

Title (en)  
Flow guiding component of a pump

Title (de)  
Strömungsführendes Bauteil einer Pumpe

Title (fr)  
Composant d'écoulement d'une pompe

Publication  
**EP 2143957 B2 20160810 (DE)**

Application  
**EP 08012463 A 20080710**

Priority  
EP 08012463 A 20080710

Abstract (en)  
[origin: EP2143957A1] A multi-stage centrifugal pump has a two-part wheel whose first section (2) is fabricated by injection moulded metal powder, and the second part (4) is made of sheet metal. Further claimed is a commensurate centrifugal pump in which the two parts are welded together. The first part is a cover plate formed jointly with the pump blades and has a hub. The second part is fabricated from sheet metal.

IPC 8 full level  
**F04D 29/22** (2006.01); **B22F 3/22** (2006.01); **F04D 29/02** (2006.01)

CPC (source: EP US)  
**B22F 3/225** (2013.01 - EP US); **F04D 29/026** (2013.01 - EP US); **F04D 29/2227** (2013.01 - EP US); **F04D 29/2233** (2013.01 - EP US); **F05B 2230/211** (2013.01 - EP US); **F05B 2230/232** (2013.01 - EP US); **F05D 2230/20** (2013.01 - EP US); **F05D 2230/232** (2013.01 - EP US); **F05D 2300/10** (2013.01 - EP US)

Citation (opposition)  
Opponent :

- EP 1331395 A2 20030730 - COPELAND CORP [US]
- DE 10354750 A1 20050623 - SIEMENS AG [DE]

Cited by  
CN111946662A

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 2143957 A1 20100113**; **EP 2143957 B1 20110831**; **EP 2143957 B2 20160810**; AT E522726 T1 20110915; CN 101624998 A 20100113; US 2010008775 A1 20100114; US 8317468 B2 20121127

DOCDB simple family (application)  
**EP 08012463 A 20080710**; AT 08012463 T 20080710; CN 200910140252 A 20090709; US 50068709 A 20090710