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VOLPE AND KOENIG, P.C.			ROY, SIKHA	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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eoffice@volpe-koenig.com

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DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by US 2007/0217188 to Klipstein et al.

Regarding claim 1 Klipstein discloses (Fig. 4 [0069]-[0077]) an apparatus for controlling three-dimensional optical field comprising a light emission device 401 emitting light and a set of zoom elements 402 disposed in front of the light-emission device and focusing the light from the light emission device.

Regarding claim 2 Klipstein discloses the set of zoom elements comprise a plurality of first zoom elements.

Regarding claim 3 Klipstein discloses (Fig. 5 [0088]-[0091]) a second zoom element (non-planar lens) 507 disposed in front of the set of zoom elements.

Regarding claim 4 Klipstein discloses the light emission device is a set of light emission units 401.

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Regarding claim 5 Klipstein discloses each of the light emission unit comprises an LED.

Regarding claim 6 Klipstein clearly discloses in Fig. 4 the set of zoom elements 402 have a portion corresponding to a single one of the set of light emission unit 401.

Regarding claim 7 Klipstein clearly discloses in Fig. 4 the set of light emission units 401 have a portion corresponding to a single one of the set of zoom elements 402.

Regarding claim 8 Klipstein discloses each of the set of zoom elements includes one selected from a group consisting of a liquid lens, a solid lens and a combination thereof.

Claims 9- 14 are rejected under 35 U.S.C. 102(b) as being anticipated by US 2005/0174775 to Conner.

Regarding claim 9 Conner discloses (Figs. 1, 5 [0030]-[0032]) an apparatus for controlling a three dimensional optical field the apparatus comprising a set of zoom light sources , wherein the set of zoom light sources include a plurality of zoom light units each of which includes a light emission unit 72 and a first zoom element 74 disposed in front of the light emission unit.

Regarding claim 10 Conner discloses the first zoom element includes one selected from a group consisting of a liquid lens, a solid lens and a combination thereof.

Regarding claim 11 Conner discloses the light emission unit comprises an LED.

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Regarding claim 12 Conner discloses (Fig. 7 [0059]) each of the zoom light units comprises a plurality of light emission units 194R, 194G, 194B and the first zoom element 174 is a single zoom element.

Regarding claim 13 Conner discloses (Fig. 1) the first zoom element further comprises a plurality of zoom elements 74,76 and the light emission unit 12 is a single unit 74.

Regarding claim 14 Conner discloses a second zoom element 18 is disposed in front of the first zoom element.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2007/0217188 to Klipstein et al., and further in view of USPN 6,183,086 to Neubert.

Regarding claim 15 Klipstein discloses (Figs. 1, 4 [0056], [0069]-[0077]) a method of controlling three-dimensional optical field comprising step of providing a plurality of zoom light units (with single LED 401 and focusing lens 402) each of which has a respective light intensity and a respective focal length . Klipstein teaches step of including beam focusing adjustment such as means to move the LED or an adjustable

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lens arrangement for controlling the respective focal length and hence the three dimensional optical field.

Klipstein does not expressly disclose controlling the three dimensional optical field by adjusting the respective light intensity.

Neubert in same field of endeavor discloses (Fig. 1 col. 2 lines 23-56) a controller 14 which determines the appropriate power level and amplifier gain for each LED 30,32,34 and thus controls the intensity of desired light output thus providing an illumination system having control over the light output and eliminating necessity of selecting among multiple light sources.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to include the controller with the zoom light units of Klipstein which determines the appropriate power level and amplifier gain for each LED as taught by Neubert for controlling the three dimensional optical field by adjusting the respective light intensity.

Regarding claim 16 Klipstein as modified by Neubert discloses (Klipstein [0071], [0115]) a two- dimensional light shape (shape of annular ring, shapes of images of chips) is controlled by variation of the intensity of plurality of zoom light units and the focal plane at a light axis is controlled by the zooming action of the zoom light units.

Regarding claim 17 Klipstein and Neubert disclose the zoom light units include solid lens.

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Regarding claim 18 Klipstein discloses (Fig. 5 [0088]-[0091]) a step of providing a second zoom light unit (non-planar lens) 507 disposed in front of the plurality of zoom light units.

Regarding claim 19 Klipstein discloses (Figs. 4, 8) the zoom light units comprise a plurality of light emission units 401.

Regarding claim 20 Klipstein discloses (Figs. 4, 8) each zoom light unit (with single LED 401 and focusing lens 402) comprises a light source and the light source is a single light emission unit.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (571) 272-2463. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is (571) 273-8300.

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/Sikha Roy/
Primary Examiner, Art Unit 2879

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