

Title (en)

A process for dispersing one fluid in another.

Title (de)

Verfahren zum Dispergieren eines Fluidums in ein anderes.

Title (fr)

Procédé pour disperser un fluide dans un autre.

Publication

**EP 0167060 A1 19860108 (EN)**

Application

**EP 85107565 A 19850619**

Priority

US 62245284 A 19840620

Abstract (en)

A process for dispersing a first fluid in a second fluid having a relatively higher viscosity comprising the following steps: (a) providing a confined zone (21) having an opening at its upstream end, an opening at its downstream end, and a hypothetical central axis (29) running from its upstream end to its downstream end; (b) introducing the second fluid into the confined zone (21) at the opening in its upstream end in such a manner that the second fluid passes from the opening in the upstream end through the opening in the downstream end; (c) dividing the first fluid into a plurality of streams and introducing the streams into the second fluid co-currently therewith whereby: (i) the number of streams is in the range of about 25 streams per square foot of a cross-section of the confined zone to about 1000 streams per square foot of the cross-section; (ii) the cross-section is perpendicular to the axis (29); and (iii) the streams are about equidistant from one another, the distance between the streams being about 0.375 to about 2.5 inches. The process may be applied in oxygen bleaching of cellulose pulp by introducing the oxygen through an inlet (27) into a plurality of small pipes (1-16) having outlet ports (31).

IPC 1-7

**B01F 3/00**; **D21C 9/147**

IPC 8 full level

**A23L 1/00** (2006.01); **B01F 5/02** (2006.01); **B01F 5/04** (2006.01); **D21C 9/10** (2006.01)

CPC (source: EP KR)

**B01F 25/313** (2022.01 - EP); **B01F 25/3132** (2022.01 - EP); **B01F 25/31323** (2022.01 - EP); **B01F 25/31331** (2022.01 - EP); **D21C 9/00** (2013.01 - KR); **D21C 9/10** (2013.01 - EP)

Citation (search report)

- [X] GB 2015360 A 19790912 - KOMAX SYSTEMS INC
- [X] GB 2095123 A 19820929 - BERGWERKSVERBAND GMBH, et al
- [X] FR 2286694 A1 19760430 - BASF AG [DE]
- [X] US 3985005 A 19761012 - LEFFLER NILS GUSTAV
- [A] EP 0106460 A1 19840425 - BLACK CLAWSON CO [US], et al

Cited by

US5749651A; CN1043612C; EP0504550A1; EP0526392A1; US5380088A; US10722860B2; WO9526226A1

Designated contracting state (EPC)

BE DE FR IT NL

DOCDB simple family (publication)

**EP 0167060 A1 19860108**; **EP 0167060 B1 19900131**; BR 8502924 A 19860304; CA 1262722 A 19891107; DE 3575680 D1 19900308; DK 278285 A 19851221; DK 278285 D0 19850619; ES 544361 A0 19860116; ES 8604031 A1 19860116; JP S6146229 A 19860306; KR 860000446 A 19860128

DOCDB simple family (application)

**EP 85107565 A 19850619**; BR 8502924 A 19850618; CA 483430 A 19850607; DE 3575680 T 19850619; DK 278285 A 19850619; ES 544361 A 19850619; JP 13208085 A 19850619; KR 850004345 A 19850619