

Title (en)
PROCESS AND APPARATUS FOR BLEACHING PAPER PULP

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EP 0226495 B1 19900711 (FR)

Application
EP 86402533 A 19861114

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Abstract (en)
[origin: EP0226495A1] 1. A multistage process for dispersing a gas containing oxygen within a suspension of cellulose pulp, dissolving it therein and reacting it with the latter for the purpose of delignifying or bleaching the said cellulose pulp whilst causing a flow of the pulp suspension to pass through a feed duct (15) coming from a source and injecting oxygen into it characterized in that, in each stage, it consists in : effecting the feed within an injection and mixing duct forming a passage of restricted cross-section (17, 19, 21) for the pulp and continuing the feed within a reaction tank (C, C1), diffusing a gas containing oxygen into the passage via a diffuser (B, B1 , B2) establishing an interface with the pulp to form microdimensional gas bubbles therein and causing the suspension stream resulting therefrom and containing the bubbles to pass into the reaction tank ; keeping unobstructed at least the greater part of the space comprised within the passage, to ensure a free linear flow of the pulp suspension flow through the said passage ; causing the pulp suspension to pass through the said passage at a speed appropriate to give rise to a turbulent fluid flow, imparting to it substantially "Newtonian" properties which cause it to behave substantially like water and the gas bubbles formed in the suspension to be exposed to mixing in the said suspension without appreciable coalescence ; causing the suspension containing the bubbles to flow into the reaction tank at a speed such as to establish a plug flow ; and, during the final stage (C2), recovering the processed suspension at the outlet of the reaction tank.

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