

Title (en)  
PAPERMAKING REFINER PLATES AND METHOD OF MANUFACTURE

Title (de)  
REFINERPLATTEN FÜR DIE PAPIERHERSTELLUNG UND HERSTELLUNGSVERFAHREN

Title (fr)  
PLAQUES DE RAFFINEUR DE PATE A PAPIER ET PROCEDE DE FABRICATION ASSOCIE

Publication  
**EP 1148971 B1 20060802 (EN)**

Application  
**EP 98940920 A 19980817**

Priority  
US 9816974 W 19980817

Abstract (en)  
[origin: WO0009288A1] Replaceable refiner fillings (10) used for refining of lignocellulosic and other natural and synthetic fibrous materials in the manufacture of paper, paperboard, and other fiberboard products. The refiner fillings (10) include a pattern of blades (14) and spacers (16) defined by a bar cluster (24), with the bar cluster being the basis of formation of the filling (10). A method of manufacture provides bar cluster patterns based on factors including pumpng angle, plurality of segments in a refiner filling (10), and the number of clusters in a segment. A bar set cluster is established for uniform fabrication of bar clusters (24) for the refiner fillings (10).

IPC 8 full level  
**B02C 7/04** (2006.01); **B02C 7/12** (2006.01); **B23P 17/00** (2006.01); **D21D 1/30** (2006.01); **D21D 1/34** (2006.01)

CPC (source: EP)  
**B02C 7/12** (2013.01); **D21D 1/306** (2013.01)

Designated contracting state (EPC)  
AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE

DOCDB simple family (publication)  
**WO 0009288 A1 20000224**; AU 757369 B2 20030220; AU 8908598 A 20000306; CA 2340895 A1 20000224; CA 2340895 C 20061107; DE 69835457 D1 20060914; DE 69835457 T2 20070215; EP 1148971 A1 20011031; EP 1148971 A4 20040512; EP 1148971 B1 20060802; JP 2002522660 A 20020723

DOCDB simple family (application)  
**US 9816974 W 19980817**; AU 8908598 A 19980817; CA 2340895 A 19980817; DE 69835457 T 19980817; EP 98940920 A 19980817; JP 2000564770 A 19980817