

Title (en)

Process for bleaching or delignification of a cellulose pulp with oxygen, and plant for carrying out the process.

Title (de)

Verfahren zum Bleichen oder zur Delignifizierung eines Zellstoffs mit Sauerstoff, und Anlage zur Durchführung des Verfahrens.

Title (fr)

Procédé de blanchiment ou de délignification d'une pâte cellulosique par l'oxygène, et installation pour sa mise en oeuvre.

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Application

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Priority

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Abstract (en)

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>

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