

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SHENZHEN RONGLIDA TECHNOLOGY CO. LTD.

Petitioner,

v.

PATHWAY IP LLC

Patent Owner.

U.S. Patent No. 7,841,729

Case No. IPR2025-01231

PATENT OWNER'S PRELIMINARY RESPONSE

UNDER 35 U.S.C. § 42.107

October 20, 2025

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Listing of Exhibits

Exhibit 2001: Notification of Affiliates (Doc. 159), filed in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill. 9/10/2024)

Exhibit 2002: First Amended Complaint (Doc. 85, with Schedule A and Exhibits 1-6 (Docs. 85-1, 85-2, 85-3, 85-4, 85-5, 85-6, 85-7) filed in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill. 8/12/2024)

Exhibit 2003: Defendants IPHOTOXX, LIXINSHUNYI, PHOTO GUARD, RUIHOTOR, CATCHPICCUS, HIFOCUSIUS, QIHUICHANG, SHIQIAOSHANG, VIVIDNWUS, XINGBOOM, XUANXIUUS, JINSNOW, and SHUTTERLIGHT Answers and Affirmative Defenses to First Amended Complaint (Doc. 117) filed in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill. 8/26/2024)

Exhibit 2004: Minute Entry (Doc. 113), filed in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill. 8/21/2024)

Exhibit 2005: Documents produced as NGD000132, NGD000137, NGD000142, NGD000146, NGD000152, and NGD000186 in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill.)

Exhibit 2006: Document produced as NGD000189 in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill.)

Exhibit 2007: Defendants' Supplemental Responses to Plaintiff's First Set of Requests for Production in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill.)

Exhibit 2008: U.S. TM Serial No. 79269469
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Exhibit 2015: U.S. TM Serial No. 79301558
Exhibit 2016: U.S. TM Serial No. 85946985
Exhibit 2017: U.S. TM Serial No. 97245221
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Exhibit 2019: U.S. TM Serial No. 98553808
Exhibit 2020: U.S. TM Serial No. 98554952
Exhibit 2021: U.S. TM Serial No. 98958307
Exhibit 2022: U.S. TM Serial No. 98958334
Exhibit 2023: U.S. Pat. No. D887,590
Exhibit 2024: U.S. Pat. No. D929,007
Exhibit 2025: U.S. Pat. No. D956,129
Exhibit 2026: U.S. Pat. No. D983,862
Exhibit 2027: U.S. Pat. No. D979,633
Exhibit 2028: Declaration of Allen Justin Poplin
Exhibit 2029: Complaint (Doc. 9, with Exhibit H-5 (Doc. 9-21)) filed in

SHENZHEN NEEWER TECHNOLOGY CO., LTD. v. ALLISMAN

*(SHENZHEN) TECHNOLOGY CO., LTD. and SHENZHEN MAITEWEI
INVESTMENT AND DEVELOPMENT CO., LTD., 1:20-cv-09446-KPF (S.D.
NY 11/12/2020)*

Exhibit 2030: Reexam Request in Control No. 90/019,924 (4/22/2025)

Exhibit 2031: Proposed ground of unpatentability in Control No. 90/019,924
(4/22/2025)

Exhibit 2032: Grant of Reexam Request in Control No. 90/019,924 (5/20/2025)

Exhibit 2033: Office Action in Control No. 90/019,924 (8/25/2025)

Exhibit 2034: Grounds of rejection in Control No. 90/019,924 (8/25/2025)

Exhibit 2035: Additional references discussed in Control No. 90/019,924
(8/25/2025)

Exhibit 2036: Declaration of Eric Bretschneider, Ph.D.

I. Introduction

As discussed below, IPR cannot be instituted here because the Petition fails to name all real parties in interest as required by 35 U.S.C. § 312(a)(2). Additionally, “[t]he Director may not authorize an inter partes review to be instituted unless the Director determines that the information presented in the petition filed under section 311 and any response filed under section 313 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). There is no reasonable likelihood that the petitioner would prevail on any claim in this case, so inter partes review cannot properly be instituted under § 314(a) as well.

This preliminary response is timely because the Notice of Filing Date Accorded (Paper 3) provides three months to respond from July 18, 2025; October 18, 2025 is a Saturday, so the due date for this preliminary response is Monday, October 20, 2025. *See* 35 U.S.C. § 21(b); 37 CFR 1.7.

II. Mandatory Notices (37 CFR 42.8)

II.A. Real Party in Interest

The real party-in-interest is Pathway IP LLC.

II.B. Related Matters

The ’729 Patent is currently in litigation in:

- *Pathway IP LLC v. Luxsure-US et al.*, Case No. 1:2024-cv-11651 (N.D. Ill.); and

- *Pathway IP LLC v. The Individuals et al.*, Case No. 1:2024-cv-05218 (N.D. Ill.).

The '729 Patent is also the subject of an ongoing *ex parte* reexamination, Control No. 90/019,924, which is discussed in further detail below.

No other judicial or administrative matters are known to Patent Owner that would affect, or be affected by, a decision in this proceeding.

II.C. Counsel and Service Information

Lead Counsel	Back-up Counsel
A. Justin Poplin Reg. No. 53,476 Avek IP, LLC 7285 W. 132 nd St., Suite 340 Overland Park, KS 66213 Phone: (913) 303-3841 Fax: (913) 369-7222 jpoplin@avekip.com	Hissan Anis Reg. No. 65,943 Avek IP, LLC 7285 W. 132 nd St., Suite 340 Overland Park, KS 66213 Phone: (913) 303-3842 Fax: (913) 369-7222 hanis@avekip.com

II.D. 37 CFR 42.8(b)(4): Service Information

Please address all correspondence to the lead and back-up counsel as shown above. Patent Owner consents to service by email to its lead and back-up counsel at doctetingop@avekip.com, jpoplin@avekip.com, and hanis@avekip.com.

III. The Petition fails to name all Real Parties in Interest, so it cannot be considered

An IPR petition may *only* be considered if it “identifies all real parties in interest.” 35 U.S.C. § 312(a)(2). This is an important requirement because “[t]he petitioner in an inter partes review... that results in a final written decision under section 318(a), **or the real party in interest or privy of the petitioner**, may not request or maintain a proceeding before the Office with respect to that claim on any ground that the petitioner raised or reasonably could have raised during that inter partes review.” 35 U.S.C. § 315(e)(1) (emphasis added). Further, “[t]he petitioner in an inter partes review... that results in a final written decision under section 318(a), **or the real party in interest or privy of the petitioner**, may not assert either in a civil action arising in whole or in part under section 1338 of title 28 or in a proceeding before the International Trade Commission under section 337 of the Tariff Act of 1930 that the claim is invalid on any ground that the petitioner raised or reasonably could have raised during that inter partes review.” 35 U.S.C. § 315(e)(2) (emphasis added).

“Congress intended that the term ‘real party in interest’ have its expansive common-law meaning.” *Applications in Internet Time, LLC v. RPX Corp.*, 897 F.3d 1336, 1351 (Fed. Cir. 2018). The Office approaches the Real Party in Interest (“RPI”) inquiry by focusing on the purpose of the RPI requirement: to preclude parties getting “two bites at the apple” by (a) ensuring that third parties who have sufficiently close relationships with IPR petitioners are bound by the outcome of instituted IPRs in final written decisions under 35 U.S.C. § 315(e); and (b)

safeguarding patent owners from having to defend their patents against multiple administrative attacks by related parties. *See RPX Corp. v. Applications in Internet Time, LLC*, Case IPR2015-01750, p. 2 (PTAB Oct. 2, 2020) (Paper 128). “Determining whether a non-party is a ‘real party in interest’ demands a flexible approach that takes into account both equitable and practical considerations, with an eye toward determining whether the non-party is a clear beneficiary that has a preexisting, established relationship with the petitioner.” *Applications in Internet Time, LLC*, 897 F.3d at 1351.

Here, the named Petitioner is “Shenzhen Ronglida Technology Co. Ltd.,” which does business as ShutterLight. *See* Petition; Notification of Affiliates (Doc. 159), filed in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill. 9/10/2024)¹ (provided in Exh. 2001 hereto). The ’5218 Litigation alleges infringement of the ’729 Patent by various sellers – including ShutterLight and twelve other defendants. Each of these thirteen sell the same NEEWER-branded products on Amazon (collectively referred to herein as the “Newer Defendants”). *See* First Amended Complaint (Doc. 85), filed in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill. 8/12/2024) (provided in Exh. 2002 hereto). The thirteen Newer Defendants are all working together, defending the case with the same law firm, and filing joint briefing. *See* Defendants IPHOTOXX, LIXINSHUNYI, PHOTO GUARD, RUIHOTOR, CATCHPICCUS, HIFOCUSIUS, QIHUICHANG, SHIQIAOSHANG, VIVIDNWUS, XINGBOOM, XUANXIUUS, JINSNOW, and SHUTTERLIGHT Answers and Affirmative Defenses to First Amended Complaint

¹ This case is referred to herein as the ’5218 Litigation.

(Doc. 117), filed in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill. 8/26/2024) (provided in Exh. 2003 hereto); Exh. 2007. The Court even refers to the thirteen as “the Newer Group of Defendants.” See Minute Entry (Doc. 113), filed in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill. 8/21/2024) (provided in Exh. 2004 hereto).

Moreover, Petitioner and ten of the other twelve Newer Defendants are using the exact same ASIN to sell their products: B01LXDNNBW. See First Amended Complaint at Schedule A (Doc. 85-1), filed in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill. 8/12/2024) (provided in Exh. 2002 hereto). This is highly unusual for independent sellers and suggests coordinated control or a shared supply chain rather than separate competitors or distributors.

