

Title (en)

Peroxide bleaching process for cellulosic and lignocellulosic material

Title (de)

Verfahren zum Peroxidbleichen von zellulosischen Materialien

Title (fr)

Procédé de blanchiment au peroxyde de substances cellulosiques et lignocellulosiquesm

Publication

EP 0919661 A1 19990602 (EN)

Application

EP 98204179 A 19950629

Priority

- EP 95926123 A 19950629
- US 27353994 A 19940711

Abstract (en)

A method for bleaching cellulosic and lignocellulosic pulp using hydrogen peroxide as a bleaching reagent, utilizes a three stage reaction, viz. two short high temperature peroxide bleaching steps (50,160) at a pressure sufficient to suppress boiling and an interstage treatment (90) including a longer atmospheric pressure reduced temperature bleaching step. The two short peroxide bleaching stages include the steps of introducing pulp, at a consistency of 10%-18%, to a mixer (20,130) in which the pulp is heated to a temperature above 100 degree Celsius; adding sufficient sodium hydroxide (32,142) to bring the pulp to a pH of 8.5; adding sufficient hydrogen peroxide (33,143) to equal from about 0.5%-5.0%, by weight, of the pulp; passing the pulp through a pressurized reactor column (50,160) at a rate providing a reaction time in the column of less than 45 minutes, cooling the pulp and discharging the cooled pulp to a washer. It may be desirable to introduce the pulp to a mixer and add alkali to reactivate residual hydrogen peroxide by bringing the pulp to a pH of at least 9 after the first bleaching stage, deposit the pulp in a reaction tower and allowing the reaction to proceed until a substantial portion of the residual hydrogen has been consumed. <IMAGE>

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [A] EP 0578304 A1 19940112 - SOLVAY INTEROX [BE]
- [A] EP 0285530 A1 19881005 - ATOCHEM ELF SA [FR]
- [A] FR 2661430 A1 19911031 - ATOCHEM [FR]

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WO 9601920 A1 19960125; AT E189716 T1 20000215; BR 9508388 A 19980714; CA 2194880 A1 19960125; CN 1176673 A 19980318; DE 69515066 D1 20000316; DE 69515066 T2 20010419; DE 797703 T1 19980219; EP 0797703 A1 19971001; EP 0797703 B1 20000209; EP 0919661 A1 19990602; ES 2107399 T1 19971201; ES 2107399 T3 20000701; FI 970104 A0 19970110; FI 970104 A 19970310; JP 2787618 B2 19980820; JP H09508945 A 19970909; PT 797703 E 20000731; RU 2141016 C1 19991110; ZA 955290 B 19961227

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