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Paper 7
Date: September 19, 2024

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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MITO RED LIGHT, INC.
Petitioner,

v.

JOOVV, INC.,
Patent Owner.

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IPR2024-00621
Patent 11,253,719 B2

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Before HUBERT C. LORIN, ARTHUR M. PESLAK, and SEAN P. O'HANLON, *Administrative Patent Judges*.

LORIN, *Administrative Patent Judge*.

# DECISION
Denying Institution of *Inter Partes* Review
*35 U.S.C. § 314*

# I. INTRODUCTION

## *A. Background*

Mito Red Light, Inc. ("Petitioner") filed a Petition (Paper 2, "Pet.") requesting *inter partes* review of claims 1, 2, 3, 9, 10, 11, 16, 17, and 19 of U.S. Patent No. 11,253,719 B2 (Ex. 1001, "the '719 patent"). Joovv, Inc. ("Patent Owner") filed a Preliminary Response (Paper 6, "Prelim. Resp.").

We have authority under 35 U.S.C. § 314, which provides that an *inter partes* review may not be instituted unless the information presented in the Petition and the Preliminary Response shows that "there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314(a) (2018).

After considering the Petition, the Preliminary Response, and the evidence of record, we deny Petitioner's request to institute an *inter partes* review as to the challenged claims 1, 2, 3, 9, 10, 11, 16, 17, 19 of the '719 patent.

## *B. Related Proceedings*

Petitioner indicates, and Patent Owner agrees, that the '719 patent was asserted in *Joovv, Inc. v Mito Red Light, Inc.,* Civil Action No. Case 2:23-cv-01084-MTL (D. Ariz.) (the "Arizona Litigation") and is pending. Pet. 55; Paper 4, 2 (Patent Owner's Mandatory Notices).

## *C. Real Parties in Interest*

Petitioner identifies "Mito Red Light, Inc." as the real party in interest. Pet. 55. Patent Owner identifies "Joovv, Inc." as the real party in interest. Paper 4, 2.

*D. The ’719 patent (Ex. 1001)*

*1. Disclosure*

The ’719 patent, titled “Photobiomodulation Therapy Systems and Methods,” relates to photobiomodulation therapy or light therapy, which “is a therapeutic technique that uses low-level wavelengths of light to improve health and treat a variety of health conditions, including skin issues, such as wrinkles, scars, and persistent wounds, among many other conditions.” Ex. 1001, code (54), 1:42–46.

The ’719 patent explains that “[c]urrently, there are a number of photobiomodulation therapy devices available on the market.” Ex. 1001, 1:51–52. “However, many of these devices are too small and require multiple sessions to treat large areas. As a result, there is a need for a photobiomodulation therapy system that can treat several areas in fewer treatments.” *Id*. at 1:51–56 (*see also id.* at 5:1–3). To that end, the patent describes embodiments that “enable two or more light therapy devices to be communicatively coupled together to form a light therapy system. In doing so, the area of treatment can be expanded to reduce the time and number of treatments to achieve the desired results.” *Id*. at 5:4–8.

Figure 1 is reproduced below:

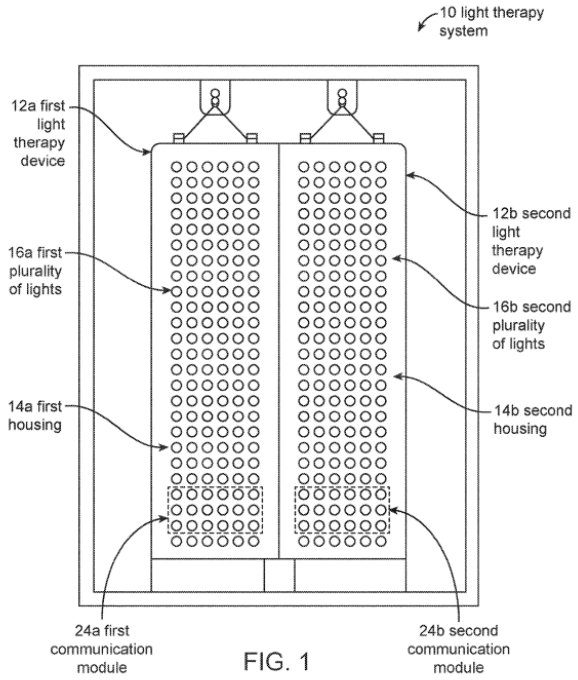


FIG. 1

Figure 1 of the '719 patent "illustrates a front view of a light therapy system, according to some embodiments." Ex. 1001, 3:49–50.

