

Title (en)
PROPELLER FAN

Title (de)
PROPELLERLÜFTER

Title (fr)
VENTILATEUR HÉLICOÏDAL

Publication
EP 3553320 A4 20200722 (EN)

Application
EP 17888019 A 20171208

Priority
• JP 2016255373 A 20161228
• JP 2017080267 A 20170414
• JP 2017044226 W 20171208

Abstract (en)
[origin: EP3553320A1] In a blade (20) of a propeller fan (10), a position on a chord line (31) where the camber becomes maximum is set as a maximum camber position A, and a ratio of a distance d between a leading edge (23) and the maximum camber position A to a chord length c is set as a maximum camber position ratio (d/c). The end portion on the hub side of the blade (20) is set as a blade root, and the end portion on the outer circumferential side of the blade (20) is set as a blade end. In the blade (20), the maximum camber position ratio (d/c) monotonically increases in the direction from the reference blade cross section located between the blade root and the blade end toward the blade end and becomes maximum at the blade end. Thus, fan efficiency of the propeller fan is improved.

IPC 8 full level
F04D 29/00 (2006.01); **F04D 29/38** (2006.01)

CPC (source: EP US)
F04D 29/00 (2013.01 - EP); **F04D 29/38** (2013.01 - EP); **F04D 29/384** (2013.01 - EP US); **F04D 29/667** (2013.01 - US)

Citation (search report)
• [XY] JP 2010275986 A 20101209 - MITSUBISHI ELECTRIC CORP
• [Y] JP 2012052443 A 20120315 - DAIKIN IND LTD
• [A] JP 2005307788 A 20051104 - MITSUBISHI ELECTRIC CORP
• [A] CN 102341603 A 20120201 - MITSUBISHI ELECTRIC CORP

Cited by
EP4212737A4

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

DOCDB simple family (publication)
EP 3553320 A1 20191016; EP 3553320 A4 20200722; EP 3553320 B1 20230913; CN 110036209 A 20190719; CN 110036209 B 20201120; JP 2018109393 A 20180712; JP 2018112196 A 20180719; JP 6414268 B2 20181031; JP 6544463 B2 20190717

DOCDB simple family (application)
EP 17888019 A 20171208; CN 201780075312 A 20171208; JP 2017080267 A 20170414; JP 2018085437 A 20180426