

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

r v.

THROUGHTTEK CO., LTD.,
Patent Owner

Case IPR2024-00509
Patent RE47,842

PATENT OWNER'S SUR-REPLY

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Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

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PATENT OWNER'S EXHIBIT LIST

Exhibit No.	Description
2001	Exclusivity Agreement of Joint Venture Partnership between Lorex Corporation and ThroughTek Co., Ltd.
2002	Reolink's Petition for Inter Partes Review
2003	U.S. Patent No. 9,787,498
2004	Declaration of Yen-Kuang Chen, Ph.D.
2005	Declaration of Yu-Li Kao
2006	Meeting Photos of Lorex at ThroughTek
2007	Deposition Transcript of Mr. Vlad Kardashov

I. Introduction

The Petition challenges the claims 1-4 and 6-19 of U.S. Patent No. RE47,842 (“the ’842 patent”) under three grounds of unpatentability:

Ground 1: Claims 1-3, 6, 10, 12-14, 17 and 18 are obvious over the *Lorex Guide* reference in view of the *Kim* reference;

Ground 2: Claims 1-3, 6, 10, 12-14, and 18 are obvious over the *Kim* reference in view of the *Lorex Video* reference; and

Ground 3: Claims 1-4 and 6-19 are obvious over the *ThroughTek-2012* reference in view of the *Lorex Video* reference.

This Patent Owner Response addresses the various arguments raised in the Petitioner’s three grounds of unpatentability.

Further, this Patent Owner Response addresses the additional arguments in Petitioner’s Reply in regard whether the *Lorex Guide* reference qualifies as a prior art.

1. Ground 1 fails because the *Lorex Guide* reference does not qualify as prior art under 35 U.S.C. §102(a)(1)¹ (“§102(a)”) based on the exception under 35 U.S.C. §102(b)(1)(A)² (“the §102(b) exception”) and the *Kim* reference alone is not

¹ 35 U.S.C. §102(a)(1) provides that a person shall be entitled to a patent unless the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention.

² 35 U.S.C. §102(b)(1)(A) provides that a disclosure made one year or less before the effective filing date of a claimed invention shall not be prior art to the claimed

sufficient to support Ground 1 of the Petition. More specifically, the disclosure in the *Lorex Guide* reference was made within the one year from the effective filing date of the '842 patent, and subject matter disclosed therein is obtained directly or indirectly from the inventor³ (Patent Owner) as evidenced by the 5-year exclusivity agreement of joint venture partnership dated September 18, 2012 ("Agreement") between ThroughTek Co., Ltd. ("ThroughTek") and Lorex Corporation ("Lorex").

2. Ground 2 fails because the *Lorex Video* reference used by the Petitioner does not qualify as prior art under §102(a) based on the §102(b) exception, and the *Kim* reference alone is not sufficient to support Ground 2 of the Petition. More specifically, the disclosure in the *Lorex Video* reference was made within the one year from the effective filing date of the '842 patent, and subject matter disclosed therein is obtained directly or indirectly from the inventor (Patent Owner) as evidenced by the 2012 Agreement between ThroughTek and Lorex.

3. Ground 3 fails because fails because in addition to the *Lorex Video* reference, the *ThroughTek-2012* reference also does not qualify as prior art under §102(a) based on the §102(b) exception. More specifically, the disclosure in the *ThroughTek-2012* reference was made within one year from the effective filing date

invention under subsection (a)(1) if the disclosure was made by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor.

³ Mr. Yu-Li Kao, a listed inventor on the '842 patents, is also the co-founder of ThroughTek. EX2005, 001.

of the '842 patent, and the subject matter therein is directly disclosed by the inventor (Patent Owner).

For the above reasons, and as explained in further detail below, the Petition fails to establish that challenged claims 1-4 and 6-19 of the '842 patent are unpatentable.

II. Burden of Proof

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* review). To prevail in an *inter partes* review, Petitioner must show by a preponderance of the evidence that a patent is invalid. 35 U.S.C. §316(e).

