

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
8 January 2009 (08.01.2009)

PCT

(10) International Publication Number
WO 2009/005548 A3

(51) International Patent Classification:
B63B 3/10 (2006.01)

(21) International Application Number:

PCT/US2008/003427

(22) International Filing Date: 14 March 2008 (14.03.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/820,692 20 June 2007 (20.06.2007) US

(71) Applicant (for all designated States except US): **FOSTER-MILLER, INC.** [US/US]; 350 Second Avenue, Waltham, MA 02451 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MANN, Thomas** [US/US]; 2 Brandy Hollow, Littleton, MA 01460 (US). **MAHNKEN, Denise** [US/US]; 588 Reservoir Road, Lunenburg, MA 01462 (US). **MCCORMACK, Michael, E., II** [US/US]; 62 Independence Avenue, Hanson, MA 02341 (US). **SMIRLOCK, Martin, Edward** [US/US]; 108 Hill Street, Concord, MA 01742 (US). **SYKES, Robert, C.** [US/US]; 13 Ellery Lane, Burlington, MA 01803 (US).

(74) Agents: **THOMPkins, Thomas, E., Jr.** et al.; Iandioro Teska & Coleman, 260 Bear Hill Road, Waltham, MA 02451-1018 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: SPALL LINER

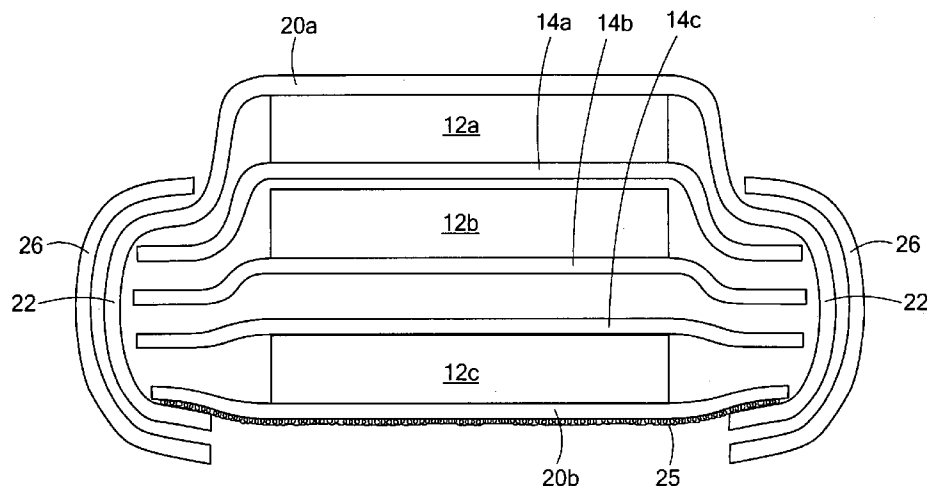


FIG. 2

(57) Abstract: A spall liner including a first plurality of flexible fabric plies of a first dimension secured together and secured to a first tie layer of a second, larger dimension. At least a second plurality of flexible fabric plies are secured together and secured to a second tie layer. The first and second tie layers are secured together. A cover includes separable fastener structure of a first type for removeably securing the liner to the inside hull of a vehicle equipped with separable fastener structure of a second type.

WO 2009/005548 A3



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) **Date of publication of the international search report:**

5 March 2009