Of the thirteen Newer Defendants, at least six (iphotoxx; Shenzhen Lixin Shunyi Tech. Co. d/b/a Lixinshunyi; Photo Guard; Shenzhen Ruihongtao Tech. Co. d/b/a RUIHOTOR; Chengdu Shiqiaoshang Tech. Co. d/b/a ShiQiaoShang; and Shenzhen QihuiChang Tech. Co. d/b/a QiHuichang) have simultaneously claimed to own the NEEWER brand. See documents produced in discovery at NGD000132, NGD000137, NGD000142, NGD000146, NGD000152, NGD000186 (collectively provided in Exh. 2005 hereto).

Further, Shenzhen Newer Technology Co., Ltd. of Guangdong, China claims to own the NEEWER brand. See NGD000189 (provided in Exh. 2006 hereto). According to the thirteen Newer defendants in the '5218 Litigation, document NGD000189 is “sufficient to identify any licenses, agreements, or arrangement under which [the Newer] Defendants obtained the right to register or use any brand

names or trademarks in a brand registry.” *See* Defendants’ Supplemental Responses to Plaintiff’s First Set of Requests for Production in the ’5218 Litigation at p. 11 (provided in Exh. 2007 hereto). That document lists Shenzhen Neewer Technology Co., Ltd. as the owner of the NEEWER brand and only lists one of the Neewer Defendants (Shenzhen BaiNaChuan Technology Co Ltd) as an authorized seller of Neewer products. *Id.*

As such, at least seven parties (six of the Neewer Defendants from the ’5218 Litigation, plus Shenzhen Neewer Technology Co.) all claim to own the NEEWER brand for lights (the subject matter of the ’729 Patent, the ’5218 litigation, and this IPR). But, although Shenzhen Neewer Technology Co. owns U.S. TM Serial Nos. 79269469, 98304743, and 98249311 for VIEWNERR, LEGLOCK, and LITETRIP, respectively (provided in Exhs. 2008-2010 hereto), it is not the recorded owner of any US TM registration or application for NEEWER. Nor are any of the other six a recorded owner of any US TM registration or application for NEEWER. Instead, Shenzhen Xing Ying Da Industry Co., Ltd. owns at least twelve granted or pending applications for NEEWER. *See* USPTO TM Serial Nos. 79082534, 79141410, 79214020, 79243553, 79301558, 85946985, 97245221, 98422419, 98553808, 98554952, 98958307, 98958334 (provided in Exhs. 2011-2022 hereto).

And when patents are reviewed, inventor Yan Ke alternates in assigning his rights to Shenzhen Neewer Technology Co. (*see, e.g.*, U.S. Pat. Nos. D887,590, D929,007, and D956,129, all for Ring Lights, assigned to Shenzhen Neewer Tech. Co. (provided in Exhs. 2023-2025 hereto)) and to Shenzhen Xing Ying Da Industry Co., discussed above as claiming to own the NEEWER trademark rights (*see, e.g.*,

U.S. Pat. Nos. D983,862 and D979,633 for lighting devices, assigned to Shenzhen Xing Ying Da Industry Co. (provided in Exhs. 2026-2027 hereto)).

So we have at least eight supposedly-different parties that claim to own the NEEWER brand and at least seven others that claim to have the “right to register or use any brand names or trademarks in a brand registry,” even though only one actually has any sort of documentation. And we have the thirteen Neewer Defendants actively working together, selling under the same ASIN, and defending the ’5218 Litigation with the same law firm and joint briefing. And patent assignments show a tie between Shenzhen Neewer Technology Co. and Shenzhen Xing Ying Da Industry Co.

Still further, of the thirteen Neewer Defendants, the named Petitioner in this IPR is the party that has the least amount of sales and the least amount to lose in the ’5218 Litigation. More specifically, according to sales figures provided to Patent Owner by Amazon, Petitioner has **less than one-tenth of 1%** of the total Neewer Defendants’ sales – and more specifically, 0.07%. *See* Declaration of Allen Justin Poplin (provided in Exh. 2028 hereto) at ¶ 2. Sales for the next smallest Neewer Defendant are almost 300% of Petitioner’s sales. *Id.* In fact, Petitioner’s sales were only \$41,205.61 – which is less than the USPTO’s fees for filing this IPR. *Id.*

Not only do all of those facts lead to a conclusion that Petitioner is a proxy for the other Neewer Defendants as well as Shenzhen Neewer Technology Co. and Shenzhen Xing Ying Da Industry Co., but Shenzhen Neewer Technology Co. has declared “under penalty of perjury under the laws of the United States” that it is the same company as at least one of the Neewer Defendants. More particularly, on

11/12/2020, Shenzhen Neewer Technology Co. filed a verified Complaint in declaratory judgment case 1:20-cv-09446-KPF in the Southern District of New York alleging that “its [i.e., Neewer’s] sales of ring light products” on Amazon, including those shown in Exhibit H-5 to the Complaint, were wrongfully accused of infringing a third-party patent. See Complaint (Doc. 9) filed in *SHENZHEN NEEWER TECHNOLOGY CO., LTD. v. ALLISMAN (SHENZHEN) TECHNOLOGY CO., LTD. and SHENZHEN MAITEWEI INVESTMENT AND DEVELOPMENT CO., LTD.*, 1:20-cv-09446-KPF (S.D. NY 11/12/2020) at ¶ 22, Exhibit H-5 (collectively provided as Exh. 2029). As clearly identified in that document, the named seller on Amazon was iphotoxx (discussed above), shown below with yellow emphasis added.

The screenshot shows an Amazon product listing for a Neewer 20-inch LED Ring Light Kit. The product title is "Neewer 20-inch LED Ring Light Kit for Makeup Youtube Video Blogger Salon - Adjustable Color Temperature with Battery or DC Power Option, Battery, Charger, AC Adapter, Phone Clamp and Stand Included". The price is \$135.99 with free shipping. The seller is iphotoxx. The page also shows a coupon for \$10.00 off and a note about a \$60 off instant discount for Amazon Rewards Visa Card holders. The product is in stock and ships from Amazon.

So, when beneficial, Shenzhen Neewer Technology Co. has sworn that it is the same as at least one of the Neewer Defendants. But in the '5218 Litigation, that

same party has denied that it is owned by Shenzhen Neewer Technology Co. *See* Notification of Affiliates (Doc. 159) at p. 2, filed in *Pathway IP LLC v. The Individuals et al.*, 24-cv-5218 (N.D. Ill. 9/10/2024) (Exh. 2001 hereto). This does not add up, and it is not credible that the thirteen Neewer Defendants – and especially Petitioner – are actually distinct parties.

Instead, it is clear that Petitioner and the other Neewer Defendants are blatantly monkeying with the RPI requirement by not only shielding the real parties behind this IPR’s filing, but also trying to have estoppel attach to only the defendant in the ’5218 Litigation that has almost nothing to lose. This is contrary to the RPI purpose of precluding “two bites at the apple” by ensuring that third parties who have sufficiently close relationships with IPR petitioners are bound by the outcome of instituted IPRs in final written decisions under 35 U.S.C. § 315(e). *See RPX Corp. v. Applications in Internet Time, LLC*, Case IPR2015-01750, p. 2 (PTAB Oct. 2, 2020) (Paper 128).

In sum: The twelve other Neewer Defendants from the ’5218 Litigation are generally indistinguishable from Petitioner and Shenzhen Neewer Technology Co. and Shenzhen Xing Ying Da Industry Co., except for the fact that Petitioner has **less than one-tenth of 1%** of the total Neewer Defendants’ sales. All thirteen of the Neewer Defendants (including Petitioner) are working together, defending the ’5218 Litigation with the same law firm, filing joint briefing, and have a preexisting, established relationship selling the same NEEWER-branded products on Amazon. Eight different interested parties claim to own the NEEWER brand with no documentation of any licenses, agreements, or arrangements between them –

because all of these parties operate in reality as one entity. When beneficial, Shenzhen Neewer Technology Co. swears under penalty of perjury that it is the same as at least one of the Neewer Defendants; but when not beneficial, they claim to have no relationship. And the twelve Neewer Defendants that are not parties to this IPR are (along with Shenzhen Neewer Technology Co. and perhaps Shenzhen Xing Ying Da Industry Co., which are shown above to have ties to one another) the only clear beneficiaries of this IPR; if Petitioner funded this IPR on its own, the costs of the IPR have already surpassed Petitioner's litigation exposure. Thus, at least the other twelve Neewer Defendants are real parties in interest under the test set forth in *Applications in Internet Time, LLC*, 897 F.3d at 1351, and Shenzhen Neewer Technology Co. and Shenzhen Xing Ying Da Industry Co. are likely real parties in interest as well.

Accordingly, the Office should reject the Petition for failure to comply with 35 U.S.C. § 312(a)(2). If the Office does not do so, it should require documentation from Petitioner regarding at least: (a) its relationship with the twelve other Neewer Defendants in the '5218 Litigation, as well as with Shenzhen Neewer Technology Co. and Shenzhen Xing Ying Da Industry Co.; (b) how Petitioner has funded this IPR and its defense in the '5218 Litigation; and (c) the identities of all individuals and entities that reviewed or otherwise had any input regarding the decision to file the Petition and/or the contents of the petition. Because § 312(a)(2) is a threshold issue, RPI should be fully addressed before the Office reviews the merits of this case.

IV. Petitioner cannot prevail on any claim, so IPR cannot be instituted

IV.A. Background

U.S. Pat. No. 7,841,729 for WEBCAM ILLUMINATION DEVICE was issued fifteen years ago, on November 30, 2010, and claims priority back to provisional application No. 60/897,600 filed on January 26, 2007. Claims 1 and 10 are independent, and claims 2-9 and 11-13 depend therefrom. The '729 Patent addresses a need in January 2007 to “provide proper lighting for users that are viewed through a webcam to ensure that they appear aesthetically pleasing.” *See* '729 Patent (Exh. 1001) at 1:34-36.