III. The Petition Fails to Establish that the *Lorex Guide* Reference is Prior Art and the Combination of the *Lorex Guide* and *Kim* References Fails to Support Ground 1 of the Petition

Petitioner fails to establish that the *Lorex Guide* reference qualifies as prior art. The '842 patent has an effective filing date of April 16, 2013. EX1002, 1. The *Lorex Guide* reference was published on September 12, 2012, which is less than one year prior to the effective filing date of the '842 patent. EX1006, 3 and 5. The *Lorex Guide* reference is not prior art under the §102(a) based on the §102(b) exception since the subject matter disclosed therein is obtained directly or indirectly from the inventor (Patent Owner) as evidenced by the Agreement between ThroughTek and Lorex. EX2001.

The Agreement specifically states that ThroughTek is the owner of all right, title and interest in and to the asserts more particularly described on Schedule A, which specifically states that ThroughTek provides “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 to build up the connection between different devices an across different operation systems.” EX2001, pp. 001, 007. The disclosure by ThroughTek pursuant to the Agreement was its complete P2P solution that included the subject matter in the '842 patent. EX2005 ¶10. In essence, the Agreement provides that the P2P

protocol along with image processing feature disclosed in the *Lorex Guide* reference is developed by ThroughTek, and that the product featured in the *Lorex Guide* reference is manufactured by a third party, and sold under brand names associated with Lorex. EX2001, 001-007, which is also consistent with deposition transcript taken from the Petitioner's witness Mr. Kardashov. EX2007, page 12.

ThroughTek via the declaration and exhibits illustrate the business cooperation between Lorex and ThroughTek. Although the execution of the Exclusive Agreement was initiated at 9/18/2012, the actual technical collaboration started far before in order to facilitate and solidify the cooperation.

Mr. Kardashov, in his second declaration paragraph 7, asserted that a company StarVedia actually provided the technical support for Lorex in developing the patented technology. Not only this information was never revealed in his deposition, it is also against all common sense why would Lorex still seek ThroughTek's technical solution if this alleged StarVedia had completed the technical solution? Further, why would Mr. Kardashov's direct supervisor Mr. Worndl would bring Mr. Kardashov to visit ThroughTek and executed the Exclusive Agreement if this so called StarVedia had completed the needed technical solution?

The Petitioner has provided numerous commercial promotional materials, such as advertisement video and alleged confidential information under Mr. Kardashov's custody since May 2012. EX1101 ¶9. It is potentially concerning why would Mr.

Kardashov is still in possession of any Lorex confidential information years after his employment termination at Lorex. Or alternatively, as Mr. Kardashov is still in possession of any related confidential information, yet no direct evidence to support the assertion on the alleged StarVedia's contribution on the patented technology. Whether a corporation will only present retail ready product in the content of the advertising/promotional material is always a marketing decision. Hence, for the reasons stated, ThroughTek submits that any alleged patented technology shown in the Lorex publication is either obtained from ThroughTek based on the on-going business cooperation between Lorex and ThroughTek, or the publication is merely a promotional material without any additional evidence demonstrating its true functionality. Therefore, the *Lorex Guide* reference should not be qualified as a prior art.

In the Petition, the *Lorex Guide* reference was combined with the *Kim* reference as a basis to support the asserted rejection under 35 USC §103 ("§103"). Therefore, the *Kim* reference alone is not sufficient to support Ground 1 of the Petition.

Additionally, beyond the combination of the *Lorex Guide* and *Kim* references, other secondary factors can be considered to provide context when evaluating obviousness under 35 USC §103. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). As remarked in the Declaration of Mr. Yen-Huang Chen, notwithstanding the existence of both Point-to-Point communication and image recognition

technologies at the time of the invention, he was unaware of any suggestion to combine these two technologies to enhance user experience (EX2004, ¶21) and he regarded this advancement as both novel and not obvious. *Id.* at ¶¶ 19-20. Moreover, as reflected by the commercial success of the patented product, there was an unmet need to enhance user experience through streamline system installation at the time when the '842 patent's earliest application was filed. EX2004, ¶¶19-21; EX2005, ¶¶7-30. The enhanced Point-to-Point connecting process of the '842 patent embodied in the Patent Owner's product has fulfilled such need for an enhanced user experience, and contributed to the commercial success of the Patent Owner's product. *Id.*

For the reasons stated above, the Board should find that the *Lorex Guide* reference fails to qualify as prior art to the '842 patent, and the combination of the *Lorex Guide* and *Kim* references fails to support the purported rejection under §103. Thus, no challenged claims 1-4 and 6-19 of the '842 patent are unpatentable under Ground 1 of the Petition.

