

Title (en)

Through-air drying apparatus having decreasing wet flow resistance in the machine direction and process of drying a web therewith

Title (de)

Durchlufttrockner mit in Laufrichtung abnehmendem Strömungswiderstand und Verfahren zur Trocknung einer Bahn

Title (fr)

Appareil de séchage à l'air comprenant un support de séchage micropore ayant un profil non circulaire, et processus de séchage de toile associé

Publication

EP 1785523 A3 20070530 (EN)

Application

EP 07102122 A 20020814

Priority

- EP 02750484 A 20020814
- US 92958901 A 20010814
- US 92960701 A 20010814

Abstract (en)

[origin: EP1785523A2] A micropore drying apparatus (10) having a variable wet flow resistance. The flow resistance preferably decreases in the machine direction. The micropore drying apparatus (10) may comprise a single integral unit having a decreasing wet flow resistance from the beginning to the end of the unit. Alternatively, the micropore drying apparatus (10) may comprise a plurality of discrete units, each unit having a successively lesser flow resistance than that of the preceding unit. Alternatively, a hybrid arrangement may be used wherein each discrete unit has a successively decreasing flow resistance within that unit. The micropore drying apparatus may comprise one or more micropore drying media (15). The micropore drying media (15) have pores (40) which allow air flow therethrough. The pores (40) are disposed in a grid, to form a field of pores. The decreasing flow resistance may preferably be provided by adjusting one or more of said pores (40), which affect the flow resistance through a single pore or through the entire field of the pores.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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- [Y] WO 9955957 A1 19991104 - VALMET CORP [FI], et al
- [A] US 5598643 A 19970204 - CHUANG STRONG C [US], et al
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WO 03016620 A1 20030227; AT E376606 T1 20071115; CA 2452853 A1 20030227; CA 2452853 C 20080805; DE 60223153 D1 20071206; DE 60223153 T2 20080814; EP 1425467 A1 20040609; EP 1425467 B1 20071024; EP 1785523 A2 20070516; EP 1785523 A3 20070530; MX PA04001149 A 20040520

DOCDB simple family (application)

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