Title (en)

SCROLL CASING, AND AIR-BLOWING DEVICE AND AIR-CONDITIONING DEVICE PROVIDED WITH SAID SCROLL CASING

Title (de)

SPIRALGEHÄUSE UND LUFTBLASVORRICHTUNG SOWIE KLIMAANLAGE MIT DIESEM SPIRALGEHÄUSE

Title (fr)

BOÎTIER DE VOLUTE, ET DISPOSITIF DE SOUFFLAGE D'AIR ET DISPOSITIF DE CLIMATISATION ÉQUIPÉS DUDIT BOÎTIER DE VOLUTE

Publication

EP 4310341 A1 20240124 (EN)

Application

EP 21931469 A 20210316

Priority

JP 2021010593 W 20210316

Abstract (en)

A scroll casing accommodates a cross-flow fan, thereby forming an airflow passage, and includes a scroll section having, as an upstream end, an approach point at which the scroll section most closely approaches the fan in the scroll casing, and forms an upstream side of the airflow passage. A region between the upstream end of the scroll section and a downstream end of the scroll section is divided into three regions in the flow direction of airflow in the airflow passage. In the three regions, the distance between the center of rotation of the fan and the scroll section increases at different change rates from the upstream end to the downstream end as the scroll section is viewed at a section perpendicular to an axis of rotation of the fan. Where the three regions are a first region, a second region, and a third region in this order from an upstream side in the flow direction of the airflow, the change rate of the second region is the smallest.

IPC 8 full level

F04D 29/42 (2006.01)

CPC (source: EP US)

F04D 17/04 (2013.01 - EP); **F04D 29/4226** (2013.01 - EP US); **F04D 29/441** (2013.01 - EP); **F24F 1/0025** (2013.01 - US); **F24F 1/0057** (2019.02 - US); **F24F 1/0059** (2013.01 - US); **F24F 1/028** (2019.02 - US)

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4310341 A1 20240124; **EP 4310341 A4 20240605**; CN 116997725 A 20231103; JP WO2022195717 A1 20220922; US 2024068486 A1 20240229; WO 2022195717 A1 20220922

DOCDB simple family (application)

EP 21931469 A 20210316; CN 202180095450 A 20210316; JP 2021010593 W 20210316; JP 2023506439 A 20210316; US 202118260646 A 20210316