

Title (en)
HIGH STRENGTH AND HIGH ELASTICITY COMPOSITE MATERIALS AND METHODS OF REINFORCING SUBSTRATES WITH THE SAME

Title (de)
VERBUNDMATERIALIEN VON HOHER FESTIGKEIT UND HOHER ELASTIZITÄT SOWIE VERFAHREN ZUR VERSTÄRKUNG VON SUBSTRATEN DAMIT

Title (fr)
MATÉRIAUX COMPOSITES TRÈS RÉSISTANTS ET TRÈS ÉLASTIQUES ET PROCÉDÉS UTILISANT CES MATÉRIAUX COMPOSITES POUR RENFORCER DES SUBSTRATS

Publication
EP 2648905 A4 20160217 (EN)

Application
EP 11846723 A 20111206

Priority
• US 42015910 P 20101206
• US 2011063581 W 20111206

Abstract (en)
[origin: WO2012078664A1] In accordance with various embodiments of the disclosed subject matter, a composite material is provided. The composite material in accordance with some embodiments of the disclosed subject matter includes a high tenacity fiber reinforced polymer fabric and a polyurea coating layer formed on at least one surface of the polymer fabric. The composite material provides significant strength, flexibility, and energy dissipation. In some embodiments, the composite material can be used to reinforce structural and non-structural substrates.

IPC 8 full level
E04G 23/02 (2006.01); **B32B 5/02** (2006.01); **D06N 3/14** (2006.01); **E04C 5/07** (2006.01)

CPC (source: EP KR US)
B05D 7/00 (2013.01 - KR); **B32B 5/02** (2013.01 - EP US); **B32B 21/10** (2013.01 - KR); **B32B 27/12** (2013.01 - KR); **E04B 1/98** (2013.01 - US); **E04C 5/07** (2013.01 - EP US); **E04G 23/0218** (2013.01 - EP US); **B32B 2037/243** (2013.01 - EP US); **B32B 2038/0076** (2013.01 - EP US); **B32B 2255/02** (2013.01 - EP US); **B32B 2255/26** (2013.01 - EP US); **B32B 2260/021** (2013.01 - EP US); **B32B 2260/046** (2013.01 - EP US); **B32B 2262/106** (2013.01 - EP US); **E04G 2023/0248** (2013.01 - EP US); **E04G 2023/0251** (2013.01 - EP US); **Y10T 428/249921** (2015.04 - EP US)

Citation (search report)
• [X] JP 2003247211 A 20030905 - SHINTOUYOU GOSEI KK, et al
• [X] WO 2006087751 A1 20060824 - TEC INN S R L [IT], et al
• [X] US 2004123541 A1 20040701 - JEWETT SCOTT E [US]
• [XY] US 5607527 A 19970304 - ISLEY JR FREDERICK P [US]
• [Y] US 2007066786 A1 20070322 - HANSON WALLACE L JR [US], et al
• See references of WO 2012078664A1

Cited by
CN111946091A

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 2012078664 A1 20120614; CA 2820465 A1 20120614; EP 2648905 A1 20131016; EP 2648905 A4 20160217; JP 2013544688 A 20131219; JP 2017149149 A 20170831; KR 20130137196 A 20131216; US 2014099496 A1 20140410

DOCDB simple family (application)
US 2011063581 W 20111206; CA 2820465 A 20111206; EP 11846723 A 20111206; JP 2013543285 A 20111206; JP 2017044207 A 20170308; KR 20137017562 A 20111206; US 201113992004 A 20111206