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- (72) Inventors; and
(75) Inventors/Applicants (for US only): **ORENSTEEN, Bruce D.**, [US/US]; 3M Center, Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US). **SPURGEON, Kathryn M.**, [US/US]; 3M Center, Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US). **BEN-SON, Olester Jr.**, [US/US]; 3M Center, Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US). **CRIM-ANDO, Joseph V.**, [US/US]; 3M Center, Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US).
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[Continued on next page]

(54) Title: CUBE CORNER SHEETING HAVING OPTICALLY VARIABLE MARKING

(57) Abstract: Retroreflective sheeting having a structured layer of cube corner elements and an at least one optically variable mark therein, and methods of making same.

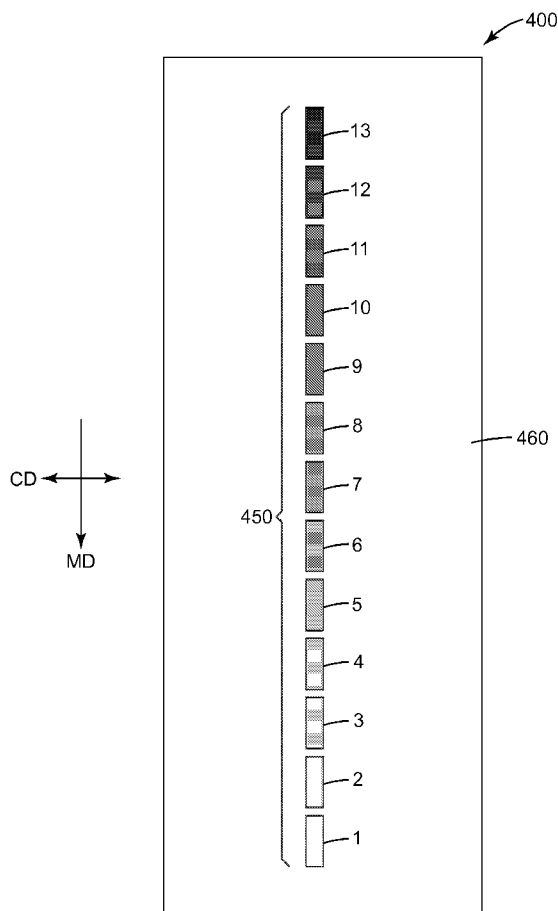


Fig. 4





(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, CL, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

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28 February 2013

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/039022**A. CLASSIFICATION OF SUBJECT MATTER****G02B 5/12(2006.01)i, G02B 5/08(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G02B 5/12; B29D 7/01; B32B 3/00; F21V 7/00; B29D 11/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: retroreflective sheet, manufacture, mold, irradiation

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2005-0141243 A1 (PATRICK MULLEN et al.) 30 June 2005 See abstract, paragraphs [0104],[0105],[0108] and figure 16.	1-26
A	US 06120636 A (NILSEN; ROBERT B. et al.) 19 September 2000 See abstract, column 4, lines 20-54, column 5, lines 23-27 and figures 1, 4A.	1-26
A	US 05770124 A (MARECKI; PAUL E. et al.) 23 June 1998 See abstract, column 16, lines 19-61, claims 12, 13 and figure 11.	1-26
A	US 05780140 A (NILSEN; ROBERT B.) 14 July 1998 See abstract, column 3, line 44 - column 4, line 20 and figure 16.	1-26

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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PCT/US2012/039022

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