

Title (en)  
CENTRIFUGAL FAN WITH AIRFOIL VANES IN ANNULAR VOLUTE ENVELOPE

Publication  
**EP 0458880 A4 19920212 (EN)**

Application  
**EP 90903670 A 19900205**

Priority  
US 31082789 A 19890214

Abstract (en)  
[origin: WO9009526A1] A rearwardly curved centrifugal blower (10) having an annular envelope (24) around the impeller (12), so that the rotating impeller draws air in through a central inlet and forces it radially outward into the envelope and out of an annular discharge. Multiple airfoil vanes (24, 27) are positioned in the annular envelope, in two axially displaced stages. The vanes are angled to turn and diffuse airflow entering the envelope.

IPC 1-7  
**F04D 29/44**

IPC 8 full level  
**F04D 17/16** (2006.01); **F04D 29/44** (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP)  
**F04D 17/16** (2013.01); **F04D 29/281** (2013.01); **F04D 29/30** (2013.01); **F04D 29/444** (2013.01); **F04D 29/5826** (2013.01); **F05D 2250/52** (2013.01)

Citation (search report)

- [Y] GB 689353 A 19530325 - LYSHOLM ALF
- [YD] GB 2080879 A 19820210 - GEBHARDT GMBH WILHELM
- [A] DE 1024673 B 19580220 - ALOIS MUELLER & SOHN G M B H M
- [A] FR 1530533 A 19680628 - NEU SA
- [A] DE 2403471 A1 19750731 - LWK LUFT WAERME KLIMATECHNIK G
- [A] FR 1031705 A 19530625 - HAVILLAND ENGINE CO LTD
- JP H0051996 A
- See references of WO 9009526A1

Designated contracting state (EPC)  
DE ES FR GB IT SE

DOCDB simple family (publication)  
**WO 9009526 A1 19900823**; EP 0458880 A1 19911204; EP 0458880 A4 19920212; JP H04505199 A 19920910

DOCDB simple family (application)  
**US 9000659 W 19900205**; EP 90903670 A 19900205; JP 50374190 A 19900205