



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/009,871	09/02/2020	Thomas BOYAJIAN	067286-0411	7022
22428	7590	03/23/2021		
FOLEY & LARDNER LLP 3000 K STREET N.W. SUITE 600 WASHINGTON, DC 20007-5109			EXAMINER MARLEN, TAMMIE K	
			ART UNIT	PAPER NUMBER
			3792	
			NOTIFICATION DATE	DELIVERY MODE
			03/23/2021	ELECTRONIC

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):

ipdocketing@foley.com

Office Action Summary

Application No.

17/009,871

Applicant(s)

BOYAJIAN et al.

Examiner

TAMMIE K MARLEN

Art Unit

3792

AIA (FITF) Status

Yes

-- 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 02 March 2021.

☐ 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) 1-19 is/are pending in the application.

5a) Of the above claim(s) ____ is/are withdrawn from consideration.

6) ☒ Claim(s) 7-13 is/are allowed.

7) ☒ Claim(s) 1-5, 14-15 and 17-19 is/are rejected.

8) ☒ Claim(s) 6 and 16 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)

3) ☐ Interview Summary (PTO-413)

Paper No(s)/Mail Date ____.

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)

4) ☐ Other: ____.

Paper No(s)/Mail Date ____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

2. The amendment filed on March 2, 2021 has been received and considered. By this amendment, claims 1, 6, 7, 9, 10, and 16 are amended, claims 17-19 are added, and claims 1-19 are now pending in the application.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-5, 14, and 15 are rejected under 35 U.S.C. 103 as being unpatentable over Larsen (U.S. 2005/0075703, previously cited) in view of Liu et al. (U.S. 2013/0190845, cited by Applicant). Regarding claim 1, Larsen discloses a method, comprising: administering 5-aminolevulinic acid (ALA) to a patient (see paragraphs [0116], [0119], and [0120] and claims 50 and 51); positioning an illuminator 10 proximate to the patient, the illuminator comprising at least five panels 13, each of the panels comprising at least one light source 17, the five panels connected by a plurality of hinges 20 (indicated as 10 in the specification, but shown as element 20 in the Figures) on inner side surfaces of adjacent panels that connect panels together (see Figures 1-3 and paragraphs [0069] and [0072], lines 1-4); and illuminating a surface of the patient with the illuminator (see paragraphs [0026], [0037], and [0072], and claim 50). However, Larsen fails to disclose that joints of the hinges are substantially flush with front surfaces of adjacent panels. Liu teaches a device for providing light therapy to a patient that includes a plurality of panels 40a/40b connected by hinges 121 (see Figures 18B and 18C), wherein joints of the hinges are substantially flush with front surface of adjacent panels (see Figure 18A, where the hinges are considered to be "substantially" flush). Liu teaches that the configuration shown in Figure 18 provides the advantage of the illuminated area presented by the front panel surface being fully or

substantially continuous across the interface between panel sections 14a and 14b (see paragraph [0223]). It would have been obvious to one having ordinary skill in the art before the effective filing date of the claimed invention to modify the hinges of Larsen such that joints of the hinges are substantially flush with front surfaces of adjacent panels, as taught by Liu, in order to provide the advantage of the illuminated area presented by the panels surface being fully or substantially continuous across the interface between panel sections, and as it has been held that combining prior art elements according to known methods to yield predictable results requires only routine skill in the art. *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1742, 82 USPQ2d 1385, 1396 (2007).

5. Regarding claim 2, Larsen discloses that the surface of the patient includes a surface affected by actinic keratosis (see paragraph [0112], line 9).

6. Regarding claim 3, Larsen discloses that the surface of the patient includes a surface affected by acne (see paragraph [0112], line 9).

7. Regarding claim 4, Larsen discloses that the panels are configurable in a U shape or in a substantially flat shape (see Figure 1 which shows the panels in both a substantially flat shape and a wide U shape).

8. Regarding claim 5, it is respectfully submitted that because the panels are connected by hinges between each panel, the panels are capable of being configured as is desired by the user. As such, the outermost panels of Larsen would be capable of being configured to be substantially parallel.

9. Regarding claim 14, Larsen discloses that illuminating the surface comprises emitting light having a wavelength 300-2000 nm, or 300-450 nm for photodiagnostics, or with a wavelength from 350-500 nm (see paragraph [0071]). However, Larsen fails to disclose the specific range of from 400 nanometers to 430 nanometers. It would have been obvious to one having ordinary skill in the art before the effective filing date of the claimed invention to modify the invention of Larsen to emit light having a wavelength from 400 nanometers to 430 nanometers, as it has been held

that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. MPEP 2144.05

10. Regarding claim 15, Larsen discloses that administering ALA to the patient comprises topically applying ALA (see paragraph [0108]).

