

Title (en)  
Apparatus for removing rotating flows

Title (de)  
Drallbrecher

Title (fr)  
Dispositif pour éliminer des courants tourbillonnaires

Publication  
**EP 0953677 A2 19991103 (DE)**

Application  
**EP 99104323 A 19990304**

Priority  
DE 19819330 A 19980430

Abstract (en)  
The pipe (2) to carry a fiber suspension along a main flow direction, has a swirl breaker (1) to reduce or eliminate rotary suspension flows round the main flow line. The swirl breaker has at least one plane (3) with a finite thickness, parallel to the main flow line, thicker than the length of the longest fibers in the suspension and pref. twice their length to give a thickness of  $\geq 5$  mm and pref.  $\geq 8$  mm. The plane is a flat plate or a plastics unit, connected to the pipe walls (7) at two opposite sides or at only one side. A number of planes can be used, intersecting at 90 degrees or 120 degrees. A gap between the side of a plane, and the nearest wall, is at least twice the mean fiber length in the suspension and max. two-thirds the pipe dia. At the bond with the pipe wall, the plane has a curvature matching the pipe shape and passing smoothly into it. The plane is at the pipe wall on both sides at an angle of significantly less than 90 degrees for the transit into the pipe wall curvature. The plane is thickened at the pipe wall and is bonded to the pipe wall without a gap by clamping and/or welding and/or an adhesive.

Abstract (de)  
Die Erfindung betrifft eine Rohrleitung zu beziehungsweise in einer Papiermaschine, die eine faserhaltige Suspension führt, mit einer Hauptströmungsrichtung. Die Erfindung ist dadurch gekennzeichnet, daß die Rohrleitung Mittel (Drallbrecher) zur Reduktion, vorzugsweise Auslöschung von Rotationsströmungen um die Hauptströmungsrichtung aufweist. <IMAGE>

IPC 1-7  
**D21F 1/06**

IPC 8 full level  
**D21F 1/02** (2006.01); **D21F 1/06** (2006.01)

CPC (source: EP)  
**D21F 1/02** (2013.01); **D21F 1/024** (2013.01); **D21F 1/065** (2013.01)

Cited by  
GB2599516A; GB2599516B; EP3276312A1; FR3054316A1; EP1005587B1

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