

Title (en)
IMPELLER, ROTARY MACHINE, AND IMPELLER MANUFACTURING METHOD

Title (de)
LAUFRAD, ROTATIONSMASCHINE UND LAUFRADHERSTELLUNGSVERFAHREN

Title (fr)
HÉLICE, MACHINE TOURNANTE, ET PROCÉDÉ DE FABRICATION D'HÉLICE

Publication
EP 3415767 A4 20190306 (EN)

Application
EP 17766726 A 20170315

Priority
• JP 2016056045 A 20160318
• JP 2017010391 W 20170315

Abstract (en)
[origin: EP3415767A1] An impeller includes a disc (3a) having a disc shape about an axis, a plurality of blades (3b) formed on a surface facing a first side in an axial direction of the disc (3a) at intervals in a circumferential direction around the axis, and a cover (3c) surrounding the plurality of blades (3b) from the first side in the axial direction. The cover (3c) includes an inner circumferential surface (11) connected to the blade (3b) with a diameter decreasing from the second side toward a first side in the axial direction, and a distal end surface (13) extending from an end portion of the inner circumferential surface (11) on the first side in the axial direction toward the outside in a radial direction and facing the first side in the axial direction. A front edge portion (20), which is an edge portion of the blade (3b) on the first side in the axial direction, extends from a boundary (K) between the inner circumferential surface (11) and the distal end surface (13) toward the inside in the radial direction.

IPC 8 full level
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F04D 29/284 (2013.01 - EP US); **F04D 29/30** (2013.01 - EP US); **F04D 17/12** (2013.01 - US); **F05B 2230/10** (2013.01 - EP US); **F05B 2240/301** (2013.01 - EP US); **F05B 2250/711** (2013.01 - EP US); **F05D 2240/303** (2013.01 - EP)

Citation (search report)
• [X] JP 2004353608 A 20041216 - MITSUBISHI HEAVY IND LTD
• [X] GB 636290 A 19500426 - LYSHOLM ALF
• [XA] US 2015308453 A1 20151029 - NAKANIWA AKIHIRO [JP], et al

Citation (examination)
• US 2013251531 A1 20130926 - YAGI NOBUYORI [JP], et al
• JP 2015175250 A 20151005 - IHI CORP
• See also references of WO 2017159730A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
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DOCDB simple family (application)
EP 17766726 A 20170315; JP 2016056045 A 20160318; JP 2017010391 W 20170315; US 201716083412 A 20170315