

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

REOLINK INNOVATION INC. AND
SHENZHEN REOLINK TECHNOLOGY CO., LTD.,
Petitioner,

v.

THROUGHTTEK CO., LTD.,
Patent Owner.

Case IPR2024-01192
Patent No. US9,774,916

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

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LIST OF EXHIBITS

EX1001	U.S. Patent No. 9,774,916 to Kuo et al. (“the ’916 Patent”)
EX1002	Prosecution History of the ’916 Patent (“the Prosecution History”)
EX1003	Declaration and Curriculum Vitae of Vlad Kardashov
EX1004	Prosecution History of U.S. Application Serial No. 13/293,506 (“the ’506 application”)
EX1005	Prosecution History of U.S. Application Serial No. 13/950,282 (“the ’282 application”)
EX1006	File History of U.S. Provisional Application Serial No. 61/924,240 (“the provisional application”)
EX1007	Lorex LH150 ECO4 Series Instruction Manual English Version 1.0 (2013), <i>available at</i> https://www.lorextechnology.com/downloads/security-dvr/LH150-Series/LH150_SERIES_MANUAL_EN_R1_web.pdf (“Lorex Manual”)
EX1008	U.S. Publication No. 2011/0082941 (“Kim941”)
EX1009	U.S. Publication No. 2014/0218517 (“Kim517”)
EX1010	Doherty et al., <i>Wireless Home Networking Simplified</i> (2007) (“Doherty”)
EX1011	U.S. Publication No. US2012/0198040 (“Kuo”)
EX1012	Lorex Technology Inc., “How to set up remote access for DVR using - Lorex Stratus Connectivity” (June 18, 2013), <i>available at</i> https://www.youtube.com/watch?v=fMPRi9WFuTM (“Lorex Video”)
EX1013	U.S. Publication No. 2012/0113265 (“Galvin”)
EX1014	RESERVED

- EX1015 Complaint, *ThroughTEK Co. Ltd. v. Reolink Innovation Inc.*, Case No. 1:24-cv-00169 (D. Del.), Feb. 8, 2024
- EX1016 U.S. Publication No. 2007/0300261 (“Barton”)
- EX1017 U.S. Publication No. 2007/0097860 (“Rys”)
- EX1018 Stipulation and Proposed Order to Substitute Party Name, *ThroughTEK Co. Ltd. v. Reolink Innovation Inc.*, Case No. 1:24-cv-00169 (D. Del.), April 13, 2024
- EX1019 Lorex LNR300 netHD Series Instruction Manual English Version 1.0 (2013), *available at* https://www.lorextechnology.com/downloads/security-nvr/LNR300-Series/LNR300_SERIES_MANUAL_EN_R1_web.pdf
- EX1020 Ford et al., Peer-to-Peer Communication Across Network Address Translators, 2005 USENIX Annual Technical Conference, pp. 179-192 (“Ford”)
- EX1021 Second Declaration of Vlad Kardashov
- EX1022 Transcript of February 21, 2025 Deposition of Yu-Li Kao in IPR2024-00509
- EX1023 Lorex Technology Inc., Lorex L-Cloud - Redefining Consumer Networked Cameras (July 2012)
- EX1024 Lorex Technology Inc., Lorex LH130 ECO2 Series Webpage, <http://www.lorextechnology.com/Security-digital-video-recorders-and-security-dvr-systems-%7C-LOREX/ECO2-Series-stand-alone-security-DVR/SER10003>, archived by the Internet Archive Aug. 27, 2012, <https://web.archive.org/web/20120827030018/http://www.lorextechnology.com/Security-digital-video-recorders-and-security-dvr-systems-%7C-LOREX/ECO2-Series-stand-alone-security-DVR/SER10003.p>
- EX1025 Lorex Technology Inc., Lorex LH130 ECO2 Series Product Specification, <http://www.lorextechnology.com/downloads/security->

dvr/LH130-Series/LH130_ECO2_Series_Specs_R3.pdf, as archived by the Internet Archive Aug. 31, 2012, https://web.archive.org/web/20120831142313/http://www.lorextechnology.com/downloads/security-dvr/LH130-Series/LH130_ECO2_Series_Specs_R3.pdf

- EX1026 Lorex Technology Inc., Lorex Remote Connectivity Compatibility Chart and App List, <http://www.lorextechnology.com/support/self-serve/Remote%2BConnectivity%2BCompatibility%2BChart%2Band%2BApp%2BList/4100028>, archived by the Internet Archive May 9, 2012, <https://web.archive.org/web/20120509033639/http://www.lorextechnology.com:80/support/self-serve/Remote+Connectivity+Compatibility+Chart+and+App+List/4100028>
- EX1027 Lorex Technology Inc., “How to Install ECO Security Camera System on iPad & iPhone -- Lorex Mobile App” (June 21, 2012), *available at* https://www.youtube.com/watch?v=C3v9qJfS_tc
- EX1028 Lorex Technology Inc., “NEW Wireless IP Camera for Mobile Phones & Tablets - LIVE PING” (Sep. 28, 2012), *available at* <https://www.youtube.com/watch?v=YaCLjpJXqMg/>
- EX1029 Oral Hearing Transcript, *Reolink Innovation Inc. v. ThroughTek Co., Ltd.*, IPR2024-00509, Paper 39 (PTAB June 2, 2025)