The IPR Petition (Paper 1) sets forth three different grounds of unpatentability for independent claim 1 and one ground of rejection for independent claim 10:

Claim	Basis	Reference(s)
1	103(a)	Naghi (6,799,861) in view of Dine (2,682,603)
1	103(a)	Nelson (2007/0115672) in view of Luo (CN 2235130Y)
1	103(a)	Cheng (2007/0046626) in view of Masayuki (JP Pub. No. 1999-066930)
10	103(a)	Du Breuil (2007/0139515) in view of Dine (2,682,603)

The '729 Patent is also the subject of an ongoing *ex parte* reexamination, Control No. 90/019,924 (“the Reexam”). The Reexam Request was filed 4/22/2025 and challenged claims 1-9. *See* Exh. 2030. The Reexam Request included one proposed ground of unpatentability based on four references, listed in the enclosed Exh. 2031. The Office granted the Reexam Request on 5/20/2025. *See* Exh. 2032. And an Office Action in the Reexam was issued 8/25/2025. *See* Exh. 2033. In issuing the OA, the Office explicitly considered all art and all proposed grounds in the IPR Petition. *See* Exh. 2033 at pp. 2, 41-42. And due to that consideration, and even

additional searching, the OA is much more extensive than the IPR Petition and includes 34 grounds of purported unpatentability based on 15 references, listed in the enclosed Exh. 2034. The OA also discusses 11 additional references that it considered, but which it did not find to be as pertinent as the art used in the rejections. *See* Exh. 2035. So the Office has already considered everything in the IPR Petition – and much more. **But even with 34 grounds of purported unpatentability based on 15 references, the Office refused to adopt any rejection set forth in the IPR Petition.** As discussed below, the holes in the IPR Petition are apparent – and there is no reasonable likelihood that the petitioner would prevail on any claim in this case.

IV.B. Level of Ordinary Skill

A person of ordinary skill in the art of the '729 Patent would have at least: (a) a bachelor's degree in electrical engineering, optical engineering, or a related field; (b) two years of practical experience in designing and developing lighting systems, particularly those integrated with electronic devices such as webcams or computer monitors; and (c) knowledge of user-interface considerations for consumer electronics. *See* Declaration of Eric Bretschneider, Ph.D. (herein, "Bretschneider, Ph.D. Dec," provided as Exhibit 2036) at ¶ 48. Additional experience can substitute for education and vice versa. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 48.

Petitioner argues that "A POSITA would understand that all types of cameras (e.g., analog and digital, photo and video) generally involve the same lighting considerations. *See* Petition at p. 2. That is incorrect. Instead, one of ordinary skill in the art would have understood that analog and digital cameras have different

operating principles and lighting requirements. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 36-47. Petitioner’s lack of appreciation for the suitability and unsuitability of different lights for different applications infects and dooms its invalidity analysis. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 47.

IV.C. Claim Construction

The construction of certain claim terms proposed by Petitioner and Patent Owner in the related litigation are set forth in the Petition. *See* Petition at pp. 14-17. Petitioner “submits that the Board need not formally construe any claim terms in order to adjudicate the merits of this Petition.” *See* Petition at p. 17. Patent Owner agrees. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 51. Petitioner fails to show unpatentability of any of claims 1-13 under any reasonable construction of the claims. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 51.

IV.D. Prior Art relied upon in the Petition

IV.D.1. Naghi (1008)

Naghi’s “invention is in the field of portable lighting devices for illuminating objects.” *See* Exh. 1008 at 1:5-7. Naghi explains that “[a] problem with [prior art] lights is that they tend to be relatively heavy and bulky, making their use impractical and clumsy, especially when used with pliable publications and/or small publications such as magazines and soft cover books.” *Id.* at 1:12-16. “Another problem with these [prior art] reading lights is that they use incandescent or fluorescent bulbs [which] consume a relatively large amount of electricity, are

inefficient, generate heat, and give only partial lighting across the entire visible spectrum.” *Id.* at 1:18-23. “As a result, these [prior art] reading lights require relatively large, more powerful batteries, consume batteries quickly, may bum (sic) the reader if the incandescent bulb comes in contact with the reader, require relatively large light housings to accommodate the heat of the incandescent bulb and large batteries, and provide unsatisfactory lighting of the reading materials.” *Id.* at 1:23-29. Naghi notes that “there is a long felt need for a simple, light-weight, energy-efficient, economical device that can adequately illuminate pliable reading materials [and other objects such as ‘laptop computers,’ (*id.* at 1:40-43)] without the drawbacks associated with prior art reading lights.” *Id.* at 1:33-38.

Petitioner’s IPR Petition relies on the laptop light 800 of Naghi (see IPR Petition at p. 18) shown in FIG. 11 thereof, which is “similar in construction to the reading light 100 described with respect to FIG. 1.” *See* Exh. 1008 at 7:19-20. FIGs. 1 and 11 of Naghi are reproduced at left and right below, respectively. “Elements similar to those described above with respect to FIG. 1 are identified with like reference numerals, but with an ‘e’ suffix.” *Id.* at 7:21-24.

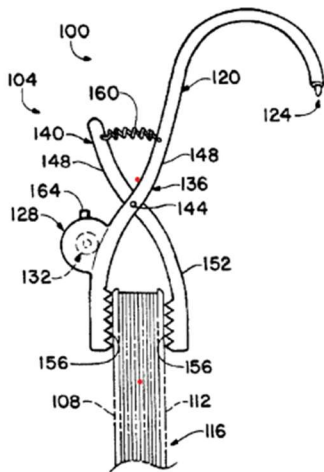


FIG. 1

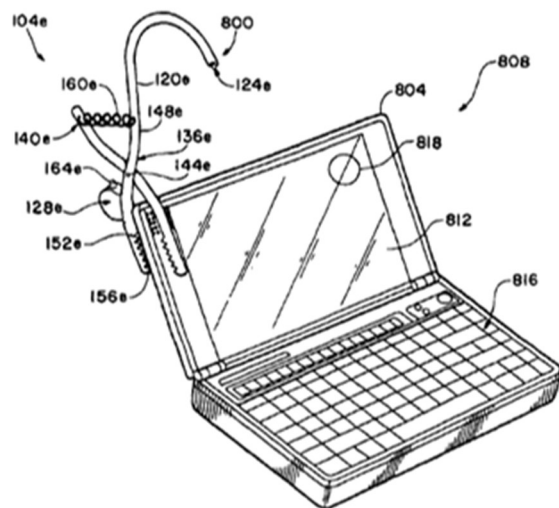


FIG. 11

“The reading light 100 includes a mounting mechanism 104 for mounting the reading light to a reading support surface ... and an adjustable, bendable body portion 120 that terminates at one end in at least one light source 124 for illuminating the page(s) 112 of the publication 116.” Exh. 1008 at 2:58-64. As shown in FIG. 11, the laptop light 800 likewise includes a mounting mechanism 104e and an adjustable body portion 120e that terminates at one end in at least one light source 124e. “The mounting mechanism 104 [/104e] carries a power housing 128 [/128e] that houses at least one power source 132 [132e is not labeled in FIG. 11] for powering the light source 124 [/124e].” *Id.* at 3:4-7.

As noted, Naghi teaches that prior art lights have “problem[s]”, (Exh. 1008 at 1:10-32), including: (a) “they tend to be relatively heavy and bulky” (*id.* at 1:12-13); (b) they “consume a relatively large amount of electricity, are inefficient, generate heat, and give only partial lighting across the entire visible spectrum” (*id.* at 1:18-23); and (c) they “require relatively large light housings to accommodate the heat” (*id.* at 1:26-27). In view of these problems, Naghi teaches that “light source 124 [and therefore 124e] is preferably a wide-angle, white LED...” *Id.* at 3:18-19.

To be clear, Naghi does not indicate its preference for LEDs just in passing. Rather, Naghi’s Detailed Description repeatedly and unmistakably teaches to use LEDs in its systems due to the many benefits of LEDs as compared to other prior art lights:

1. “An LED is advantageous because it draws little electrical power during operation, prolonging the power life of the power source 132.” *Id.* at 3:21-23.

2. “An LED is small, lightweight and also does not burn out like conventional filament light bulbs, as used in prior art reading lights.” *Id.* at 3:30-31. “As a result, the LED does not need to be replaced, reducing maintenance of the light 100.” *Id.* at 3:32-33.
3. “Because an LED does not emit heat, it uses power more efficiently and can be formed into plastic without heat-warping effects on the light housing.” *Id.* at 3:34-36.
4. A smaller reading light means the reading light can be attached to pliable pages and/or a cover without bending the pages/cover. A smaller reading light is also less clumsy than a larger reading light.” *Id.* at 3:27-30.
5. “[A]n LED casts light in a more even and focused manner than bulbs used in prior reading lights.” *Id.* at 3:38-39.
6. “A white light LED is further preferred because it emits the full spectrum of visible light, unlike conventional light bulbs used in prior art reading lights, resulting in more vibrant, vivid and true colors.” *Id.* at 3:47-51.
7. “The resulting light from a white light LED is also more comfortable to a reader’s eyes than the light from conventional light bulbs.” *Id.* at 3:51-53.
8. “Because the LED draws little power, the power source 132 is a small, low-voltage power source such as, but not limited to, an AA battery, an AAA battery, an AAA (sic) battery, or a watch battery.” *Id.* at 3:54-57; *see also*, Bretschneider, Ph.D. Dec (Exh. 2036) at ¶53.

In addition to the Detailed Description, Naghi’s Summary is replete with references to LEDs. *See, e.g.*, Exh. 1008 at 1:49-51 (“illuminating one or more

objects associated with the laptop computer with at least one LED of the light.”), 1:55-56 (“illuminating one or more objects associated with the PDA with at least one LED of the light.”), 2:10-12 (“The method includes providing an attachable light including at least one LED powered by at least one power source.”).