Figure 1 shows "a light therapy system 10 having a first light therapy device 12a and a second light therapy device 12b." Ex. 1001, 5:12–14. In some embodiments, as illustrated, "the first light therapy device 12a may have a first housing 14a, a first plurality of lights 16a, and a first communication module 24a." *Id*. at 5:14–17. The "second light therapy device 12b, which is communicatively coupled to the first light therapy device 12a," may have a similar arrangement. *Id*. at 5:26–28.

In some embodiments, the first and second plurality of lights may be red lights, near infrared lights, or some combination of the two. Ex. 1001, 5:18–21, 32–35.

*2. Claims 1, 2, 3, 9, 10, 11, 16, 17, and 19*

Petitioner challenges claims 1, 2, 3, 9, 10, 11, 16, 17, and 19. Pet. 1.

Claim 1, reproduced below, is the only independent claim and from which claims 2, 3, 9, 10, 11, 16, 17, and 19 directly or indirectly depend. Bracketing, consistent with the Petition, is added to assist in referring to the claim elements.

> 1. [1Preamble] A method for providing a light therapy treatment, comprising:
>
> [1a] providing a first light therapy device comprising a first housing and a first plurality of lights configured to emit at least one of red light and near infrared light;
>
> [1b] providing a second light therapy device comprising a second housing and a second plurality of lights configured to emit at least one of red light and near infrared light;
>
> [1c] communicatively coupling the first light therapy device directly to the second light therapy device;
>
> [1d] emitting at least one of red light and near infrared light from at least a portion of the first plurality of lights and at least a portion of the second plurality of lights;
>
> [1e] placing the first light therapy device in a lead mode; and
>
> [1f] placing the second light therapy device in a follow mode whereby the second light therapy device performs operations as instructed by the first light therapy device.

Ex. 1001, 11:53–12:4.

*E. Asserted References*

Petitioner relies on the following references:

| Name | Reference | Ex. No. |
|---|---|---|
| Dijkstra | U.S. Patent Application Publication No. 2019/0030359 A1, published Jan. 31, 2019 | 1004 |
| Norwood | U.S. Patent Application Publication No. 2006/0237439 A1, published Oct. 26, 2006 | 1005 |

Petitioner also relies on the Declaration of Dr. Eric Bretschneider (Ex. 1002) as support for the various contentions.

Patent Owner relies on the Declaration of Dr. Jianzhong Jiao (Ex. 2014) as support for the various contentions.

*F. Asserted Grounds*

Petitioner contends that claims 1, 2, 3, 9, 10, 11, 16, 17, and 19 of the ’719 patent are unpatentable under the following grounds:

| Ground | Claims Challenged | 35 U.S.C. § | Reference(s)/Basis |
|---|---|---|---|
| I | 1, 2, 3, 9, 10, 11, 16, 17, 19 | § 103[1] | Dijkstra, "POSITA[2]'s knowledge"[3] |
| II | 1, 2, 3, 9, 10, 11, 16, 17, 19 | § 103 | Dijkstra, "POSITA's knowledge," Norwood |

Pet. 2.

## II. ANALYSIS

### *A. Principles of Law for Patentability*

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter 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." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in

[1] The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) ("AIA"), amended 35 U.S.C. §§ 102 and 103. Because the challenged claims of the '719 patent have an effective filing date after the effective date of the applicable AIA amendments, we refer to the post-AIA version of 35 U.S.C. § 103 throughout this Decision.

[2] Person of ordinary skill in the art.

[3] Petitioner indicates that "as used [in the Petition], "POSITA's knowledge" refers to a POSITA's general knowledge." Pet. 2 n.2.

evidence, objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

"In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable." *Harmonic v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify "with particularity . . . the evidence that supports the grounds for the challenge to each claim")). This burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* reviews).

*B. Claim Construction*

For petitions filed on or after November 13, 2018, "[claims] of a patent . . . shall be construed using the same claim construction standard that would be used to construe the [claims] in a civil action under 35 U.S.C. § 282(b), including construing the [claims] in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent." 37 C.F.R. § 42.100; *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005).

