

Title (en)

YARN JOINING NOZZLE, YARN JOINING DEVICE, YARN WINDING DEVICE, AND YARN JOINING METHOD

Title (de)

GARNVERBINDUNGSDÜSE, GARNVERBINDUNGSVORRICHTUNG, GARNWICKELVORRICHTUNG UND GARNVERBINDUNGSVERFAHREN

Title (fr)

BUSE D'ASSEMBLAGE DE FIL, DISPOSITIF D'ASSEMBLAGE DE FIL, DISPOSITIF D'ENROULEMENT DE FIL ET PROCÉDÉ D'ASSEMBLAGE DE FIL

Publication

**EP 3466856 A1 20190410 (EN)**

Application

**EP 18197301 A 20180927**

Priority

JP 2017193284 A 20171003

Abstract (en)

A yarn joining space (71) extends in a vertical direction, and includes a first space (71a) on an upper side, a second space (71b) on a lower side, and a third space (71c) therebetween. Core fibers of two yarns are repeatedly stretched and shrunken and interlaced by injecting compressed air in the third space (71c) from a third injection port (75a) that is open on an inner wall surface of the third space (71c) in a direction parallel to a left right direction.

IPC 8 full level

**B65H 69/06** (2006.01)

CPC (source: CN EP)

**B65H 69/061** (2013.01 - EP); **D01H 15/00** (2013.01 - CN); **B65H 2701/31** (2013.01 - EP)

Citation (applicant)

JP H07125932 A 19950516 - MURATA MACHINERY LTD

Citation (search report)

- [XAY] US 4505098 A 19850319 - BABA SUSUMU [JP]
- [XY] DE 4019959 A1 19910110 - MURATA MACHINERY LTD [JP]
- [X] JP H11106147 A 19990420 - MURATA MACHINERY LTD
- [A] US 3306020 A 19670228 - NATHAN ROSENSTEIN
- [A] DE 4232027 A1 19930325 - MESDAN SPA [IT]
- [A] US 4452035 A 19840605 - ROHNER JOACHIM [DE], et al

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 3466856 A1 20190410**; CN 109594159 A 20190409; JP 2019064804 A 20190425

DOCDB simple family (application)

**EP 18197301 A 20180927**; CN 201811073268 A 20180914; JP 2017193284 A 20171003