

Title (en)

METHOD FOR EMBOSSED AND COLOURLESS DECORATION AND BONDING OF A FABRIC WEB AND DEVICE THEREFOR

Title (de)

VERFAHREN ZUR FARBLOSEN, PLASTISCHEN MUSTERUNG UND VERFESTIGUNG EINER WARENBAHN UND VORRICHTUNG ZUR DURCHFÜHRUNG DES VERFAHRENS

Title (fr)

PROCEDE POUR DECORER EN RELIEF ET DE MANIERE INCOLORE ET POUR SOLIDIFIER UNE BANDE DE TISSU ET DISPOSITIF POUR METTRE EN OEUVRE CE PROCEDE

Publication

EP 1454002 A2 20040908 (DE)

Application

EP 02772389 A 20021021

Priority

- DE 10152075 A 20011025
- EP 0211747 W 20021021

Abstract (en)

[origin: WO03035955A2] The invention concerns a method for producing three-dimensional colourless designs in a non-woven fabric or like material entirely bonded. Said method consists in subjecting the fibers to a blowing process through openings which form the design, then in optionally bonding them in the openings, since the fibers in the openings are only displaced therein with limited depth, and are subsequently needle bonded against a supplementary support.

IPC 1-7

D06C 23/00

IPC 8 full level

D04H 1/492 (2012.01); **D04H 1/495** (2012.01); **D04H 1/72** (2012.01); **D04H 18/04** (2012.01); **D06C 23/00** (2006.01)

CPC (source: EP KR US)

D04H 1/492 (2013.01 - EP US); **D04H 1/495** (2013.01 - EP KR US); **D04H 1/72** (2013.01 - EP US); **D04H 18/04** (2013.01 - EP KR US); **D06C 23/00** (2013.01 - EP US)

Citation (search report)

See references of WO 03035955A2

Cited by

CN110468545A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03035955 A2 20030501; **WO 03035955 A3 20031224**; AT E366838 T1 20070815; CA 2464621 A1 20030501; CN 1283870 C 20061108; CN 1575361 A 20050202; DE 10152075 A1 20030508; DE 50210471 D1 20070823; EA 006139 B1 20051027; EA 200400581 A1 20040826; EP 1454002 A2 20040908; EP 1454002 B1 20070711; IL 161508 A0 20040927; JP 2005506470 A 20050303; JP 4388811 B2 20091224; KR 100712365 B1 20070502; KR 20040058231 A 20040703; PT 1454002 E 20071220; US 2005155200 A1 20050721; US 7308743 B2 20071218

DOCDB simple family (application)

EP 0211747 W 20021021; AT 02772389 T 20021021; CA 2464621 A 20021021; CN 02821116 A 20021021; DE 10152075 A 20011025; DE 50210471 T 20021021; EA 200400581 A 20021021; EP 02772389 A 20021021; IL 16150802 A 20021021; JP 2003538447 A 20021021; KR 20047006039 A 20021021; PT 02772389 T 20021021; US 49353205 A 20050228