I. INTRODUCTION

The Patent Owner's Response ("POR") presents only limited rebuttals to the instituted Grounds 1A-2B in this IPR. Patent Owner ("PO") does not dispute, for example, that any element of claims 1-10 and 16 (the "Challenged Claims") is missing from the prior art combinations advanced in Grounds 1C-1D or 2A-2B. Nor does PO refute any of the multiple motivations for combining the prior art that are set forth in detail in the Petition and the corroborated expert declaration of Mr. Vlad Kardashov (EX1003). Indeed, PO elected to forego any cross-examination of Mr. Kardashov in this proceeding. Apart from unfounded—and ultimately immaterial—assertions that Kim941 somehow teaches away from the negative limitation recited in claim element [1h], PO does not address the merits of the obviousness grounds at all. Any such patentability arguments are now waived. *See* Scheduling Order (Paper 7), p. 9 ("may be deemed waived.").

Rather than confront the merits, PO instead focuses on unsupported and erroneous arguments that the primary references in Grounds 1A-2B (namely, Lorex Manual and Lorex Video) should be disqualified as prior art. As demonstrated below, however, the evidence does not support PO's theory. PO assumes too much.

II. LOREX MANUAL AND LOREX VIDEO QUALIFY AS PRIOR ART TO THE '916 PATENT

Using the same flawed playbook it ran in IPR2024-00509, PO attempts to dodge Grounds 1A-2B by arguing that the Lorex Manual (EX1007) and Lorex Video

(EX1012) references are somehow excepted as prior art under §102(b)(1)(A).¹ Not so. According to the plain text of the statute, PO owns the burden of demonstrating that “*the* disclosure”—that of Lorex Manual and Lorex Video—was made by Lorex’s personnel who “obtained *the subject matter disclosed* directly or indirectly” from an alleged inventor of ThroughTek’s ’916 Patent. 35 U.S.C. § 102(b)(1)(A) (emphasis added). The POR comes up far short of meeting PO’s burden in this regard.

Indeed, the linchpin of PO’s argument here is Mr. Kao’s declaration (EX2005), which attempts to provide testimony that introduces an Agreement (EX2001) between Lorex and ThroughTek. This is a fatally flawed premise. As

¹ Although PO’s argument here is substantially the same as the argument it raised in IPR2024-00509 (and the argument fails here for many of the same reasons), Petitioner notes that the Lorex Manual and Lorex Video references at issue in this proceeding are not the same as the earlier Lorex references at issue in the -00509 IPR. For example, the Lorex references in this IPR describe features of the Lorex LH150 ECO4 Series DVR, while the Lorex references in the -00509 proceeding focused on the Lorex LNC100 Series IP Camera. *Compare* IPR2024-01192 Lorex Manual (EX1007) & Lorex Video (EX1012) *with* IPR2024-00509 Lorex Guide (EX1006) and Lorex Video (EX1008).

detailed below, *Mr. Kao's declaration was not even prepared for this proceeding and it never mentions the '916 Patent or the particular Lorex publications at issue in this IPR*. EX2005, p. 1 (cover identifying IPR of U.S. Patent RE47,842 rather than '916 Patent), ¶¶1-13 (addressing “the '842 Patent” not the '916 patent);² EX1021, ¶4. To the extent PO's evidence is probative at all (it is not), it fails to show that the narrow §102(b)(1)(A) exception is applicable here.

A. PO has Failed to Meet its Burden of Showing that § 102(b)(1)(A) Exception Applies to Lorex Manual and Lorex Video

The Petition presented undisputed evidence that Lorex Manual and Lorex Video were each publicly accessible and freely disseminated to the public before the earliest possible effective filing date of the '916 Patent (January 7, 2014). Pet., 1-3, 7-11, 54-56; EX1003, ¶¶53-60. To this point, the parties agree that Lorex Manual and Lorex video meet the requirements to qualify as printed publications under 35 U.S.C. § 102(a)(1). *See, e.g.*, POR, 8 (conceding that Lorex Manual “was published on 2013”), 18 (conceding that Lorex Video “was published on June 18, 2013”).

² To be clear, the only “subject matter” mentioned in Mr. Kao's testimony was “the subject matter *in the '842 patent* per Exclusivity Agreement,” not that of *the '916 patent*. EX2005, ¶10 (emphasis added). No testimony in the record connects the Agreement (EX2001) to the '916 patent or the Lorex references at issue in this proceeding. None.

