

Title (en)
Multilayered fabric.

Title (de)
Schichtstoff.

Title (fr)
Etoffe multicouche.

Publication
EP 0176847 A2 19860409 (DE)

Application
EP 85111672 A 19850916

Priority
DE 3435643 A 19840928

Abstract (en)
A multilayered fabric which when used as support material for built-up roofing and sealing membranes shows not only good fire properties but also improved mechanical properties is obtained by needling together two preconsolidated fibre webs, one of which consists of synthetic fibres and the other of mineral fibres. The needling produces a strong positive bond between the two webs, which prevents the parting of the two layers under extreme thermomechanical conditions.

Abstract (de)
Ein Schichtstoff, der bei seiner Verwendung als Trägerbahn für Dach- und Dichtungsbahnen bei guten Brandeigenschaften ein verbessertes mechanisches Verhalten zeigt und der aus einer Vliessschicht aus synthetischen und einer Vliessschicht aus mineralischen Fasern besteht, wird erhalten durch die Vernadelung zweier vorverfestigter Faservliese, die einmal aus Synthefasern, zum anderen aus mineralischen Fasern bestehen. Die Vernadelung ergibt eine feste formschlüssige Verbindung beider Vliese, wodurch die Neigung zur Delaminierung beider Schichten unter extremen thermomechanischen Bedingungen vermieden wird.

IPC 1-7
D04H 1/46; **D04H 5/02**

IPC 8 full level
B32B 5/06 (2006.01); **B32B 5/26** (2006.01); **D04H 1/4218** (2012.01); **D04H 1/435** (2012.01); **D04H 1/46** (2006.01); **D04H 1/498** (2012.01); **D04H 5/02** (2012.01); **E04D 5/10** (2006.01)

CPC (source: EP US)
D04H 1/4218 (2013.01 - EP US); **D04H 1/435** (2013.01 - EP US); **D04H 1/498** (2013.01 - EP US); **D04H 3/004** (2013.01 - EP US); **D04H 5/02** (2013.01 - EP US); **Y10T 442/2213** (2015.04 - EP US); **Y10T 442/2254** (2015.04 - EP US); **Y10T 442/667** (2015.04 - EP US); **Y10T 442/685** (2015.04 - EP US)

Cited by
DE19618775A1; US5612114A; EP0572891A1; EP0446822A1; DE4114952A1; US5856243A; EP0315553A1; FR2622604A1; US5047276A; DE19955730A1; DE19955730C2; DE4339709A1; DE19620361A1; DE19620361C2; DE19620361C5; EP0667427A1; FR2715957A1; US5616395A; EP0403403A1; FR2648482A1; US5175042A; EP0242524A3; EP0465382A1; FR2663960A1; EP0432620A1; EP0359165A3; DE19935531A1; DE19935531C2; EP0413295A1; EP0409993A4; DE102006060241A1; DE10151411A1; DE10151411B4; DE19952432A1; DE19952432B4; DE102007060494A1; US6235657B1; WO9015181A1; DE102009005587A1; DE202006021073U1; US10260197B2; US11248338B2; US11408123B2; EP1939342A2; EP0285705B1; WO2021028369A1; US6412154B1; US7351673B1; US6630046B1; US7199065B1; EP2154281A2; DE202008010258U1; EP2360304A1; DE102010007939A1; EP0242524A2; EP3530804A1; US10836876B2

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0176847 A2 19860409; **EP 0176847 A3 19890426**; **EP 0176847 B1 19920701**; AT E77855 T1 19920715; AU 4797585 A 19860410; CA 1297281 C 19920317; DE 3435643 A1 19860410; DE 3586276 D1 19920806; DE 3605830 A1 19870827; FI 853681 A0 19850925; FI 853681 L 19860329; FI 94937 B 19950815; FI 94937 C 19951127; JP H0579020 B2 19931101; JP S6184238 A 19860428; NO 173665 B 19931004; NO 173665 C 19940112; NO 853811 L 19860401; US 5017426 A 19910521; ZA 857469 B 19860625

DOCDB simple family (application)
EP 85111672 A 19850916; AT 85111672 T 19850916; AU 4797585 A 19850927; CA 491815 A 19850927; DE 3435643 A 19840928; DE 3586276 T 19850916; DE 3605830 A 19860222; FI 853681 A 19850925; JP 21273585 A 19850927; NO 853811 A 19850927; US 48188590 A 19900220; ZA 857469 A 19850927