Naghi has a sole independent claim – claim 1 – and it too expressly recites a “light including at least one LED.” *See id.* at 8:15-20. In fact, six of the eight dependent claims of Naghi also expressly reference the “at least one LED” of claim 1. *Id.*

IV.D.2. Dine (1006)

Dine’s “invention relates to photographic light units and more particularly to an improved construction of a gaseous-discharge flash-lamp unit which is operative to produce the exposure flash for illuminating an object to be photographed and which is adapted to be operatively mounted directly upon the photographic camera.” Exh. 1006 at 1:1-7. FIGs. 1, 2, 3, 7, and 9 of Dine illustrating its enclosure 15 are reproduced below.

†
Fig. 1.

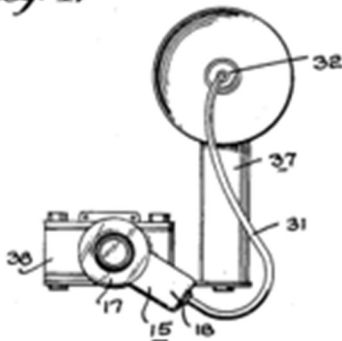


Fig. 2.

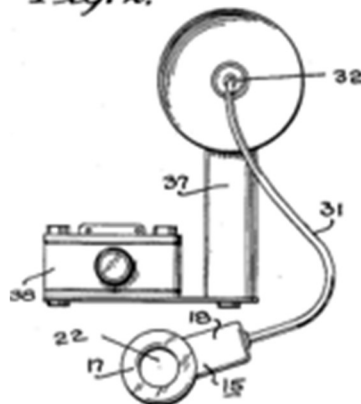
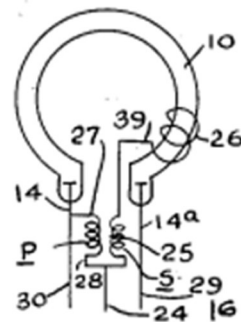


Fig. 9.



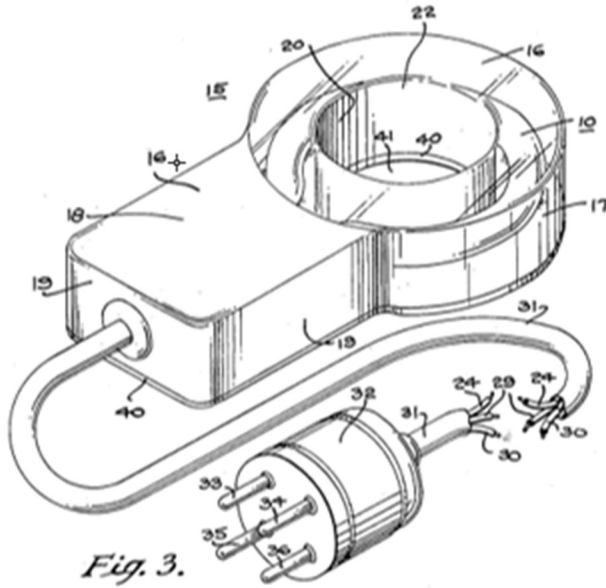


Fig. 3.

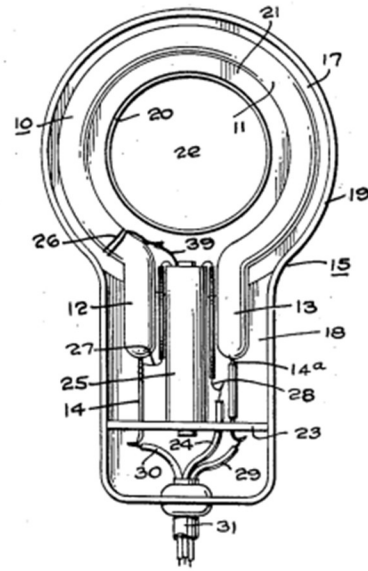


Fig. 7.

The lighting component of Dine is a “gaseous discharge tube 10 of glass or quartz within which is sealed a suitably ionizable gas, such as xenon, krypton or the like, the main body portion 11 of this tube being generally circular in form and having outwardly turned, substantially parallel portions 12 and 13 which constitute chambers which respectively enclose discharge supporting electrodes suitably connected to current leading-in wires 14 and 14a.” Exh. 1006 at 2:5-16, FIG. 7 (reproduced above).

The gaseous discharge tube 10 is housed within enclosure 15. More specifically, the Dine enclosure 15 has a “substantially front facing 16 having a circularly shaped part 17 at one end and a rectangularly shaped part 18 at the other end thereof.” *Id.* at 2:17-25. “The walled circular part 17 is centrally provided with an annular member 20 preferably formed as an integral component of the tube enclosure 15, this annular member 20 being so concentrically disposed within the

circular part 17 as to form therewith an annular chamber 20 for receiving the circular body portion 11 of the tube [15].” *Id.* at 2:28-34.

The purpose of Dine is to provide “exposure flash for illuminating an object to be photographed” *Id.* at 1:1-6. More particularly, Dine is configured to be “mounted directly” onto the camera proximate the camera lens such that the light from the gaseous tube projects an “intense flash of actinic light” forwardly of the camera lens axis. *Id.* at 1:1-6 (the “gaseous-discharge flash-lamp unit [] is operative to produce the exposure flash for illuminating an object to be photographed and which is adapted to be operatively mounted directly upon the photographic camera.”), 1:8-18 (“Among the principal objects of the present invention is the provision of an exceedingly compact and light-weight lighting accessory for cameras which is characterized by the use of an electric discharge lamp in the form of a circular tube adapted for attachment in close relation to and concentrically about the camera lens to produce an intense flash of actinic light by which the subject to be photographed may be uniformly illuminated virtually free of any shadow.”), 1:19-24 (“A further object of the present invention is to provide a lighting unit of the character aforesaid which may be mounted directly upon the camera by use of a suitable adapter fitting”).

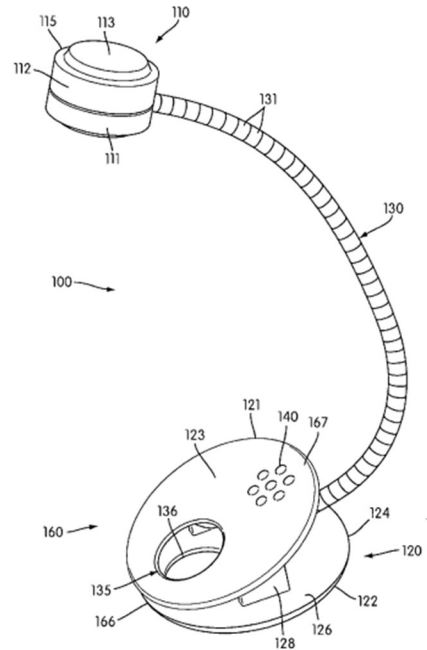
This is why the Dine gaseous tube 10 has a generally circular main body portion 11 and the Dine enclosure 15 has an annular member 20 for retaining the generally circular main body portion 11 of gaseous tube 10: The camera lens is circular, and the generally circular configuration of each of the annular member 20 of enclosure 15 and the main body portion 11 of gaseous tube 10 allows the Dine

enclosure 15 to be mounted onto the camera concentrically with the circular camera lens (see FIGs. 1 and 2 above) such that the light from the gaseous tube 10 projects forwardly of the camera lens in sync with the camera shutter. *See id.* at 3:61-4:4 (“a suitable adapter ring 45 for mounting the unit upon the lens mount of the camera, as will be readily understood. When the unit is thus mounted directly upon the camera and is energized through operation of the flash gun in synchronization with actuation of the camera shutter, a brilliant flash of actinic light, produced in full circle about the camera lens, is projected forwardly of the camera lens axis to provide shadow-free illumination of the subject to be photographed.”); *see also*, Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 57-59.

Dine’s gaseous tube 10 is powered using AC power accessible via connector plug 32. Specifically, to power the Dine gaseous tube 10, a three-wire cable 31 connects the tube’s electrodes 13, 14. *See* Exh. 1006 at 3:10-28. This three-wire cable 31 includes lead-in wires 14, 14a, 21, 22, 24. *Id.* at 3:16-23. The lead-in wires link to a spark coil 25. *Id.* at 3:15-17. A trip wire electrode 26 wraps around the tube 10 for triggering discharge. *Id.* at 3:3-9, FIG. 9. The three-wire cable 31 terminates in a connector plug 32 with prongs 33, 34, 35. *Id.* at 3:16-23. This connector plug 32 connects to a flash gun 37. *Id.* at 3:23-28, 3:61-4:4. The flash gun 37 energizes the unit in synchronization with the camera shutter. *Id.* at 3:61-4:4. This produces the flash through gaseous discharge across the spark gap 27 between electrodes 13, 14. *Id.* at 3:25-38, FIGS. 1, 3, 9.