Petitioner has thus met its initial burden of production of showing that Lorex Manual and Lorex Video are prior art to the '916 Patent, leaving to PO the burden of production in showing that the §102(b)(1)(A) exception applies. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375 (Fed. Cir. 2015); *K/S Himpp v BRAGI GmbH*, IPR2023-00901, Paper 39, 16 fn.11 (PTAB Nov. 24, 2024). PO has failed to meet this burden.

As noted above, for the §102(b)(1)(A) exception to apply, PO must show that “*the subject matter disclosed*” in Lorex Manual and Lorex Video that is relied upon in the Petition—e.g., details of the Lorex DVR including its ports, unique device ID, and capabilities for streaming secure video to a remote client device over the Internet—must be “obtained ... directly or indirectly from the inventor or a joint inventor” of the '916 Patent. 35 U.S.C. §102(b)(1)(A) (emphasis added); MPEP § 2153.03 (requiring that “*the* subject matter” must be actually “communicated” (emphasis added)); *see also Sanho Corp. v. Kaijet Tech. Int'l Ltd.*, 108 F.4th 1376, 1380-81 (Fed. Cir. 2024). PO’s evidence on this critical issue does not withstand scrutiny. It fails to show that “the subject matter disclosed” in Lorex Manual or Lorex Video was ever communicated from ThroughTek, let alone from any specific inventor of the '916 Patent as the statute explicitly requires.

The deficiencies in PO’s proof come into focus from review of the principal evidence PO cites in support of its §102(b)(1)(A) arguments, namely the Agreement

(EX2001) that was apparently executed on October 11, 2012. The Agreement purports to establish a joint venture between Lorex and ThroughTek (and an unnamed Third Party). EX2001, 1-7. The terms of the Agreement provide that Lorex acknowledged ThroughTek's "cloud connectivity services Assets," which would be combined with the unnamed Third Party's "manufacturing" capabilities to create the joint venture. *Id.*, 1. Critically, ThroughTek's "Assets" at the crux of this Agreement—which were "more particularly described on Schedule A"—have nothing to do with the physical ports, video streaming capabilities, or other conventional DVR features disclosed in Lorex Manual and Lorex Video. EX2001, 1, 7. Instead, the Agreement centers upon "Cloud Connectivity services" that ThroughTek theoretically "will develop" for a future "end result" that "will allow" a ready-to-use API:

ASSETS

Cloud Connectivity services.

Cloud Connectivity services specializing in varied network devices, including IP cams, NAS, Set-top box, home gateway, and similar devices.

The Partner ***will develop*** connectivity services with a connection platform based on P2P (Point to Point) network connection architecture and advanced Cloud computing technology via API (Application Programming Interface) for cross-platform connection.

The end result will allow developers to utilize a ready-to-use API to

build up the connection between different devices and across different operation systems.

EX2001, 7 (emphasis added); *see also id.*, 1 (“solely for the purposes”). The Agreement also includes a signature page indicating that a Lorex representative executed it on October 11, 2012—the same day as an introductory meeting between the parties. *Id.*, 6.

But the evidence of record, including the facts indicated on pages 6 and 7 of the Agreement—the execution date and the purported technology that “will” be developed for the future “end result”—belie ThroughTek’s argument here. Namely, they highlight at least three fatal errors: (1) a subject matter shortcoming reflecting that the technology described in the Agreement is noticeably different from the Petition’s cited disclosure of Lorex Manual and Lorex Video, (2) a temporal problem that arises from the fact that the cited capabilities of Lorex’s LH150 ECO4 Series DVR were already publicly marketed/sold in other products to others well before the October 11, 2012 meeting, and (3) a legal error that taints all of PO’s assumptions. Petitioner addresses these three flaws in turn.

1. The “Subject Matter” Shortcoming

First, at most, the text of the Agreement indicates that the subject matter was centered upon ThroughTek’s Assets for “Cloud Connectivity Services,” and specifically that ThroughTek “will develop” in the future some type of “connectivity

services with a connection platform based on P2P (Point to Point) network connection architecture and Cloud computing technology.” EX2001, 7. But the Petition does *not* rely on Lorex Manual’s or Lorex Video’s cloud connectivity or P2P solutions. Rather, the Petition plainly cites to disclosures *of Kim941* (EX1008) in Grounds 1A-1B and disclosures *of Kuo* (EX1011) in Grounds 1C-2B for claim elements related to establishing P2P connections using a linking server. Fatally, PO never alleges that the disclosure *of Kim941* or *of Kuo* was somehow obtained from ThroughTek in the relevant timeframe. It was not.³

The following excerpts exemplify the Petition’s reliance on Kim941 and Kuo—rather than Lorex Manual or Lorex Video—to address claim elements related to connectivity via a server platform:⁴

³ Moreover, Kim941 and Kuo each published more than a year before the ’916 Patent’s earliest alleged filing date. Accordingly, no exception applies to disqualify Kim941 or Kuo as prior art under §102(b).

