Title (en)

Device for automatically adjusting the tension of the feeding yarn of four-twist spindles

Title (de)

Vorrichtung zur automatischen Einstellung der Spannung des Zuführgarns von Vierzwirn-Spindeln

Title (fr)

Dispositif pour régler automatiquement la tension d'alimentation de fil de broches à quatre torsions

Publication

EP 2366818 A1 20110921 (EN)

Application

EP 11154974 A 20110218

Priority

IT MI20100274 A 20100222

Abstract (en)

Device for automatically adjusting the inlet tension of the yarn in the inner balloon (B) in four-twist spindles, wherein the feeding yarn (F) is unwound from a feeding reel (11), passes through a rotary unwinder (50) and then enters into an inner axial cavity up to a bell-shaped deflecting element (51), from which the inner balloon (B) of the four-twist spindle (10) begins, where between the deflecting element and rotary unwinder a friction element is interposed which causes rotation speed variations in the bell-shaped deflecting element (51) and in the rotary unwinder caused by the tension variations of the yarn (F).

IPC 8 full level

D01H 7/88 (2006.01); **D01H 13/10** (2006.01)

CPC (source: EP)

D01H 7/88 (2013.01); **D01H 13/106** (2013.01)

Citation (applicant)

- EP 1726693 A2 20061129 - SAVIO MACCHINE TESSILI SPA [IT]
- EP 1007773 A1 20000614 - AGNOLO ARMANDO D [IT]
- US 4759175 A 19880726 - INOUE YOSHIHISA [JP]
- JP S63162877 A 19880706 - TOSHIBA CORP
- EP 2028300 A2 20090225 - SAVIO MACCHINE TESSILI SPA [IT]
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Citation (search report)

- [YD] EP 2028300 A2 20090225 - SAVIO MACCHINE TESSILI SPA [IT]
- [Y] JP S63162877 U 19881024

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 2366818 A1 20110921; **EP 2366818 B1 20121219**; CN 102162158 A 20110824; CN 102162158 B 20141217; IT 1398310 B1 20130222; IT MI20100274 A1 20110823

DOCDB simple family (application)

EP 11154974 A 20110218; CN 201110042613 A 20110222; IT MI20100274 A 20100222