

Title (en)  
Centrifugal pump and impeller protector for a centrifugal pump

Title (de)  
Kreiselpumpe und Laufradprotector für Kreiselpumpe

Title (fr)  
Pompe centrifuge et protection de roue mobile pour pompe centrifuge

Publication  
**EP 2706238 A3 20170719 (DE)**

Application  
**EP 13180050 A 20130812**

Priority  
DE 102012108357 A 20120907

Abstract (en)  
[origin: EP2706238A2] The centrifugal pump (1) has a pump housing (2) that is provided with a suction inlet (3) and a pressure outlet (4). A rotatably mounted wheel (5) is provided for conveying the pumping medium from the suction inlet to pressure outlet. An impeller seat (10) is formed in an annular wheel protector (8) made of a corrosion resistant plastic material and is accommodated in pump housing. An insertion portion (7) of rotatably mounted wheel is radially surrounded by the annular wheel protector.

IPC 8 full level  
**F04D 29/02** (2006.01); **F04D 29/16** (2006.01); **F04D 29/42** (2006.01)

CPC (source: EP US)  
**F04D 29/026** (2013.01 - EP US); **F04D 29/167** (2013.01 - EP US); **F04D 29/4286** (2013.01 - US); **F05D 2260/95** (2013.01 - EP US); **F05D 2300/43** (2013.01 - EP US); **F05D 2300/432** (2013.01 - EP US)

Citation (search report)  
• [X] DE 19960160 A1 20010621 - BEEZ GUENTHER [DE], et al  
• [X] US 4909707 A 19900320 - WAULIGMAN KENNETH R [US], et al

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2706238 A2 20140312; EP 2706238 A3 20170719; EP 2706238 B1 20200304**; CA 2826214 A1 20140307; CA 2826214 C 20200818; DE 102012108357 A1 20140313; DE 102012108357 B4 20160602; DK 2706238 T3 20200602; ES 2795102 T3 20201120; PL 2706238 T3 20201005; US 2014072424 A1 20140313; US 9447793 B2 20160920

DOCDB simple family (application)  
**EP 13180050 A 20130812**; CA 2826214 A 20130906; DE 102012108357 A 20120907; DK 13180050 T 20130812; ES 13180050 T 20130812; PL 13180050 T 20130812; US 201314021058 A 20130909