

Title (en)  
PROCESS FOR BLEACHING OF LIGNOCELLULOSE-CONTAINING PULP

Title (de)  
VERFAHREN ZUM BLEICHEN VON LIGNOCELLULOSE-ENTHALTENDEM ZELLSTOFF

Title (fr)  
PROCEDE POUR BLANCHIR LA PATE A PAPIER CONTENANT DE LA LIGNOCELLULOSE

Publication  
**EP 0670929 B2 20031022 (EN)**

Application  
**EP 94901142 A 19931125**

Priority  

- SE 9301018 W 19931125
- SE 9203584 A 19921127
- SE 9300225 A 19930126

Abstract (en)  
[origin: WO9412722A1] The present invention relates to a process for bleaching of lignocellulose-containing pulp, where the pulp is first treated with a complexing agent, then delignified with an organic peracid or a salt thereof, and subsequently bleached with a peroxide-containing compound, ozone or sodium dithionite. Before bleaching, the pulp is washed at a pH of at least about 4. Suitably, delignification is performed with the strongly oxidizing peracetic acid, so that a considerable increase in brightness as well as a considerable reduction of the kappa number are obtained after said bleaching. The brightness-increasing effect is very selective, i.e. the viscosity of the pulp is maintained to a relatively great extent. By a suitable choice of pH in all the stages before the chlorine-free bleaching, the advantageous metal ions are retained in the pulp, while at the same time the pH adjustment between the stages is minimized and the resulting spent bleach liquors are advantageously used internally, e.g. for washing the pulp.

IPC 1-7  
**D21C 9/16**; **D21C 9/153**

IPC 8 full level  
**D21C 9/16** (2006.01); **D21C 9/10** (2006.01)

CPC (source: EP)  
**D21C 9/1042** (2013.01); **D21C 9/166** (2013.01)

Citation (opposition)  
Opponent :  

- JP S5721591 A 19820204 - MITSUBISHI GAS CHEMICAL CO
- US 3867246 A 19750218 - HEBBEL GERHARD, et al
- EP 0578305 A1 19940112 - SOLVAY INTEROX [BE]
- DE 4114135 A1 19921105 - SUEDDEUTSCHE KALKSTICKSTOFF [DE]
- US 4400237 A 19830823 - KRUEGER HORST [DE], et al
- TAPPI Pulping Conference Proceedings, 1 to 5, November 1992, pp. 1219-1230
- The Bleaching of Pulp, TAPPI monograph series n° 27, 1963, pp. 220-223

Cited by  
EP1607519A1; EP0728238B1

Designated contracting state (EPC)  
AT DE ES FR PT SE

DOCDB simple family (publication)  
**WO 9412722 A1 19940609**; AT E141972 T1 19960915; AU 5583194 A 19940622; AU 671337 B2 19960822; BR 9307520 A 19990831; CA 2149649 C 20000919; CZ 132895 A3 19960117; CZ 285246 B6 19990616; DE 69304342 D1 19961002; DE 69304342 T2 19970306; DE 69304342 T3 20040701; EP 0670929 A1 19950913; EP 0670929 B1 19960828; EP 0670929 B2 20031022; ES 2091121 T3 19961016; FI 118572 B 20071231; FI 952551 A0 19950524; FI 952551 A 19950524; JP H08503749 A 19960423; MX 9307413 A 19940729; NO 306737 B1 19991213; NO 952074 D0 19950526; NO 952074 L 19950726; NZ 258273 A 19960827; PL 309190 A1 19950918; RU 2097463 C1 19971127; RU 95113460 A 19961227

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**SE 9301018 W 19931125**; AT 94901142 T 19931125; AU 5583194 A 19931125; BR 9307520 A 19931125; CA 2149649 A 19931125; CZ 132895 A 19931125; DE 69304342 T 19931125; EP 94901142 A 19931125; ES 94901142 T 19931125; FI 952551 A 19950524; JP 51305194 A 19931125; MX 9307413 A 19931125; NO 952074 A 19950526; NZ 25827393 A 19931125; PL 30919093 A 19931125; RU 95113460 A 19950526