

Title (en)  
IMPELLER, CENTRIFUGAL COMPRESSOR AND REFRIGERATION CYCLE APPARATUS

Title (de)  
LAUFRAD, RADIALVERDICHTER UND KÄLTEKREISLAUFVORRICHTUNG

Title (fr)  
ROUE, COMPRESSEUR CENTRIFUGE ET APPAREIL À CYCLE DE RÉFRIGÉRATION

Publication  
**EP 3196476 A1 20170726 (EN)**

Application  
**EP 17152121 A 20170119**

Priority  
JP 2016011785 A 20160125

Abstract (en)  
An impeller for a centrifugal compressor according to the present disclosure includes a hub (20) and wings (21). Each of the wings has a leading edge portion (24) and a body portion (25). A tip (35) of the leading edge portion and a tip (36) of the body portion extend from the foremost part of the hub toward the aftmost part of the hub on a side opposite to a side (37) where the wing is in contact with the hub (20). In a plan view of the wing seen from a radial direction perpendicular to an axis (O) of the impeller, a profile of the tip (35) of the leading edge portion (24) has a linear shape and a profile of the tip (36) of the body portion (25) has a curved shape.

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**F05D 2250/71** (2013.01 - EP US)

Citation (applicant)  
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• COLIN OSBORNE ET AL.: "AERODYNAMIC AND MECHANICAL DESIGN OF AN 8:1 PRESSURE RATIO CENTRIFUGAL COMPRESSOR", NASA CR-134782, April 1975 (1975-04-01)

Citation (search report)  
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DOCDB simple family (application)  
**EP 17152121 A 20170119**; CN 201611101833 A 20161205; JP 2016242981 A 20161215; US 201715411885 A 20170120