

Title (en)  
CENTRIFUGAL COMPRESSOR

Title (de)  
ZENTRIFUGALVERDICHTER

Title (fr)  
COMPRESSEUR CENTRIFUGE

Publication  
**EP 2806170 A4 20151118 (EN)**

Application  
**EP 13738815 A 20130111**

Priority  
• JP 2012006714 A 20120117  
• JP 2013050360 W 20130111

Abstract (en)  
[origin: EP2806170A1] A centrifugal compressor for which  $\alpha \pm 0^\circ$  and  $0^\circ < \alpha < 34^\circ$ , when the angle formed by a diffuser inlet hub-side line (5a) and the radial direction at a point B in the meridian plane is  $\alpha$ , and the angle formed by a tangent line (3b) and the radial direction at a point A of an impeller hub-side line (3a) nearest the inlet of the diffuser (5) is  $\pm$ . Thus, skewing of the velocity distribution of a gas within the diffuser of the centrifugal compressor is eliminated.

IPC 8 full level  
**F04D 17/10** (2006.01); **F04D 29/28** (2006.01); **F04D 29/44** (2006.01)

CPC (source: EP US)  
**F04D 17/10** (2013.01 - US); **F04D 29/284** (2013.01 - EP US); **F04D 29/441** (2013.01 - EP US); **F04D 29/444** (2013.01 - US)

Citation (search report)  
• [X] EP 2314876 A2 20110427 - HITACHI PLANT TECHNOLOGIES LTD [JP]  
• [XI] EP 2072834 A1 20090624 - MITSUBISHI HEAVY IND LTD [JP]  
• [XI] US 2002106278 A1 20020808 - KOGA JUN [JP]  
• [XI] US 2010178163 A1 20100715 - DETTMANN TOBIAS [DE], et al  
• [XI] GB 152689 A 19210317 - MIROSLAV PLOHL  
• [XI] JP H1182389 A 19990326 - HITACHI LTD  
• [XI] JP 2008175124 A 20080731 - IHI CORP  
• [A] EP 2221487 A1 20100825 - MITSUBISHI HEAVY IND LTD [JP]  
• See references of WO 2013108712A1

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

DOCDB simple family (publication)  
**EP 2806170 A1 20141126; EP 2806170 A4 20151118; EP 2806170 B1 20181226**; CN 103998790 A 20140820; CN 103998790 B 20161019; JP 2013147935 A 20130801; JP 5905268 B2 20160420; US 2014369823 A1 20141218; WO 2013108712 A1 20130725

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**EP 13738815 A 20130111**; CN 201380004288 A 20130111; JP 2012006714 A 20120117; JP 2013050360 W 20130111; US 201314366910 A 20130111