

Title (en)

PAPER PRODUCTS AND METHODS FOR APPLYING CHEMICAL ADDITIVES TO CELLULOSIC FIBERS

Title (de)

PAPIERPRODUKTE UND VERFAHREN ZUM AUFTRAGEN VON CHEMISCHEN ZUSATZSTOFFEN AUF ZELLSTOFFFASERN

Title (fr)

PRODUITS DE PAPIER ET PROCEDES POUR L'APPLICATION D'ADDITIFS CHIMIQUES SUR DES FIBRES CELLULOSIQUES

Publication

EP 1042556 A1 20001011 (EN)

Application

EP 98964756 A 19981217

Priority

- US 9826834 W 19981217
- US 7146897 P 19971224
- US 1067598 A 19980122

Abstract (en)

[origin: WO9934057A1] Chemical additives can be adsorbed on cellulosic papermaking fibers at high levels with a minimal amount of unadsorbed chemical additives present in the papermaking process water. A method includes treating a fiber slurry with an excess of the chemical additive, allowing sufficient residence time for adsorption to occur, filtering the slurry to remove unadsorbed chemical additives, and redispersing the filtered pulp with fresh water. Filtrate from the thickening process contains unadsorbed chemical additive and it is not sent forward in the process with the chemically treated fibers. The method can be employed to make improved paper products.

IPC 1-7

D21H 17/00

IPC 8 full level

A47K 10/16 (2006.01); **D21H 11/16** (2006.01); **D21H 17/00** (2006.01); **D21H 23/04** (2006.01); **D21H 27/30** (2006.01); **D21H 21/20** (2006.01); **D21H 21/22** (2006.01); **D21H 27/38** (2006.01)

CPC (source: EP KR)

D21H 3/00 (2013.01 - KR); **D21H 23/04** (2013.01 - EP); **D21H 21/20** (2013.01 - EP); **D21H 21/22** (2013.01 - EP); **D21H 27/38** (2013.01 - EP)

Citation (search report)

See references of WO 9934057A1

Designated contracting state (EPC)

BE DE ES FR GB IT NL SE

DOCDB simple family (publication)

WO 9934057 A1 19990708; AR 017855 A1 20011024; AU 2001099 A 19990719; AU 739322 B2 20011011; BR 9814354 A 20011016; BR 9814354 B1 20100601; CA 2310692 A1 19990708; CA 2310692 C 20080805; CN 1224757 C 20051026; CN 1283244 A 20010207; CO 5040185 A1 20010529; DE 69841662 D1 20100624; EP 1042556 A1 20001011; EP 1042556 B1 20100512; ID 24904 A 20000831; IL 135910 A0 20010520; JP 2002500286 A 20020108; KR 100543841 B1 20060123; KR 20010033530 A 20010425; PL 340766 A1 20010226; TR 200001834 T2 20010122; TW 440641 B 20010616

DOCDB simple family (application)

US 9826834 W 19981217; AR P980106335 A 19981211; AU 2001099 A 19981217; BR 9814354 A 19981217; CA 2310692 A 19981217; CN 98812551 A 19981217; CO 98075230 A 19981217; DE 69841662 T 19981217; EP 98964756 A 19981217; ID 20001143 A 19981217; IL 13591098 A 19981217; JP 2000526701 A 19981217; KR 20007007032 A 20000623; PL 34076698 A 19981217; TR 200001834 T 19981217; TW 87120388 A 19981209