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15/369,218	12/05/2016	Michael Miskin	53998.19US03_82037	5014

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EXAMINER	
LE, DON P	

ART UNIT	PAPER NUMBER
2844	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 15/369,218	Applicant(s) MISKIN ET AL.	
	Examiner DON LE	Art Unit 2844	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/13/2018*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1 and 3-33* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☒ Claim(s) *1* is/are allowed.

7)☒ Claim(s) *3-33* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *6/13/2018, 7/12/2018*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application is being examined under the pre-AIA first to invent provisions.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of pre-AIA 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 –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim(s) 3-9, 11, 12 and 20-26 are is/are rejected under pre-AIA 35 U.S.C. 102(e) as being anticipated by Shteynberg et al. (US 2012/0081009).

4. With respect to claim 3, figure 1 of Shteynberg teaches an LED lighting system comprising:

at least one LED circuit having at least two LEDs (140s), wherein at least one LED of the at least two LEDs capable of emitting light of a different color or wavelength (see para 0050, segment with different color) than at least one other LED of the at least two LEDs;

Wherein a color of light emitted by the at least one LED circuit is selectable by a switch (110, switch 110 is controlled by a user via interface 190 through controller 120) controlled by a user, the color being produced by at least one of the at least two LEDs; and

wherein the LED lighting system is driven with an AC voltage source (102).

5. With respect to claim 4, figure 1 of Shteynberg teaches a least one of the at least two LEDs emit light during both the positive and negative phases of an AC voltage supplied to the LED lighting system (LEDs are on for both phase of AC source voltage input).

6. With respect to claim 5, figure 1 of Shteynberg teaches a bridge rectifier (105), the bridge rectifier providing rectified AC voltage and current to the at least one LED circuit.

7. With respect to claim 6, figure 1 of Shteynberg teaches a control device (CONTROLLER) capable of adjusting the color temperature of the at least one LED circuit.

8. With respect to claim 7, figure 1 of Shteynberg teaches a control method capable of adjusting the color temperature of the at least one LED circuit (the method is inherent in the apparatus to provide control).

9. With respect to claim 8, figure 1 of Shteynberg teaches a dimmer switch connected to the at least one LED circuit, the dimmer switch controlling the at least one LED circuit, and the at least one LED circuit changing color temperature in response to an adjustment of the dimmer switch (see para 0173, dimmer switch used to control LEDs).

10. With respect to claim 9, figure 1 of Shteynberg teaches a switch (110s), the switch controlling the at least one LED circuit, and the at least one LED circuit changing color temperature in response to an adjustment of the switch.

11. With respect to claim 11, figure 1 of Shteynberg teaches a sensor (115, current sensor), wherein the at least one LED circuit changes color temperature in response to the sensor.

12. With respect to claim 12, figure 1 of Shteynberg teaches the at least one LED circuit is driven with a constant DC current or constant DC voltage when connected to an AC power source (see para 0253, providing constant current).

13. With respect to claim 20, figure 1 of Shteynberg teaches an LED lighting system comprising:

at least one LED circuit having at least two LEDs (140s);

a switch (110) configured to be controlled by a user to control an amount of voltage or current that flows through the at least two LEDs (switch 110 is controlled by a user via interface 190 through controller 120);

wherein the at least one LED circuit provides light of a different level of brightness in response to adjustment of the switch (see para 0173 dimmer to control brightness); and

wherein the LED lighting system is driven with an AC voltage source (102).

14. With respect to claim 21, figure 1 of Shteynberg teaches the at least one LED circuit comprises at least two LEDs (175s), wherein at least one of the at least two LEDs emits light of a different color or wavelength than at least a second LED from the at least two LEDs (see para 0050, segment with different color).

15. With respect to claim 22, figure 1 of Shteynberg teaches a bridge rectifier (105), the bridge rectifier being electrically connected to the at least one LED circuit to provide rectified voltage and current to the at least one LED circuit.

16. With respect to claim 23, Shteynberg teaches a dimmer switch connected to the at least one LED circuit, the dimmer switch controlling the at least one LED circuit, and the at least one LED circuit changing color temperature in response to an adjustment of the dimmer switch (see para 0173, dimmer switch used to control LEDs).

17. With respect to claim 24, Shteynberg teaches a switch (110s), the switch controlling the at least one LED circuit, and the at least one LED circuit changing color temperature in response to an adjustment of the switch.

18. With respect to claim 25, Shteynberg teaches a sensor (current sensor 115), wherein the at least one LED circuit changes color temperature in response to the sensor.

19. With respect to claim 26, Shteynberg teaches the at least one LED circuit is driven with a constant current or constant voltage DC when connected to an AC power source (see para 0253, providing constant current).

Claim Rejections - 35 USC § 103

20. Claims 10 13-19 and 27-33 is/are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Shteynberg et al. (US 2012/0081009) in view of Fukano et al. (US 2013/0119896).

