

Title (en)

Method for oxygen delignification.

Title (de)

Verfahren zum Delignifizieren mittels Sauerstoff.

Title (fr)

Méthode pour la délignification à l'oxygène.

Publication

EP 0062539 A1 19821013 (EN)

Application

EP 82301826 A 19820406

Priority

US 25140181 A 19810406

Abstract (en)

Cellulosic pulp is transported by means of timing screws (24) in essentially plug flow through one or more substantially horizontal reactor tubes (10) in which an oxygen delignification takes place. Oxygen gas is injected into the system at a point adjacent to the pulp inlet (22) and travels concurrently in substantially plug flow with the pulp through the system. In this manner, the pulp is initially exposed to gas of a high oxygen partial pressure while gas vented from the system (38) adjacent the pulp outlet (31) is of low oxygen partial pressure and has a high content of diluent gases. In an alternate embodiment, a countercurrent gas flow process is disclosed. Also provided is a catalytic treatment and recirculation system for the vented gas which permits efficient use of oxygen within the system.

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D21C 9/10

IPC 8 full level

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Citation (search report)

- [XP] EP 0030158 A1 19810610 - BLACK CLAWSON CO [US], et al
- [A] GB 2006852 A 19790510 - AIRCO INC
- [X] TAPPI, Journal of the technical association of the pulp and paper industry, vol.63, no.11, November 1980, Atlanta, G.A. (US)
- [Y] ABSTRACT BULLETIN OF THE INSTITUTE OF PAPER CHEMISTRY, vol.51, no.5, November 1980, Appleton, Wisc. (US)
- [A] TAPPI, vol.61, no.5, May 1978, Atlanta, G.A. (US)

Cited by

US5164043A; US5472572A; US5211811A; US5188708A; US5181989A; US5863389A; US5409570A; US5174861A; US5520783A; US5451296A; US5173153A; US5525195A; US5164044A; US5217574A; US5085734A

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