Title (en)

Pneumatic reactor ozone bleaching of paper pulp.

Title (de)

Pneumatischer Reaktor zum Ozonbleichen von Zellstoff.

Title (fr)

Réacteur pneumatique pour le blanchiment à l'ozone de pâte à papier.

Publication

EP 0492039 A1 19920701 (EN)

Application

EP 91109775 A 19910614

Priority

US 63334790 A 19901227

Abstract (en)

A method and apparatus (10) for delignifying comminuted cellulosic fibrous material (paper pulp) with ozone. Pulp having a consistency of about 25-45% is fluffed (in 16), ozone is added to it (17, 19), and then it is pneumatically conveyed (by 20) in a pathway (21) for at least several seconds (e.g. about four seconds). The majority of the gas is then separated from the pulp in a cyclone (22), and the pulp is discharged into a retention tube (25), where it is retained for at least a few seconds (e.g. about ten seconds) in a relatively static condition. It is then fed through an air lock (26) to another blower (120), and additional ozone added to it (via 35), then the above steps are repeated. The gas separated from one cyclone (123, 223) can be returned as conveying gas to another blower (20, 120). The method is practiced at a pH of about 1.8-3.5, and a temperature of about 20 to 50 DEG C. <IMAGE>

IPC 1-7

D21C 9/153

IPC 8 full level

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

CPC (source: EP)

D21C 9/10 (2013.01); **D21C 9/153** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AT DE FR GB IT SE

DOCDB simple family (publication)

EP 0492039 A1 19920701; AU 636766 B2 19930506; AU 7911691 A 19920702; BR 9104366 A 19920818; CA 2044907 A1 19920628; FI 915947 A0 19911218; FI 915947 A 19920628; JP H04245989 A 19920902; NO 914169 D0 19911023; NO 914169 L 19920629; ZA 915144 B 19920527

DOCDB simple family (application)

EP 91109775 A 19910614; AU 7911691 A 19910618; BR 9104366 A 19911009; CA 2044907 A 19910618; FI 915947 A 19911218; JP 24341091 A 19910924; NO 914169 A 19911023; ZA 915144 A 19910703