

Title (en)

AN IMPROVED YARN LIFTING ARRANGEMENT IN AUTOMATIC PIECING UNIT OF RING SPINNING MACHINE

Title (de)

VERBESSERTE GARNHEBEANORDNUNG IN EINER AUTOMATISCHEN ANSPINNEINHEIT EINER RINGSPINNMASCHINE

Title (fr)

DISPOSITIF AMÉLIORÉ DE LEVAGE DE FIL DANS UNE UNITÉ DE RATTACHE AUTOMATIQUE D'UN MÉTIER À FILER À ANNEAUX

Publication

**EP 4249655 A1 20230927 (EN)**

Application

**EP 23160704 A 20230308**

Priority

IN 202241015703 A 20220322

Abstract (en)

An automatic piecing unit for a textile ring spinning machine comprises a bottom circumferential jet arrangement having three nozzles. The bottom circumferential jet arrangement is disposed concentrically around a spindle of the textile ring spinning machine proximate a cop. Each nozzle project air towards cop at an upwards angle. The automatic piecing unit also comprises an additional jet arrangement disposed above the bottom circumferential jet arrangement and having blow nozzles. Two blow nozzles blow air at an acute angle towards an upward direction of the cop and another blow nozzle points towards traveler region of the ring. Each of the bottom circumferential jet arrangement and the additional jet arrangement discharge air to detach a broken yarn end from the cop and lift the broken yarn end upstream towards a drafting zone of the ring spinning machine to enable effective automatic yarn piecing with a drafted fibre material.

IPC 8 full level

**D01H 15/00** (2006.01); **B65H 69/06** (2006.01)

CPC (source: EP)

**B65H 67/081** (2013.01); **D01H 15/00** (2013.01); **B65H 2701/31** (2013.01)

Citation (applicant)

- US 4132057 A 19790102 - WEISS HELMUT, et al
- DE 3012210 A1 19811008 - ZINSER TEXTILMASCHINEN GMBH [DE]

Citation (search report)

- [Y] DE 19501464 C1 19960523 - ZINSER TEXTILMASCHINEN GMBH [DE]
- [Y] EP 3556918 A1 20191023 - LAKSHMI MACHINE WORKS LTD [IN]
- [Y] JP H07278975 A 19951024 - ISHIKAWA SEISAKUSHO KK
- [Y] EP 0417618 A2 19910320 - ZINSER TEXTILMASCHINEN GMBH [DE]

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

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DOCDB simple family (application)

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