



12 **EUROPEAN PATENT APPLICATION**

21 Application number: **90810681.8**

51 Int. Cl.⁵: **D21C 3/00, D21C 9/10,
D21C 5/00**

22 Date of filing: **10.09.90**

30 Priority: **12.09.89 GB 8920595**
12.09.89 GB 8920596

43 Date of publication of application:
20.03.91 Bulletin 91/12

84 Designated Contracting States:
CH DE ES FR GB IT LI SE

88 Date of deferred publication of the search report:
23.09.92 Bulletin 92/39

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54 **Bleaching wood pulp with enzymes.**

57 Wood pulp may be delignified enzymatically with very good results when treating it with a lignin peroxidase in the absence of a peroxide and when the enzyme is firstly chemically modified in such a way that it does not adsorb to the pulp.



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 90 81 0681

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
D,A	DE-A-3 636 208 (CALL, H. P.) * the whole document *	1-3, 10	D21C3/00 D21C9/10 D21C5/00
D,A	JOURNAL OF BIOTECHNOLOGY, vol. 8, no. 2, 1988, AMSTERDAM NL pages 97 - 112; JANSHEKAR, H. ET AL.: 'Cultivation of Phanerochaete chrysosporium and production of lignin peroxidases in submerged stirred tank reactors.' * the whole document *	1, 2, 4, 5	
A	ABSTRACT BULLETIN OF THE INSTITUTE OF PAPER CHEMISTRY, vol. 57, no. 7, January 1987, APPLETON US page 959; HUYNH, V.-B. ET AL.: 'Oxidation of lignin model compounds by a Manganese-dependent enzyme from Phanerochaete chrysosporium as compared with chemically generated Mn(III).'	1, 2, 7, 10	
A	WORLD PATENTS INDEX LATEST Week 8744, Derwent Publications Ltd., London, GB; AN 87-310987 & JP-A-62 220 190 (QJI PAPER KK) 28 September 1987 * abstract *	1, 3, 9	TECHNICAL FIELDS SEARCHED (Int. Cl.5) D21C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 27 JULY 1992	Examiner BERNARDO NORIEGA F.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	