IV.D.3. Nelson (1014)

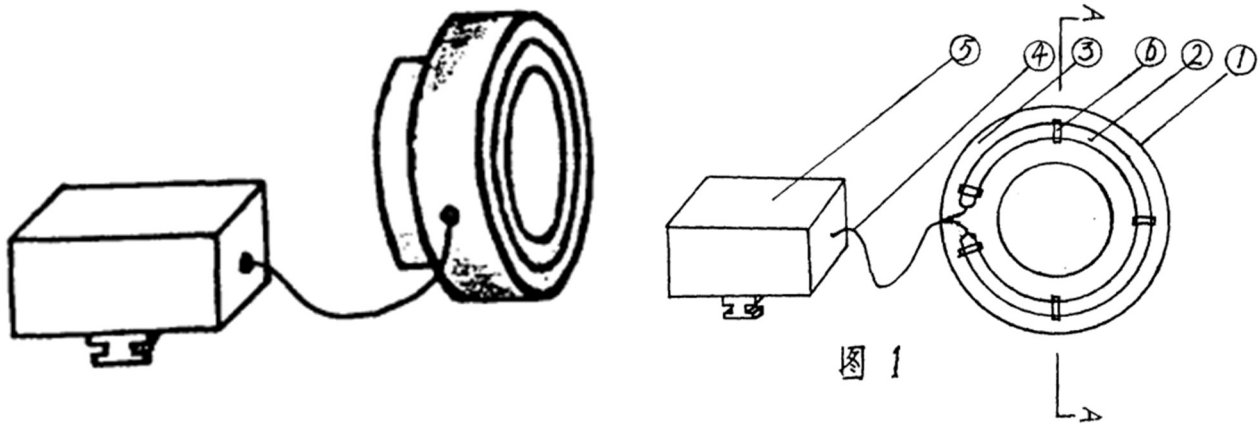
Similar to Naghi discussed above, Nelson (illustration follows) is an “Illuminating Book Light.” *See* Exh. 1014 at Title, [0001]. Nelson is particularly directed to the fact that “portable illuminators traditionally have had drawbacks associated with their use. For example, portable illuminators are susceptible to breakage.” *See id.* at [0003]. The only light source disclosed in Nelson is an LED. *See id.* at [0009], [0021], [0023], [0050], [0064]. This makes particular sense given Nelson’s desire to prevent breakage and the low power requirements of LEDs. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 96.



IV.D.4. Luo (1012/1013)

Luo provides a “shadowless flash” device for use with film cameras. *See* Exh. 1013 at pp. 2, 3. Similar to Dine discussed above, Luo utilizes a “lamp tube,” which those skilled in the art understood to be a glass or quartz tube having an ionizable gas therein. *See* Exh. 1013 at pp. 3, 5; Exh. 1006 at 2:4-10. Such lamp tubes, while appropriate for providing a flash for film photography, were known to be breakable, to emit significant heat, and to require large amounts of electrical power. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 61-62, 96. Further, such flash units are

not appropriate for sustained illumination. See Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 96. Illustrations from Luo are below.



“The objective” of Luo is “to provide a flash device in which the axis of the flash aligns with the axis of the camera lens, thereby eliminating shadows on the film.” Exh. 1013 at p. 4. This is contrary to conventional flash units. “Conventional flash units are typically mounted above the camera body. Since the axis of the flash is angled relative to the axis of the camera lens, this often results in shadow formation on the film.” *Id.*

IV.D.5. Cheng (1005)

Cheng (shown below) provides an image acquiring device (i.e., a video camera) 13 that is mounted on a flexible support arm 12, and Cheng further includes a separate lamp 14. See Exh. 1005 at [0003], [0015], Fig. 1. Cheng addresses the problem that “There has been not (sic) any digital presenter having the camera

equipped with the automatic focusing function and the flexible support arm concurrently so far.” Exh. 1005 at [0006].

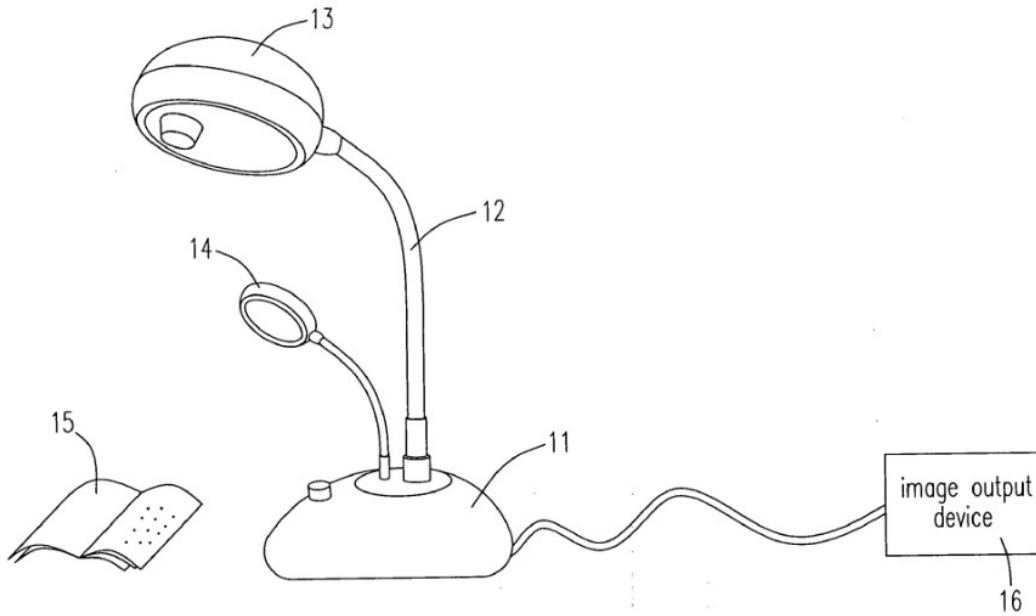
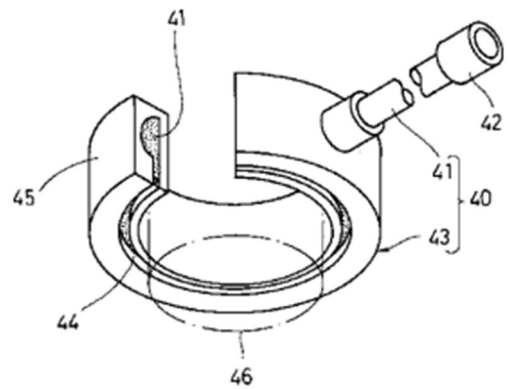


Fig. 1

IV.D.6. Masayuki (1009)

Masayuki (illustration follows) discloses yet another light that is generally circular and which is installed around a lens. *See* Exh. 1010 at p. 3. By positioning the lens of the camera in the center of the light, uniform light will be irradiated from the periphery of the lens of the camera onto the product that is being photographed. *Id.* at pp. 3-4.



IV.D.7. Du Breuil (1015)

Du Breuil was applied by the examiner against the claims of the '729 Patent during original prosecution, (*see* Office Action in prosecution dated 11/27/2009), and the claims were held allowable thereover.

Du Breuil discloses a “lighting for video systems” to compensate for low-light conditions during video communications, such as in video telephones. Exh. 1015 at [0001]. Du Breuil explains that “[o]ne problem with video processing devices, including video telephones, is the proper lighting of the user’s face.” *Id.* at [0002]. “Due to the image processing at both the transmitter and receiver ends, poor lighting conditions at the transmission side can result in the user’s face being heavily shadowed and distorted at the receiver side.” *Id.*

To address these “poor lighting conditions” (*id.*) in video telephone settings, Du Breuil provides an adjustable light source(s) integrated into or associated with the video system to shine light on the user’s face. *See id.* at Abstract (“The video system includes a light source that adjusts. In one example the light source is controlled to either shine more light upon the user’s face or less dependent upon the ambient conditions.”), [0012] (“If the user’s face is not properly lit, the image displayed at the receiver video telephone 100 will be dark and distorted, especially in the shadow areas of faces including the eyes, under the nose and under the chin. To increase the quality of the displayed image, light source 120b is used.”), [0013] (“This increased light improves the image quality at receiver video telephone 100 and yields a more pleasing video telephony experience by providing more visual detail as well as improved visibility of the sender’s eyes and facial expressions.”).

The brightness of the Du Breuil light can be adjusted manually or automatically. *See id.* at [0013] (“The user changes the brightness of light 120b by turning the dial.”), [0014] (“An alternative system may include a light sensor that automatically adjusts the illumination level for optimal results taking into consideration both the ambient lighting conditions as well as the skin tone of the subject.”).

Du Breuil describes multiple embodiments for the placement of its light sources, each designed to illuminate the user’s face while integrated into the video telephone housing. In one embodiment (FIG. 1 below at left), the light source 120b is a single, substantially contiguous element that circumscribes the screen 120c, recessed into housing 120a to provide even illumination. *See id.* at [0011], [0016]. In another embodiment (FIG. 2 below at right), the light source 220b consists of two discrete light elements placed parallel to the vertical edges of screen 220c, which may also be recessed, with the vertical placement advantageous for shining less light into or near the camera 215. *See id.* at [0017]-[0018].

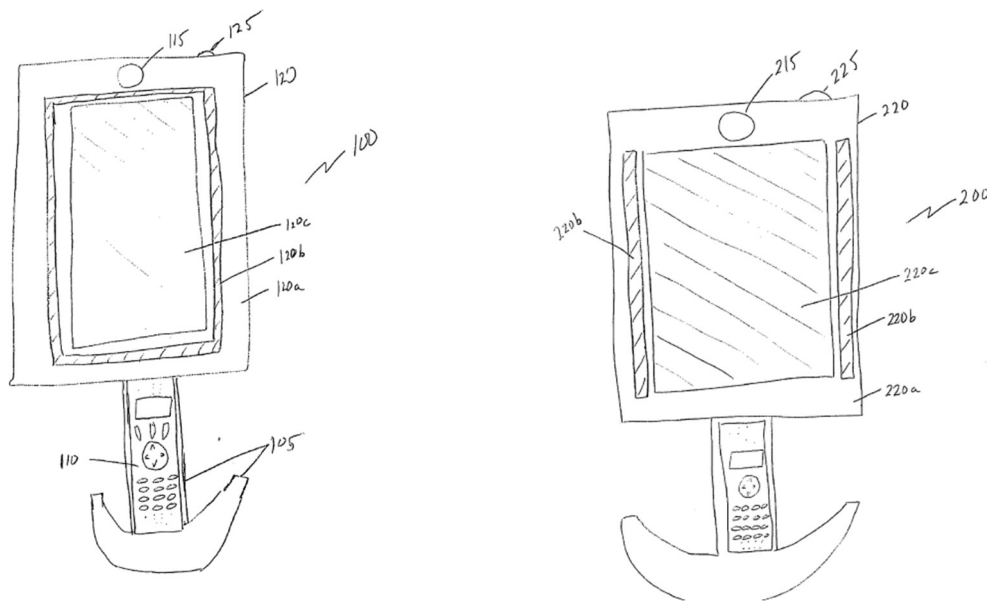


Figure 1

In yet another embodiment (FIG. 7 below), smaller discrete light sources 720b are dispersed around the screen 720c like the numbers on the face of a clock, placed approximately 30 degrees apart, with fewer or more sources possible depending on design. *See id.* at [0052].