⁴ This Reply highlights examples of the Petition’s analysis from Grounds 1A, 1C, and 2A, but these examples apply equally to Grounds 1B, 1D, and 2B, respectively. In particular, Grounds 1B, 1D, and 2B extend the combinations from Grounds 1A, 1C, and 2A to include Kim517, thereby addressing dependent claim

- **Ground 1A:** “Although *Lorex Manual does not expressly disclose many of the back-end details* involved in setting up the P2P connection between its DVR and a remote client device (e.g., the smartphone, tablet, or PC), *Kim941 describes a conventional process for establishing P2P connections* that involve registering a device’s unique ID with a server and configuring the server to use the unique ID to provide each peer with appropriate network address information of the other peer so that the peers can perform hole-punching and establish the P2P connection.” Pet., 11-12; *see also id.*, 14 (“*consistent with the teachings of Kim941*”), 27 (same), 29-30 (“*To the extent that Lorex Manual does not expressly disclose that the mobile device does not have a UID to register* with the Lorex servers when the remote client device contacts the servers to connect, such conventional features would have been obvious to a POSITA when *considering the teachings of Kim941.*”).

- **Ground 1C:** “Lorex Manual does not, however, describe many details as to how the P2P connection is established after the client device requests to

9, but still rely on Kim941 or Kuo—and not Lorex Manual or Lorex Video—for details related to the claim limitations directed to establishing a P2P connection through a linking server (e.g., a cloud platform).

login to the service and connect to the DVR. ***Kuo nonetheless describes a conventional solution that would have been obvious to apply to Lorex Manual to achieve its goals of establishing a P2P connection*** between the DVR and remote client device.” Pet., 45-46; *see also id.*, 49 (“a POSITA would have found it obvious to combine Lorex Manual and Kuo such that Lorex Manual’s DVR would contact a linking server through the Internet to register its unique Device ID ***consistent with Kuo’s suggested techniques***”).

- **Ground 2A:** “***Lorex Video, however, does not explicitly [disclose] many details about how the connection is established*** after the mobile device requests to login to the service and connect to the DVR. ***Kuo nonetheless describes a conventional solution that would have been obvious to apply to Lorex Video*** to achieve its goals of establishing a direct connection between the DVR and mobile device. Multiple reasons would have prompted a POSITA to implement Lorex Video in accordance with ***Kuo’s suggestions for establishing a P2P connection*** using device registration, identification, and hole-punching techniques to achieve known benefits.” Pet., 57.

As shown above, PO’s reliance on the Agreement related to “cloud connectivity services” fails to address what is required by §102(b)(1)(A). Put simply, the Petition did not rely on Lorex Manual or Lorex Video’s cloud connectivity services and there is thus nothing relevant from Lorex Manual or Lorex

Video to exclude as prior art even if Lorex had obtained cloud connectivity subject matter from ThroughTek (which it did not). Nothing in this Agreement nor in Mr. Kao's testimony establishes that "the subject matter disclosed" and relied upon from each of Lorex Manual and Lorex Video—e.g., details of the the physical DVR ports, DVR video streaming capabilities, and other conventional DVR features (*see* Pet., 17-22)—was communicated from Mr. Kao or any other purported inventor of the '916 Patent. For this reason alone, PO's reach for the §102(b)(1)(A) exception fails.

2. The Temporal Problem

Second, PO's attempt to invoke the §102(b)(1)(A) exception suffers from a temporal problem. Namely, the timeline indicated by the Agreement actually shows why the §102(b)(1)(A) exception should *not* apply. As discussed above, the Agreement was purportedly executed by Lorex on October 11, 2012 during an in-person meeting between representatives from Lorex and ThroughTek. EX2001, 6; EX2005, ¶9; EX1101, ¶18. Significantly, however, neither party executed the Agreement before either:

(1) the subject matter disclosed in Lorex Manual and Lorex Video cited in the Petition had been *earlier implemented in Lorex products and disclosed in multiple earlier Lorex publications*; or before

(2) ThroughTek had *publicly disclosed in Kuo (EX1011) identical techniques* for establishing P2P connections through a linking server (e.g., a

cloud platform) as those claimed in the '916 Patent. EX1101, ¶¶5-10; EX1021, ¶¶7-14, 18-20, 23-24.

In this regard, it is notable that the particular Lorex Manual and Lorex Video references cited in the Petition are but two of many different prior art documents that Lorex had published in connection with products in their DVR and security camera product lines before the Critical Date (January 7, 2014) of the '916 Patent. Many of these publications disclosed substantially the same subject matter as the Lorex Manual and Lorex Video references even *before* Lorex executed the Agreement on October 11, 2012 or before ThroughTek executed the Agreement on September 18, 2012. EX2001, 6. Lorex's earlier disclosures of DVR features that anticipate multiple elements of the Challenged Claims confirm that, contrary to assertions in the POR, it was not Lorex who derived subject matter from ThroughTek. Rather, it was ThroughTek who would have obtained the same subject matter as that disclosed in Lorex Manual and Lorex Video from Lorex's earlier publications (or at least would have had the opportunity)—even though ThroughTek elected not to file its January 2014 provisional that allegedly supports the Challenged Claims for well over a year after its meeting with Lorex. EX1021, ¶¶7-24.

