

Title (en)
Pneumatic spinning device and spinning machine

Title (de)
Druckluftspinnvorrichtung und Spinnmaschine

Title (fr)
Fileuse pneumatique et fileuse

Publication
EP 2369043 A3 20150325 (EN)

Application
EP 11159000 A 20110321

Priority
JP 2010070746 A 20100325

Abstract (en)
[origin: EP2369043A2] A pneumatic spinning device includes a nozzle block (34), a fiber guide section, and a hollow guide shaft (20). The nozzle block (34) is adapted to form a whirling chamber. At least one air injection nozzle (27) is formed in the nozzle block (34) to inject compressed air from a nozzle opening (27a) opening into the whirling chamber to generate a whirling airflow in the whirling chamber. The fiber guide section includes a fiber guide hole connected to the whirling chamber. The hollow guide shaft (20) is structured such that a fiber passage through which the fiber that has been whirled in the whirling chamber passes is formed in an inner portion thereof. In a cross-section cut through a plane passing through an axial line of the hollow guide shaft (20), a portion of a cross-sectional contour of a whirling chamber forming surface (82) located near the fiber guide section is formed as a circular curved section (82a).

IPC 8 full level
D01H 1/115 (2006.01); **D01H 4/02** (2006.01)

CPC (source: CN EP)
D01H 1/115 (2013.01 - EP); **D01H 4/02** (2013.01 - CN EP)

Citation (search report)

- [X] WO 03014443 A1 20030220 - RIETER AG MASCHF [CH], et al
- [X] EP 1284312 A2 20030219 - RIETER AG MASCHF [CH]
- [X] DE 4202963 A1 19930805 - SCHURR STAHLHECKER & GRILL [DE]
- [A] EP 1826299 A2 20070829 - MURATA MACHINERY LTD [JP]

Cited by
CN102926054A; CN113439134A; EP3643818A1; IT201800009728A1; US11155939B2

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 2369043 A2 20110928; EP 2369043 A3 20150325; EP 2369043 B1 20170802; CN 102199815 A 20110928; CN 102199815 B 20150107; CN 104532418 A 20150422; CN 104532418 B 20171017; CN 202007291 U 20111012; JP 2011202312 A 20111013; JP 5526915 B2 20140618

DOCDB simple family (application)
EP 11159000 A 20110321; CN 201110050710 A 20110301; CN 201120053174 U 20110301; CN 201410781547 A 20110301; JP 2010070746 A 20100325