21. With respect to claim 10, Shteynberg does not specifically disclose the at least two LEDs is integrated on a single substrate. Fukano teaches an LED circuit having

LEDs on a single substrate as a matter of choice for the purpose of implementation. It would have been obvious to one of ordinary skill of art at the effective filing date to have the LEDs of Shteynberg on a single substrate as taught by Fukano as a matter of choice for the purpose of implementation of an LED circuit.

22. With respect to claim 13, the rejection of claim 10 above also apply to claim 13 in that the additional element of a single substrate.

23. With respect to claim 14, figure 1 of Shteynberg teaches a least one of the at least two LEDs emit light during both the positive and negative phases of an AC voltage supplied to the LED lighting system (LEDs are on for both phase of AC source voltage input).

24. With respect to claim 15, figure 1 of Shteynberg teaches a bridge rectifier (105), the bridge rectifier providing rectified AC voltage and current to the at least one LED circuit.

25. With respect to claim 16, figure 1 of Shteynberg teaches a dimmer switch connected to the at least one LED circuit, the dimmer switch controlling the at least one LED circuit, and the at least one LED circuit changing color temperature in response to an adjustment of the dimmer switch (see para 0173, dimmer switch used to control LEDs).

26. With respect to claim 17, figure 1 of Shteynberg teaches a switch (110s), the switch controlling the at least one LED circuit, and the at least one LED circuit changing color temperature in response to an adjustment of the switch.

27. With respect to claim 18, figure 1 of Shteynberg teaches a sensor (115, current sensor), wherein the at least one LED circuit changes color temperature in response to the sensor.

28. With respect to claim 19, figure 1 of Shteynberg teaches the at least one LED circuit is driven with a constant DC current or constant DC voltage when connected to an AC power source (see para 0253, providing constant current).

29. With respect to claim 27, Shteynberg teaches every elements as shown in claim 20 rejection above with the exception of a single substrate. Fukano teaches an LED circuit having LEDs on a single substrate as a matter of choice for the purpose of implementation. It would have been obvious to one of ordinary skill of art at the effective filing date to have the LEDs of Shteynberg on a single substrate as taught by Fukano as a matter of choice for the purpose of implementation of an LED circuit.

30. With respect to claim 28, figure 1 of Shteynberg teaches the at least one LED circuit comprises at least two LEDs (175s), wherein at least one of the at least two LEDs emits light of a different color or wavelength than at least a second LED from the at least two LEDs (see para 0050, segment with different color).

31. With respect to claim 29, figure 1 of Shteynberg teaches a bridge rectifier (105), the bridge rectifier being electrically connected to the at least one LED circuit to provide rectified voltage and current to the at least one LED circuit.

32. With respect to claim 30, Shteynberg teaches a dimmer switch connected to the at least one LED circuit, the dimmer switch controlling the at least one LED circuit, and

the at least one LED circuit changing color temperature in response to an adjustment of the dimmer switch (see para 0173, dimmer switch used to control LEDs).

33. With respect to claim 31, Shteynberg teaches a switch (110s), the switch controlling the at least one LED circuit, and the at least one LED circuit changing color temperature in response to an adjustment of the switch.

34. With respect to claim 32, Shteynberg teaches a sensor (current sensor 115), wherein the at least one LED circuit changes color temperature in response to the sensor.

35. With respect to claim 33, Shteynberg teaches the at least one LED circuit is driven with a constant current or constant voltage DC when connected to an AC power source (see para 0253, providing constant current).

Allowable Subject Matter

36. Claim 1 is allowed.

37. The following is an examiner's statement of reasons for allowance:

With respect to claim 1, the prior art does not teach a driver for an LED lighting device comprising: a bridge rectifier, the bridge rectifier having a first pair of driver connection leads to connect the bridge rectifier to an AC voltage source; a current limiting device connected to the output of the bridge rectifier; [[and]] a second set of driver connection leads having a third and a fourth driver connection lead, wherein the third driver connection lead is connected to the output of the current limiting device and the fourth driver connection lead provides a return to the bridge rectifier when connected to a load: and a second current limiting device and a third set of driver

connection leads, the second current limiting device electrically unconnected from the bridge rectifier and the current limiting device, wherein the third set of driver connection leads includes a fifth driver connection lead connected to the input of the second current limiting device and a sixth driver connection lead connected to the output of the second current limiting device.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

38. Applicant's arguments filed 6/13/2018 have been fully considered but they are not persuasive.

Applicant argues that the switch 110 of Shteynberg is not controlled by a user. This is incorrect in that a user provides a signal via user interface to the controller 120 to control the switch 110. Therefore, the user controls the switch 110.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DON LE whose telephone number is (571)272-1806. The examiner can normally be reached on 7AM - 5PM.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an

interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Taningco can be reached on 571-272-8048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DON LE/
Primary Examiner, Art Unit 2844
8/19/2018