

Title (en)

METHOD FOR IMPROVING SIZING EFFICIENCY OF ASA EMULSION EMULSIFIED BY A POLYMER EMULSIFIER

Title (de)

VERFAHREN ZUR ERHÖHUNG DER EFFIZIENZ DER SCHLICHTUNG EINER DURCH EINEN POLYMER-EMULGATOREN EMULGIERTEN ASA-EMULSION

Title (fr)

PROCÉDÉ POUR AMÉLIORER L'EFFICACITÉ DE COLLAGE D'UNE ÉMULSION ASA ÉMULSIFIÉE PAR UN ÉMULSIFIANT POLYMÈRE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2015100125A1] The present invention relates to a method for improving sizing efficiency of an ASA sizing agent in a paper-making process. In particular, the invention comprises: sizing a pulp slurry by using the polymer emulsifier emulsified ASA emulsion as sizing agent, and adding, as a paper-making filler, paper-making filler particles modified by a hydroxyl-containing hydrocarbon natural polymer polysaccharide compound to the pulp slurry.

IPC 8 full level

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Citation (search report)

- [XY] EP 1918456 A1 20080507 - M REAL OYJ [FI]
- [XY] US 5411639 A 19950502 - KURRLE FREDERICK L [US]
- [XY] US 6494991 B1 20021217 - PALMER RICHARD F [US], et al
- [X] US 5458679 A 19951017 - FAIRCHILD GEORGE H [US]
- [X] US 3873336 A 19750325 - LAMBERT BRIAN PAUL, et al
- [Y] US 2008277084 A1 20081113 - DENOWSKI DANIEL H [US], et al
- [X] US 2012103547 A1 20120503 - GRIMM MARK [US], et al
- [A] "HANDBOOK OF PAPER AND BOARD", 20 January 2006, ISBN: 978-3-527-30997-9, article WERNER J. AUHORN: "Chapter 3: Chemical Additives", pages: 62 - 149, XP055382763, DOI: 10.1002/3527608257.ch3
- See references of WO 2015100125A1

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