

Title (en)

MULTI-BLADE FAN

Title (de)

VENTILATOR MIT MEHREREN SCHAUFELN

Title (fr)

VENTILATEUR À PALE MULTIPLES

Publication

EP 3020979 A4 20170301 (EN)

Application

EP 13889351 A 20130710

Priority

JP 2013068871 W 20130710

Abstract (en)

[origin: EP3020979A1] A multiblade blower (1) includes: a first impeller (3a) arranged in a casing (2) having an air inlet (6) ; and a second impeller (3b) arranged in an internal space of the first impeller. The first impeller is a centrifugal fan including a plurality of first-impeller blades (11). The second impeller is an axial-flow fan including a plurality of second-impeller blades (14) extending radially from a rotation axis (5). In the second-impeller blades, a swirling-direction component of a wake in a region on an outer peripheral side in the internal space of the first impeller is smaller than a swirling-direction component of a wake in a region on an inner peripheral side in the internal space.

IPC 8 full level

F04D 29/28 (2006.01); **F04D 29/00** (2006.01); **F04D 29/30** (2006.01); **F04D 29/32** (2006.01); **F04D 29/38** (2006.01); **F04D 29/66** (2006.01)

CPC (source: EP)

F04D 19/002 (2013.01); **F04D 25/166** (2013.01); **F04D 29/282** (2013.01); **F04D 29/30** (2013.01); **F04D 29/325** (2013.01); **F04D 29/384** (2013.01)

Citation (search report)

- [X] JP H06129388 A 19940510 - MATSUSHITA SEIKO KK
- [A] US 6345956 B1 20020212 - LIN KUO-CHENG [TW]
- [A] FR 2155668 A5 19730518 - SUEDEDEUTSCHE METALLWERKE GMBH
- See references of WO 2015004750A1

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

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EP 3020979 A1 20160518; **EP 3020979 A4 20170301**; **EP 3020979 B1 20180822**; JP 6038320 B2 20161207; JP WO2015004750 A1 20170223; WO 2015004750 A1 20150115

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EP 13889351 A 20130710; JP 2013068871 W 20130710; JP 2015526062 A 20130710