

Title (en)
Papermakers fabric with flat machine direction yarns

Title (de)
Papiermachergewebe mit flachen Längsfäden

Title (fr)
Toile pour papeterie ayant des fils dans le sens de la longueur de la machine à section droite aplatie

Publication
EP 0612881 B1 19970611 (EN)

Application
EP 94103974 A 19910315

Priority
• EP 91907325 A 19910315
• US 53416490 A 19900606
• US 56797490 A 19900815
• US 65400891 A 19910214

Abstract (en)
[origin: WO9119044A1] A papermakers fabric having a system of flat monofilament machine direction yarns (hereinafter MD yarns) which control the permeability of the fabric. The present weave provides for usage of high aspect ratio yarns as structural weave components. The system of MD yarns comprises upper and lower yarns which are vertically stacked. Preferably, the upper MD yarns define floats on the upper surface of the fabric and each upper MD yarn is paired in a vertically stacked orientation with a lower MD yarn. At least the upper MD yarns are flat monofilament yarns woven contiguous with each other to reduce the permeability of the fabric and to lock in the machine direction alignment of the stacking pairs of MD yarns. The stacked, contiguous woven machine direction system provides stability and permits the MD yarns to have a relatively high aspect ratio, cross-sectional width to height, of greater than 3:1. A seam for the fabric comprised of loops from selected flat MD yarns is provided to render the fabric endless during use in papermaking.

IPC 1-7
D21F 1/00

IPC 8 full level
D21F 1/10 (2006.01); **D21F 1/00** (2006.01); **D21F 7/08** (2006.01)

CPC (source: EP)
D21F 1/0036 (2013.01); **D21F 1/0054** (2013.01); **D21F 7/083** (2013.01)

Cited by
WO9906631A1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
WO 9119044 A1 19911212; AT E114006 T1 19941115; AT E154403 T1 19970615; AT E172506 T1 19981115; AT E172764 T1 19981115; AU 2703092 A 19930107; AU 642004 B2 19931007; AU 649570 B2 19940526; AU 673615 B2 19961114; AU 7039494 A 19941103; AU 7553891 A 19911231; CA 2084054 A1 19911207; CA 2084054 C 19960604; DE 553501 T1 19980312; DE 612882 T1 19980312; DE 69105130 C5 20080214; DE 69105130 D1 19941215; DE 69105130 T2 19950323; DE 69126545 D1 19970717; DE 69126545 T2 19971218; DE 69130398 D1 19981126; DE 69130398 T2 19990311; DE 69130423 D1 19981203; DE 69130423 T2 19990422; DK 0532510 T3 19950424; DK 0553501 T3 19990705; DK 0612881 T3 19970714; DK 0612882 T3 19990628; EP 0532510 A1 19930324; EP 0532510 B1 19941109; EP 0553501 A2 19930804; EP 0553501 A3 19931222; EP 0553501 B1 19981028; EP 0612881 A1 19940831; EP 0612881 B1 19970611; EP 0612882 A1 19940831; EP 0612882 B1 19981021; ES 2063504 T3 19950101; ES 2102711 T3 19970801; ES 2107977 T1 19971216; ES 2107977 T3 19981216; ES 2107978 T1 19971216; ES 2107978 T3 19981216; FI 119065 B 20080715; FI 20031544 A 20031022; FI 925483 A0 19921202; FI 925483 A 19921202; FI 96881 B 19960531; JP 3179752 B2 20010625; JP 3179753 B2 20010625; JP 3346736 B2 20021118; JP 3655301 B2 20050602; JP H05509134 A 19931216; JP H11124784 A 19990511; JP H111885 A 19990106; JP H111886 A 19990106; NO 305215 B1 19990419; NO 305216 B1 19990419; NO 309435 B1 20010129; NO 924688 D0 19921204; NO 924688 L 19930205; NO 940200 D0 19940120; NO 940200 L 19930205; NO 974419 D0 19970924; NO 974419 L 19930205; NZ 237553 A 19950328

DOCDB simple family (application)
US 9101776 W 19910315; AT 91907325 T 19910315; AT 92122165 T 19910315; AT 94103974 T 19910315; AT 94103975 T 19910315; AU 2703092 A 19921015; AU 7039494 A 19940822; AU 7553891 A 19910315; CA 2084054 A 19910315; DE 69105130 T 19910315; DE 69126545 T 19910315; DE 69130398 T 19910315; DE 69130423 T 19910315; DE 92122165 T 19910315; DE 94103975 T 19910315; DK 91907325 T 19910315; DK 92122165 T 19910315; DK 94103974 T 19910315; DK 94103975 T 19910315; EP 91907325 A 19910315; EP 92122165 A 19910315; EP 94103974 A 19910315; EP 94103975 A 19910315; ES 91907325 T 19910315; ES 92122165 T 19910315; ES 94103974 T 19910315; ES 94103975 T 19910315; FI 20031544 A 20031022; FI 925483 A 19921202; JP 50660591 A 19910315; JP 5251898 A 19980304; JP 5251998 A 19980304; JP 5252098 A 19980304; NO 924688 A 19921204; NO 940200 A 19940120; NO 974419 A 19970924; NZ 23755391 A 19910325