

Title (en)  
IMPROVEMENTS TO PUMPS AND COMPONENTS THEREFOR

Title (de)  
VERBESSERUNGEN AN PUMPEN UND BAUTEILE DAFÜR

Title (fr)  
AMÉLIORATIONS APPORTÉES DES POMPES ET COMPOSANTS UTILISÉS À CET EFFET

Publication  
**EP 2734736 A4 20150114 (EN)**

Application  
**EP 12815181 A 20120720**

Priority  
• AU 2011902894 A 20110720  
• AU 2012000868 W 20120720

Abstract (en)  
[origin: WO2013010224A1] A pump side part for use with a shrouded pump impeller, comprising a side wall section rear face including an outer region with an outer edge in a plane which is substantially at right angles to the rotation axis, an inner region with an inner edge and an intermediate region between the outer and inner regions which is inclined inwardly from the said plane in a direction towards the inlet section, the inner region extending from the intermediate region in a direction away from the front face of the side wall section, wherein the outer face of the impeller front shroud and the side part rear face are arranged to be facing one another with a gap therebetween, the rear face being configured so that the cross-sectional dimension of the gap increases in a direction toward the impeller rotation axis in the intermediate region.

IPC 8 full level  
**F04D 7/04** (2006.01); **F04D 29/22** (2006.01); **F04D 29/42** (2006.01)

CPC (source: EP US)  
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Citation (search report)  
• [X] JP 2003184783 A 20030703 - EBARA CORP  
• [X] GB 1250062 A 19711020 - ALLWEILER AG [DE]  
• [X] US 4913619 A 19900403 - HAENTJENS WALTER D [US], et al  
• [A] US 5427498 A 19950627 - LEHE JEAN-ROBERT [FR], et al  
• See references of WO 2013010224A1

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Designated extension state (EPC)  
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DOCDB simple family (publication)  
**WO 2013010224 A1 20130124**; AP 2013007329 A0 20131231; AU 2012286528 A1 20130502; AU 2012286528 B2 20160421; BR 112013032290 A2 20161220; BR 112013032290 B1 20210518; CA 2839472 A1 20130124; CA 2839472 C 20191001; CL 2013003561 A1 20141114; CN 103703254 A 20140402; CN 103703254 B 20161228; EA 026576 B1 20170428; EA 201391709 A1 20140430; EP 2734736 A1 20140528; EP 2734736 A4 20150114; EP 2734736 B1 20161228; ES 2620760 T3 20170629; HU E031960 T2 20170928; IL 229958 B 20190926; MX 2013015045 A 20140217; MX 341285 B 20160812; PE 20141349 A1 20141013; PL 2734736 T3 20170731; PT 2734736 T 20170330; UA 112986 C2 20161125; US 2014241888 A1 20140828; ZA 201309463 B 20210825

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