

Title (en)
LAMINATED COMPOSITE FOR BALLISTIC PROTECTION

Title (de)
LAMINIERTE BALLISTISCHE VERBUNDPANZERUNG

Title (fr)
COMPOSITE STRATIFIÉ DE PROTECTION BALISTIQUE

Publication
EP 2732234 B1 20180411 (EN)

Application
EP 12750487 A 20120710

Priority
• FR 1156296 A 20110711
• US 201161506362 P 20110711
• IB 2012053523 W 20120710

Abstract (en)
[origin: WO2013008178A1] The present invention relates, generally, to the field of ballistic protection using panels for ballistic protection. More particularly, the present invention relates to a laminated hybrid composite (1a,1b) for ballistic protection, characterized in that it comprises a solid central thermoplastic polymer layer (2) which comprises, at least on one of the faces, a laminated thermoset material layer (3). The invention also relates to a process for manufacturing a composite according to the invention comprising the assembling, using an adhesive, of a solid thermoplastic polymer layer either sandwiched between two laminated thermoset material layers, or comprising, at least on one of the faces, a laminated thermoset material layer. The invention additionally relates to a bulletproof or antishrapnel protective device comprising a composite according to the invention. The invention also relates to the use of the composite according to the invention as bulletproof or antishrapnel protection.

IPC 8 full level
F41H 5/04 (2006.01)

CPC (source: EP)
F41H 5/0478 (2013.01); **F41H 5/0485** (2013.01)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2013008178 A1 20130117; EP 2732234 A1 20140521; EP 2732234 B1 20180411; FR 2977933 A1 20130118; FR 2977933 B1 20150116

DOCDB simple family (application)
IB 2012053523 W 20120710; EP 12750487 A 20120710; FR 1156296 A 20110711