Petitioner indicates that the parties have agreed to construe the claim term "switch" as "an interactive interface" in the Arizona Litigation. Pet. 4. Petitioner does not otherwise submit constructions for any claim terms, stating that "[t]erms should be given their plain meaning." *Id*.

Patent Owner states that it "does not disagree" with Petitioner that "the claim terms of the '719 Patent should be given their plain meaning." Prelim. Resp. 14 (citing Pet. 4). Patent Owner further states that

> The parties previously agreed to the definition of certain terms in the Arizona Litigation and others were defined by the Court. EX2008. Patent Owner believes that none of those terms will be the focus of this proceeding and, as such, the Board need not go beyond, or even address, the District Court's constructions to deny institution and find that Petitioner has not met its burden to show a reasonable likelihood of prevailing.

*Id*. Patent Owner does not identify the terms in the Arizona Litigation the parties previously agreed to or the others the Court defined nor does it provide the definitions

Based on the above, and on this record, the parties do not assert terms that are in controversy. Only those terms that are in controversy need to be construed, and only to the extent necessary to resolve the controversy. *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999). Therefore, we determine that no express construction of any term is necessary.

*C. Level of Ordinary Skill in the Art*

Petitioner contends, *inter alia*, that

> at the time of the alleged invention of the '376 [sic, '719] patent would be an individual with a bachelor's degree in an engineering field (*e.g.*, mechanical, chemical, electrical or materials science) and at least two years of design experience with LED panel lighting or display products.

Pet. 5 (citing Ex. 1002 ¶¶ 152–170). Petitioner adds that "[b]ecause the focus of the patent is related to mechanical and electrical product design

issues an[] advanced degree would not reduce the required amount of product design experience." *Id.*

Patent Owner agrees with Petitioner's proposed definition of the level of ordinary skill. Prelim. Resp. 14 (citing Ex. 2014 ¶¶ 40–42).

We apply Petitioner's description of the qualifications of a POSITA in our analysis as it appears consistent with the problems addressed in the '719 patent and the prior art.

*D. Overview of the Prior Art References*

*1. Dijkstra (Ex. 1004)*

Dijkstra discloses a system for providing light therapy to a user. Ex. 1004 ¶ 1. Dijkstra explains that "[t]he basic premise of light-based treatment is that different wavelength trigger different reactions beneath the epidermis and penetrate the skin at varying depths." *Id.* ¶ 9. For example, "[b]lue light is generally used to kill the bacteria that causes acne." *Id.*

According to Dijkstra, "it is still desirable to have a convenient at-home skin treatment device that is portable, lightweight and that is simple to use without user discomfort" and "that can provide full body treatment by using different type of light therapies according to internal and external body conditions or diseases." *Id* ¶¶ 10, 11. To that end, Dijkstra provides for a light therapy device (200) as shown in Fig 7, reproduced below.

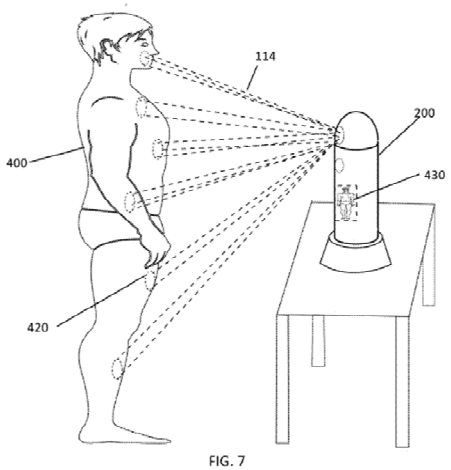

FIG. 7

Figure 7 of Dijkstra showing a light therapy device 200 "projecting a light 114 on the treatment portion 420." Ex. 1004 ¶ 79.

Figure 2, reproduced below, shows

> the light therapy device 200 . . . having a first housing 210 mounted on a second housing 220. The first housing 210 includes a rotatable head 250 that is mounted on a spindle 230 in a rotatable manner. Further, the rotatable head 250 includes a light projection unit 110, a camera unit 120, a controlling unit 130 and a memory unit 140. Furthermore, the light projection unit 110, the camera unit 120, and the memory unit 140 are electronically and communicatively connected to the controlling unit 130.

Ex. 1004 ¶ 59.

