

Title (en)  
PURIFICATION OF ALKALINE WASHING LIQUID

Title (de)  
REINIGUNG ALKALISCHER WASCHFLÜSSIGKEIT

Title (fr)  
PURIFICATION D'UN LIQUIDE DE LAVAGE ALCALIN

Publication  
**EP 1611281 B1 20061206 (EN)**

Application  
**EP 04725953 A 20040406**

Priority  
• FI 2004000210 W 20040406  
• FI 20030522 A 20030407

Abstract (en)  
[origin: WO2004090225A1] A method for washing sulphate cellulose pulp in the washing department of a sulphate cellulose mill, in which method a first pulp flow (1) is conducted to a first washer (101), where a washing liquid (12) is combined with the first pulp flow (1). A second pulp flow (2) is conducted from the first washer (101) to a second washer (102), where a washing liquid (3) is combined with the second pulp flow (2). The washed pulp flow (5) is proceeded from the second washer (102) in the process and the filtrate (4) displaced by the washing liquid (3) is recycled to the process so that the filtrate (4) displaced by the washing liquid (3) in the second washer (102) is divided into a first part flow (6) and a second part flow (7) and the pH of the second part flow (7) is dropped by combining an acidifier (8) with the second part flow (7). The acidified part flow (9) is conducted to a process unit (103), where sludge (10) containing extractives and metals is separated from the part flow (9) and the entire process and the part flow (11) treated in the process unit (103) is combined with the first part flow (6) and is recycled to the process for use as the washing liquid (12) in the first washer (101).

IPC 8 full level  
**D21C 9/02** (2006.01); **D21C 11/00** (2006.01); **D21C 3/02** (2006.01)

IPC 8 main group level  
**D21C** (2006.01)

CPC (source: EP FI US)  
**D21C 9/02** (2013.01 - EP FI US); **D21C 3/02** (2013.01 - EP US); **D21C 11/00** (2013.01 - EP US)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2004090225 A1 20041021**; AT E347636 T1 20061215; DE 602004003573 D1 20070118; DE 602004003573 T2 20070927;  
EP 1611281 A1 20060104; EP 1611281 B1 20061206; ES 2278312 T3 20070801; FI 115977 B 20050831; FI 115977 B2 20190329;  
FI 20030522 A0 20030407; FI 20030522 A 20041008; JP 2006522235 A 20060928; US 2007039702 A1 20070222

DOCDB simple family (application)  
**FI 2004000210 W 20040406**; AT 04725953 T 20040406; DE 602004003573 T 20040406; EP 04725953 A 20040406; ES 04725953 T 20040406;  
FI 20030522 A 20030407; JP 2006505631 A 20040406; US 55243504 A 20040406