

Title (en)  
PROCESS FOR BLEACHING OR DELIGNIFICATION OF A CELLULOSE PULP WITH OXYGEN, AND PLANT FOR CARRYING OUT THE PROCESS

Publication  
**EP 0295180 A3 19891011 (FR)**

Application  
**EP 88401393 A 19880608**

Priority  
CA 539056 A 19870608

Abstract (en)  
[origin: EP0295180A2] In this continuous process for bleaching or delignifying a cellulose pulp with oxygen, the pulp, in the form of an aqueous suspension, is passed through a dispersing and mixing conduit (123) at a speed at which this pulp behaves like a turbulent liquid and, next, through a retention vessel (137) at a speed at which the suspension adopts a piston-type flow. An oxygen-steam mixture is distributed through a microporous wall which forms an interface with the suspension travelling in the conduit, to form a mass of small oxygen bubbles where the steam separates off by condensation while contributing heat to the suspension and leaving the oxygen in the form of smaller bubbles which are dispersed throughout the volume of the suspension, presenting a total surface area which is considerably greater than those of the bubbles which would result from the injection of oxygen by itself through the same microporous wall under the same conditions. The oxygen bubbles remain dispersed throughout the volume of the suspension when the latter assumes a piston-type flow, to give the oxygen time to perform its bleaching action. The invention also relates to a plant for implementing the process. <IMAGE>

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

IPC 8 full level  
**D21C 9/147** (2006.01)

CPC (source: EP)  
**D21C 9/147** (2013.01)

Citation (search report)

- [X] EP 0106460 A1 19840425 - BLACK CLAWSON CO [US], et al
- [Y] EP 0226495 A1 19870624 - LIQUID AIR CANADA [CA]
- [A] US 4177105 A 19791204 - LAAKSO OLIVER A [US], et al
- [X] JOURNAL OF THE TECHNICAL ASSOCIATION OF THE PULP AND PAPER INDUSTRY, vol. 64, no. 6, juin 1981, pages 87-90, Atlanta, Georgia, US; P.J. KLEPPE: "Oxygen/alkali delignification at medium consistency. Mill-scale trials to commercial installation"

Cited by  
US5479792A; EP0647466A3; ES2050566A1; WO9309391A1

Designated contracting state (EPC)  
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0295180 A2 19881214; EP 0295180 A3 19891011**; AU 2202188 A 19900628; AU 613952 B2 19910815; CA 1300322 C 19920512; FR 2617877 A1 19890113; FR 2617877 B1 19950106; JP H0299681 A 19900411

DOCDB simple family (application)  
**EP 88401393 A 19880608**; AU 2202188 A 19880908; CA 539056 A 19870608; FR 8709702 A 19870708; JP 24587888 A 19880929