

Title (en)

Method for the production of a stranded fibre composite from glass fibres and fibre composite from glass fibres

Title (de)

Vorrichtung zum Herstellen eines strangartigen Faserverbundes aus Glasfasern und Glasfaserfaserverbund

Title (fr)

Procédé pour la production d'un composite à base de fibres de verre et composite de fibres à base de fibres de verre

Publication

EP 1043429 A1 20001011 (DE)

Application

EP 00106778 A 20000330

Priority

DE 19915955 A 19990409

Abstract (en)

The appts. to produce strands of bundled glass fibers, and at least one additional material, has a feed (15) with a second f path (22), separate from the first feed path, through the peripheral wall of the spinning funnel (10). The two feed paths pass through the feed opening (11), separated from each other by a dividing wall. The second feed path h channel (22) which passes through the feed opening (11) or is connected to it, and it has its own air supply (20) with a variabl air stream. The feed (15) has an opening unit (18,19) which is exposed to the air stream at the second feed path (22). The first feed path is closer to the outer wall (12) of the spinning funnel (10) than the second feed path (22). An Independent claim is included for the prodn. of bundled strands of glass fibers, where the additional material is fed into the spinning funnel separa from the glass. Preferred Features: The additional material passes into the spinning funnel through the same feed opening as the first feed path, but separated from it. The additional material, and especially plastics fibers, is in a homogenous mix through cross section of the hybrid fibers. The glass and the plastics fibers are aligned along the line of the hybrid fibers. The ratio the glass fibers to the additional fibers is 10:90 to 99:1 and pref. 10:90 to 90:10. The glass fibers are of C-glass and/or E-gi with a dia. of 2-25 μ m and pref. 7-17 μ m. The glass and the plastics fibers are in staple fiber form. The additional fibers a length of \geq 10 mm and pref. 40-80 mm. The hybrid fiber material has a titer of 20-5000 tex and pref. up to 2000 tex.

Abstract (de)

Es wird eine Vorrichtung und ein Verfahren zum Herstellen eines strangartigen Faserverbundes (14) aus Glasfasern (4) und mindestens einem Zusatzmaterial (16) angegeben mit einer rotierenden Ziehfläche (6), einer Abhebeeinrichtung (9), einem Spinntrichter (10), der in seiner Umfangswand eine längliche Zuführöffnung (11) mit einem ersten Speisepfad für Glasfasern und an einer Stirnseite eine Abzugsöffnung aufweist, mit einer Abzugseinrichtung (26) und mit einer Speiseeinrichtung (15) für das Zusatzmaterial. Hierbei möchte man den Faserverbund homogen mischen können. Hierzu weist die Speiseeinrichtung (15) einen zweiten Speisepfad (22) auf, der getrennt vom ersten Speisepfad durch die Umfangswand des Spinntrichters (10) verläuft. <IMAGE>

IPC 1-7

D01G 13/00; **D02G 3/04**; **D02G 3/18**

IPC 8 full level

C03B 37/12 (2006.01); **D01G 13/00** (2006.01); **D02G 3/04** (2006.01); **D02G 3/18** (2006.01)

CPC (source: EP US)

D01G 13/00 (2013.01 - EP US); **D02G 3/18** (2013.01 - EP US); **Y10T 428/2913** (2015.01 - EP US); **Y10T 428/2927** (2015.01 - EP US); **Y10T 428/2929** (2015.01 - EP US); **Y10T 428/2967** (2015.01 - EP US); **Y10T 428/298** (2015.01 - EP US)

Citation (search report)

- [DXA] DE 3634904 A1 19880428 - SCHULLER GMBH GLASWERK [DE]
- [X] EP 0636717 A1 19950201 - VALEO [FR]
- [X] DE 3151968 A1 19820812 - VALEO [FR]
- [X] EP 0292409 A1 19881123 - SCHAPPE SA [FR]

Cited by

DE102007028373A1; CN110725028A; DE102007028373B4

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 1043429 A1 20001011; **EP 1043429 B1 20040218**; AT E259897 T1 20040315; CA 2303745 A1 20001009; CA 2303745 C 20080617; CZ 20001282 A3 20010411; CZ 300597 B6 20090624; DE 19915955 A1 20001019; DE 19915955 C2 20010913; DE 50005291 D1 20040325; DK 1043429 T3 20040517; ES 2215511 T3 20041016; PL 193380 B1 20070228; PL 339108 A1 20001023; US 2001009719 A1 20010726; US 2001010862 A1 20010802; US 6254816 B1 20010703; US 6438935 B2 20020827; US 6440558 B2 20020827

DOCDB simple family (application)

EP 00106778 A 20000330; AT 00106778 T 20000330; CA 2303745 A 20000406; CZ 20001282 A 20000407; DE 19915955 A 19990409; DE 50005291 T 20000330; DK 00106778 T 20000330; ES 00106778 T 20000330; PL 33910800 A 20000320; US 54421700 A 20000407; US 81486301 A 20010323; US 81487001 A 20010323