

Title (en)  
CENTRIFUGAL TURBOMACHINE

Title (de)  
ZENTRIFUGAL-TURBOMASCHINE

Title (fr)  
TURBOMACHINE CENTRIFUGE

Publication  
**EP 2650546 A1 20131016 (EN)**

Application  
**EP 11847208 A 20111201**

Priority  
• JP 2010275839 A 20101210  
• JP 2011077863 W 20111201

Abstract (en)  
A plurality of vaned diffusers is disposed on a concentric plate at intervals in a circumferential direction thereof, and each of the diffusers is a curvilinear element three-dimensional diffuser having blades which are extended from a hub side of a impeller to a shroud side thereof. The blades are formed in a form in which a blade serving as a reference is stacked in a direction of the height of the blade, which is a direction of a gap between the hub and the shroud. A dihedral distribution in which moving in a direction perpendicular to a chord direction linking a leading edge of the blade as the reference with a tailing edge thereof, is set as a positive movement is non-uniform from an end portion on the hub side to an intermediate portion of the height of the blade.

IPC 8 full level  
**F04D 29/44** (2006.01)

CPC (source: EP US)  
**F01D 1/06** (2013.01 - US); **F04D 29/444** (2013.01 - EP US); **F05D 2250/52** (2013.01 - EP)

Citation (search report)  
See references of WO 2012077580A1

Cited by  
EP3460256A1; EP3460255A1; WO2019057413A1; EP3460257A1; WO2019057414A1; WO2019057412A1; CN105705796A; FR3065023A1; CN111133203A; US11225977B2; US11009038B2; EP3760876A1; WO2018185445A1; EP3760871A1; WO2021001106A1; WO2015061344A1; US10527059B2; EP3805572A1; US11313384B2

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 2650546 A1 20131016**; CN 103314218 A 20130918; CN 103314218 B 20160309; JP 2012122443 A 20120628; JP 5608062 B2 20141015; US 2013309082 A1 20131121; WO 2012077580 A1 20120614

DOCDB simple family (application)  
**EP 11847208 A 20111201**; CN 201180058898 A 20111201; JP 2010275839 A 20101210; JP 2011077863 W 20111201; US 201113992457 A 20111201