

Title (en)

Device and method for humidifying a moving web material

Title (de)

Vorrichtung und Verfahren zum Befeuchten einer vorbeilaufenden Materialbahn

Title (fr)

Dispositif et méthode pour humidifier une bande de matériau en défilement

Publication

EP 0708203 A3 19970115 (DE)

Application

EP 95113744 A 19950901

Priority

DE 4437375 A 19941019

Abstract (en)

[origin: EP0708203A2] A moistening appts. for a running web of material has a chamber with a surface where steam exits treat the web facing it and a front facing against the web run at the end of the treatment surface. Here, a strip (15), placed before said surface (8), esp. at the chamber front (9) and projecting, at least partially over strip length, to the web over the surface, has an edge (17) facing the oncoming web (2). Also claimed is a process using the appts. where at least one steam jet is directed at the web and where, here, the air layer adhering to the web is at least partially stirred about or stripped off before steam application. Pref. the strip is arranged to have an adjustable spacing between the web and the chamber edge which also is adjustable in a curve across the web. The spacing width (A), following web curvature, is constant over the web breadth and is between 2 and 12 mm. The strip, formed from at least two layers placed together, has slits which travel from the edge opposite the steam-side edge (17), end in holes of dia. greater than slit widths, the slits of one layer being displaced from those of the other. One layer, being heated on the chamber, lies flat and is made from heat-conducting material at least equivalent to copper. The strip has elongated holes to take bolts inserted from the chamber front to attach the two layers at pre-set points where between any two is placed a slit from each layer. The air layer is stripped off just before the gap through which steam is blown. Alternatively the strip is bent at an angle facing against web run at angle, alpha, between 30 and 70 degrees .

IPC 1-7

D21F 7/00; **D21G 7/00**

IPC 8 full level

D21F 7/00 (2006.01); **D21G 7/00** (2006.01)

CPC (source: EP US)

D21F 7/008 (2013.01 - EP US); **D21G 7/00** (2013.01 - EP US)

Citation (search report)

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- [X] CA 1134187 A 19821026 - DOVE NORMAN F
- [A] US 3242587 A 19660329 - DUPASQUIER JOSEPH H
- [A] GB 2150163 A 19850626 - MYLLYKOSKI OY

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EP1424440A1

Designated contracting state (EPC)

AT FR GB IT SE

DOCDB simple family (publication)

EP 0708203 A2 19960424; **EP 0708203 A3 19970115**; **EP 0708203 B1 20001220**; AT E198223 T1 20010115; CA 2157311 A1 19960420; CA 2157311 C 19990511; DE 4437375 A1 19960425; DE 4437375 C2 20000525; US 5778559 A 19980714; US 5946821 A 19990907

DOCDB simple family (application)

EP 95113744 A 19950901; AT 95113744 T 19950901; CA 2157311 A 19950831; DE 4437375 A 19941019; US 37863395 A 19950126; US 7635898 A 19980512