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(54) **Title:** LASER PROBE WITH AN ELECTRICALLY STEERABLE LIGHT BEAM

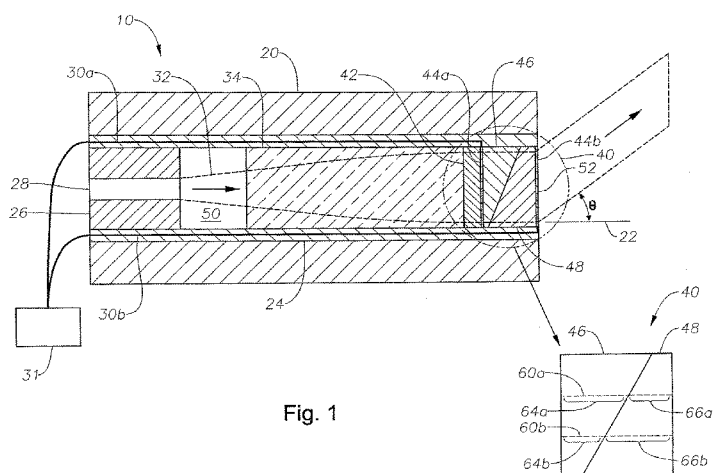


Fig. 1

(57) **Abstract:** Laser probes have one or more optical fibers that emit light beams. Laser probes typically use mechanical approaches to steer the emitted light beams. For example, an optical fiber may be placed in a tube that can be bent or straightened to emit a light beam in a particular direction. As another example, prisms rotated by motors may steer light beams passing through the prisms. As yet another example, a laser probe may have different optical fibers that direct a light beam in different directions, and a light beam is focused onto a particular fiber to direct the beam in a particular direction. Known laser probes, however, may not be able to steer emitted light beams in a satisfactory manner in certain situations.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 12/43504

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G02F 1/03, G02F 1/035 (2012.01)

USPC - 385/1; 359/246

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)

USPC: 385/1; 359/246

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

IPC(8): G02F 1/03, G02F 1/035; USPC: 385/1,2,4; 356/3; 359/237,238,245,246; 349/16,57,58,62

(keyword limited; terms below)

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

PubWEST(USPT,PGPB,EPAB,JPAB); Google Scholar

Search Terms: waveguide, pdlc, laser, electrode, angle, light guide, light tube, steer, direct, prism, voltage, pattern, cannula, polymer, otec, transparent, electrode, tubular, beam, lcd, housing.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2010/0228124 A1 (BRENNAN et al.) 09 September 2010 (09.09.2010), entire document, especially; FIG 3, 4A, para [0002], [0027], [0054], [0057].	1-20
Y	US 2005/0122566 A1 (CICCHIELLO) 09 June 2005 (09.06.2005), entire document, especially; FIG 2, para [0005], [0006], [0019], [0031], [0035]-[0038], [0049].	1-20
Y	US 7,400,787 B2 (BURNS) 15 July 2008 (15.07.2008), entire document, especially; col 2, ln 36-44, col 3, ln 5-19.	4, 12, 18
Y	US 2008/0063808 A1 (STUMPE et al.) 13 March 2008 (13.03.2008), entire document, especially; para [0002], [0059], [0091].	6, 7, 15
A	US 2011/0052114 A1 (BERNASCONI et al.) 03 March 2011 (03.03.2011), entire document.	1-20
A	US 2007/0024978 A1 (JACKSON et al.) 01 February 2007 (01.02.2007), entire document.	1-20

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"&" document member of the same patent family

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