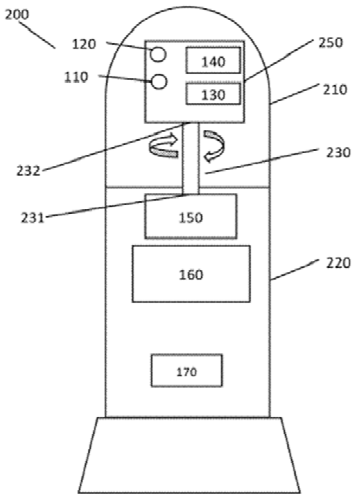


FIG. 2

Figure 2 of Dijkstra showing the components of light therapy device 200.

Dijkstra explains that "[t]he light projection unit 110 [has] a light head 111, a light direction controller 112, and a light source 113. In this, the light source 113 projects a light on the light direction controller 112 which is able to control and divert the light as per the controlling unit 130 input." Ex. 1004 ¶ 61. According to Dijkstra, "the light source 113 may be a LED light, infrared light, a UV light, a laser light, photo reactive chemical producing light, phosphorus or any other suitable light source generating the light in a range of 100-1600 nm wavelength for treating a person." *Id*. ¶ 63.

*2. Norwood (Ex. 1005)*

Norwood "relates to plug-in [scent] diffusers, having one or more LEDs used as nightlights." Ex. 1005 ¶ 1.

Norwood describes an electrically operated diffuser, comprising a housing, a plug, a resistance heater, and at least one LED. Ex. 1005 ¶¶ 19, 50. Norwood explains that the use of LEDs overcomes disadvantages

associating with using incandescent bulbs, such as the considerable heat they produce. *Id*. ¶ 5. According to Norwood, "the LED lighting element . . . of our invention provides sufficient light, i.e., is of a sufficient luminous intensity, to satisfactorily perform as a nightlight." *Id*. ¶ 53.

*E. Ground I*

Petitioner challenges claims 1, 2, 3, 9, 10, 11, 16, 17, and 19 as unpatentable under 35 U.S.C. § 103 over Dijkstra. Pet. 5–36.

*1. Independent claim 1*

We focus our attention on limitation [1a]:

> [1a] providing a first light therapy device comprising a first housing and a first plurality of lights configured to emit at least one of red light and near infrared light.

Ex. 1001, 11:55–57.

Petitioner contends, *inter alia*, that

> *Dijkstr*a shows in Figs. 1, 2, 8 and 9 a light therapy system, comprising a first light therapy device (200) comprising a first housing (210) *and a first plurality of lights* arranged and configured to emit red light or near-infrared light. Ex. 1004 [0019, 0129, 0133]. *Dijkstra* discloses that the light therapy device can emit light in a range of 100–1600 nm wavelength. Ex. 1004 [0063, 0067]. This wavelength range includes red light and near -infrared light; wavelengths in the range of 800–1072 nm (Ex. 1004, [0037]), which is in the near-infrared range; wavelengths in the range of 632–904 nm and 660-nm – 905 nm (Ex. 1004, [0129]) which includes the red light range and the near-infrared range and wavelength of 1072 nanometers (Ex. 1004, [0130]) which is in the near-infrared range. Ex. 1002, ¶143.

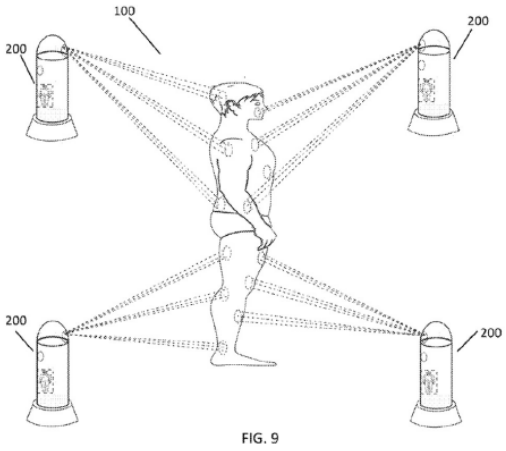

FIG. 9

Pet. 9–10 (emphasis added for "and a first plurality of lights)".

Patent Owner argues, *inter alia*, that "[t]he Petition . . . fails to provide a specific identification of what structure in Dijkstra is supposed to be the 'plurality of lights configured to emit.'" Prelim. Resp. 37.

We agree with Patent Owner.

