

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 March 2004 (18.03.2004)

PCT

(10) International Publication Number
WO 2004/022331 A1

(51) International Patent Classification⁷: **B32B 5/26**,
A47L 13/10

(21) International Application Number:
PCT/US2003/027462

(22) International Filing Date:
4 September 2003 (04.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/408,229 6 September 2002 (06.09.2002) US

(71) Applicant: **S. C. JOHNSON & SON, INC.** [US/US];
1525 Howe Street, Racine, WI 53403 (US).

(72) Inventors: **HARMAN, Rebecca, D.**; 8640 S. Clearwater
Court, Oak Creek, WI 53154 (US). **KLIMOWICZ, Ran-
dal, S.**; 12931 Seven Mile Road, Caledonia, WI 53108
(US). **BELAND, Rene, M.**; 511 Fairview Circle, Water-
ford, WI 53185 (US).

(74) Agent: **MCDONALD, Frank, B.**; S. C. Johnson & Son,
Inc., 1525 Howe Street, Racine, WI 53403 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, UZ, VC, VN, YU, ZA, ZM, ZW.

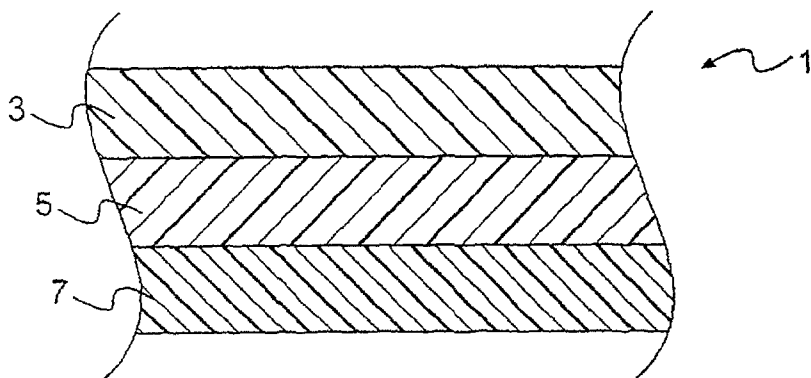
(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: CLEANING AND DUSTING FABRIC



(57) Abstract: A first layer (3) includes about 50 to about 100 percent rayon by dry weight, the first layer (3) having dust collection properties as well as liquid absorbency. A second layer (5) includes a polymer spunbond that provides a structural base for the cleaning and dusting fabric that is soft yet resists tearing. The first layer (3) and the second layer (5) are hydroentangled. A third layer (7) includes thermoplastic fibers having a melting temperature lower than that of each of the first and the second layers (3,5) and the third layer (7) is hydroentangled to at least

one of the first layer (3) and the second layer (5).