

Title (en)

METHOD OF CONTROLLING SPINDLE OF SPINNING MACHINE AND SPINDLE CONTROL DEVICE

Title (de)

VERFAHREN ZUR STEUERUNG DER SPINDEL EINER SPINNMASCHINE UND SPINDELSTEUERUNGSVORRICHTUNG

Title (fr)

PROCÉDÉ DE COMMANDE D'UNE BROCHE D'UN MÉTIER À FILER ET DISPOSITIF DE COMMANDE DE BROCHE

Publication

**EP 3666943 A1 20200617 (EN)**

Application

**EP 19204483 A 20191022**

Priority

JP 2018212608 A 20181113

Abstract (en)

A method of controlling a spindle (1) of a spinning machine in which the spindle (1) is provided for each of a plurality of spindle stations, includes a setting process (S1) setting a target rotation speed and a target number of yarn breakages for each interval, a detection process (S2) detecting a number of yarn breakages for the plurality of spindle stations, a calculation process (S3) calculating a difference between the number of yarn breakages and the target number of yarn breakages, a classification process (S4) classifying a changing trend in the difference for multiple intervals, a change process (S5) changing the target spindle rotation speed applied to the next interval, and a control process (S6) controlling the spindle rotation speed in the next interval based on a changed target spindle rotation speed during the spinning process.

IPC 8 full level

**D01H 13/32** (2006.01)

CPC (source: CN EP)

**D01H 1/26** (2013.01 - CN); **D01H 13/32** (2013.01 - EP)

Citation (applicant)

JP 2002105772 A 20020410 - TOYOTA IND CORP

Citation (search report)

- [A] EP 0634507 A1 19950118 - LUWA AG ZELLWEGER [CH]
- [AD] JP 2002105772 A 20020410 - TOYOTA IND CORP
- [A] EP 0415290 A1 19910306 - RIETER AG MASCHF [CH]
- [A] EP 2565306 A2 20130306 - OERLIKON TEXTILE GMBH & CO KG [DE]
- [A] DE 2454721 A1 19760526 - ZINSER TEXTILMASCHINEN GMBH
- [A] US 4043107 A 19770823 - GUNTHER GERHARD, 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)

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DOCDB simple family (application)

**EP 19204483 A 20191022**; CN 201911099627 A 20191112; JP 2018212608 A 20181113