For example, the Petition cited Lorex Manual and Lorex Video for their disclosures of a DVR (*an electronic device for concentrating information*) having video input ports configured to connect up to eight or sixteen video cameras as

information sources for video data (*at least one first interface for receiving information from at least one information source*) and having a local area network (LAN) port for receiving an ethernet cable for connecting the DVR to the Internet (*a second interface coupling to the Internet*). Pet., 18-20, 60-62. But this subject matter was not new in Lorex Manual or Lorex Video. Lorex had disclosed DVR products having substantially the same interfaces in various other publications that pre-date the Agreement (and certainly before the Critical Date of the '916 Patent). EX1021, ¶¶7-14 In fact, Internet Archive snapshots from August 2012 show webpages and product specifications for DVR products that were already on the market having substantially the same features as those cited from Lorex Manual and Lorex Video before either party executed the Agreement and before the time of the October 11, 2012 meeting. *See, e.g.*, EX1024 & EX1025, 1-5 (disclosing details of Lorex LH130 ECO2 Series DVR similar to LH150 ECO4 Series DVR). EX1021, ¶¶9-10, 19.

Additional Lorex publications likewise confirm that Lorex had developed solutions for live streaming video from one or more security cameras to a mobile device through the Internet well before any record interaction between Lorex and ThroughTek. *See, e.g.*, EX1026 (LorexTechnology.com webpage captured May 9, 2012 comparing remote connectivity features across multiple product lines); EX1027 (video posted to YouTube.com on June 21, 2012 disclosing step-by-step

instructions for installing Lorex’s ECO security camera app for remote DVR connectivity); EX1028 (video posted to YouTube.com on September 28, 2012 disclosing step-by-step instructions for connecting to a remote Lorex security camera from a mobile device by capturing a QR code affixed to the camera); EX1021, ¶¶11-13 20 Mr. Kardashov further submits contemporaneous evidence showing that Lorex presented a QR-code based connectivity solution like that disclosed in Lorex Manual and Lorex Video to retail customers months before Lorex’s meeting with ThroughTek in October 2012. EX1021, ¶¶8, 14, 20 (citing to “Slide 7” of EX1023).

PO also fails to acknowledge a critical fact—namely, that it had already publicly disclosed the exact same approach for establishing a P2P connection through a linking server (e.g., a cloud platform) as that disclosed and claimed in the ’916 Patent *in Kuo* (EX1011) long before its meeting with ThroughTek. Kuo was filed in the U.S. in November 2011 and published in August 2012—i.e., more than two months before the meeting between Lorex and ThroughTek and well over a year before the January 2014 Critical Date of the ’916 Patent. *See* EX1011, Cover. As noted in the Petition, the ’916 Patent explicitly incorporates Kuo by reference and cites to Kuo for its solution to establishing a P2P connection in the manner recited by the Challenged Claims. EX1001, 1:8-14, 13:42-52, 14:10-22; Pet., 43-45. The Petition even relied on Kuo in Grounds 1C-2B to address the claimed P2P

connection features and PO did not contest Kuo's relevance in this regard. *Id.* Thus, even if PO's allegation were true that Lorex had obtained the connectivity features of the '916 Patent from ThroughTek (they did not), those features had already been publicly disclosed. PO submits no evidence that Lorex obtained any relevant subject matter from ThroughTek that was not already publicly available through Kuo.

Moreover, PO has failed to present any evidence of exactly what was communicated from ThroughTek to Lorex in relation to the Agreement or the October 11, 2012 meeting. The only evidence PO cites at all as to what was allegedly communicated is Mr. Kao's assertion that "[b]efore the Exclusive Agreement was executed, Lorex and ThroughTek had exchanged technical information, and the ThroughTek has provided Lorex any necessary technical support for facilitating the decision of the Exclusive Agreement." EX2005, ¶9B (cited by POR, p. 9). But this vague assertion falls well short of establishing that the subject matter disclosed in either Lorex Manual or Lorex Video was obtained from any inventor of the '916 Patent. Critically, Mr. Kao identifies *no specific disclosures* from Lorex Manual or Lorex Video that were allegedly the subject of the "exchanged technical information," nor does Mr. Kao specify whether the alleged exchange of technical information began before Lorex published various other documents containing substantially the same subject matter as Lorex Manual and Lorex Video (e.g., EX1027-EX1027). EX1021, ¶¶25-30. This is unsurprising

considering that *Mr. Kao's declaration was not even prepared for this proceeding and it never mentions the '916 Patent or the Lorex Manual or Lorex Video publications that are the subject of this IPR*. POR, p. 4 (conceding that "EX2005 and EX2007 are documents originally prepared for a different Petition IRP2024-00509"); EX2005, p. 1 (cover identifying IPR of U.S. Patent RE47,842 rather than '916 Patent), ¶¶1-13 (addressing '842 Patent). In fact, PO submitted no evidence that Mr. Kao had ever considered the Lorex references at issue in this IPR at all.⁵ The timeline simply does not support PO's argument.