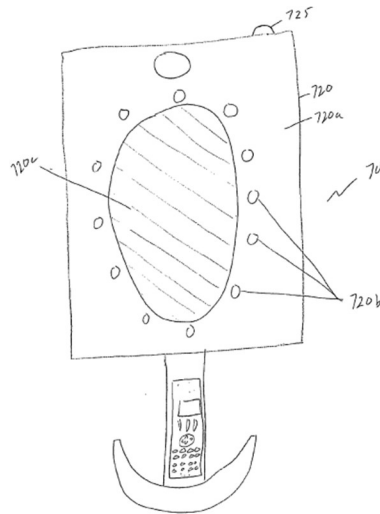


Figure 7

Du Breuil notes it is preferable that its light does not project onto the screen or onto the camera as such would cause distortion. *See id.* at [0016] (“By recessing light 120c, light is not projected onto screen 120c so it does not reflect off of the screen and cause the image to be drowned out.... In addition, recessed light 120c does not shine light directly into camera 115 distorting the image being captured by camera 115.”), [0018] (“Light source 220b may also be recessed into housing 220a so as not to shine light directly into camera 215 or screen 220c.”).

Du Breuil’s system is designed for continuous, adjustable illumination during video calls, not momentary flashes, to provide sustained uniform lighting for real-time video transmission. *See id.* at Abstract (“A video system and method of operation are described that compensate for low-light conditions. The video system

includes a light source that adjusts.”), [0012] (“This increased light improves the image quality at receiver video telephone 100 and yields a more pleasing video telephony experience...”).

IV.E. Claim 1 is not obvious over Naghi in view of Dine

IV.E.1. One of ordinary skill in the art would not be motivated to substitute Naghi’s LED 124/124e with Dine’s enclosure 15 and gaseous tube 10 to reach Claim 1 at least because:

IV.E.1.a. Naghi requires constant light, whereas Dine’s gaseous tube 10 provides flashes of brilliant light

Naghi’s reading light 100 serves as a portable lighting apparatus crafted to deliver consistent illumination for reading or working tasks. *See* Exh. 1008 at 2:55-65 (“The reading light 100... terminates at one end in at least one light source 124 for illuminating the page(s) 112 of the publication 116.”). One having skill in the art at the time of the ’729 Patent would have therefore understood that Naghi’s reading light 100 provides generally constant or uninterrupted light. It would be clear even to those of lesser skill that a flashing light would be unsuitable to illuminate pages 112 of publication 116. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 83-88.

Naghi’s laptop light 800, relied upon by Petitioner for Ground 1A, is similar in construction to the reading light 100. *See* Exh. 1008 at 7:19-21 (“Laptop light 800 [is] similar in construction to the reading light 100 described with respect to FIG. 1.”). Thus, the laptop light 800 likewise provides constant or uninterrupted light. Indeed, laptop light 800 is expressly configured for tasks that require constant

illumination, such as viewing the laptop screen, keyboard, and adjacent materials. *See* Exh. 1008 at 7:24-32 (“The laptop light 800 may be used to illuminate objects associated with the laptop 804 such as, but not by way of limitation, a screen 812, a keyboard 816, an object of a digital camera 818, or any other object(s) in the area of the laptop 804, e.g., papers, documents, etc.”). One skilled in the art would understand that a light for illuminating screen 812 and keyboard 816 would provide generally constant light, not intermittent flashes, to enable ongoing use without eye strain or disruption. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 87.

Dine’s gaseous tube 10, conversely, provides “brilliant flash[es] of actinic light ... in synchronization with actuation of the camera shutter.” *See* Exh. 1006 at 3:61-4:4, 1:1-6 (“This invention relates to photographic light units and more particularly to an improved construction of a gaseous-discharge flash-lamp unit which is operative to produce the exposure flash for illuminating an object to be photographed....”). Dine’s gaseous tube 10 is designed exclusively for momentary bursts of light to capture photographs, not for sustained illumination.

One having skill in the art at the time of the ’729 Patent would recognize that Dine’s flash operation is fundamentally incompatible with Naghi’s requirement for constant light. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 87. Naghi’s lights, including embodiments 100 and 800, are intended for prolonged tasks like reading pages or viewing laptop screens and keyboards, which demand uninterrupted visibility. *See* Exh. 1008 at 1:33-43 (“there is a long felt need for a simple, light-weight, energy-efficient, economical device that can adequately illuminate pliable reading materials [and other objects] such as laptop computers....”). Dine’s

intermittent flashes would cause eye strain, disruption, and inadequate lighting for such ongoing activities. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 87. Further, Dine’s actinic light would be unflattering in the digital videography of Naghi. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 88.

A POSITA would not be motivated to substitute Naghi’s LED 124/124e with Dine’s gaseous tube 10 and enclosure 15, as proposed in Ground 1A (IPR Petition at pp. 17-25). Such a substitution would replace Naghi’s steady illumination with synchronized flashes, directly contradicting Naghi’s teachings on ongoing lighting for reading or laptop use. *See* Exh. 1008 at 2:57-64 (“The reading light 100 includes ... at least one light source 124 for illuminating the page(s) 112 of the publication 116.”), 7:24-32 (“The laptop light 800 may be used to illuminate objects associated with the laptop 804 such as... a screen 812, a keyboard 816....”). *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 86-88. Petitioner’s combination ignores Naghi’s core purpose of providing constant light for reviewing documents or objects.

Indeed, the combination would render Naghi unsatisfactory for its intended purpose, in violation of MPEP 2143.01.V. Naghi’s portable lights are designed for constant operation during extended tasks like viewing screens or keyboards (*see* Exh. 1008 at 7:24-32), whereas Dine’s system requires synchronization with a camera shutter for brief flashes (*see* Exh. 1006 at 3:61-4:4). Use of Dine’s gaseous tube 10 in Naghi would eliminate Naghi’s usability for tasks requiring uninterrupted light, as even brief flashes would interrupt visibility. Further, use of Dine’s “brilliant flashes of actinic light” (*see* Exh. 1006 at 3:61-4:4) in Naghi would cause the user discomfort, which too goes against the express teachings of Naghi (*see* Exh. 1008 at

3:50-52 (“The resulting light from a white light LED is more comfortable to a reader’s eyes than the light from conventional light bulbs.”)). See Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 87.

Petitioner’s own statements regarding motivation to combine Naghi and Dine highlight the impropriety of the combination. Petitioner argues:

“Ring” lights were well-known in the art (e.g., in photography, videography, makeup lighting, etc.) to achieve soft, uniform illumination of the subject’s face. EX1017, ¶ 43-44. Dine itself teaches that uniform, shadow-free illumination of a photographic subject can be achieved using a ring-shaped, toroidal bulb and conforming circular reflector. EX1004 at 1:8-18, 3:57-61. Thus, a POSITA would have been motivated to incorporate Dine’s lighting module comprising a toroidal bulb shape and conforming reflector into Naghi’s lighting apparatus. EX1017, ¶¶ 60, 65, 66.

So, in one sentence, Petitioner argues that “soft” lighting is used to illuminate a subject’s face in photography, videography, and makeup lighting, and that such light was provided by well-known ring lights. In the very next sentence, though, Petitioner cites to Dine as showing a ring light, but this time, Petitioner removes the word “soft.” Such handwaving ought not be countenanced. If ring lights for achieving “soft, uniform illumination of the subject’s face” for videography were well-known, as Petitioner contends, then Petitioner should have cited a prior art reference showing such. Petitioner’s failure to do so dooms its invalidity argument in Ground 1.

IV.E.1.b. Naghi emphasizes the benefits of using LEDs and dissuades use of prior art lights that require high power or emit heat – and Dine both requires high power and emits heat

Naghi identifies problems with prior art lights. *See* Exh. 1008 at 1:10-33. Prior art lights use “incandescent or fluorescent bulbs [which] consume a relatively large amount of electricity, are inefficient, generate heat, and give only partial lighting across the entire visible spectrum.” *Id.* at 1:18-23. Prior art lights “require relatively large, more powerful batteries, consume batteries quickly, may bum (sic) the reader if the incandescent bulb comes in contact with the reader, require relatively large light housings to accommodate the heat of the incandescent bulb and large batteries, and provide unsatisfactory lighting of the reading materials.” *Id.* at 1:22-29.

Naghi prefers LEDs to address these issues. “The light source 124 is preferably a wide-angle, white LED.” *Id.* at 3:18-21. “An LED is advantageous because it draws little electrical power during operation, prolonging the power life of the power source 132.” *Id.* at 3:21-23. “An LED is small, lightweight and also does not burn out like conventional filament light bulbs, as used in prior art reading lights.” *Id.* at 3:29-32. “Because an LED does not emit heat, it uses power more efficiently and can be formed into plastic without heat-warping effects on the light housing.” *Id.* at 3:33-37. “Because the LED draws little power, the power source 132 is a small, low-voltage power source such as, but not limited to, an AA battery, an AAA battery, an AAA (sic) battery, or a watch battery.” *Id.* at 3:54-57.

Dine is powered using connector plug 32 coupled to conventional AC power – i.e., Dine’s gaseous tube 10 requires much higher power than does Naghi’s LED

124/124e. Therefore, one of skill in the art would not be motivated to substitute Naghi's LED 124/124e with Dine's gaseous tube. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 58-63. Petitioner does not even explain how Dine's gaseous tube 10 would be powered using "a small, low-voltage power source," (*see* Exh. 1008 at 3:54-57), if it were to be incorporated into Naghi.