IV. The Petition Fails to Establish that the *Lorex Video* Reference is Prior Art and the Combination of the *Kim* and *Lorex Video* References Fails to Support Ground 2 of the Petition

Petitioner fails to establish that the *Lorex Video* reference qualifies as prior art. The '842 patent has an effective filing date of April 16, 2013. EX1002, 1. The *Lorex Video* reference was published on October 19, 2012, which is less than one year prior

to the effective filing date of the '842 patent. EX2002, 015. The *Lorex Video* reference is not prior art under the §102(a) in view of the §102(b) exception since the subject matter disclosed therein is obtained directly or indirectly from the Patent Owner as evidenced by the Agreement between ThroughTek and Lorex. EX2001.

Similar to the *Lorex Guide* reference, the subject matter disclosed in the *Lorex Video* reference is also obtained from the Inventor (Patent Owner) as evidenced by the Agreement between ThroughTek and Lorex. EX2001. The earlier remarks regarding the *Lorex Guide* reference are also applicable to the *Lorex Video* reference.

In the Petition, the *Lorex Video* reference was combined with the *Kim* reference as a basis to support the asserted rejection under 35 USC §103. Therefore, the *Kim* reference alone is not sufficient to support Ground 2 of the Petition.

Additionally, beyond the combination of the *Kim* and *Lorex Video* references, other secondary factors can be considered to provide context when evaluating obviousness patent under 35 USC §103. *Id.* As discussed earlier regarding remarks from the Declaration of Mr. Yen-Huang Chen, he was unaware of any suggestion to combine the technologies to enhance user experience notwithstanding the existence of both Point-to-Point communication and image recognition technologies at the time of the invention (EX2004, ¶21), and he regarded the advancement as both novel and not obvious. *Id.* at ¶¶ 19-20. Moreover, as reflected by the commercial success of the patented product, there was an unmet need to enhance user experience through

streamline system installation at the time when the '842 patent's earliest application was filed. EX2004, ¶¶19-21; EX2005, ¶¶7-30. The enhanced Point-to-Point connecting process of the '842 patent embodied in the Patent Owner's product has fulfilled such need for an enhanced user experience, and contributed to the commercial success of the Patent Owner's product. *Id.*

For the aforementioned reasons, the Board should find that the *Lorex Video* reference fails to qualify as prior art to the '842 patent, and the combination of the *Kim* and *Lorex Video* references fails to support the purported rejection under §103. Thus, no challenged claims 1-4 and 6-19 of the '842 patent are unpatentable under Ground 2 of the Petition.

V. The Petition Fails to Establish that the *ThroughTek-2012* Reference is Prior Art and the Combination of the *ThroughTek-2012* and *Lorex Video* References Fails to Support Ground 3 of the Petition

Petitioner fails to establish that the *ThroughTek-2012* reference qualifies as prior art. The '842 patent has an effective filing date of April 16, 2013. EX1002, 1. The *ThroughTek-2012* reference was published on June 6, 2012, which is less than one year prior to the effective filing date of the '842 patent. EX1017, 1. The *ThroughTek-2012* reference is not prior art under §102(a) in view of the §102(b) exception since the subject matter disclosed therein is obtained directly from the Patent Owner.

In the Petition, the *ThroughTek-2012* reference was combined with the *Lorex Video* reference as a basis to support the asserted rejection of the '842 patent under 35 USC §103. Since neither the *ThroughTek-2012* reference nor the *Lorex Video* reference qualifies as prior art for aforementioned reasons, the purported combination thereof is not sufficient to support Ground 3 of the Petition.

