

Title (en)

Fiber bundle concentrating device in spinning machine and method for manufacturing perforated belt

Title (de)

Vorrichtung zum Verdichten von Faserbündeln in einer Spinnmaschine und Verfahren zum Herstellen eines perforierten Riemchens

Title (fr)

Dispositif pour compacter un faisceau de fibres textiles dans une machine de filature, et procédé pour la fabrication d'une courroie

Publication

EP 1783253 A3 20091028 (EN)

Application

EP 06123395 A 20061102

Priority

JP 2005322782 A 20051107

Abstract (en)

[origin: EP1783253A2] A fiber bundle concentrating device includes a fiber bundle delivery portion including a nip roller (19a,20), a suction portion (17) having a guide surface (29b), and a perforated belt (18). The fiber bundle delivery portion is located downstream of a final delivery roller pair (14,15). The guide surface (29b) has a suction hole (29a) at least in a section upstream of a nip point of the delivery portion in a moving direction of the fiber bundles (F). The perforated belt (18) rotates while sliding on the guide surface (29b). The perforated belt (18) is formed as a sheet body that contains intersecting sets of yarns (34). Part of intersecting portions (35) of the yarns (34) are fused such that fused regions (37), where the fused intersecting portions (35) are adjacent to each other, and non-fused regions (38), where the non-fused intersecting portions are adjacent to each other, are alternately arranged at least in a circumferential direction of the perforated belt.

IPC 8 full level

D01H 5/86 (2006.01); **D03D 15/587** (2021.01); **D01H 5/72** (2006.01)

CPC (source: EP KR)

D01H 5/26 (2013.01 - EP); **D01H 5/68** (2013.01 - KR); **D01H 5/72** (2013.01 - EP KR); **D01H 5/86** (2013.01 - EP)

Citation (search report)

- [DA] DE 10324287 A1 20041216 - STAHLLECKER GMBH WILHELM [DE]
- [A] US 2001003324 A1 20010614 - BLANKENHORN PETER [DE]
- [A] DE 10318303 A1 20041028 - STAHLLECKER GMBH WILHELM [DE]
- [A] DE 10325385 A1 20041223 - SCHURR STAHLLECKER & GRILL [DE]

Cited by

EP2881500A1; EP2881501A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 06123395 A 20061102; CN 200610164632 A 20061107; JP 2005322782 A 20051107; KR 20060086765 A 20060908