

Title (en)
METHOD OF MANUFACTURING A NANOCELLULOSE COMPOSITE

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES NANOCELLULOSE-VERBUNDSTOFFS

Title (fr)
PROCÉDÉ DE FABRICATION DE COMPOSITE DE NANOCELLULOSE

Publication
EP 2928957 A1 20151014 (EN)

Application
EP 13859915 A 20131204

Priority

- FI 20126269 A 20121204
- US 201261732958 P 20121204
- FI 2013051139 W 20131204

Abstract (en)
[origin: WO2014087053A1] Nanocellulose composites and a method of manufacturing nanocellulose composites which comprise nanocellulose material mixed with a polymer. The method comprises the steps of milling in a pearl mill a nanocellulose feedstock in liquid phase to produce a dispersion containing nanocellulose. The liquid phase of the dispersion is formed by a monomer of components of a thermoset resin. By adding a hardener the dispersion is hardened to achieve cross-linking of the polymer to the reinforcing nanocellulose. The composite can be used for high-performance composite applications.

IPC 8 full level
C08L 1/02 (2006.01); **C08B 15/10** (2006.01); **C08J 3/24** (2006.01); **C08J 5/24** (2006.01); **C08K 7/02** (2006.01); **D21B 1/16** (2006.01); **D21H 11/18** (2006.01)

CPC (source: EP FI US)
C08B 15/10 (2013.01 - EP); **C08J 3/24** (2013.01 - FI); **C08J 5/245** (2021.05 - EP FI US); **C08K 7/02** (2013.01 - EP FI); **C08L 1/02** (2013.01 - EP FI); **C08L 63/00** (2013.01 - FI); **C08L 67/02** (2013.01 - FI); **D21B 1/16** (2013.01 - EP FI); **C08K 2201/011** (2013.01 - EP); **D21H 11/18** (2013.01 - EP)

Cited by
WO2018146338A1

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)
WO 2014087053 A1 20140612; EP 2928957 A1 20151014; EP 2928957 A4 20160706; FI 125900 B 20160331; FI 20126269 A 20140605

DOCDB simple family (application)
FI 2013051139 W 20131204; EP 13859915 A 20131204; FI 20126269 A 20121204