

## Title (en)

Expanded flow range edge flow control valve for use in a paper machine headbox

## Title (de)

Durchfluss-Regelventil für die Randströmungen in einem Stoffauflauf einer Papiermaschine

## Title (fr)

Vanne de régulation du débit du flux en contact avec la paroi pour une caisse de tête d' une machine à papier

## Publication

**EP 0936303 A3 20000802 (EN)**

## Application

**EP 99630015 A 19990205**

## Priority

US 2124698 A 19980210

## Abstract (en)

[origin: EP0936303A2] Edge flow control valves located within edge flow tubes of a tube bank in a headbox can be adjusted to optimize fiber orientation of paper produced in a papermaking process. The present invention uses a chamfer at the inlet of edge flow tubes in order to increase maximum flow of pulp through the edge tube and edge valve. The minimum flow range is not changed, therefore, the essential flow range of pulp through the edge flow valve is increased. Laboratory tests have shown at least a 15 percent increase in maximum flow while not changing the minimum flow. Using a chamfer tool with a stop collar to control the depth of the cut, a chamfer is provided at the inlet of each edge flow tube for optimum performance. According to the present invention, paper produced in a papermaking process will have an improved fiber orientation when more flow at the edges of a headbox is needed. <IMAGE>

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**D21F 1/02**; **D21F 1/06**

## IPC 8 full level

**D21F 1/02** (2006.01); **D21F 1/06** (2006.01)

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## Citation (search report)

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EP1693507A3; US8214071B2

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