Additionally, beyond the combination of the *ThroughTek-2012* and *Lorex Video* references, other secondary factors can be considered to provide context when evaluating obviousness patent under 35 USC §103. *Id.* As discussed earlier regarding remarks from the Declaration of Mr. Yen-Huang Chen, he was unaware of any suggestion to combine the technologies to enhance user experience notwithstanding the existence of both Point-to-Point communication and image recognition technologies at the time of the invention (EX2004, ¶21), and he regarded the advancement as both novel and not obvious. *Id.* at ¶¶ 19-20. Moreover, as reflected by the commercial success of the patented product, there was an unmet need to enhance user experience through streamline system installation at the time when the '842 patent's earliest application was filed. EX2004, ¶¶19-21; EX2005, ¶¶7-30. The enhanced Point-to-Point connecting process of the '842 patent embodied in the Patent Owner's product has fulfilled such need for an enhanced user experience, and contributed to the commercial success of the Patent Owner's product. *Id.*

For the aforementioned reasons, the Board should find that the *ThroughTek-*

2012 and *Lorex Video* references fail to qualify as prior art to the '842 patent, and the combination of the *ThroughTek-2012* and *Lorex Video* references fails to support the purported rejection under §103. Thus, no challenged claims 1-4 and 6-19 of the '842 patent are unpatentable under Ground 3 of the Petition.

VI. The '842 Patent Is Entitled to an Effective Filing Date of April 16, 2013

The '842 patent, which is filed on December 13, 2018 and issued on February 4, 2020, is a reissue of U.S. Patent No. 9,787,498 ("the '498 patent"), which claims a benefit under 35 U.S.C. §119(e) to a provisional application No. 61/812, 262 ("the '262 application") filed on April 16, 2013. As a result, the '842 patent having each claim that is fully supported under 35 U.S.C. §112 by the '262 application, and is entitled to the effective filing date of April 16, 2013. *See* MPEP 2152.01.

More specifically, the '842 patent is entitled to the filing date of the '262 application because the subject matter claimed in both the '842 and '498 patents is fully disclosed and supported by the '262 application, meaning that a POSITA could readily understand and make the invention based on the information provided in the '262 application, noting that the '498 patent was filed within 12 months of the filing date of the '262 application, and claimed the benefit of the earlier filing date.

Petitioner asserts that the claimed limitation with respect to "the first networked monitoring device does not capture any image pattern associated with the terminal device for establishing the P2P connection between the terminal device and the first

networked monitoring device” is not supported by the provisional application. EX2002, 008-011. However, this issue was directly addressed by the Patent Owner's remarks in the 498 patent that the Examiner had reviewed and concurred. EX1004, 179-192. In essence, the Patent Owner's remarks in the '498 patent explained that the limitation regarding “the first networked monitoring device does not capture any image pattern associated with the terminal device for establishing the P2P connection between the terminal device and the first networked monitoring device” is inherently implied, and supported by paragraphs 0035 to 0037 of the specification in the '498 patent. It is noted that paragraphs 0035 to 0037 in the specification of the '498 patent are reflected as column 5, lines 25-53 of the '498 patent, which are the same as column 5, lines 40-67 of the '842 patent, and mirrored on page 12 of the '262 application. EX1002, 11; EX1003, 54; EX1004, 25 and 26; and EX2003, 011.

Even assuming, *arguendo*, that the effective filing date of the '842 patent is linked to the filing date of the '498 patent instead of the filing date of the '262 application, then such alternative effective filing of July 25, 2013 still makes both reference dates of the *Lorex Guide* reference (i.e., September 12, 2012) and *Lorex Video* reference (i.e., October 19, 2012) falling under the one-year grace period, and the §102(b) exception to prior art under §102(a) as discussed earlier still applies.

VII. The Expert Declaration from Harry Bims, Ph.D. Does Not Render the Challenged Claims 1-4 and 6-19 as Invalid

Harry Bims, Ph.D. (“Dr. Bim”) in his Declaration asserted that the different combinations of the *Lorex Guide*, *Kim*, *Lorex Video* and *ThroughTek-2012* references render the ‘842 patent obvious. EX1001, 98-116. However, the assertions by Dr. Bims with respect to the different combinations are moot since at least one of the references used in each of the combinations fails to qualify as prior art for the aforementioned reasons.