Petitioner does not explain *how* "Dijkstra shows in Figs. 1, 2, 8 and 9 a light therapy system, comprising a first light therapy device (200) comprising a first housing (210) and a first plurality of lights arranged and configured to emit red light or near-infrared light. Ex. 1004 [0019, 0129, 0133]." Pet. 9. Petitioner leaves it to the Board to figure out how Figures 1, 2, 8 and 9 and paragraphs 19, 129, and 133 "show" a first plurality of lights. "Appellant's Brief is at best an invitation to the court to scour the record, research any legal theory that comes to mind, and serve generally as an advocate for appellant. We decline the invitation." *Ernst Haas Studio, Inc. v. Palm Press, Inc.*, 164 F.3d 110, 112 (2d Cir. 1999). It is Petitioner's burden to "show with particularity why the patent it challenges is unpatentable." *Harmonic*, 815 F.3d at 1363. *Cf. DeSilva v. DiLeonardi*, 181 F.3d 865, 867 (7th Cir. 1999) ("[An appeal] brief must make all

arguments accessible to the judges, rather than ask them to play archaeologist with the record."); *see* also *Shiokawa v. Maienfisch*, 56 USPQ2d 1970, 1975 (Bd. Pat. App. & Int. 2000) and *LeVeen v. Edwards*, 57 USPQ2d 1406, 1413 (Bd. Pat. App. & Int. 2000).

That said, the evidence Petitioner presents – that is, Figures 1, 2, 8 and 9 and paragraphs 19, 129, and 133 of Dijkstra – insufficiently supports Petitioner's contention.

Figures 1, 2, 8 and 9 do not show a first light therapy device comprising a plurality of lights as the claim requires. Petitioner specifically reproduces Figure 9 (Pet. 10), but this figure does not show a light therapy device comprising a plurality of lights. Rather, it shows a plurality of light therapy devices each comprising a housing and emitting beams of light. Figure 9 is devoid of any detail about the physical source of the beams of light. That the beams of light are due to a plurality of lights is at best a matter of speculation.

Given no other information about the lighting system within the housing of the devices that projects the beams of light, and no explanation from Petitioner, Figure 9, as well as Figures 1, 2, and 8, are insufficient to have led one of ordinary skill in the art to a light therapy device such that it comprises a plurality of lights as claimed.

Paragraph 129 is not helpful to Petitioner's case because a plurality of lights is nowhere suggested.

The only relevant statement in paragraph 133 of Dijkstra is: "LED treatments work by using an array of bright light-emitting diodes that send low-level light energy into the deeper layers of the skin." Ex. 1004 ¶ 133. We agree with Patent Owner that "it is unambiguously clear that the

sentence is referring to 'treatments,' not an actual physical structure, and 'treatments' is written in the plural form." Prelim. Resp. 39. We agree with Patent Owner that, when read in light of Dijkstra's entire disclosure, in describing using an array of bright light-emitting diodes, Dijkstra is describing "'a user **using** a **plurality** of light therapy devices according to an exemplary embodiment' as shown in FIG. 9." *Id* at 39 (quoting Ex. 1004 ¶ 47, citing, *inter alia,* Ex. 2014 ¶ 65). We also agree that "[t]he parties are seemingly in agreement on this fact, as Petitioner included FIG. 9 in this section of the Petition. *See* Pet. at 10 and Petitioner's inclusion of FIG. 9." *Id*. "Naturally, a plurality of devices [as shown in Fig. 9], each with one LED, would, together, comprise a plurality of LEDs." *Id*. at 40 (citing Ex. 2014 ¶ 66). Claim 1, however, requires "a first light therapy device comprising . . . a first plurality of lights." Ex. 1001, 11:55–56.

Given no other information about the lighting system within Dijkstra's light therapy devices, and no explanation by Petitioner, the teaching in paragraph 133 of a plurality of *treatments*, is insufficient to have led one of ordinary skill in the art to a light therapy device such that it comprises a plurality of lights as claimed.

That leaves only paragraph 19, which states:

> According to yet another aspect of the present disclosure, the light projection unit includes a light direction controller, a light head and a light source, wherein the light source is a laser light, LEDs, photoreactive chemical producing light, phosphorus or any other suitable light source generating the light ranging from 100-1600 nm wavelength.

