

Title (en)

Method and device for creating a UD layer

Title (de)

Vorrichtung und Verfahren zum Erzeugen einer UD-Lage

Title (fr)

Dispositif et procédé de production d'une couche UD

Publication

**EP 2327648 A3 20120718 (DE)**

Application

**EP 10008359 A 20100811**

Priority

DE 102009056189 A 20091127

Abstract (en)

[origin: EP2327648A2] The device for producing uni-directional layer (7) from a predetermination number of filament strands (10), comprises a dispenser arrangement (8) for issuing the filament strands, a storage system (16) for intermediate storage of the filament strands, a spreader arrangement, and an output. The storage system comprises a storage for each filament strands. The storage is relatively arranged to each other adjacent to movable filament strands. The storage system comprises a fault sensor. A supply work is arranged between the dispenser arrangement and the storage system. The device for producing uni-directional layer (7) from a predetermination number of filament strands (10), comprises a dispenser arrangement (8) for issuing the filament strands, a storage system (16) for intermediate storage of the filament strands, a spreader arrangement, and an output. The storage system comprises a storage for each filament strands. The storage is relatively arranged to each other adjacent to movable filament strands. The storage system comprises a fault sensor. A supply work is arranged between the dispenser arrangement and the storage system. A filament strand-drive arrangement is arranged in running direction behind the spreader arrangement, which comprises a spreading device, which is arranged at different positions, where the adjacent filament strands run through different spreading device. The spreader arrangement is arranged downstream to a calibration device, which forms a breadth reduction device for each filament strands. The calibration device comprises a bandwidth variation device. A dividing device (24) is arranged before the spreader arrangement, which comprises a guide body with a groove for each filament strands. The filament strand-drive device comprises a nip in which the spread filament strands are impinged with a pressure. An independent claim is included for a method for producing uni-directional layer.

IPC 8 full level

**D02J 1/18** (2006.01); **B65H 59/36** (2006.01); **D04H 3/04** (2012.01)

CPC (source: EP US)

**B65H 59/36** (2013.01 - EP US); **D02J 1/18** (2013.01 - EP US); **D04H 3/04** (2013.01 - EP US); **B65H 2701/314** (2013.01 - EP US);  
**B65H 2701/38** (2013.01 - EP US)

Citation (search report)

- [XY] US 2006137156 A1 20060629 - KAWABE KAZUMASA [JP], et al
- [Y] BE 649291 A 19641215
- [Y] DE 10003184 A1 20010809 - MAYER MALIMO TEXTILMASCHF [DE]
- [Y] US 4301579 A 19811124 - VAN DEN HOVEN GERARDUS
- [Y] GB 1209803 A 19701021 - TURBO MACHINE CO [US]
- [X] WO 9844183 A1 19981008 - SNECMA [FR], et al
- [A] US 3277537 A 19661011 - ROEDER RICHARD M, et al
- [A] EP 0837162 A1 19980422 - FUKUI PREFECTURE [JP]
- [A] US 6385828 B1 20020514 - KISS PETER A [US], et al
- [A] US 2002123819 A1 20020905 - BAUDRY YVAN [FR], et al

Cited by

DE102014222667A1; EP3124661A1

Designated contracting state (EPC)

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Designated extension state (EPC)

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US 8578575 B2 20131112

DOCDB simple family (application)

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US 95168610 A 20101122