

Title (en)
Mechanical pulp hydrosulfite bleaching.

Title (de)
Hydrosulfitbleichen von mechanischer Pulpe.

Title (fr)
Blanchiment à l'hydrosulfite d'une pâte mécanique.

Publication
EP 0155928 A1 19850925 (EN)

Application
EP 85890055 A 19850304

Priority
US 58593884 A 19840305

Abstract (en)
A medium consistency mechanical pulp (e.g. RMP, CMP, TMP, CTMP or stone groundwood) is treated to effect efficient reductive bleaching. The pulp, at about 8-15% consistency is simultaneously pumped and degassed utilizing a fluidizing pump (13), and by controlling the pump head to maximize deaeration. The pulp may be immediately passed -- without air introduction -- to a fluidizing mixer (28), where it is mixed with hydrosulfite (dithionite) bleaching chemical. Alternatively, the hydrosulfite may be added directly to the discharge (25) or suction (14) of the pump, and the mixer eliminated. After chemical addition, the pulp is retained at predetermined pH and temperature conditions for a predetermined period of time to effect the desired bleaching, as in an upflow tower (31).

IPC 1-7
D21C 9/10

IPC 8 full level
D21C 9/10 (2006.01); **D21D 5/26** (2006.01); **F04D 7/04** (2006.01)

CPC (source: EP)
D21C 9/1089 (2013.01); **D21D 5/26** (2013.01)

Citation (search report)
• [Y] US 2707146 A 19550426 - BURTON THOMAS M
• [Y] US 2963395 A 19601206 - SANGHO BACK, et al
• [A] US 4030969 A 19770621 - ASPLUND ARNE JOHAN ARTHUR, et al
• [A] US 4410337 A 19831018 - GULLICHSEN JOHAN [FI], et al
• [APD] US 4435193 A 19840306 - GULLICHSEN JOHAN E [FI], et al
• [A] US 2071307 A 19370216 - WILHELM HIRSCHKIND
• [AD] US 4093506 A 19780606 - RICHTER JOHAN C F C
• [A] US 3313678 A 19670411 - RYDIN STEN O
• [Y] TAPPI, vol. 64, no. 9, September 1981, pages 113-116, Atlanta, Georgia, US; J. GULLICHSEN et al.: "Medium-consistency technology II. Storage dischargers and centrifugal pumps"

Cited by
US5234480A; EP1375735A1; EP0330387A3; US5403442A; US7029554B2; US7736463B1; WO0053844A1

Designated contracting state (EPC)
AT DE FR SE

DOCDB simple family (publication)
EP 0155928 A1 19850925; EP 0155928 B1 19881026; AT E38258 T1 19881115; BR 8500938 A 19851022; DE 3565870 D1 19881201; FI 77905 B 19890131; FI 77905 C 19890510; FI 850854 A0 19850301; FI 850854 L 19850906; JP S60209088 A 19851021; NO 164310 B 19900611; NO 164310 C 19900919; NO 850720 L 19850906

DOCDB simple family (application)
EP 85890055 A 19850304; AT 85890055 T 19850304; BR 8500938 A 19850301; DE 3565870 T 19850304; FI 850854 A 19850301; JP 4201585 A 19850305; NO 850720 A 19850222