

Title (en)
USE OF A PUNCTURE RESISTANT TEXTILE STRUCTURE FOR SHOE SOLES

Title (de)
VERWENDUNG EINER DURCHLÖCHERUNGSSICHEREN TEXTILSTRUKTUR FÜR SCHUHSOHLNEN

Title (fr)
UTILISATION D'UNE STRUCTURE TEXTILE RESISTANTE A LA PERFORATION POUR DES SEMELLES DE CHAUSSURES

Publication
EP 1613185 B1 20080702 (EN)

Application
EP 04727364 A 20040414

Priority
• IT 2004000208 W 20040414
• IT PO20030005 A 20030414

Abstract (en)
[origin: WO2004089143A2] A textile structure (10, 10) resistant to perforation, specifically for shoe soles, comprises one or more layers (12, 12) of woven fabric of aramid fibers and one or more layers (14, 14) of woven fabric of high tenacity non-aramid fibers; the layers are bonded together by means of thermoplastic film and each separate layer of fabric is treated, preferably in the right side, by coating with a polyester and/or acrylic resin enriched with powders of hard and abrasive materials, such as ceramic materials preferably micronized and in form of aluminum silicates.

IPC 8 full level
A43B 7/32 (2006.01); **A41D 31/00** (2006.01); **A43B 7/34** (2006.01); **A43B 7/36** (2006.01); **A43B 13/12** (2006.01); **F41H 5/04** (2006.01)

CPC (source: EP US)
A43B 7/32 (2013.01 - EP US); **A43B 13/026** (2013.01 - EP US); **A43B 13/12** (2013.01 - EP US); **F41H 5/0485** (2013.01 - EP US); **Y10T 442/30** (2015.04 - EP US)

Cited by
EP3348686A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2004089143 A2 20041021; **WO 2004089143 A3 20041118**; AT E399483 T1 20080715; CA 2521626 A1 20041021; CN 1787755 A 20060614; DE 602004014749 D1 20080814; EP 1613185 A2 20060111; EP 1613185 B1 20080702; IT PO20030005 A1 20041015; US 2006211318 A1 20060921

DOCDB simple family (application)
IT 2004000208 W 20040414; AT 04727364 T 20040414; CA 2521626 A 20040414; CN 200480009957 A 20040414; DE 602004014749 T 20040414; EP 04727364 A 20040414; IT PO20030005 A 20030414; US 55253405 A 20051011