

Title (en)

MELT SPINNING APPARATUS AND NON-WOVEN FABRIC PRODUCTION METHOD

Title (de)

SCHMELZSPINNVORRICHTUNG UND VERFAHREN ZUR HERSTELLUNG VON VLIESSTOFF

Title (fr)

APPAREIL DE FILAGE PAR FUSION ET PROCÉDÉ DE PRODUCTION D'UN TISSU NON-TISSÉ

Publication

EP 3690086 B1 20220525 (EN)

Application

EP 18900577 A 20181221

Priority

JP 2018047370 W 20181221

Abstract (en)

[origin: EP3690086A1] A melt spinning apparatus includes a spinning unit including plural spinning nozzles that spin filaments, a cooling unit that cools the filaments spun from the spinning nozzles, and a cooling air supply unit that faces the cooling unit and supplies cooling air to the cooling unit through an air-permeable partition. In the melt spinning apparatus, the cooling air supply unit includes a first cooling air supply unit at a vertically upper side and a second cooling air supply unit at a vertically lower side, divided into two stages in a vertical direction through a partition, there is a gap between an end, facing the air-permeable partition, of the partition and a face of a side, facing the partition, in the air-permeable partition, and the distance (distance A) of the gap is 55 mm or less.

IPC 8 full level

D01D 5/088 (2006.01); **D01D 5/098** (2006.01)

CPC (source: EP KR)

D01D 5/088 (2013.01 - EP KR); **D01D 5/0985** (2013.01 - EP KR); **D04H 1/4291** (2013.01 - KR)

Citation (opposition)

Opponent : Reifenhäuser GmbH & Co. KG Maschinenfabrik

- US 2003178742 A1 20030925 - GEUS HANS-GEORG [DE], et al
- US 2006040008 A1 20060223 - GEUS HANS-GEORG [DE], et al
- US 2273105 A 19420217 - WALTER HECKERT WINFIELD
- US 6168406 B1 20010102 - TSENG CHING-KUN [TW]

Cited by

EP4008814A1

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 3690086 A1 20200805; EP 3690086 A4 20200805; EP 3690086 B1 20220525; CN 113195803 A 20210730; CN 113195803 B 20221209;
DK 3690086 T3 20220627; JP 6510158 B1 20190508; JP WO2020129256 A1 20210215; KR 102524390 B1 20230420;
KR 20210089768 A 20210716; WO 2020129256 A1 20200625

DOCDB simple family (application)

EP 18900577 A 20181221; CN 201880100224 A 20181221; DK 18900577 T 20181221; JP 2018047370 W 20181221;
JP 2019503501 A 20181221; KR 20217018511 A 20181221