

Title (en)
CENTRIFUGAL COMPRESSOR

Title (de)
ZENTRIFUGALVERDICHTER

Title (fr)
COMPRESSEUR CENTRIFUGE

Publication
EP 2559904 A1 20130220 (EN)

Application
EP 10849813 A 20100413

Priority
JP 2010056595 W 20100413

Abstract (en)
The present invention is intended to provide a technique in a centrifugal compressor in which the direction of protrusion of a vane blade is avoided from deviating from a specified direction as a result of a deformation of a deformation member. The present invention resides in a centrifugal compressor which includes a vane blade that is movable into and out of a diffuser passage, a space that is formed in a wall of the diffuser passage in which the vane blade is caused to be buried, and a deformation member that divides the space into a diffuser side chamber and an anti-diffuser side chamber, and deforms the volume of the anti-diffuser side chamber in a changeable manner, the deformation member causing the vane blade to move in a specified direction thereby to protrude into the diffuser passage due to a deformation thereof at the time of increasing the volume of the anti-diffuser side chamber, wherein the vane blade and the deformation member are separate bodies from each other, and only a displacement in the specified direction of a portion of the deformation member which is made into contact with the vane blade due to the deformation thereof at the time of increasing the volume of the anti-diffuser side chamber acts on the vane blade.

IPC 8 full level
F04D 29/46 (2006.01); **F04D 29/44** (2006.01)

CPC (source: EP)
F04D 29/462 (2013.01); **F05D 2250/52** (2013.01)

Designated contracting state (EPC)
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 SE SI SK SM TR

DOCDB simple family (publication)
EP 2559904 A1 20130220; EP 2559904 A4 20141210; EP 2559904 B1 20161123; JP 5348316 B2 20131120; JP WO2011128975 A1 20130711; WO 2011128975 A1 20111020

DOCDB simple family (application)
EP 10849813 A 20100413; JP 2010056595 W 20100413; JP 2012510493 A 20100413