11. Claims 1-5, 14, 15, and 17-19 are rejected under 35 U.S.C. 103 as being unpatentable over Larsen (U.S. 2005/0075703, previously cited) in view of Parker et al. (U.S. 2012/0287671, cited by Applicant). Regarding claim 1, Larsen discloses a method, comprising: administering 5-aminolevulinic acid (ALA) to a patient (see paragraphs [0116], [0119], and [0120] and claims 50 and 51); positioning an illuminator 10 proximate to the patient, the illuminator comprising at least five panels 13, each of the panels comprising at least one light source 17, the five panels connected by a plurality of hinges 20 (indicated as 10 in the specification, but shown as element 20 in the Figures) on inner side surfaces of adjacent panels that connect panels together (see Figures 1-3 and paragraphs [0069] and [0072], lines 1-4); and illuminating a surface of the patient with the illuminator (see paragraphs [0026], [0037], and [0072], and claim 50). However, Larsen fails to disclose that joints of the hinges are substantially flush with front surfaces of adjacent panels. Parker teaches an illumination device 12 including a plurality of panels 16 connected by hinge assemblies 14 (see Figure 20). It can be seen from Figure 20 of Parker and the exploded view that the hinge assembly 14 is "substantially" flush with front surfaces of adjacent panels. It would have been obvious to one having ordinary skill in the art before the effective filing date of the claimed invention to modify the hinges of Larsen such that joints of the hinges are substantially flush with front surfaces of adjacent panels, as taught by Parker, as it has been held that combining prior art elements according to known methods to yield predictable results requires only routine skill in the art. *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1742, 82 USPQ2d 1385, 1396 (2007).

12. Regarding claim 2, Larsen discloses that the surface of the patient includes a surface affected by actinic keratosis (see paragraph [0112], line 9).

13. Regarding claim 3, Larsen discloses that the surface of the patient includes a surface affected by acne (see paragraph [0112], line 9).

14. Regarding claim 4, Larsen discloses that the panels are configurable in a U shape or in a substantially flat shape (see Figure 1 which shows the panels in both a substantially flat shape and a wide U shape).

15. Regarding claim 5, it is respectfully submitted that because the panels are connected by hinges between each panel, the panels are capable of being configured as is desired by the user. As such, the outermost panels of Larsen would be capable of being configured to be substantially parallel.

16. Regarding claim 14, Larsen discloses that illuminating the surface comprises emitting light having a wavelength 300-2000 nm, or 300-450 nm for photodiagnostics, or with a wavelength from 350-500 nm (see paragraph [0071]). However, Larsen fails to disclose the specific range of from 400 nanometers to 430 nanometers. It would have been obvious to one having ordinary skill in the art before the effective filing date of the claimed invention to modify the invention of Larsen to emit light having a wavelength from 400 nanometers to 430 nanometers, as it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. MPEP 2144.05

17. Regarding claim 15, Larsen discloses that administering ALA to the patient comprises topically applying ALA (see paragraph [0108]).

18. Regarding claims 17-19, Larsen discloses a method, comprising: administering 5-aminolevulinic acid (ALA) to a patient (see paragraphs [0116], [0119], and [0120] and claims 50 and 51); positioning an illuminator 10 proximate to the patient, the illuminator comprising at least five panels 13, each of the panels comprising at least one light source 17, the five panels connected by a plurality of hinges 20 (indicated as 10 in the specification, but shown as element

20 in the Figures) on inner side surfaces of adjacent panels that connect panels together (see Figures 1-3 and paragraphs [0069] and [0072], lines 1 -4); and illuminating a surface of the patient with the illuminator (see paragraphs [0026], [0037], and [0072], and claim 50). However, Larsen fails to disclose at least one of the inner side surfaces having a recess to accommodate therein at least part of one of the hinges, wherein the part is a flange or a hinge joint. Parker teaches an illumination device 12 including a plurality of panels 16 connected by hinge assemblies 14 (see Figure 20). Parker teaches that each panel 16 has a notch 124 that is configured to accommodate a flange 76/78 of hinge assemblies 14 (see the exploded view in Figure 20 and paragraph [0086]). Furthermore, it can be seen from the exploded view in Figure 20 that hinge joint 123 is accommodated as well. It would have been obvious to one having ordinary skill in the art before the effective filing date of the claimed invention to modify the invention of Larsen such that at least one of the inner side surfaces having a recess to accommodate therein at least part of one of the hinges, wherein the part is a flange or a hinge joint, as taught by Parker, as it has been held that combining prior art elements according to known methods to yield predictable results requires only routine skill in the art. *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1742, 82 USPQ2d 1385, 1396 (2007).

Allowable Subject Matter

19. Claims 7-13 are allowed.
20. Claims 6 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

21. Applicant's arguments with respect to claims 1-5 and 15 have been considered but are moot because the new ground of rejection does not rely on any reference applied in the prior rejection of record for any teaching or matter specifically challenged in the argument.

22. Applicant's arguments, see pages 9 and 10, filed March 2, 2021, with respect to claims 7-13 have been fully considered and are persuasive. The rejection of claims 7-13 has been withdrawn.

Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMMIE K MARLEN whose telephone number is (571)272-1986. The examiner can normally be reached on Monday through Friday from 8 am until 4 pm.

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, Carl Layno can be reached on 571-272-4949. 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 <https://ppair-my.uspto.gov/pair/PrivatePair>. 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.

/TAMMIE K MARLEN/
Primary Examiner, Art Unit 3792