3. The Legal Error: PO Ignores the Statutory Text

Finally, beyond the factual shortcomings noted above, PO invites the Board to adopt a fatal legal error. Specifically, PO contends that the Board should invoke the §102(b)(1)(A) exception without any evidence that "the "subject matter disclosed" in Lorex Video and Lorex Manual is the *same* as any alleged technical disclosure obtained from an inventor of the '916 Patent in connection with the

⁵ Notably, PO's counsel conceded at the oral hearing in IPR2024-00509 that there was "[n]othing on record" indicating that the ThroughTek inventors communicated their invention claimed in the '842 Patent to Lorex before the October 11, 2012 meeting. EX1029, 22:11-19. The record supporting PO's argument is at least as bare in the present IPR as well.

October 11, 2012 meeting (or any earlier or later discussions). The exceptions under §102(b)(1) are narrow, and the law imposes a burden upon PO to meet an exacting standard. The MPEP explains, for example, that the subject matter is not the same “even if the only differences between the subject matter in the prior art disclosure ... and the subject matter previously disclosed by the inventor are mere insubstantial changes, or only trivial or obvious variations.” MPEP § 2153.02; *see also* MPEP § 2153.03 (requiring “the subject matter” that was actually “communicated”). The Office requires that the disclosed subject matter be “**identical**” to the subject matter disclosed by the inventor. *Id.* (“This guidance maintains the **identical** subject matter interpretation ...”); *see also K/S Himpp v BRAGI GmbH*, IPR2023-00901, Paper 39, p. 16 footnote 11 (PTAB Nov. 24, 2024) (“only applicable when the subject matter of the intervening disclosure is the **same** as the subject matter of the earlier inventor-originated prior public disclosure.”), 16 (“the subject matters are not identical, and the two subject matters at least embody different species”).⁶

⁶ While *K/S Himpp* addressed the standard in the context of the §102(b)(1)(B) exception, the exact same statutory phrase at issue (“another who obtained **the subject matter disclosed** directly or indirectly from the inventor or a joint inventor”) is likewise recited in §102(b)(1)(A). This same statutory language imposes the same

Against this standard, PO's vague citations to the Agreement about "cloud connectivity services" that ThroughTek "will develop" (EX2001, 7) comes up well short of what is required. PO presents no evidence that "the subject matter" allegedly communicated from ThroughTek in connection with the Agreement was actually the *same* as the subject matter disclosed in Lorex Manual and Lorex Video. ThroughTek makes no attempt to cite evidence of this sameness. MPEP § 2153.03 (requiring "the subject matter" that was actually "communicated"); *see K/S Himpp*, Paper 39 at 11-16 ("the subject matters are not identical"); *Sanho*, 108 F.4th at 1391-91 ("no indication" and "[t]hat is clearly not enough to qualify for the exception").

burden under both §102(b)(1)(B) and §102(b)(1)(A). *See Sanho*, 108 F.4th at 1380 ("[S]ection 102(b) contains two largely parallel exceptions ..."). That is why MPEP § 2153.03—in addressing this statutory language—imposes a burden upon PO to establish both that the subject matter disclosed in Lorex Guide and Lorex Video "originated with the inventor or a joint inventor" and "that *the subject matter was communicated* by the inventor or a joint inventor." MPEP § 2153.03.

Indeed, Mr. Kao concedes the opposite of what PO needed. EX2005, ¶11 (admitting ThroughTek was “not involve[d] in any Lorex publications”).⁷

To be clear, as noted above, PO has submitted *no evidence* whatsoever that connects the subject matter of the Agreement or any related technical discussions to the “the subject matter disclosed” in Lorex Manual or Lorex Video. This is because

⁷ Mr. Kao also made a vague allegation not cited in the POR that ThroughTek later provided to Lorex “the subject matter *in the ’842 patent* per Exclusivity Agreement,” but this suffers from at least four fatal flaws. EX2005, ¶10 (emphasis added). First, such a “naked assertion” is insufficient under the law. *EmeraChem Holdings, LLC v. Volkswagen Grp. of Am., Inc.*, 859 F.3d 1341, 1345-47 (Fed. Cir. 2017); MPEP § 2155.01. Second, Mr. Kao mentions only the ’842 Patent here but never addresses the ’916 Patent at issue in this proceeding. Third, Mr. Kao never testified *when* this information was communicated. Neither the ’916 Patent nor its allegedly supporting provisional application from Jan. 7, 2014 existed in 2012, so it follows that ThroughTek did not provide Lorex with the subject matter in the ’916 Patent in 2012. Fourth, this bare assertion is certainly not enough for ThroughTek to show that any technical disclosure allegedly communicated when the Agreement was executed was actually the *same* as the subject matter disclosed in Lorex Guide or Lorex Video. See EX1021, ¶¶25-30; EX2005, ¶11 (“not involve[d]”).

