Title (en)

Pneumatic spinning device and spinning machine

Title (de)

Druckluftspinnvorrichtung und Spinnmaschine

Title (fr)

Fileuse pneumatique et fileuse

Publication

EP 2369042 A3 20150325 (EN)

Application

EP 11156211 A 20110228

Priority

JP 2010070761 A 20100325

Abstract (en)

[origin: EP2369042A2] A pneumatic spinning device includes a hollow guide shaft (20) , and a nozzle block (34). A portion of the hollow guide shaft (20) is located within a whirling chamber. A whirling chamber is formed in the nozzle block (34). Four air injecting nozzles (27) that inject compressed air from a nozzle opening (27a) opening into the whirling chamber to generate whirling airflow in the whirling chamber are formed in the nozzle block (34). The whirling chamber has a columnar portion formed as a substantially columnar shape having a constant diameter (D2). A height (H1) of the whirling chamber is equal to or smaller than the diameter (D2) . A flow path cross-sectional area at a downstream end of the whirling chamber in a fiber feeding direction (a position A2) is formed smaller than a flow path cross-sectional area of the whirling chamber at a position where the nozzle opening (27a) is formed.

IPC 8 full level

D01H 1/115 (2006.01); **D01H 4/02** (2006.01)

CPC (source: EP)

D01H 1/115 (2013.01); **D01H 4/02** (2013.01)

Citation (search report)

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- [A] ZHUANYONG ZOU ET AL: "A Study of the Twisted Strength of the Whirled Airflow in Murata Vortex Spinning", TEXTILE RESEARCH JOURNAL, vol. 78, no. 8, 1 August 2008 (2008-08-01), pages 682 - 687, XP055167008, ISSN: 0040-5175, DOI: 10.1177/0040517508089753

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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

DOCDB simple family (publication)

EP 2369042 A2 20110928; **EP 2369042 A3 20150325**; **EP 2369042 B1 20170809**; CN 102199817 A 20110928; CN 102199817 B 20150603; CN 202064060 U 20111207; JP 2011202314 A 20111013; JP 5515934 B2 20140611

DOCDB simple family (application)

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