

Title (en)

MULTI-LAYER FABRIC FOR PAPER MAKING MACHINES

Title (de)

MEHRLAGIGES GEWEBE FÜR PAPIERMASCHINEN

Title (fr)

TISSU MULTICOUCHE POUR MACHINES DE PAPIER

Publication

EP 1590527 A2 20051102 (EN)

Application

EP 03814788 A 20031215

Priority

- US 0339814 W 20031215
- US 33416602 A 20021230
- US 41123503 A 20030410

Abstract (en)

[origin: WO2004061210A2] A fabric having top and bottom layers, with each layer having machine direction (MD) yarns and cross-direction (CD) yarns interwoven together. The fabric includes pairs of binder yarns that bind together the top and bottom layers. The binder pairs are interwoven so as to be an integral part of the first layer and contribute to a structure thereof. The binder pairs are a non-integral part of the second layer and do not contribute to the structure thereof. During a repeat pattern, at least one of the two binder yarns of a binder pair is integrally woven with the yarns of the first layer and passes over outer surfaces of, two non-consecutive yarns in the second layer. As a result, a "double knuckle" binding structure may be formed which improves integrity of the resulting composite fabric by reducing the length of the binder yarn path through the fabric.

IPC 1-7

D21F 1/00

IPC 8 full level

D21F 1/00 (2006.01)

CPC (source: EP KR)

D21F 1/00 (2013.01 - KR); **D21F 1/0036** (2013.01 - EP)

Citation (search report)

See references of WO 2004061210A2

Citation (examination)

- CA 2352898 A1 20011006 - ASTENJOHNSON INC [CA]
- EP 0794283 A1 19970910 - SEABROOK RONALD H [CA], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004061210 A2 20040722; WO 2004061210 A3 20041028; WO 2004061210 A8 20050929; AU 2003300929 A1 20040729;
AU 2003300929 B2 20080925; AU 2003300929 C1 20090326; BR 0317865 A 20051206; BR 0317865 B1 20130611; CA 2509067 A1 20040722;
CA 2509067 C 20120731; EP 1590527 A2 20051102; KR 101126075 B1 20120412; KR 20050088350 A 20050905; MX PA05006467 A 20060217;
NO 20053695 L 20050729; NZ 540278 A 20060428; RU 2005117346 A 20060227; RU 2337187 C2 20081027

DOCDB simple family (application)

US 0339814 W 20031215; AU 2003300929 A 20031215; BR 0317865 A 20031215; CA 2509067 A 20031215; EP 03814788 A 20031215;
KR 20057012314 A 20031215; MX PA05006467 A 20031215; NO 20053695 A 20050729; NZ 54027803 A 20031215;
RU 2005117346 A 20031215