

Title (en)

FIXING ARRANGEMENT FOR A CENTRIFUGAL PUMP IMPELLER MADE OF BRITTLE MATERIAL

Publication

EP 0276656 A3 19890104 (DE)

Application

EP 88100138 A 19880108

Priority

DE 3702016 A 19870124

Abstract (en)

[origin: US4806078A] A centrifugal pump wherein the back shroud of a brittle impeller of ceramic or glass is coupled to the radially outwardly extending disc of a metallic adapter whose hub receives torque from the pump shaft. The adapter has a flange which surrounds the peripheral surface of the impeller or it has a collar which surrounds a complementary collar of the back shroud. The arrangement is such that the coupling between the adapter and the impeller does not subject the impeller to any tensional or other stresses which would be likely to affect the integrity of the brittle impeller. The disc of the adapter is adjacent the rear side of the back shroud so that the adapter does not interfere with the flow of conveyed material to, in and from the impeller.

IPC 1-7

F04D 29/20; **F04D 29/22**

IPC 8 full level

F04D 29/20 (2006.01); **F04D 29/22** (2006.01)

CPC (source: EP US)

F04D 29/20 (2013.01 - EP US); **F04D 29/227** (2013.01 - EP US); **F05D 2300/10** (2013.01 - EP US); **F05D 2300/20** (2013.01 - EP US); **F05D 2300/518** (2013.01 - EP US); **Y10T 403/217** (2015.01 - EP US)

Citation (search report)

- [X] FR 1122205 A 19560904 - ONERA (OFF NAT AEROSPATIALE)
- [X] DE 1059245 B 19590611 - MASCHF AUGSBURG NUERNBERG AG
- [A] US 2643851 A 19530630 - MCMAHAN KENTON D
- [A] DE 2845199 A1 19800424 - SAVONUZZI GIOVANNI F

Cited by

GB2249135A

Designated contracting state (EPC)

AT BE CH ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0276656 A2 19880803; **EP 0276656 A3 19890104**; DE 3702016 A1 19880804; US 4806078 A 19890221

DOCDB simple family (application)

EP 88100138 A 19880108; DE 3702016 A 19870124; US 14632388 A 19880121