

Title (en)
TWO-STEP METHOD FOR DIPPING SYNTHETIC FIBER

Title (de)
ZWEISCHRITTVERFAHREN ZUM TAUCHEN VON KUNSTFASER

Title (fr)
PROCEDE DE TREMPAGE DE FIBRES SYNTHETIQUES A DEUX ETAPES

Publication
EP 1664161 A1 20060607 (EN)

Application
EP 04764828 A 20040904

Priority
• EP 2004009877 W 20040904
• EP 03020731 A 20030912
• EP 04764828 A 20040904

Abstract (en)
[origin: WO2005026239A1] The invention relates to a two-step method for dipping a synthetic fiber wherein the fiber is first dipped with an aqueous pre-dip composition followed by a dip with resorcinol-formaldehyde latex (RFL) composition, characterized in that the pre-dip composition comprises a blocked isocyanate having at least tri-functional isocyanate groups and a latex wherein the ratio by weight of blocked isocyanate and latex is between 9 and 0.7, preferably between 4 and 1. The invention further pertains to a pre-dip composition for dipping a synthetic fiber, comprising a blocked at least tri-functional isocyanate compound and a latex, further comprising water, an emulsifier, and 2-vinyl pyridine copolymer and to a fiber, cord, and composite article of rubber and fiber or cord, wherein the fiber or cord has distributed over at least a surface portion thereof (1) blocked tri-functional isocyanate compound, preferably HDI-trimer; (2) an RFL adhesive; and (3) an in situ vulcanized rubber compound.

IPC 1-7
C08J 5/06; D06M 13/395; D06M 13/02; C08L 21/00

IPC 8 full level
C08J 5/06 (2006.01); **D06M 13/02** (2006.01); **D06M 13/395** (2006.01); **D06M 15/356** (2006.01); **D06M 15/41** (2006.01); **C08L 53/02** (2006.01)

CPC (source: EP US)
C08J 5/06 (2013.01 - EP US); **D06M 13/02** (2013.01 - EP US); **D06M 13/395** (2013.01 - EP US); **D06M 15/356** (2013.01 - EP US); **D06M 15/41** (2013.01 - EP US); **C08J 2321/00** (2013.01 - EP US); **C08L 53/02** (2013.01 - EP US); **Y10T 428/2913** (2015.01 - EP US); **Y10T 428/2929** (2015.01 - EP US); **Y10T 428/2933** (2015.01 - EP US)

Citation (search report)
See references of WO 2005026239A1

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 2005026239 A1 20050324; CN 100523057 C 20090805; CN 1849362 A 20061018; EP 1664161 A1 20060607; JP 2007505228 A 20070308; RU 2006112004 A 20060827; RU 2346015 C2 20090210; US 2006280942 A1 20061214

DOCDB simple family (application)
EP 2004009877 W 20040904; CN 200480026126 A 20040904; EP 04764828 A 20040904; JP 2006525726 A 20040904; RU 2006112004 A 20040904; US 57167106 A 20060313