

Title (en)
Blowing fan and blower using the same

Title (de)
Gebläserotor und zugehöriges Gebläse

Title (fr)
rotor d'une soufflante radiale et ventilateur l'utilisant

Publication
EP 2295817 A2 20110316 (EN)

Application
EP 10174481 A 20100830

Priority
JP 2009210072 A 20090911

Abstract (en)
A blowing fan includes a hub to which a rotary shaft of a motor is rigidly mounted, a shroud confronting the hub, and multiple blades placed between the hub and the shroud. A space is formed between a trailing edge of each one of the blades and the shroud. Flowing of air through this space allows reducing an air-speed at the outer most periphery of the blowing fan while the performance of the fan can be maintained. As a result, BPF (Blade Passing Frequency) noises can be lowered. On top of that, this simple construction allows manufacturing the blowing fan at a lower cost.

IPC 8 full level
F04D 29/28 (2006.01); **F04D 29/30** (2006.01)

CPC (source: EP)
F04D 29/281 (2013.01); **F04D 29/288** (2013.01); **F04D 29/30** (2013.01); **F05D 2240/304** (2013.01)

Citation (applicant)
JP 2007170331 A 20070705 - DAIKIN IND LTD

Citation (examination)
JP H06118993 A 19940428 - KOKUSAI ELECTRIC CO LTD

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 SE SI SK SM TR

Designated extension state (EPC)
BA ME RS

DOCDB simple family (publication)
EP 2295817 A2 20110316; **EP 2295817 A3 20120314**; CN 102022349 A 20110420; CN 201851371 U 20110601; JP 2011058442 A 20110324; JP 4894900 B2 20120314; TW 201109532 A 20110316; TW I418709 B 20131211

DOCDB simple family (application)
EP 10174481 A 20100830; CN 201010282474 A 20100910; CN 201020526883 U 20100910; JP 2009210072 A 20090911; TW 99124719 A 20100727