

Title (en)  
Impregnation with black liquor prior to white liquor introduction.

Title (de)  
Tränkung mit Schwarzlauge vor der Zufuhr der Weisslauge.

Title (fr)  
Imprégnation avec liqueur noire avant l'introduction de la liqueur blanche.

Publication  
**EP 0477059 B1 19950712 (EN)**

Application  
**EP 91402350 A 19910903**

Priority  
US 58579090 A 19900920

Abstract (en)  
[origin: EP0477059A2] A method of continuously digesting comminuted cellulosic fibrous material (e.g. wood chips) is provided which simultaneously improves uniformity of the end product and has substantial energy economy. The chips are slurried, e.g. with black liquor, and fed to the top of a vertical digester. In the digester the chips are soaked in and heated with black liquor withdrawn from near the bottom of the cooking zone, which black liquor is at cooking temperature. White liquor (kraft cooking liquor) introduced into the cooking zone is preheated by passing it in heat exchange relationship with a portion of the black liquor withdrawn from the digester, so that only a small amount of heat in the form of steam need be added to the white liquor to bring it to cooking temperature. At the top of the digester, a portion of the liquid in the slurry can be withdrawn through a screen, pressurized, and then introduced under pressure with a downward velocity component facilitating a zone of concurrent movement of the chips and liquor.

IPC 1-7  
**D21C 3/02**; **D21C 11/00**

IPC 8 full level  
**D21C 1/00** (2006.01); **D21C 3/02** (2006.01); **D21C 3/24** (2006.01); **D21C 7/14** (2006.01); **D21C 11/00** (2006.01)

CPC (source: EP)  
**D21C 3/02** (2013.01); **D21C 3/24** (2013.01); **D21C 11/0021** (2013.01)

Citation (examination)  
US 3802956 A 19740409 - BACKLUND E

Cited by  
US6159336A; US5925216A; EP1561856A1; US5824187A; US6063238A; US5635026A; US5489363A; US5547012A; EP2390409A1; CN102268829A; US5716497A; AU721103B2; US5849151A; EP1878827A3; EP0822288A3; EP1538256A3; EP3851576A1; WO9615313A1; WO9607786A1; WO9518261A1; US8808498B2; WO9607787A1; EP1308554B1; EP1308555B1; US6248208B1; US6506283B2; US6544384B2; US6179958B1

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AT DE FR SE

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