

Title (en)

Fibre condensing device for a spinning machine

Title (de)

Vorrichtung zum Bündeln eines in einer Spinnereimaschine verzogenen Faserverbandes

Title (fr)

Dispositif condenseur de rubans de fibres dans un métier à filer

Publication

**EP 1612309 A3 20060426 (EN)**

Application

**EP 05010863 A 20050519**

Priority

JP 2004183990 A 20040622

Abstract (en)

[origin: EP1612309A2] A fiber bundle collecting device (11) is provided on a downstream side of a final delivery roller pair (13) of a drafting device (12), and has a nip roller pair (16), a sucking portion (17) with guide surfaces (29b) and (30b) equipped with suction holes (29a) and (30a) in a moving direction of a fiber bundle (F), with a nipping point of the nip roller pair (16) therebetween, and a perforated belt (18) rotated while in slide contact with the guide surfaces (29b) and (30b). The perforated belt (18) is formed of a plain-woven fabric in a loop-like configuration, and a thermal fusion yarn (34) is used as a yarn forming the fabric, with the thermal fusion yarn (34) being fused at crossing portions (35). The thermal fusion yarn (34) has a core portion (34b) and a sheath portion (34a) which are both formed of polyamide.

IPC 8 full level

**D01H 5/86** (2006.01); **D01H 5/70** (2006.01); **D01H 5/72** (2006.01); **D03D 3/02** (2006.01); **D03D 15/00** (2006.01)

CPC (source: EP US)

**D01H 5/72** (2013.01 - EP); **D01H 5/86** (2013.01 - EP); **D03D 3/02** (2013.01 - EP US); **D03D 15/283** (2021.01 - EP US);  
**D03D 15/292** (2021.01 - EP US); **D03D 15/587** (2021.01 - EP US); **D10B 2201/02** (2013.01 - EP); **D10B 2331/02** (2013.01 - EP);  
**D10B 2401/041** (2013.01 - EP); **D10B 2401/061** (2013.01 - EP); **D10B 2401/16** (2013.01 - EP)

Citation (search report)

- [PX] DE 10324287 A1 20041216 - STAHLCKER GMBH WILHELM [DE]
- [X] US 6308878 B1 20011030 - STAHLCKER HANS [DE]
- [PX] DE 10325383 A1 20050105 - J H VOM BAUR SOHN GMBH & CO KG [DE]
- [X] DE 19837183 A1 20000224 - SCHURR STAHLCKER & GRILL [DE]
- [DA] US 6073314 A 20000613 - BARAUKE NORBERT [DE]
- [A] US 3619319 A 19711109 - UTZ KASTULUS
- [A] US 5119938 A 19920609 - BECKH GERHARD [DE], et al
- [X] PATENT ABSTRACTS OF JAPAN vol. 2003, no. 12 5 December 2003 (2003-12-05)

Cited by

WO2019034946A1; WO2018234912A1; WO2013140215A1; US9695526B2; WO2012068692A1; WO2012068693A1; US9127378B2;  
US9228277B2

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DOCDB simple family (publication)

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DOCDB simple family (application)

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