA PHIROZE [US]
- [A] EP 0201912 A2 19861120 - DRESSER IND [US]
- [A] US 4900225 A 19900213 - WULF JAMES B [US], et al
- [A] GB 693727 A 19530708 - POWER JETS RES & DEV LTD
- [A] COMPRESSED AIR MAGAZINE, Vol.9, September 1985 Washington, USA. "The X-Flo Compressor-A Machine Whose Time Has Come." Page 30-34. *the whole document
- [A] PATENT ABSTRACTS OF JAPAN vol. 5, no. 80 (M-70)(752) 26 May 1981, & JP-A-56 29099 (HITACHI) 23 March 1981,

Cited by
EP3760876A1; ITUA20164221A1; CN1069742C; US6155779A; EP0908631A3; EP0610051A1; EP3805572A1

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