This passage lists a number of types of light sources, e.g., "a laser light." We recognize, as Patent Owner has (Prelim. Resp. 42–45), that

"LEDs" is recited in the passage and that "LEDs" might suggest that Dijkstra contemplates using a plurality of lights (i.e., LEDs) within the housing of a light therapy device. However, according to Patent Owner, since the "single letter ['s' attached to 'LED'] in paragraph [0019] of Dijkstra is the only letter/word in Dijkstra's entire specification" (*id*. at 42; *see also id.* at 44 (citing Ex. 1004 ¶¶ 28, 33, 63, 133 as referring to "a LED" and "a light")) which could be interpreted as showing a plurality of lights, Patent Owner speculates that the additional "s" is a typographical error (*id*. at 44). Or "Dijkstra is referring to the fact that one of several different 'LEDs' needs to be selected in order to produce the desired wavelength within the specified wavelength range (100-1600 nm) mentioned in that same sentence." *Id.* (citing Ex. 2014 ¶ 69). We agree with Patent Owner that "[i]t is difficult to know which is the correct interpretation." *Id*. "[B]ut, either way, Petitioner has not only not discussed this portion of Dijkstra, but, more telling, Petitioner has not mentioned it at all." *Id*.

Given no other information about the lighting system within the housing of light therapy device, and no explanation from Petitioner, the teaching in paragraph 19 of various possible types of light sources, including "LEDs," is insufficient to have led one of ordinary skill in the art to a light therapy device such that it comprises a plurality of lights as claimed.

Moreover, Petitioner's reproduction of Figure 9, which illustrates multiple light therapy devices that, collectively, illustrate a plurality of lights (*see* Pet. 10) further confuses the issues by suggesting that Petitioner is relying on multiple light therapy devices rather than a single light therapy device having a plurality of lights.

For at least the foregoing reasons, Petitioner has not met its burden of showing, with particularity, that Dijkstra teaches a plurality of lights as claimed. The evidence Petitioner presents does not sufficiently support Petitioner's contention that Dijkstra shows a light therapy device comprising a plurality of lights as claimed. Furthermore, Petitioner provides no discussion as to why it would have been obvious to one of ordinary skill in the art, given Dijkstra, to provide a light therapy device with a plurality of lights with reasonable expectation of success. Pet. 8–10. Accordingly, the Petition does not establish a reasonable likelihood that independent claim 1 is unpatentable over Dijkstra.

*2. Conclusion as to Claim 1*

After considering Petitioner's and Patent Owner's positions, including the supporting Declarations of Dr. Bretschneider (Ex. 1002) and Dr. Jiao (Ex. 2014), and for the reasons set forth above, we are persuaded that, based on the current record, Petitioner has not demonstrated a reasonable likelihood of prevailing on its obviousness challenge to claim 1 of the '719 patent over Dijkstra.

*3. Claims 2, 3, 9, 10, 11, 16, 17, and 19*

Building on Petitioner's position with respect to independent claim 1, discussed above, Petitioner argues that dependent claims 2, 3, 9, 10, 11, 16, 17, and 19 are obvious over Dijkstra. Pet. 22–36.

For the same reasons as set forth above, namely, that Petitioner provides insufficient explanation and evidence in support of its contention that Dijkstra shows a plurality of lights as claimed and that it would have been obvious to a person of ordinary skill in the art to implement a plurality

of lights in Dijkstra's light therapy devices, the Petition also does not establish a reasonable likelihood that dependent claims 2, 3, 9, 10, 11, 16, 17, and 19 are unpatentable over Dijkstra.

*F. Ground II*

Petitioner challenges claims 1, 2, 3, 9, 10, 11, 16, 17, and 19 as unpatentable under 35 U.S.C. § 103 over the combination of Dijkstra and Norwood. Pet. 36–51.

*1. Independent claim 1*

We again focus our attention on limitation [1a].

Petitioner states that "Dijkstra discloses this limitation [1a] as noted in Ground 1. Ex. 1002, ¶234." Pet. 38. For the reasons discussed under Ground I, we find that Petitioner has not sufficiently explained and provided insufficient evidence in support of its contention that Dijkstra discloses a plurality of lights as set forth in limitation [1a].

Petitioner contends that

> *Norwood* teaches that the diffusers can include "a light array 542 including a plurality of different color LEDs. In particular, light array 542 includes a plurality of red LEDs 540 a, blue LEDs 540 b, and green LEDs 540 c.["]

Pet. 38 (quoting Ex 1005 ¶ 110, citing Ex. 2002 ¶ 235). According to Petitioner, a POSITA would, *inter alia*,

> be well aware of the use of both red light and near infrared light for phototherapy and would be motivated to design LED therapy systems that emitted red light, near infrared light, or both red and near infrared light.

