

Title (en)
A CONTINUOUS PROCESS FOR PRODUCTION OF CELLULOSE PULP

Title (de)
KONTINUIERLICHES VERFAHREN ZUR HERSTELLUNG VON ZELLSTOFF

Title (fr)
PROCESSUS CONTINU DESTINÉ À LA PRODUCTION DE PÂTE DE CELLULOSE

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Application
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Abstract (en)
[origin: WO2017178849A1] The present invention discloses the continuous process for production of cellulose pulp of very high whiteness from grass-like plant feedstock suitable for paper making. Process comprising the steps of: preparing the grass-like plant feedstock by comminuting; dedusting; continuous digestion with optimized concentrations of NaOH and NaCl; dispersing; continuous bleaching with optimized concentrations of H₂O₂ and sodium silicate without the use of NaOH; optional dispersing; dewatering to remove the black liquor; and washing, to yield final cellulose pulp of very high whiteness, >90%, suitable for manufacturing of paper or cellulose sheets. The process additionally includes integrated electrolytic removal of lignin and other by-products accompanied with regeneration of cooking chemicals solution, what enables completely closed process materials cycle. In one form of invention, heating of digesting and bleaching steps can be optionally performed by microwave (MW) heating. The preferred grass-like feedstock for the process is miscanthus (*Miscanthus x giganteus*, Andersson).

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