Title (en)

CELL WALL LOADING OF NEVER-DRIED PULP FIBERS.

Title (de)

ZELLWANDAUFFÜLLUNG VON NIE GETROCKNETEN ZELLSTOFFASERN.

Title (fr)

CHARGEMENT DE PAROIS CELLULAIRES DE FIBRES DE PATE TOUJOURS HUMIDES.

Publication

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Application

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Priority

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Abstract (en)

[origin: WO9101409A1] There is disclosed a filled paper composition comprising intact cellulose fibers and fillers wherein the cellulose fibers are originally never-dried, and wherein the filler material is in an insoluble precipitate formed in situ within the cell wall of the never-dried cellulose pulp fibers. The filled paper composition is characterized by having increased strength characteristics relative to a corresponding conventionally loaded paper composition containing the same amount of the same filler material. There is also disclosed a process for the production of filled paper using never-dried pulp fibers and filler comprising an insoluble precipitate that is precipitated in situ within the cell wall of the fibers. The process first immerses the never-dried pulp fibers in a first solution containing a soluble salt or salts, filters the pulp fibers from the first solution, and reimmerses the never-dried pulp fibers containing the first solution in the pores into a second solution, wherein the second solution comprises soluble salt or salts different from those of the first solution and able to form an insoluble precipitate with the salt or salts of the first solution. The filled, never-dried pulp fibers are filtered and washed and either used to form filled paper products or dried to filled pulp fibers for later use in papermaking.

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D21C 9/00; D21H 11/16

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