*Id*. at 39 (citing Ex. 1002 ¶¶ 236–237). We observe that while Norwood teaches a light array of LEDs emitting different colors, [1a] does not require the plurality of lights to be configured to emit *both* red light and near infrared light. Rather, [1a] recites that the plurality of lights are "configured to emit *at least one of* red light and near infrared light." Ex. 1001, 11:55–57. In that regard, Norwood's teaching of red LEDs suffices to show a plurality of lights as [1a] nominally calls for.

That said, we agree with Patent Owner that Norwood is non-analogous prior art. Prelim. Resp. 45–48.

A reference qualifies as prior art for an obviousness determination under 35 U.S.C. § 103 only when it is analogous to the claimed invention. *In re Klein*, 647 F.3d 1343, 1348 (Fed. Cir. 2011); *see also Innovention Toys, LLC, v. MGA Entertainment, Inc.*, 637 F.3d 1314, 1321 (Fed. Cir. 2011); *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004); *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992). Two separate tests define the scope of analogous prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed or (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. *Klein*, 647 F.3d at 1348.

Petitioner contends that "Norwood discloses in an analogous art of lighting a plurality of illuminated diffusers and addressed the 'problem is that conventional diffusers typically do not have suitable controllability for varying the emission of light and/or fragrance.'" Pet. 36 (quoting Ex. 1005 ¶ 13).

Patent Owner argues, *inter alia*, that "Norwood is entirely non-analogous art to the devices of Dijkstra that provide therapeutic skin treatment via a specialized high-power intense singular light source." Prelim. Resp. 46. "While controllability [that Petitioner indicates Dijkstra describes (Pet. 37)] may be one aspect of the claimed photobiomodulation therapy systems and methods of the '719 Patent, it is entirely unrelated to the type of light source being used." *Id*. (citing Ex. 2014 ¶ 74). Patent Owner argues that "Norwood discloses a purely aesthetic ornamental display device with a very low light emission level using low-power (less than 0.1 watts) LEDs." *Id*. (citing Ex. 1005 ¶ 56 ("only a small fraction (less than 0.1 watt) is used to power the LED lighting element 7")).

We first determine whether Norwood is in the same field of endeavor as the '719 patent.

The '719 patent relates to photobiomodulation therapy to "improve health and treat a variety of health conditions, including skin issues, such as wrinkles, scars, and persistent wounds, among many other conditions." Ex. 1001, 1:41–46. Given this, the '719 patent's field of endeavor is light therapy.

In contrast, Norwood is directed to plug-in scent diffusers "having one or more LEDs used as nightlights and/or ornamental displays." Ex. 1005 ¶ 1. The diffuser comprises a housing, a heating element, and at least one light emitting diode. *Id* ¶ 21. In one aspect, "[t]he at least one light emitting diode is disposed in the housing and shines through at least one window in the housing to project an image in the shape of the at least one window." *Id*. "The heating element and the LED are electrically connected to the plug, the at least one LED preferably being electrically connected to the plug via a

full-wave bridge circuit. When activated, the at least one LED preferably provides minimal heat to an active [scent-diffusing] material received in the compartment of said housing." *Id*. ¶ 19. "'[M]inimal heat' means that the heat generated by the LED(s) is negligible when compared to the heat generated by the heating element(s)." *Id*. "[T]he LED lighting element . . . provides sufficient light, i.e., is of a sufficient luminous intensity, to satisfactorily perform as a nightlight." *Id*. ¶ 53. Given all this, Norwood's field of endeavor is scent diffusers and nightlights.

From their descriptions, we find that one of ordinary skill in the art would have viewed the '719 patent and Norwood as directed to light therapy and scent diffusers and nightlights, respectively. These are different fields of endeavor.

Because we find that the '719 patent and Norwood are not in the same field of endeavor, we turn to the question of whether Norwood is reasonably pertinent to the particular problem with which the inventor is involved.

Norwood describes an improvement over conventional diffuser/incandescent-nightlight combinations. Ex. 1005 ¶¶ 4–13. Norwood explains that a problem

> with conventional plug-in diffusers is that they do not make effective use of lighting elements. For example, lighting elements in conventional diffusers are typically not used to generate aesthetic lighting displays, such as multicolored displays, color-changing displays, projection displays, shine-through displays, or the like.