Further, one having skill in the art at the time of the '729 Patent would have understood that Dine's xenon gaseous discharge tube 10 emits significant heat, as the flash process ionizes gas to plasma at high temperatures, causing the tube 10 to heat up. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 61-63. Naghi, conversely, teaches the use of LEDs that do not generate high heat. Substitution of Naghi's LED 124/124e with Dine's gaseous tube 10 would go against the express teachings of Naghi. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 83-92.

To be clear, Patent Owner does not argue that Naghi must use LEDs and that use of any other light therein is nonobvious. Rather, Patent Owner argues that one of skill in the art at the time of the invention would not find it obvious to substitute Naghi's LED 124/124e with Dine's gaseous tube 10 and housing 15 from 1952. "[T]here must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness," and that articulated reasoning and rational underpinning is missing here. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (internal citation omitted). Petitioner incorporates the inferior and unsuitable gaseous tube 10 of Dine into Naghi in an attempt to reach what is claimed, but the combination does not pass *KSR* muster.

IV.E.1.c. Naghi does not have the problem conjured up by Petitioner

Petitioner creates in Naghi a problem Naghi does not have, and then attempts to solve this problem using Dine’s gaseous tube 10 – which introduces new and more significant problems. Specifically, Petitioner only gives one reason to modify Naghi in view of Dine – the “need to uniformly illuminate a webcam user’s face....” *See* Petition at p. 21. But Naghi was already aware that prior art lighting systems “provide unsatisfactory lighting” (*see* Exh. 1008 at 1:28-30), and consequently, provided systems that do not suffer from this drawback. *See* Exh. 1008 at 1:33-39 (“Accordingly, there is a long felt need for a simple, light-weight, energy-efficient, economical device that can adequately illuminate pliable reading materials and/or small reading materials such as magazines and soft cover books without the drawbacks associated with prior reading lights.”). In fact, Naghi repeatedly notes that its systems provide “optimal lighting.” *See* Exh. 1008 at 7:9-11 (“Thus, the bendable body 704 may be bent to an infinite number of positions and configurations for optimal lighting.”), Abstract (“light sources are oriented in a desired configuration for optimal lighting of the one or more subjects”), 1:57-65 (“the light sources are oriented in a desired configuration for optimal lighting of the one or more objects”).

One skilled in the art would not be motivated to improve Naghi’s already “optimal lighting,” particularly when such “improvement” requires Dine’s inferior tube 10 that takes more power, generates more heat, and which is incapable of continuously and suitably illuminating objects intended to be illuminated using Naghi. Again, there is no articulated reasoning with some rational underpinning to

support the legal conclusion of obviousness as required to invalidate the claim. *See KSR Int'l Co.*, 550 U.S. at 418.

IV.E.1.d. Dine's gaseous enclosure 15 (and tube 10) have a generally circular portion because the enclosure 15 is configured to be mounted onto the circular lens of the Dine camera

Dine's enclosure 15 and tube 10 are circular for concentric lens mounting. Dine uses "a circular tube adapted for attachment in close relation to and concentrically about the camera lens." *See* Exh. 1006 at 1:12-14, 1:4-7. The camera lens is circular, and so the shape of Dine allows mounting "concentrically about the camera lens to produce an intense flash of actinic light." *Id.* at 1:12-16. When mounted, "a brilliant flash of actinic light, produced in full circle about the camera lens, is projected forwardly of the camera lens axis." *Id.* at 3:63-4:4.

Naghi does not fix the light to a lens. Naghi's light 100 has an "adjustable, bendable body portion 120 that terminates at one end in at least one light source 124." *See* Exh. 1008 at 2:57-67. The laptop light 800 is similar in construction to light 100. *Id.* at 7:19-20. The body portion 120e of laptop light 800 is adjustable and bendable and so "laptop light 800 may be used to illuminate objects associated with the laptop 808 such as, but not by way limitation, a screen 812, a keyboard 816, an object of a digital camera 818, or any other object(s) in the area of the laptop 808, e.g., papers, documents, etc." *Id.* at 7:24-28.

One of skill in the art at the time of the '729 Patent reviewing Dine would understand the circular shape of Dine is for concentric lens mounting. *See*

Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 57. Dine’s benefits, like “shadow-free illumination,” rely on the fixed concentric relationship between the camera lens and Dine. Neither Dine nor Naghi indicates benefits for circular light not concentric with a lens.

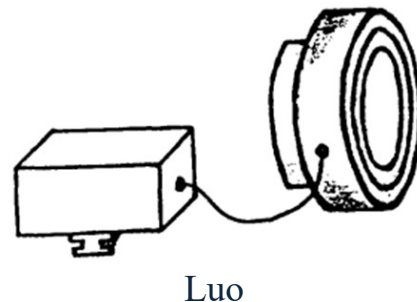
One having skill in the art at the time of invention would not have been motivated to substitute Naghi's LED 124/124e with Dine’s circular enclosure 15 and tube 10. The advantages of Dine – which are largely inapplicable to Naghi in any event – depend on fixed, concentric lens mounting. Naghi’s adjustable arm (*see* Exh. 1008 at 2:56-67) cannot maintain Dine’s concentric alignment. Petitioner cherry picks elements from Dine (e.g., gaseous tube 10) without regard to the teachings of Dine about these elements. The combination fails also for this reason. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 91-92.

In sum, Petitioner has not shown that claim 1 is obvious under 35 U.S.C. § 103 or otherwise invalid over Naghi in view of Dine.

IV.F. Claim 1 is not obvious over Nelson in view of Luo



Petitioner’s combination of Nelson (left) and Luo (below at right) is no better than the proposed ground of Naghi in view of Dine.



First, replacing Nelson’s LED (which is appropriate for providing constant light) with Luo’s flash unit (which is not suitable for providing constant light; *see* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 95-96), makes Nelson inoperable for its intended purpose of being a “book light,” contrary to MPEP 2143.01.V. Even if one were to utilize the Nelson light with a computer webcam as Petitioner argues, this would require a constant light – not a flash. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 93-96, 88. Accordingly, one of ordinary skill in the art would not combine Nelson with Luo as set forth in the Petition because doing so would leave Nelson inoperable for its intended purpose – contrary to MPEP 2143.01.V. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 96.

Further, like Dine discussed above at Sections IV.D.2 and IV.E, Luo provides a generally circular light that is fixed to and generally encircles a lens of a film camera. *See* Exh. 1013 at p. 4. But, like Naghi discussed above at Sections IV.D.1 and IV.E, Nelson does not fix a light to a lens. Luo’s shadow-free illumination relies on the fixed concentric relationship between the camera lens and the Luo light. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 68-69. In fact, Luo specifically teaches that the alignment of the light with the camera axis is what avoids shadows and that any type of light that is not so aligned will result in shadow formation on the film. *See* Exh. 1013 at p. 4. Neither Nelson nor Luo indicates any benefits for a generally circular light that is not concentric with a lens. So one of ordinary skill in the art would not have been motivated to substitute Nelson’s LED with Luo’s generally circular tube light since the advantages of Luo are inapplicable to Nelson and depend on fixed, concentric lens mounting. *See KSR Int’l Co., 550 U.S.* at 418 (requiring an

articulated reasoning with some rational underpinning to support the legal conclusion of obviousness).

Moreover, one of ordinary skill in the art would not replace the durable LED in Nelson with the breakable gas tube of Luo since doing so would make Nelson more breakable – which is contrary to Nelson’s goal of providing a light that is not “susceptible to breakage.” *See* Exh. 1014 at [0003]. And the Luo flash unit is fundamentally incompatible with the Nelson disclosure. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 93-96. Again, there is no articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.

This proposed ground of rejection is no better than Naghi in view of Dine, and Petitioner has not shown that claim 1 is obvious or otherwise invalid under 35 U.S.C. § 103 over Nelson in view of Luo.

IV.G. Claim 1 is not obvious over Cheng in view of Masayuki

Petitioner’s combination of Cheng and Masayuki relies on fatal inconsistencies.

Cheng (shown below) provides a camera 13 mounted on a flexible support arm 12. *See* Exh. 1005 at [0015], Fig. 1. A separate lamp 14 in Cheng provides light. *Id.*

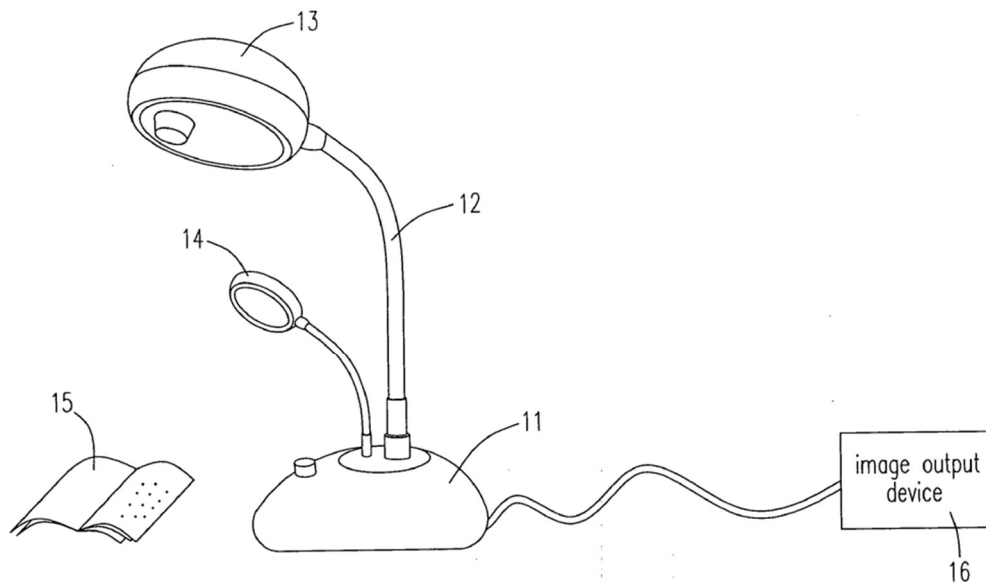


Fig. 1

Petitioner argues that one of ordinary skill in the art would add the Masayuki light around the camera 13 of Cheng. *See* Petition at p. 39. However, claim 1 proceeds to require “said bulb is positionable relative to the web camera to provide optimal viewing of the user through the web camera.” To address this limitation, Petitioner focuses not on the bulb that it incorporated from Masayuki (and which is fixed relative to the camera – not positionable); instead, Petitioner argues that lamp 14 is positionable relative to the camera 13. *See* Petition at pp. 41-42. Petitioner cannot have it both ways: Either Masayuki is incorporated as argued (i.e., around the camera) and the bulb is *not* positionable relative to the web camera, or the lamp 14 is the bulb at issue and there is absolutely no reason to incorporate the light from Masayuki. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 101-107. Either way, there is no obviousness under 35 U.S.C. § 103.

