

Title (en)
MANUFACTURE OF PULP

Publication
EP 0262988 A3 19880629 (EN)

Application
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Priority
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Abstract (en)
[origin: EP0262988A2] Processes for producing pulp from lignocellulosic material in which the delignification agent comprises an alkali metal hydroxide together with a small amount of a sulphite in the range between 0.1 and 15% expressed as Na₂SO₃ by mass on an oven dry basis of said lignocellulose. The addition of the small amount of sulphite gives a marked improvement in both the quality of the paper produced from the pulp and the rate of delignification. The rate of delignification is improved further by the use of a redox agent such as anthraquinone, anthrahydroquinone, homologues and derivatives thereof. Optionally, the process may be carried out in two stages, including a first stage in which lignocellulose is digested in a liquor containing between 0.1 and 15% of a sulphite, and another further stage in which said lignocellulose is digested in a liquor containing an alkali metal hydroxide. The pulping liquors may also contain other alkaline compounds such as sodium carbonate which act as buffers.

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D21C 3/02; **D21C 3/26**

IPC 8 full level
D21C 3/02 (2006.01); **D21C 3/22** (2006.01)

CPC (source: EP)
D21C 3/022 (2013.01); **D21C 3/222** (2013.01)

Citation (search report)

- [X] US 1651665 A 19271206
- [X] US 2528351 A 19501031 - EDUARD FARBER
- [A] US 4213871 A 19800722 - BAVAVEAS TRISTAN [FR]
- [A] US 4363700 A 19821214 - WADA ISAO, et al
- [XP] ABSTRACT BULLETIN OF THE INSTITUTE OF PAPER CHEMISTRY, vol. 57, no. 9, page 1258, abstract no. 11374 Appleton, Wisconsin, US; H. OHI et al.: "Modified soda/quinone cooking.(1). Soda/Quinone cooking with sodium sulfite" & J. JAPAN WOOD RES.SOC. (MOKUZAI GAKKAISHI) 32, no. 9: pages 697-704
- [XP] TAPPI JOURNAL, vol. 69, no. 12, December 1986, pages 89,90 Norcross, GA, US; P. HE et al.: "Influence of sulfite on the effectiveness of anthraquinone in soda pulping"
- [X] ABSTRACT BULLETIN OF THE INSTITUTE OF PAPER CHEMISTRY, vol. 56, no. 5, November 1985, pages 586, 587 abstract no. 5231 Appleton, Wisconsin, US; T.J. McDONOUGH ET AL.: "Sulfite-anthraquinone pulping of southern pine for bleachable grades" & CPPA ANN.MFG. (MONTREAL) REPRINTS 71A: 161-170(Jan. 20-30 1985)
- [X] ABSTRACT BULLETIN OF THE INSTITUTE OF PAPER CHEMISTRY, vol. 52, no. 1, July 1981, page 129, abstract no. 1082 Appleton, Wisconsin, US; & JP - A - 55 163 291(OJI PAPER) 19-12-1980
- [X] ABSTRACT BULLETIN OF THE INSTITUTE OF PAPER CHEMISTRY, vol. 52, no. 9, March 1982, page 110, abstract no. 10562 Appleton, Wisconsin, US; & JP - A - 56 118 988 (OJI PAPER) 18-09-1981
- [A] ABSTRACT BULLETIN OF THE INSTITUTE OF PAPER CHEMISTRY, vol. 50, no. 10, April 1980, pages 1010,1011, abstract 9393 Appleton, Wisconsin, US; J. KETTUNEN et al.: "Effect of anthraquinone on neutral sulfite and alkaline sulfite cooking of pine" & PAPERI PUN 61, no. 11:6845-690, 693-694, 699-700 (Nov. 1979)
- [A] TAPPI JOURNAL. vol. 66, no. 12, December 1983, pages 81,82 Norcross, GA, US; J.M. MACLEOD et al.: "Delignification rates of alkaline-AQ processes"
- [A] TAPPI JOURNAL, vol. 69, no. 8, August 1986, pages 102-105, Norcross, GA, US; I.B. SANBORN et al.: "An evaluation of the sulfite-AQ pulping process"

Cited by
CN115976865A; ES2195750A1; ES2319035A1; US9200406B2; US6325892B1; WO2013164234A1

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