

Title (en)
IMPELLER

Title (de)
FLÜGELRAD

Title (fr)
HÉLICE

Publication
EP 3597924 A4 20201111 (EN)

Application
EP 18768414 A 20180227

Priority
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Abstract (en)
[origin: EP3597924A1] Blade grooves (Qn) are continuous from a 1st blade groove (Q₁) and constitute each of m blade groove groups, m satisfying $m \geq 5$. A pitch angle (θ_n) is set to a value different from the pitch angles (θ_n) of the other blade grooves constituting the one blade groove group (Rn). With respect to integrated pitch angles (tn), among a 1st integrated pitch angle t₁ to an i-th integrated pitch angle t_i, the number of integrated pitch angles having one value is two or less, and the number of sets having the same value does not exceed $i \times 0.18$.

IPC 8 full level
F04D 5/00 (2006.01); **F04D 29/18** (2006.01); **F04D 29/24** (2006.01); **F04D 29/66** (2006.01)

CPC (source: EP)
F04D 5/002 (2013.01); **F04D 29/188** (2013.01); **F04D 29/666** (2013.01)

Citation (search report)
• [A] JP H1150990 A 19990223 - DENSO CORP
• [A] JP 2003278684 A 20031002 - DENSO CORP
• [A] US 4881871 A 19891121 - WUNDERLICH ERHARD [DE]
• [A] US 5163810 A 19921117 - SMITH JOHN E [US]
• See references of WO 2018168442A1

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 3597924 A1 20200122; **EP 3597924 A4 20201111**; **EP 3597924 B1 20220615**; JP 6659911 B2 20200304; JP WO2018168442 A1 20190627; WO 2018168442 A1 20180920

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EP 18768414 A 20180227; JP 2018007194 W 20180227; JP 2019505848 A 20180227