

Title (en)  
SYSTEM FOR SEPARATING FLUID-BORNE MATERIAL FROM A FLUID THAT CARRIES PARTICULATE MATTER ALONG WITH THE MATERIAL

Title (de)  
SYSTEM ZUR ABTRENNUNG EINES IN EINER FLÜSSIGKEIT ENTHALTENEN MATERIALS VON DER DANEBEN AUCH NOCH PARTIKULÄRE STOFFE ENTHALTENDEN FLÜSSIGKEIT

Title (fr)  
SYSTEME PERMETTANT DE SEPARER UNE MATIERE PORTEE PAR UN FLUIDE DUDIT FLUIDE QUI TRANSPORTE EN PLUS DE LADITE MATIERE DES PARTICULES

Publication  
**EP 1576230 A2 20050921 (EN)**

Application  
**EP 03764559 A 20030711**

Priority

- US 0321808 W 20030711
- US 19478502 A 20020712
- US 61728603 A 20030710

Abstract (en)  
[origin: WO2004007835A2] A system for screening fluid-borne material from a fluid that carries particulate matter along with the material, e.g. for screening usable fibers in papermaking or tissue making white water that also contains waste material such as fines and ash. The system employs a flexible and pliable screen to which the fluid is applied. The screen is supported in a suspended manner from a frame. The fluid is directed onto an inside surface defined by the screen, and the location at which the fluid strikes the screen is varied so as to result in bending and flexing of the screen due to the flexibility and pliability of the screen material. In this manner, the configuration of the screen drainage passages is continuously altered, to provide a self-cleaning action that prevents the screen passages from plugging or blinding over. In one form, the screen is generally frustoconical, and the fluid is applied to the inside surface of the screen in a manner which results in rotation of the screen. The material retained on the screen is directed toward a discharge opening defined by the lower end of the frustoconical screen, and the waste water including the particulate matter passes through the screen and is collected in a waste water collection tank. In another form, the screen is suspended from a frame to form a trough configuration having an open discharge end. The frame is movable in either an axial direction or a transverse direction, to cause movement of the screen and to obtain the desired flexing and bending of the screen to self-clean the screen drainage passages.

IPC 1-7  
**D21F 1/00**

IPC 8 full level  
**B07B 1/06** (2006.01); **B07B 1/24** (2006.01); **B07B 1/46** (2006.01); **D21D 5/02** (2006.01); **D21D 5/06** (2006.01); **D21F 1/66** (2006.01)

CPC (source: EP KR)  
**B07B 1/06** (2013.01 - EP); **B07B 1/24** (2013.01 - EP); **B07B 1/46** (2013.01 - EP); **D21D 5/02** (2013.01 - EP KR); **D21D 5/06** (2013.01 - EP); **D21F 1/00** (2013.01 - KR); **D21F 1/66** (2013.01 - EP); **B07B 2230/01** (2013.01 - EP)

Citation (search report)  
See references of WO 2004007835A2

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 PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2004007835 A2 20040122; WO 2004007835 A3 20060914; WO 2004007835 A8 20071025**; AT E389053 T1 20080315; AU 2003256514 A1 20040202; AU 2003256514 A8 20040202; BR 0312558 A 20070626; BR 0312558 B1 20141118; CA 2492202 A1 20040122; CA 2492202 C 20091222; DE 60319736 D1 20080424; DE 60319736 T2 20080717; EP 1576230 A2 20050921; EP 1576230 B1 20080312; ES 2301829 T3 20080701; JP 2006508258 A 20060309; JP 4150720 B2 20080917; KR 100721493 B1 20070523; KR 20050025351 A 20050314; MX PA05000520 A 20050930

DOCDB simple family (application)  
**US 0321808 W 20030711**; AT 03764559 T 20030711; AU 2003256514 A 20030711; BR 0312558 A 20030711; CA 2492202 A 20030711; DE 60319736 T 20030711; EP 03764559 A 20030711; ES 03764559 T 20030711; JP 2004521732 A 20030711; KR 20057000577 A 20050112; MX PA05000520 A 20030711