

Title (en)
CENTRIFUGAL IMPELLER AND CENTRIFUGAL COMPRESSOR

Title (de)
RADIALIMPELLER UND RADIALVERDICHTER

Title (fr)
HÉLICE CENTRIFUGE ET COMPRESSEUR CENTRIFUGE

Publication
EP 3196477 A4 20180502 (EN)

Application
EP 15841417 A 20150326

Priority
• JP 2014190468 A 20140918
• JP 2015059344 W 20150326

Abstract (en)
[origin: EP3196477A1] A centrifugal impeller capable of suppressing the development of a boundary layer and thus fulfilling its performance sufficiently, and a centrifugal compressor are provided. The impeller includes a hub 20, a shroud 21, and a plurality of blades 22 disposed between the hub 20 and the shroud 21 and blows out fluid in a radial direction by the rotation of a rotary shaft fixed to the hub 20. When an angle made by a projection line 33 that is obtained by projecting a camber line 32 of the blade 22 onto a predetermined meridional cross section and the camber line 32 is defined as an inclination angle α , and an inclination in a direction opposite to a rotating direction of the rotary shaft is defined to be positive, the blade 22 is formed in such a manner that the inclination angle α of a leading edge 22A is zero or positive on the hub 20 side and gradually increasing toward the shroud 21 and the inclination angle is gradually decreasing from the leading edge toward a trailing edge in a flow direction of the fluid.

IPC 8 full level
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CPC (source: EP US)
F04D 29/284 (2013.01 - EP US); **F04D 29/30** (2013.01 - EP US); **F04D 29/4206** (2013.01 - US); **F04D 29/681** (2013.01 - EP US); **F05D 2240/303** (2013.01 - EP US); **F05D 2240/304** (2013.01 - EP US); **F05D 2250/70** (2013.01 - EP US)

Citation (search report)
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• [A] JP 2013024057 A 20130204 - DAIKIN IND LTD
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Designated contracting state (EPC)
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