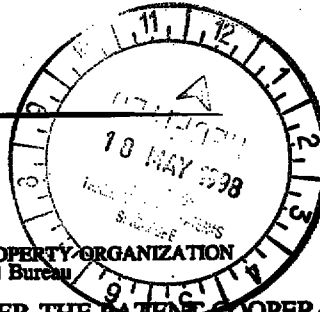


9802115-7



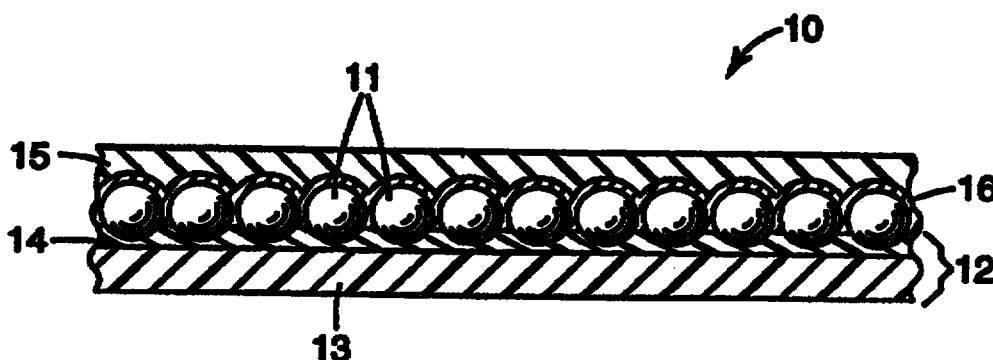
PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G02B 5/128, A41D 13/00, D06Q 1/12, B44C 1/17	AI	(11) International Publication Number: WO 97/10522 (43) International Publication Date: 20 March 1997 (20.03.97)
(21) International Application Number: PCT/US96/12748 (22) International Filing Date: 6 August 1996 (06.08.96) (30) Priority Data: 08/528,906 15 September 1995 (15.09.95) US (71) Applicant: MINNESOTA MINING AND MANUFACTURING COMPANY [US/US]; 3M Center, P.O. Box 33427, Saint Paul, MN 55133-3427 (US). (72) Inventor: MARECKI, Paul, E.; P.O. Box 33427, Saint Paul, MN 55133-3427 (US). (74) Agents: HANSON, Karl, G. et al.; Minnesota Mining and Manufacturing Company, Office of Intellectual Property Counsel, P.O. Box 33427, Saint Paul, MN 55133-3427 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>

(54) Title: **RETROREFLECTIVE TRANSFER SHEET AND APPLIQUE**



(57) Abstract

A retroreflective applique (10) is provided that includes a layer of optical lens elements (11) partially embedded in and protruding from a transfer adhesive layer (15) prepared from ingredients comprising a vinyl plastisol and a substantially nonhydrolyzed aminosilane adhesion promoter; wherein the aminosilane adhesion promoter is used in an amount effective to produce an applique capable of: (a) retaining at least about 60 % of its initial retroreflectivity after being laminated to 65/35 polyester/cotton blend fabric (100 g/m²) at about 174 °C and about 2.8 kg/cm² pressure for about 20 seconds and subjected to home laundering conditions five times; and (b) retaining at least about 40 % of its initial retroreflectivity after being laminated to 65/35 polyester/cotton blend fabric (100 g/m²) at about 174 °C and about 2.8 kg/cm² pressure for about 20 seconds and subjected to home laundering conditions twenty-five times.