

Title (en)  
COMPOSITION AND METHOD FOR COMPOSITE MATERIAL IMPREGNATED WITH SEMI-CRYSTALLINE POLYAMIDE, OBTAINED FROM A PREPOLYMER AND A CHAIN EXTENDER

Title (de)  
ZUSAMMENSETZUNG UND VERFAHREN FÜR EINEN MIT EINEM SEMIKRISTALLINEN POLYAMID IMPRÄGNIERTEN VERBUNDSTOFF AUS EINEM PRÄPOLYMER SOWIE KETTENERWEITERER

Title (fr)  
COMPOSITION ET PROCÉDÉ POUR MATÉRIAU COMPOSITE AVEC IMPRÉGNATION PAR POLYAMIDE SEMI-CRISTALLIN, ISSU D'UN PREPOLYMER ET D'UN ALLONGEUR DE CHAÎNE

Publication  
**EP 3131948 A1 20170222 (FR)**

Application  
**EP 15725735 A 20150415**

Priority  
• FR 1453349 A 20140415  
• FR 2015051017 W 20150415

Abstract (en)  
[origin: WO2015159020A1] The invention relates to a moulding composition, in particular for a thermoplastic composite material, including at least one semi-crystalline polyamide obtained from the addition polymerisation of: a) at least one polyamide prepolymer having n identical X functions selected among carboxy, amine and hydroxyl; and b) at least one non-polymer reactive extender having two identical Y functions which are reactive with said X functions, wherein n ranges from 1 to 3, said polyamide and prepolymer a) including 55-95 mol % of amide A units and 5-45 mol % of amide B units, wherein A corresponds to x.T in which x is a C9-C18 linear aliphatic diamine, and B corresponds to x'.T in which x' can be B1): a specific branched aliphatic diamine dependent on x, B2): MXD, or B3): a linear aliphatic diamine dependent on x, said polyamide having a glass transition temperature of at least 90 °C and a melting temperature no higher than 280 °C. The invention also relates to a method for manufacturing said composite material, to the use of the composition of the invention for composite material parts, and to said parts.

IPC 8 full level  
**B29C 70/06** (2006.01); **C08G 69/26** (2006.01); **C08J 5/04** (2006.01); **C08L 77/06** (2006.01); **C08L 77/12** (2006.01)

CPC (source: CN EP KR US)  
**B29C 70/48** (2013.01 - US); **B29C 70/52** (2013.01 - US); **C08G 69/265** (2013.01 - CN EP KR US); **C08G 69/28** (2013.01 - US); **C08G 69/44** (2013.01 - CN); **C08G 69/48** (2013.01 - US); **C08J 5/04** (2013.01 - CN EP KR US); **C08L 77/06** (2013.01 - CN EP KR US); **C08L 77/12** (2013.01 - CN EP KR US); **B29K 2077/00** (2013.01 - US); **B29K 2105/06** (2013.01 - US); **C08G 2120/00** (2013.01 - US); **C08J 2377/06** (2013.01 - CN EP KR US); **C08J 2377/12** (2013.01 - CN EP KR US)

Citation (search report)  
See references of WO 2015159020A1

Citation (examination)  
WO 2014064375 A1 20140501 - ARKEMA FRANCE [FR]

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**FR 3019827 A1 20151016**; **FR 3019827 B1 20201009**; CN 106232676 A 20161214; EP 3131948 A1 20170222; JP 2017511419 A 20170420; KR 20160147822 A 20161223; US 2017037199 A1 20170209; WO 2015159020 A1 20151022

DOCDB simple family (application)  
**FR 1453349 A 20140415**; CN 201580020088 A 20150415; EP 15725735 A 20150415; FR 2015051017 W 20150415; JP 2016562821 A 20150415; KR 20167031719 A 20150415; US 201515304676 A 20150415