

Title (en)

Air spinning device, spinning unit, and spinning method using the air spinning device

Title (de)

Luftspinnvorrichtung, Spinneinheit und Spinnverfahren unter Verwendung der Luftspinnvorrichtung

Title (fr)

Fileuse à air, unité de filature et procédé de filature au moyen de la fileuse à air

Publication

**EP 2453045 A3 20151209 (EN)**

Application

**EP 11187855 A 20111104**

Priority

JP 2010252278 A 20101110

Abstract (en)

[origin: EP2453045A2] An air spinning device (6) includes a nozzle block (63) that includes a through hole (63p) that partially defines a spinning chamber (SC), and an air hole (63a) that is communicable with the spinning chamber (SC); a fiber guide (61) in which a fiber introducing passage (61g) that is communicable with the spinning chamber (SC) is defined; and a spindle (62) in which a fiber passageway (62s) that is communicable with the spinning chamber (SC) is defined. The air spinning device (6) spins a spun yarn (Y) from a fiber bundle (F) by supplying air from the air hole (63a) into the spinning chamber (SC). The air hole (63a) is located such that a point of intersection (IS1) between a central axis of the air hole (63a) and a wall surface of the through hole (63p) is in a range of greater than or equal to 3 mm to less than or equal to 10 mm from a contact surface between the nozzle block (63) and the fiber guide (61).

IPC 8 full level

**D01H 4/02** (2006.01); **D01H 1/15** (2006.01)

CPC (source: CN EP)

**D01H 1/15** (2013.01 - EP); **D01H 4/02** (2013.01 - CN); **D01H 4/38** (2013.01 - CN)

Citation (search report)

- [A] EP 1584715 A1 20051012 - RIETER AG MASCHF [CH]
- [A] EP 1335050 A2 20030813 - RIETER AG MASCHF [CH]
- [A] WO 2010034416 A1 20100401 - RIETER AG MASCHF [CH], et al
- [A] DE 102004044345 A1 20060316 - STAHLCKER GMBH WILHELM [DE]
- [A] CH 696848 A5 20071231 - RIETER AG MASCHF [CH]

Cited by

CN106012123A; CN110656407A; EP2813604A1; CN104233530A

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 2453045 A2 20120516; EP 2453045 A3 20151209; EP 2453045 B1 20190102;** CN 102534879 A 20120704; CN 102534879 B 20160706; CN 105696124 A 20160622; CN 105696124 B 20200107; CN 202466010 U 20121003; EP 3098337 A1 20161130; EP 3098337 B1 20180321; JP 2012102432 A 20120531

DOCDB simple family (application)

**EP 11187855 A 20111104;** CN 201110351190 A 20111101; CN 201120437053 U 20111101; CN 201610093420 A 20111101; EP 16170789 A 20111104; JP 2010252278 A 20101110