

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 A4 20160706 (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)

Citation (search report)

- [X] WO 2011125801 A1 20111013 - MITSUBISHI CHEM CORP [JP], et al
- [X] CA 2812868 A1 20120405 - DAINIPPON INK & CHEMICALS [JP]
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- [A] WO 2012152997 A1 20121115 - UPM KYMMENE CORP [FI], et al
- [XP] WO 2013147062 A1 20131003 - DAINIPPON INK & CHEMICALS [JP]
- See references of WO 2014087053A1

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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

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