Dr. Bim further asserted the negative limitation in the ‘498 and ‘842 patents is not described in either the ‘262 application or the ‘498 patent. EX1001, 34-35. As discussed in the Declaration from Mr. Yu-Li Kao, a negative limitation can be inherently supported by the specification. EX2005, 007; See *Novartis, Pharmaceuticals Corp. v. Accord Healthcare, Inc.*, 38 F. 4th 1013, 1017 (Fed. Cir. 2022) (quoting *Santarus, Inc. v. Par Pharm., Inc.*, 694 F.3d 1344, 1351 (Fed. Cir. 2012); *Seabed Geosolutions (US) Inc. v. Magseis FF L.L.C.*, 8 F.4th 1285, 1288 (Fed. Cir. 2021); and *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1159 (Fed. Cir. 1998)) Indeed, the Examiner of the ‘498 patent concurred with the Patent Owner’s position that the negative limitation is inherently implied based on paragraphs 0035 to 0037 of the specification (page 12 of the ‘262 application) in that “it does not make sense for the first networked device 20 to capture any image pattern associated with terminal device for establishing the P2P connection....” EX1001, 33.

Additionally, Dr. Bim’s reliance on the Declaration from Mr. Vlad Kardashov

regarding the disclosures of the *Lorex Guide* and *Lorex Video* references is flawed and undermines his conclusions. EX1001, 62-87. The Declaration from Mr. Vlad Kardashov has conveniently omitted the fact that during his employment at Lorex, he and other executives from Lorex had visited ThroughTek's headquarter office in Taiwan, and reached an understanding and signed the Agreement with ThroughTek that included ThroughTek sharing its product development information to Lorex so that Lorex could focus on marketing, branding and distributing a product that would be manufactured by a third party. This arrangement is reflected in the Agreement that included a Confidentiality clause (EX2001, 003). It was information from ThroughTek's disclosure which was later published in the *Lorex Guide* and *Lorex Video* references. Indeed, Mr. Kardashov was not able to recall "any engagement" between Lorex and ThroughTek until *after* he was presented with the photos⁴ and the Exclusivity Agreement during his deposition⁵ on November 1, 2024 between ThroughTek and Lorex. EX2007, 018. Mr. Yu-Li Kao, who is both the founder of ThroughTek and named inventor in the '842 patent, has refuted the incorrect statement from Mr. Kardashov that the subject matter of the 2012 Lorex publication is not obtained from any of the four named inventors of the '842 patent. EX2005, ¶¶9-13. Mr. Kardashov's suggestion or contention that Lorex independently derived the

⁴ See EX2006

⁵ See EX2007

concepts disclosed in the Lorex publication is further not credible because, at the time of the publication, Lorex had no software development team and the published marketing materials failed to actually teach the know-how required to implement ThroughTek's P2P solution. Id at ¶¶ 11-12.

VIII. Conclusion

For at least all of these reasons, the Petitioner has failed to meet its burden of proving by a preponderance of the evidence that the challenged claims 1-4 and 6-19 of the '842 patent are not patentable in view of the references cited by the Petitioner. The Petition should therefore be denied in its entirety, and the Board should reaffirm the patentability of claims 1-4 and 6-19.

Dated: March 11, 2025

/Justin I. King/

Justin I. King
Lead Counsel for Patent Owner
Registration No. 50,464
WPAT, P.C.
8230 Boone Blvd., Suite 405
Vienna, Virginia, 22182
Tel: (703) 639-0151
Fax (703) 880-7487
Email: jking@wpat.com

CERTIFICATION REGARDING WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), Patent Owner certifies that there are 3,860 words in the paper excluding the portions exempted under 37 C.F.R. § 42.24(a)(1).

Dated: March 11, 2025

/Justin I. King/

Justin I. King
Lead Counsel for Patent Owner
Registration No. 50,464
WPAT, P.C.
8230 Boone Blvd., Suite 405
Vienna, Virginia, 22182
Tel: (703) 639-0151
Fax (703) 880-7487
Email: jking@wpat.com

CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e)(1))

Pursuant to 37 C.F.R. § 42.6, I hereby certify that on March 11, 2025 the foregoing Patent Owner's Response from Patent Owner ThroughTek Co., Ltd. was served via email on the following counsel of record for the Petitioner:

Michael T. Hawkins
Nicholas W. Stephens
Joseph Bauer
Fish & Richardson P.C.
hawkins@fr.com
nstephens@fr.com
jbauer@fr.com
IPR52472-0005IP1@fr.com

Dated: March 11, 2025

/Justin I. King/

Justin I. King
Lead Counsel for Patent Owner
Registration No. 50,464
WPAT, P.C.
8230 Boone Blvd., Suite 405
Vienna, Virginia, 22182
Tel: (703) 639-0151
Fax (703) 880-7487
Email: jking@wpat.com