

Title (en)

A DEVICE, A SYSTEM AND METHOD FOR RESURRECTION OF A YARN BREAKAGE IN A RING SPINNING MACHINE

Title (de)

VORRICHTUNG, SYSTEM UND VERFAHREN ZUR WIEDERHERSTELLUNG NACH FADENBRUCH IN EINER RINGSPINNMASCHINE

Title (fr)

DISPOSITIF, SYSTÈME ET PROCÉDÉ DE RÉPARATION D'UNE RUPTURE DE FIL DANS UNE MACHINE À FILER À ANNEAUX

Publication

EP 3708701 A1 20200916 (EN)

Application

EP 19175745 A 20190521

Priority

IN 201941010238 A 20190315

Abstract (en)

A device (31) for automated resurrection of a yarn breakage in a ring spinning machine (1), the device (31) comprising a robot arrangement (51) for carrying out a plurality of work steps for resurrection of a yarn breakage and a transportation arrangement (141) with a drive (142) for moving the device (31) along the ring spinning machine (1). The robot arrangement (51) comprises a yarn capturing unit (101) having a yarn attracting and picking mechanism (104) for attracting and picking the yarn end from the cop (7), a yarn holding mechanism (108) for holding the picked yarn, and a moving and positioning mechanism (102) for moving and positioning the yarn attracting and picking mechanism (104). The device (31) further comprises a yarn threading unit (121) for threading the yarn (8) into the traveller (11), having a yarn holding mechanism (127), a traveller positioning mechanism (124) and a moving and positioning mechanism (122) for moving and positioning the yarn holding mechanism (127) and the traveller positioning mechanism (124).

IPC 8 full level

D01H 15/013 (2006.01)

CPC (source: CN EP)

D01H 13/005 (2013.01 - EP); **D01H 13/14** (2013.01 - CN); **D01H 13/1616** (2013.01 - CN); **D01H 15/00** (2013.01 - CN);
D01H 15/013 (2013.01 - EP)

Citation (applicant)

- US 3905187 A 19750916 - HARMON ALBERT D, et al
- DE 4010113 A1 19911002 - ZINSER TEXTILMASCHINEN GMBH [DE]
- JP H03199436 A 19910830 - TOYOTA CENTRAL RES & DEV
- US 3688486 A 19720905 - BELL CHARLES C, et al
- EP 0421157 A2 19910410 - ZINSER TEXTILMASCHINEN GMBH [DE]
- CN 102560770 A 20120711 - JIANBO WANG

Citation (search report)

- [XY] EP 3222761 A1 20170927 - PREMIER EVOLVICS PVT LTD [IN]
- [XY] CN 108842239 A 20181120 - SINOMACH INTELLIGENCE TECH RESEARCH INSTITUTE
- [XDY] US 3688486 A 19720905 - BELL CHARLES C, et al
- [Y] EP 0391110 A2 19901010 - RIETER AG MASCHF [CH]
- [Y] US 5090190 A 19920225 - SLAVIK WALTER [CH], et al

Cited by

CH719902A1; EP3736361A1; EP4166972A1

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 3708701 A1 20200916; CN 111691029 A 20200922

DOCDB simple family (application)

EP 19175745 A 20190521; CN 201910439481 A 20190524