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AO, AT, AU, AZ, BA, BB, BG, BH, BN, 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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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(54) Title: INTEGRATED FILTER AND GRATING IN AN AIMING SIGHT

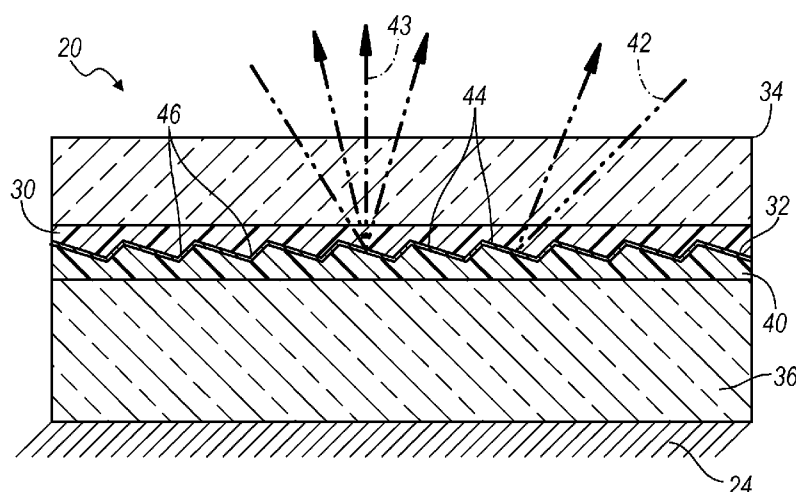


FIG. 4

(57) Abstract: A holographic sight is provided having a housing that includes a plurality of holograph sight components. A laser diode mounted in the housing is configured to emit a laser light beam. The light beam is transmitted to an integrated diffraction grating and filter unit which includes a grating and a filter in a single device. The diffraction grating has a grating surface for diffracting the light beam and also diffracting unwanted ambient light transmitted into the housing. The filter is an optical filter contacting at least a portion of the grating. The optical filter is adapted to absorb at least one wavelength of the ambient light to inhibit the ambient light from diffracting into a visible spectrum that might otherwise be viewable to a user looking into the holographic sight.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 15/30074

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - F41G 1/02, G02B 1/11, G02B 5/18, G02B 5/20, G02B 5/32 (2015.01)

CPC - F41C 33/0254, F41G 1/02, G02B 1/11, G02B 5/20, G02B 5/203, G02B 5/206, G02B 19/0052

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)

IPC(8)- F41G 1/02, G02B 1/11, G02B 5/18, G02B 5/20, G02B 5/32 (2015.01);

CPC- F41C 33/0254, F41G 1/02, G02B 1/11, G02B 5/20, G02B 5/203, G02B 5/206, G02B 19/0052

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 USPC- 42/111, 42/119, 42/122, 42/123, 42/130, 42/131, 89/20, 345/7, 345/8, 345/9, 359/1-35, 359/399, 359/425-429, 359/630;
 Patents and NPL (classification, keyword; search terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Pub West (US EP JP WO), Pat Base (AU BE BR CA CH CN DE DK EP ES FI FR GB IN JP KR SE TH TW US WO), Google Patent, Google Scholar, Free Patents Online; search terms: holographic, sight, reticle, view, window, grating, diffraction, dye, epoxy, glycidyl, reflection, diffraction, refraction, birefringence, diffusion, filter, laser, diode, collimate

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y -- A	US 5,815,936 A (SIECZKA et al.) 06 October 1998 (06.10.1998), col 2, ln 47-49; col 4, ln 49 to col 5, ln 28;	8-11, 16-18 ----- 1-7, 12-15, 19-20
Y -- A	US 5,539,544 A (LE PAIH et al.) 23 July 1996 (23.07.1996), Fig. 5a; col 5, ln 44-57	8-11, 16-18 ----- 1-7, 12-15, 19-20
A	US 2011/0228366 A1 (LIU) 22 September 2011 (22.09.2011), para [0010]-[0022]	1-7, 12-15, 19-20
A	US 2010/0328743 A1 (WOLTERINK et al.) 30 December 2010 (30.12.2010), para [0005]-[0036]	1-7, 12-15, 19-20
A	WO 95/30179 A1 (INSTRUMENTS SA, INC.) 09 November 1995 (09.11.1995), Figs. 12, 13; pg 5, ln 20 to pg 23, ln 38	1-7, 12-15, 19-20

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* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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