

Title (en)

A METHOD FOR REDUCING RESIDUAL CHLORINE CONTENT IN HARDWOOD PULP

Title (de)

VERFAHREN ZUR REDUZIERUNG VON RESTCHLOR IN LAUBHOLZ-ZELLSTOFF

Title (fr)

PROCEDE DE REDUCTION DE CHLORURE RESIDUELLE DANS DES PATES FEUILLUS

Publication

EP 0407421 B1 19960313 (EN)

Application

EP 89903748 A 19890313

Priority

- FI 8900045 W 19890313
- FI 881192 A 19880314

Abstract (en)

[origin: WO8908738A1] The present invention concerns a procedure for bleaching cellulose pulp obtained from hardwood, wherein bleaching chemical containing chlorine is used. The essential feature of the invention is that the residual chlorine content of the bleached pulp is reduced by subjecting the pulp to enzyme treatment. With the enzyme especially the removal from the pulp of chlorine-binding extractive substances present in hardwood pulp is promoted. The invention furthermore concerns the use of enzyme towards lowering the residual chlorine content of bleached cellulose pulp made from hardwood. Such cellulose pulp is particularly contemplated which will be converted into foodstuff package cardboard or paper, which are commonly disposed of by burning. Lowered chlorine content reduces the risk of producing toxic dioxin at the incineration step.

IPC 1-7

D21C 9/12

IPC 8 full level

C12S 3/08 (2006.01); **D21C 9/10** (2006.01); **D21C 9/12** (2006.01); **D21C 9/14** (2006.01)

CPC (source: EP)

D21C 9/1026 (2013.01); **D21C 9/14** (2013.01)

Citation (examination)

- M.G. Paice et al: "Viscosity-Enhancing Bleaching of Hardwood Kraft Pulp with Xylanase from a Cloned Gene", Biotechnology and Bioengineering, Vol. 32, July 1988, pages 235-239.
- Chauvet, J-M et al, "Assistance in bleaching of never-dried pulps by the use of xylanases, consequences on pulp properties", Fourth International Symposium on Wood and Pulping Chemistry, April 27-30, 1987, Paris-Palais des Congrès, pages 325-327.

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

WO 8908738 A1 19890921; AT E135429 T1 19960315; AU 3292389 A 19891005; AU 626846 B2 19920813; BR 8907314 A 19910319; CA 1334581 C 19950228; DE 68925967 D1 19960418; DE 68925967 T2 19960912; DK 175185 B1 20040628; DK 211990 A 19901107; DK 211990 D0 19900904; EP 0407421 A1 19910116; EP 0407421 B1 19960313; FI 81395 B 19900629; FI 881192 A0 19880314; FI 881192 A 19890915; JP H03505758 A 19911212; NO 174722 B 19940314; NO 174722 C 19940622; NO 903913 D0 19900907; NO 903913 L 19900907; NZ 228308 A 19900626

DOCDB simple family (application)

FI 8900045 W 19890313; AT 89903748 T 19890313; AU 3292389 A 19890313; BR 8907314 A 19890313; CA 593523 A 19890313; DE 68925967 T 19890313; DK 211990 A 19900904; EP 89903748 A 19890313; FI 881192 A 19880314; JP 50285689 A 19890313; NO 903913 A 19900907; NZ 22830889 A 19890313