Mr. Kao's declaration was prepared for a different IPR involving a different patent and different prior art, and consequently, it does not even mention the '916 Patent or the particular Lorex Manual or Lorex Video publications that are the subject of the grounds in this IPR. POR, p. 4 (conceding that "EX2005 and EX2007 are documents originally prepared for a different Petition IRP2024-00509"); EX2005, p. 1 (cover identifying IPR of U.S. Patent RE47,842 rather than '916 Patent), ¶¶1-13 (addressing '842 Patent); EX1021, ¶4.

The complete absence of any evidence necessary to establish key facts under §102(b)(1)(A) renders PO's arguments all the more astonishing. Lacking such necessary evidence, there is no legitimate basis for PO to contend that Lorex obtained the subject matter disclosed in Lorex Manual or Lorex Video from ThroughTek. It is not enough for PO to meet its burden under §102(b)(1)(A).

III. PO'S ARGUMENT THAT KIM941 "TEACHES AWAY" IS BASELESS AND IMMATERIAL IN LIGHT OF ADDITIONAL GROUNDS THAT DO NOT RELY ON KIM941

PO does little to contest the merits of the compelling obviousness positions presented in Grounds 1A-2B of the Petition. Indeed, PO does not address, let alone refute, any of the multiple motivations to combine articulated in the Petition and the declaration of expert Mr. Kardashov. Nor does PO dispute that a POSITA would have reasonably expected success combining the prior art references in each ground, or that at least one prior art reference in the Petition discloses every element of the

Challenged Claims. The only argument PO makes on the merits is that Kim941 somehow teaches away from the negative limitation recited in claim 1 (i.e., Element [1h]). *See* POR, 9-13; EX1021, ¶31. This argument, however, is underpinned by plain legal and factual errors addressed in further detail below. The argument also fails to touch all grounds and thus would not defeat a finding that all Challenged Claims are unpatentable even if there were an infirmity in Kim941 (which there is not).

More to the point, Kim941 is relied upon in only two of the six grounds at issue in this IPR. Grounds 1A-1B cite Kim941 in combination with Lorex Manual to address the negative limitation (i.e., Element [1h]), but Grounds 1C-1D and 2A-2B rely on a different reference—i.e., Kuo (EX1011)—as an alternative to Kim941 for this limitation. *Pet.*, 1, 28-31, 51-52, 71-73. Importantly, PO never disputes the fact that Kuo discloses the negative limitation in [1h] or that this limitation would have been obvious to a POSITA based on Kuo as applied in Grounds 1C-1D and 2A-2B. Nor could PO have disputed Kuo's relevance considering that Kuo is PO's own asset, and specifically is a publication of an earlier-filed patent application by a subset of the same ThroughTek inventors named on the '916 Patent, which the '916 Patent incorporates by reference and repeatedly refers to for the claimed details on establishing a P2P connection with a remote client device. *See e.g.*, EX1001, 1:8-14, 13:42-52, 14:10-16; EX1011; *Pet.*, 43. In other words, Kuo explicitly describes

the preferred embodiment for establishing P2P connections contemplated in the '916 Patent. And because Kuo published more than one year before the Critical Date of the '916 Patent (January 7, 2014), these features—including the negative limitation of Element [1h]—were already dedicated to the public. PO's arguments on Kim941 are thus immaterial insofar as they do not rebut the Petition's showing that the Challenged Claims are unpatentable based on multiple additional grounds that rely on Kuo in lieu of Kim941.

That being said, there is no deficiency in Kim941 at all and Grounds 1A-1B render the Challenged Claims obvious to the same extent as the additional grounds based on Kuo. PO argues that Kim941 teaches away from the negative limitation recited in Element [1h] because Kim941's "peer nodes P1 and P2 are required to register with the server 100 for obtaining the virtual address and storing the information such as the network connection type in the storage unit 100 of the server 100 *before establishing a direct connection.*" POR, 12 (emphasis added); *generally id.*, 9-13. But PO fails to address what Element [1h] requires, namely that "the remote client device does not have a unique identification (UID) to register in the at least one linking server for associating connecting information of the remote client device *when the remote client device contacts the at least one linking server for establishing the P2P connection.*" EX1001, 15:35-40 (emphasis added). EX1021, ¶¶31-32.

