

Title (en)  
HIGH EFFICIENCY CHLORINE DIOXIDE PULP BLEACHING PROCESS

Title (de)  
HOCHLEISTENDES VERFAHREN ZUM BLEICHEN VON ZELLSTOFF MIT CHLORDIOXYD

Title (fr)  
PROCEDE DE BLANCHIMENT DE CELLULOSE HAUTEMENT EFFICACE A L'AIDE DE DIOXYDE DE CHLORE

Publication  
**EP 0496782 B1 19960320 (EN)**

Application  
**EP 90915570 A 19901017**

Priority  
• US 9005825 W 19901017  
• US 42434789 A 19891019

Abstract (en)  
[origin: WO9105909A1] A high-efficiency wood pulp bleaching process to produce wood pulps with higher brightness at equal chlorine dioxide usage or of equal brightness at significantly reduced chlorine dioxide usage. The process comprises reacting the chlorine dioxide with wood pulp at a pH of about 5-10 for about 5-40 minutes and then acidifying the mixture to a pH of about 1.9-4.2. The mixture is then allowed to react for about 2 or more hours to complete the two-step high/low pH bleaching process.

IPC 1-7  
**D21C 9/14; D21C 9/147**

IPC 8 full level  
**D21C 9/14** (2006.01)

CPC (source: EP)  
**D21C 9/142** (2013.01)

Citation (examination)  
• CA 1239253 A 19880719 - KAMYR INC  
• CA 1004805 A 19770208 - INT PAPER CO  
• A. Wong, Effect of Tetrahydroanthraquinone (THAQ) on the Neutral Sulphite Pulping of Seed Flax Fibres, Journal of Pulp and Paper Science: Vol. 13 No. 1, Jan 1987. A. Teder and Lisa Tormund, Carbohydrate degradation in chlorine dioxide bleaching, Tappi, Vol. 61, No 12, Dec 1978

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CN111979818A

Designated contracting state (EPC)  
DE ES FR GB IT SE

DOCDB simple family (publication)  
**WO 9105909 A1 19910502**; AR 243945 A1 19930930; AU 6537690 A 19910516; CA 2069322 A1 19910420; CN 1052157 A 19910612; DE 69026105 D1 19960425; DE 69026105 T2 19960926; EP 0496782 A1 19920805; EP 0496782 A4 19930203; EP 0496782 B1 19960320; ES 2085358 T3 19960601; MX 172853 B 19940117; NZ 235754 A 19930326; PL 164745 B1 19941031; PL 287415 A1 19910923; ZA 908341 B 19910828

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**US 9005825 W 19901017**; AR 31813990 A 19901019; AU 6537690 A 19901017; CA 2069322 A 19901017; CN 90109504 A 19901019; DE 69026105 T 19901017; EP 90915570 A 19901017; ES 90915570 T 19901017; MX 2293190 A 19901019; NZ 23575490 A 19901018; PL 28741590 A 19901019; ZA 908341 A 19901018