

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 A2 20110601 (DE)

Application
EP 10008359 A 20100811

Priority
DE 102009056189 A 20091127

Abstract (en)
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.

Abstract (de)
Es wird eine Vorrichtung zum Erzeugen einer UD-Lage (7) aus einer vorbestimmten Anzahl von Filamentsträngen (10) angegeben mit einer Spenderanordnung (8) zur Ausgabe der Filamentstränge (10), einer Speicheranordnung (16) und zum Zwischenspeichern der Filamentstränge (10), eine Aufspreizanordnung (27) und einem Ausgang. Man möchte eine UD-Lage mit guter Verarbeitbarkeit herstellen. Hierzu ist vorgesehen, dass die Speicheranordnung (16) für jeden Filamentstrang (10) einen eigenen Speicher aufweist.

IPC 8 full level
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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 (applicant)

- DE 69819699 T2 20041021 - SNECMA [FR], et al
- DE 102005008705 B3 20060921 - MAYER MALIMO TEXTILMASCHF [DE]
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- DE 19707125 A1 19980610 - EPO FASER TECHNIK GMBH [DE]

Cited by
DE102014222667A1; EP3124661A1

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