

Title (en)

Fluff binding device, tension applying unit, and automatic winder

Title (de)

Flusenbindungsanordnung, Spannungsanwendungseinheit und automatische Wickelvorrichtung

Title (fr)

Dispositif de liaison de peluches, unité d'application de tension et enrouleur automatique

Publication

EP 2407406 A3 20130227 (EN)

Application

EP 11170307 A 20110617

Priority

JP 2010159920 A 20100714

Abstract (en)

[origin: EP2407406A2] A fluff binding device (16) includes a fluff binding roller (45), and a yarn guide mechanism. The fluff binding roller (45) is arranged so that an axis line is oblique with respect to a yarn traveling path and so as to be rotatable with the axis line as a center. The yarn guide mechanism brings a spun yarn (20) into contact with one part of an outer peripheral surface of the fluff binding roller (45).

IPC 8 full level

B65H 54/70 (2006.01); **B65H 59/30** (2006.01); **B65H 69/00** (2006.01); **D02J 7/00** (2006.01)

CPC (source: EP)

B65H 54/705 (2013.01); **B65H 59/30** (2013.01); **B65H 69/00** (2013.01); **D01H 13/30** (2013.01); **D02J 7/00** (2013.01); **B65H 2701/31** (2013.01)

Citation (search report)

- [AD] JP H0683774 U 19941129
- [A] EP 0638673 A1 19950215 - MURATA MACHINERY LTD [JP]
- [A] DE 4239310 A1 19930527 - MURATA MACHINERY LTD [JP]
- [AD] JP 2002348042 A 20021204 - MURATA MACHINERY LTD
- [A] EP 0866014 A2 19980923 - MURATA MACHINERY LTD [JP]
- [A] JP H08188332 A 19960723 - MURATA MACHINERY LTD
- [A] JP H05214617 A 19930824 - MURATA MACHINERY LTD
- [A] EP 0628508 A1 19941214 - MURASE TEIICHI [JP], et al
- [A] DE 1919508 A1 19701029 - BIRKMAIER WOLF

Cited by

EP2765103A1; CN114314186A; DE102017130516A1; CN113774536A; WO2019120963A1; US9498916B2

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

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DOCDB simple family (application)

EP 11170307 A 20110617; CN 201110190170 A 20110707; CN 201120238832 U 20110707; JP 2010159920 A 20100714