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(54) Title: HIGH-POWER SHORT-PASS TOTAL INTERNAL REFLECTION FILTER

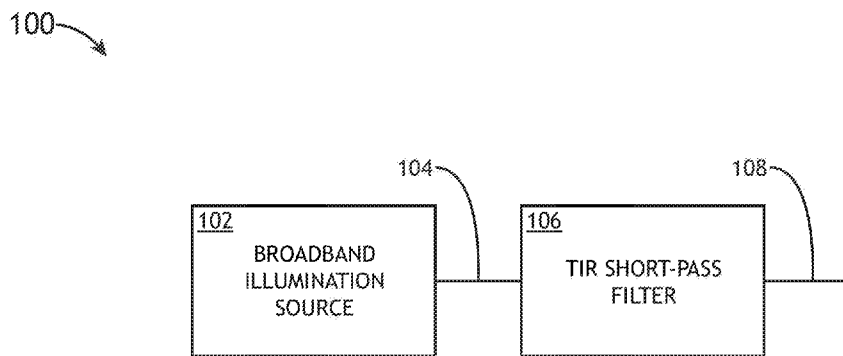


FIG. 1A

(57) Abstract: An apparatus for generating filtered light may include a broadband illumination source configured to generate broadband illumination and a total internal reflection (TIR) filter formed from a material at least partially transparent to the broadband illumination. The TIR filter may include one or more input faces oriented to receive the broadband illumination. The TIR filter may further be oriented to reflect wavelengths of the broadband illumination beam below a selected cutoff wavelength on one or more filtering faces as filtered broadband illumination and provide the filtered broadband illumination beam through one or more output faces. The cutoff wavelength may further be selected based on total internal reflection on the one or more faces.



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A. CLASSIFICATION OF SUBJECT MATTER**G02B 5/26(2006.01)i**

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

B. FIELDS SEARCHEDMinimum documentation searched (classification system followed by classification symbols)
G02B 5/26; F41G 3/26; G02B 5/04; G02B 5/20; G02F 1/01; G03B 21/60; H01J 65/04; H05H 1/24Documentation 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 modelsElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & Keywords: total internal reflection, filter, prism, reflection, transmission, selected wavelength**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2016-0066402 A1 (KLA-TENCOR CORPORATION) 03 March 2016 See paragraphs [0023]-[0069] and figure 1A.	1-39
Y	US 2008-0026346 A1 (ANNA-KARIN HOLMER et al.) 31 January 2008 See paragraphs [0020]-[0022] and figure 4.	1-39
Y	JP 2011-221376 A (DAINIPPON PRINTING CO., LTD.) 04 November 2011 See paragraphs [0025]-[0043], claim 8 and figure 1.	7-12, 27-31, 36-37
A	US 2010-0097699 A1 (PATRICK R. DESTAIN et al.) 22 April 2010 See paragraphs [0016]-[0046] and figures 1-4.	1-39
A	US 2009-0128881 A1 (STEVEN M. PENN) 21 May 2009 See abstract.	1-39

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

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Information on patent family members

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