

Title (en)

Process for the chlorine-free bleaching and delignification of pulp.

Title (de)

Verfahren zur chlorfreien Bleiche und Delignifizierung von Zellstoff.

Title (fr)

Procédé pour le blanchiment et la délignification exempt de chlore de pâtes cellulosiques.

Publication

**EP 0442425 B1 19940330 (DE)**

Application

**EP 91101890 A 19910211**

Priority

DE 4004364 A 19900213

Abstract (en)

[origin: EP0442425A1] For chlorine-free bleaching and delignification of pulp, which has been pretreated with oxygen and peroxide or oxygen and ozone, two treatment stages are carried out with peroxide which has been activated by cyanamide and/or cyanamide salts. In this way, pulps of high whiteness can be produced at low engineering expense and without the aid of chlorine-containing treatment agents.

IPC 1-7

**D21C 9/10; D21C 9/16**

IPC 8 full level

**D21C 9/10** (2006.01); **D21C 9/147** (2006.01); **D21C 9/153** (2006.01); **D21C 9/16** (2006.01)

CPC (source: EP)

**D21C 9/1036** (2013.01); **D21C 9/147** (2013.01); **D21C 9/153** (2013.01); **D21C 9/163** (2013.01)

Citation (examination)

EP 0325731 A1 19890802 - DEGUSSA [DE]

Cited by

EP0479319A1; EP0543175A1; WO9613634A1; WO9212289A1

Designated contracting state (EPC)

AT CH DE ES FR IT LI SE

DOCDB simple family (publication)

**EP 0442425 A1 19910821; EP 0442425 B1 19940330**; AT E103649 T1 19940415; CA 2036173 A1 19910814; CA 2036173 C 19960123; DE 4004364 A1 19910814; DE 4004364 C2 19921119; DE 59101249 D1 19940505; ES 2051531 T3 19940616; FI 910703 A0 19910213; FI 910703 A 19910814; NO 176329 B 19941205; NO 176329 C 19950315; NO 910458 D0 19910206; NO 910458 L 19910814

DOCDB simple family (application)

**EP 91101890 A 19910211**; AT 91101890 T 19910211; CA 2036173 A 19910212; DE 4004364 A 19900213; DE 59101249 T 19910211; ES 91101890 T 19910211; FI 910703 A 19910213; NO 910458 A 19910206