

Title (en)  
A VOLUTE CASING FOR A CENTRIFUGAL PUMP

Title (de)  
SPIRALGEHÄUSE FÜR EINE KREISELPUMPE

Title (fr)  
ENVELOPPE À VOLUTE POUR POMPE CENTRIFUGE

Publication  
**EP 3211245 A1 20170830 (EN)**

Application  
**EP 16156930 A 20160223**

Priority  
EP 16156930 A 20160223

Abstract (en)  
The present invention relates to a volute casing for a centrifugal pump, the volute casing (44) having an axis A and a centreline C L ; a cutwater tongue (54); an outlet duct (50) with an outlet opening (52) having a centre, the outlet opening (52) being surrounded by a collar (56) with a collar surface (56'); and the centreline C L of the volute casing (44) running via the axis of the volute casing (44) in a direction perpendicular to the collar surface (56'), wherein that the outlet duct (50) has a curved centreline C LOD , a constant circular cross section and a constant cross sectional area for the entire length of the curved centreline C LOD , and that the outlet opening (52) has a centreline C LO running via the centre of the outlet opening (52) in a direction perpendicular to the collar surface (56'), the centreline C LO of the outlet opening (52) being positioned at a distance D of from 0.25 to 0.8 times C from the centreline C L of the volute casing (44) where C is the distance of the cutwater tongue from the axis of the volute casing (44).

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

CPC (source: EP)  
**F04D 29/426** (2013.01); **F04D 29/428** (2013.01); **F04D 29/4293** (2013.01)

Citation (search report)  
• [I] DE 7217110 U  
• [I] US 5084236 A 19920128 - MORRIS ALLEN L [US]  
• [A] EP 0466167 A2 19920115 - AHLSTROEM OY [FI]  
• [A] WO 2013163601 A1 20131031 - WEIR MINERALS AUSTRALIA LTD [AU], et al  
• [A] US 4844693 A 19890704 - GRZINA ANTHONY [AU]

Cited by  
CN108954754A; CN114688086A; JP2021076017A; US2023074178A1; WO2021090795A1

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 3211245 A1 20170830**

DOCDB simple family (application)  
**EP 16156930 A 20160223**