IV.H. Claim 10 is not obvious over Du Breuil in view of Dine

As discussed in Section IV.D.7 above, Du Breuil discloses a video telephone with light sources positioned around the screen to provide even, continuous illumination of the user's face during video calls, without shining light directly into the camera. *See* Exh. 1015 at [0010]-[0014], [0016], FIGS. 1-2, 7.

De Breuil teaches different configurations of lights – a contiguous element circumscribing the screen (*see* Exh. 1015 at FIG. 1, [0011], [0016]), two discrete vertical elements parallel to the screen edges (*see* Exh. 1015 at FIG. 2, [0017]-[0018]), or discrete sources dispersed like clock numbers around the screen (*see* Exh. 1015 at FIG. 7, [0052]). The camera is mounted above the screen, separate from the lights, to avoid distortion. *See* Exh. 1015 at [0011], [0016], [0018].

Claim 10 requires an illumination device with “one bulb surrounding the web camera,” which Du Breuil neither teaches nor suggests. Petitioner first argues that claim 10 is obvious over De Breuil alone. *See* Petition at pp. 48-49. Specifically, Petitioner argues in the Petition at pp. 48-49:

[I]t would have been obvious to a POSITA to try rearranging Du Breuil's existing frame-mounted light elements 220b/720b to optimize the quality of the image. EX1017, ¶ 140 . Further, a POSITA would have recognized that there was a limited number of places in the frame of the terminal (video telephone 200/700) where Du Breuil's light elements could be located: above the camera, below the camera, around the camera, and/or to the sides of the camera. EX1017, ¶ 141. Thus, rearranging the lights so that at least one light (e.g., 220) surrounded the web camera 215 would have been one of a finite number of predictable solutions for achieving direct, uniform illumination of the user's face.

Petitioner's obvious to try argument fails. Petitioner's characterization that there are only four locations for placing De Breuil's lights, (*see* Petition at p. 48 ("above the camera, below the camera, around the camera, and/or to the sides of the camera.")), is overly broad and self-centered. In reality, there are virtually an infinite number of possible placements of the De Breuil light(s) (linear placement, clustered placement, dispersed placement, placement in one or more of an infinite number of patterns, et cetera). Indeed, De Breuil shows three different examples of light placement (*see* Exh. 1015 at FIGs 1, 2, and 7) – and in each of these examples, following Petitioner's argument, the lights are placed "below the camera." Thus, De Breuil itself shows that there are multiple options to arrange lights according to each of Petitioner's four characterizations; so the obvious to try argument fails. *See Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc.*, 520 F.3d 1358, 1364 (Fed. Cir. 2008) (rejecting obviousness based on "obvious to try" in part because "this invention, contrary to [challenger's] characterization, does not present a finite (and small in the context of the art) number of options easily traversed to show obviousness."); *Leo Pharm. Prods. v. Rea*, 726 F.3d 1346, 1356 (Fed. Cir. 2013) ("To the contrary, the breadth of these choices and the numerous combinations indicate that these disclosures would not have rendered the claimed invention obvious to try.").

Even if there were only four options for light placement in De Breuil as Petitioner contends (which is incorrect), the argument still fails. An "obvious to try" attack requires a showing that the POSITA would have understood that the selected approach has a reasonable expectation of success. *Leo Pharm. Prods.*, 726 F.3d at

1357 (Fed. Cir. 2013) (“Without a reasonable expectation of success or clues pointing to the most promising combinations, an artisan could have spent years experimenting without success.”). Here, De Breuil expressly tells the artisan to keep the light(s) away from the camera lens, as a light that shines directly into the camera lens can cause distortion. *See* Exh. 1015 at [0016] (“recessed light 120c does not shine light directly into camera 115 distorting the image being captured by camera 115.”), [0018] (“Light source 220b may also be recessed into housing 220a so as not to shine light directly into camera 215 or screen 220c.”). In view of these teachings, one of skill in the art would not find it obvious to rearrange the De Breuil light such that it surrounds the camera or is otherwise proximate or shining light into the camera. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶¶ 109-112). Indeed, during initial examination, the U.S. Patent Office already held that this claim is allowable over De Breuil. Petitioner does not provide any reason to reverse the Office’s previous conclusion.

Petitioner argues, in the alternative, that one of skill in the art would find it obvious to rearrange De Breuil’s light such that it surrounds the camera, because such is taught by Dine. *See* Petition at p. 49. But Dine’s gaseous tube 10, because of its substantially parallel portions 12 and 13 (shown below), does not “surround” the lens, as claimed. In any event, Dine provides a gaseous tube 10 for illuminating objects for flash photography, and one of skill in the art would have not have looked

to Dine to modify De Breuil in the manner suggested by Petitioner. *See* Bretschneider, Ph.D. Dec (Exh. 2036) at ¶ 113).

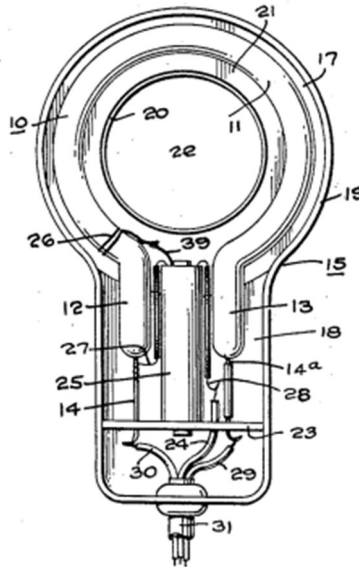


Fig. 7.

Petitioner provides a sole reason to modify De Breuil in view of Dine – that the subject would be “uniformly illuminated virtually free of any shadows.” *See* Petition at p. 49. But De Breuil was already aware of such problems. *See* Exh. 1015 at [0002] (“One problem with video processing devices, including video telephones, is the proper lighting of the user’s face... [P]oor lighting conditions at the transmission side can result in the user’s face being heavily shadowed and distorted at the receiver side.”), [0012] (“If the user’s face is not properly lit, the image displayed at the receiver video telephone 100 will be dark and distorted, especially in the shadow areas of faces including the eyes, under the nose and under the chin.”). Further, De Breuil expressly notes that its systems solve these problems. *See, e.g.,* Exh. 1015 at [0012] (“This increased light improves the image quality at receiver video telephone 100 and yields a more pleasing video telephony experience by

providing more visual detail as well as improved visibility of the sender's eyes and facial expressions.”). Petitioner conjures up in the De Breuil video system a problem it does not have, and then attempts to solve this alleged problem in the De Breuil video system by pointing to the gaseous tube in Dine that is only used for flash photography. Petitioner's positions show a misappreciation of both the technical considerations and the law. The obviousness ground should be denied.

IV.I. The dependent claims are not obvious

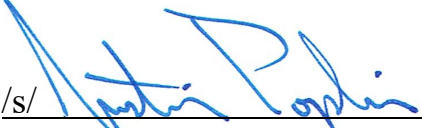
As discussed above, Petitioner has not shown that the independent claims are obvious. The challenges to the dependent claims have not cured those deficiencies, so the challenges to the dependent claims necessarily fail. *See In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988) (“Dependent claims are nonobvious under section 103 if the independent claim from which they depend are nonobvious.”) (internal citations omitted); MPEP 2143.03 (“If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious.”).

V. Certificate of Service

Pursuant to 37 CFR § 42.6(e), the undersigned certifies that he served this Patent Owner's Preliminary Response on counsel of record for Petitioner SHENZHEN RONGLIDA TECHNOLOGY CO. LTD. by filing this document through P-TACTS, as well as delivering a copy via first-class U.S. mail to the following:

Hasan A. Almashat, #79,166
Dinsmore & Shohl LLP
550 S. Hope Street
Suite 1765
Los Angeles, CA 90071
619.400.0533
Hasan.Almashat@Dinsmore.com

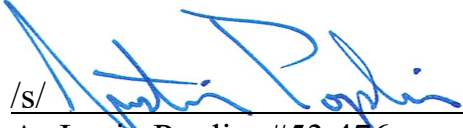
Date: October 20, 2025


/s/ A. Justin Poplin, #53,476

VI. Certificate of Compliance

This Petition complies with the type-volume limitations as mandated in 37 CFR 42.24, totaling 11,390 words (including Sections I-V, the cover page, the table of contents, the table of authorities, the listing of exhibits, mandatory notices, certificate of service, and certificate of compliance). Counsel has relied upon the word count feature provided in Microsoft Word for Windows.

Date: October 20, 2025


/s/ Justin Poplin
A. Justin Poplin, #53,476

Dated: October 20, 2025

Respectfully Submitted,

/s/


A. Justin Poplin, #53,476

Hissan Anis, #65,943

Avek IP, LLC

7285 W. 132nd St., Suite 340

Overland Park, KS 66213

Phone: (913) 303-3841

jpoplin@avekip.com

hanis@avekip.com

Counsel for Patent Owner