

Title (en)

METHOD OF MANUFACTURING A COMPOSITE, ESPECIALLY A BULLETPROOF COMPOSITE, AND COMPOSITE OBTAINED

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES VERBUNDSTOFFES, INSBESONDERE EINES KUGELSICHEREN VERBUNDSTOFFES, UND DAMIT ERHALTER VERBUNDSTOFF

Title (fr)

PROCÉDÉ DE FABRICATION D'UN MATÉRIAU COMPOSITE, NOTAMMENT POUR LA PROTECTION BALISTIQUE, ET MATÉRIAU COMPOSITE OBTENU

Publication

**EP 2153159 A1 20100217 (FR)**

Application

**EP 08805945 A 20080605**

Priority

- FR 2008051009 W 20080605
- FR 0755511 A 20070606

Abstract (en)

[origin: US2010215953A1] The subject of the present invention is a method of manufacturing a composite (8) comprising a textile reinforcement (7) and a polymer matrix, especially a bulletproof composite. Said method characteristically comprises: a step of forming the textile reinforcement (7) by 2.5D weaving of first yarns with second yarns in a defined weave (A1/1), said second yarns being of a thermosetting polymer and said first yarns being high-performance yarns, so as to obtain an interlock fabric (7); and then a heat treatment during which said interlock fabric (7) is subjected to specified temperature and pressure conditions so as to melt said second yarns in order to form the polymer matrix, without impairing the first yarns.

IPC 8 full level

**F41H 5/04** (2006.01)

CPC (source: EP US)

**F41H 5/0485** (2013.01 - EP US); **Y10T 428/249921** (2015.04 - EP US); **Y10T 428/27** (2015.01 - EP US)

Cited by

CN107912840A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**FR 2917099 A1 20081212**; **FR 2917099 B1 20100319**; AT E491131 T1 20101215; CA 2710861 A1 20081218; DE 602008003924 D1 20110120; EP 2153159 A1 20100217; EP 2153159 B1 20101208; EP 2153159 B9 20110406; US 2010215953 A1 20100826; WO 2008152337 A1 20081218

DOCDB simple family (application)

**FR 0755511 A 20070606**; AT 08805945 T 20080605; CA 2710861 A 20080605; DE 602008003924 T 20080605; EP 08805945 A 20080605; FR 2008051009 W 20080605; US 66307310 A 20100315