Ex. 1005 ¶ 11. To solve this problem Norwood uses LEDs. "The LED lighting element . . . used with our invention produces a much whiter light than an incandescent bulb used in conventional nightlights. In addition, the

LED lighting element . . . is much more robust and durable than an incandescent bulb, in part because there is no filament that could break." *Id.* ¶ 55. "The LED lighting elements also tend to have a longer life than incandescent bulbs having comparable luminous intensities." *Id*. They "use[] substantially less power than conventional nightlight devices" (*id*. ¶ 56), "emit[] very little heat" (*id*.), and "[i]f multiple LEDs are used, they may be arranged in, for example, a line, a circle, a square, a flower shape, a rainbow shape, or any other desired shape or arrangement" (*id*. ¶ 53), among other advantages.

The problem Norwood is seeking to solve – i.e., problems associated with using incandescent bulbs in nightlights – is not a problem pertinent to the inventor of the '719 patent. The '719 patent is concerned with treating ailments to the human body using light therapy using lights that emit red or infrared light, irrespective of the type of light source. Ex. 1001, 4:58–67, 5:1–8. From their descriptions, we find that one of ordinary skill in the art would have viewed Norwood (LED nightlights) as not reasonably pertinent to the particular problem (light therapy to treat ailments) with which the inventor of the '719 patent was involved.

Petitioner focusses on a particular problem discussed at ¶ 13 of Norwood. Pet. 36. But Petitioner does not explain, and we are unable to discern, how the problem discussed there is pertinent to the inventor of the '719 patent. This paragraph states that

> conventional diffusers typically do not have suitable controllability for varying the emission of light and/or fragrance. In particular, such plug-in diffusers seldom include fragrance dispensers that are easily and precisely adjustable to vary a

> fragrance intensity or diffusion rate, such as, for example, piezoelectric fragrance dispensing pumps.

Ex. 1005 ¶ 13. The claimed invention of the '719 patent is not concerned with controlling fragrance or a light's emission.

Norwood does not qualify as prior art for an obviousness determination under 35 U.S.C. § 103 because we determine, for the foregoing reasons, that it is non-analogous to the claimed invention.

*2. Conclusion as to Claim 1*

After considering Petitioner's and Patent Owner's positions, including the supporting Declarations of Dr. Bretschneider (Ex. 1002) and Dr. Jiao (Ex. 2014), and for the reasons set forth above, we are persuaded that, based on the current record, Petitioner has not demonstrated a reasonable likelihood of prevailing on its obviousness challenge to claim 1 of the '719 patent over the combination of Dijkstra and Norwood.

*3. Claims 2, 3, 9, 10, 11, 16, 17, and 19*

Building on Petitioner's position with respect to independent claim 1, discussed above, Petitioner argues that dependent claims 2, 3, 9, 10, 11, 16, 17, and 19 are obvious over the combination of Dijkstra and Norwood. Pet. 45–51.

For the same reasons as set forth above, namely, that we determine that Norwood is non-analogous prior art, the Petition also does not establish a reasonable likelihood that dependent claims 2, 3, 9, 10, 11, 16, 17, and 19 are unpatentable over the combination of Dijkstra and Norwood.

*G. Discretionary Denial Under 35 U.S.C. §§ 314(a) 325(d)*

Patent Owner requests that we exercise our discretion to deny institution under 35 U.S.C. §§ 314(a) and 325(d). *See* Prelim. Resp. 16–22, 23–26, respectively. Petitioner disagrees. Pet. 51–54.

For the reasons stated above, we decline to institute *inter partes* review. Because we base our denial of institution on the merits of this case, it is unnecessary for us to analyze whether we should also discretionarily deny institution under 35 U.S.C. §§ 314(a) and 325(d).

## III. CONCLUSION

For the foregoing reasons, we determine that Petitioner has not demonstrated a reasonable likelihood that it would prevail in showing the unpatentability of at least one of claims 1, 2, 3, 9, 10, 11, 16, 17, and 19 of the ’719 patent based on Grounds I or II as presented in the Petition. Accordingly, we deny the Petition.

## IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), *inter partes* review of claims 1, 2, 3, 9, 10, 11, 16, 17, and 19 of the ’719 patent is denied.

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