Critically, nothing in the plain language of Element [1h] precludes the remote client device from ***pre-registering*** a unique identification (UID) in the linking server ***before*** the remote client device contacts the server to establish a P2P connection. *Id.*; Pet., 28-32, 51-52, 71-73. Element [1h] instead recites a specific temporal condition that limits the remote client device to not having a UID to register in the linking server only at the time “***when the remote client device contacts the at least one linking server for establishing the P2P connection.***” While Kim941 does disclose that peer nodes including a remote client device ***pre-register*** their respective IDs with a server, this registration process takes place ***separately and before*** a peer node later contacts the server to establish a P2P connection with another peer after the peers are registered. EX1008, [0055] (“in order to register information such as an ID and a password to the server 100, the peer node P1 transmits a registration request message including an ID and a password to the server”), [0056]-[0060], [0079]-[0087], FIGS. 5 (showing peers pre-registered with server 100), 6-7. For example, Kim941 explicitly discloses that the first peer’s “tunnel query request message,” which the first peer sends when contacting the server to establish a P2P connection with a second peer, includes only the unique ID of the second peer to identify the second peer as the target of the connection. EX1008, [0081], FIG. 6; EX1021, ¶33. The first peer does not need to (and does not) send its own unique ID

to register with the server in the tunnel query request message since the first peer is already registered by this time. *Id.*; EX1003, ¶¶110-112.

The Petition and Mr. Kardashov specifically addressed out how Kim941's process, as applied in a straightforward combination with Lorex Manual, meets the temporal condition recited in Element [1h]. Pet., 28-32, 51-52, 71-73; EX1003, ¶¶108-113. Rather than confront or refute this analysis, PO simply ignores it, offering no reasons why Element [1h] should be interpreted more narrowly to preclude pre-registration and offering no reasons why the Petition and Mr. Kardashov's interpretation of Kim941's process is incorrect. *See* POR, 9-13. Indeed, PO elected not to depose Mr. Kardashov on the opinions in his declaration in this proceeding at all,⁸ and PO submitted no contrary expert opinion or other evidence in support of its attorney argument. Contrary to PO's assertions, the Petition never proposed to eliminate registration from Kim941's process or otherwise deviate from Kim941's plain teachings to meet Element [1h]. *See* POR, 13 (arguing that "any modification on *Kim941* to prohibit the registration of any peer

⁸ The deposition transcript PO submitted as EX2007 pertains to a deposition taken in a different proceeding (IPR2024-00509) involving a different patent. PO never questioned Mr. Kardashov on Kim941 or the '916 Patent's negative limitation in that deposition. POR, p. 4; EX2007.

node will hinder the *Kim941*'s intended function"). Pet., 29-31. PO's arguments simply fail to recognize that the breadth of [1h] is met by Kim941's process despite the peer nodes' pre-registration with the linking server. Because the Petition never proposed to eliminate or modify Kim941's registration process, there can be no teaching away from a modification that was never made or proposed—especially where Kim941 itself embraces rather than criticizes registration techniques. *Meiresonne v. Google, Inc.*, 849 F.3d 1379, 1382 (Fed. Cir. 2017) ("A reference that merely expresses a general preference for an alternative invention but does not criticize, discredit, or otherwise discourage investigation into the claimed invention does not teach away.").

Noticeably, PO does not dispute (nor could it) that Kim941's peer nodes register with the linking server before contacting the linking server to establish a P2P connection. The parties appear to agree on this point. PO's arguments instead rest on its erroneous interpretation of [1h] that effectively reads out the actually recited temporal condition in favor of a blanket prohibition on any registration of the UID. But this is what dependent claim 5 allegedly recites (not claim 1), and PO makes no attempt to reconcile its position with the plain language of [1h] or the presumptive claim differentiation that arises from claim 5. *Nazomi Commc'ns, Inc. v. Arm Holdings, PLC.*, 403 F.3d 1364, 1370 (Fed. Cir. 2005) ("Claim differentiation normally means that limitations stated in dependent claims are not to be read into

the independent claim from which they depend.”). For each of these reasons, the Board should reject the notion that Kim941 teaches away from Element [1h].

IV. CONCLUSION

For the reasons discussed above and in the Petition, Petitioner submits that all the Challenged Claims are unpatentable based on all Grounds 1A-2B.

Respectfully submitted,

Dated: July 15, 2025

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CERTIFICATION UNDER 37 CFR § 42.24(d)

Under the provisions of 37 CFR § 42.24(d), the undersigned hereby certifies that the word count for the foregoing Petitioner's Reply to Patent Owner's Response totals 5,564, which is less than the 5,600 allowed under 37 CFR § 42.24.

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e)(4), the undersigned certifies that on July 15, 2025, a complete and entire copy of this Petitioner's Reply to Patent Owner's Response and its exhibits were provided via email to the Patent Owner by serving the correspondence email address of record as follows:

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