

Title (en)

Chlorine-free wood pulps and process of making.

Title (de)

Chlorfreier Holzzellstoff und Verfahren zur Herstellung.

Title (fr)

Pâtes de bois sans chlore et procédé pour leur obtention.

Publication

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Application

EP 91117401 A 19911011

Priority

- US 59676590 A 19901012
- US 77062891 A 19911003

Abstract (en)

This invention provides for a batch and continuous process with countercurrent recycle of bleaching filtrates for the delignification and bleaching of pulp. Oxygen delignification of pulp is achieved in excess of 50% as measured by kappa numbers, while the pulp viscosity is minimally decreased by no more than about 8 cps. Bleaching of delignified pulp may be achieved with peroxy compounds and ozone and pulp brightness of from about 82 to 88 ISO maybe achieved with pulp containing zero level TOX from chlorine based bleaching chemicals and zero level of AOX in the bleach effluents. Higher brightness of from about 90 to about 92 ISO can also be achieved by addition of very low levels of chlorine based bleaching chemicals. Corresponding bleach effluents contain less than 200 ppm AOX. Bleaching filtrates may be recycled for pulp washing and for use with an organosolv pulping process which results in significant energy savings and mitigation if not elimination of pollution typically associated with chlorine based bleaching. This invention also relates to bleach pulp product derived from the process and to an apparatus for carrying out the process.

<IMAGE>

IPC 1-7

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