

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Kuo et al.
U.S. Patent No.: RE47,842 Attorney Docket No.: 52472-0005IP1
Issue Date: February 4, 2020
Appl. Serial No.: 16/218,841
Filing Date: December 13, 2018
Title: SYSTEM AND METHOD OF IDENTIFYING
NETWORKED DEVICE FOR ESTABLISHING A P2P
CONNECTION

SECOND DECLARATION OF MR. VLAD KARDASHOV

I, Vlad Kardashov, declare as follows:

1. I am over the age of 18, have personal knowledge of the facts set forth herein, and am competent to testify to the same.

2. I understand that this declaration is being submitted by Petitioners Reolink Innovation Inc. and Shenzhen Reolink Technology Co., Ltd. in *inter partes* review proceeding IPR2024-00509 involving U.S. Patent RE47,842, assigned to Patent Owner ThroughTek Co., Ltd. This is the second declaration that I have prepared in connection with IPR2024-00509. I previously prepared a first declaration, dated January 10, 2024, in connection with IPR2024-00509, which I understand has been assigned exhibit number EX1011 (“First Declaration”). My First Declaration detailed facts and circumstances regarding the publication by Lorex Technology, Inc. of certain prior art references to the ’842 Patent, including the Lorex LNC100 Series User’s Guide v. 2.0 (“Lorex Guide,” EX1006) and the

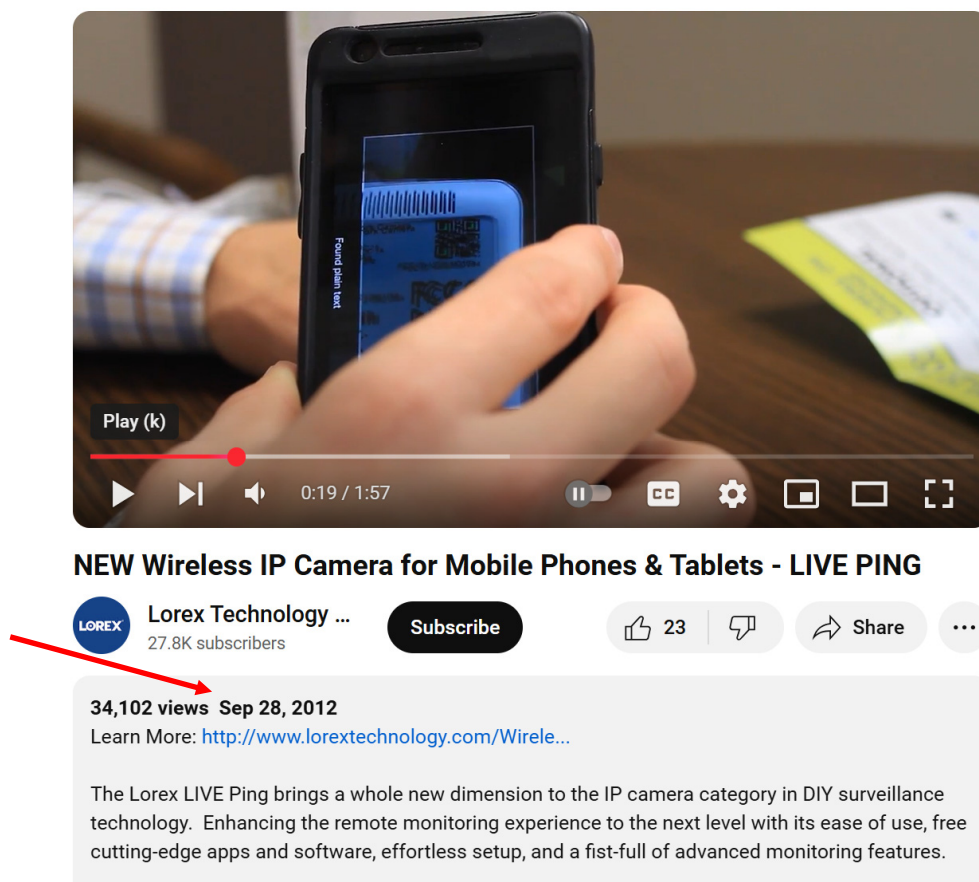
instructional YouTube video titled “How-To Set Up and Connect The NEW Lorex LNC100 Series IP Network Camera” (“Lorex Video,” EX1008).

3. I understand that ThroughTek submitted a Patent Owner’s Response (“POR”) in IPR2024-00509 that addresses my First Declaration and that attempts to refute the prior art status of Lorex Guide and Lorex Video by arguing that the disclosed subject matter of Lorex Guide and Lorex Video were allegedly obtained from ThroughTek employees, namely from one or more of the inventors named on the ’842 Patent. The POR cites a declaration from Mr. Yu-Li Kao (EX2005) in support of these arguments. I have reviewed the POR along with the declaration of Mr. Kao. Based on my review, these documents contain a range of factual errors that culminate with the false assertion that Lorex obtained the subject matter disclosed in Lorex Guide and Lorex Video from ThroughTek. I have prepared this Second Declaration to supplement the testimony provided in my First Declaration and to set the record straight in response to various inaccurate and/or incomplete assertions in the POR and in Mr. Kao’s declaration.

4. I am being compensated for my work in connection with this IPR proceeding at my standard hourly rate. My compensation is not in any way contingent on the substance of my opinions or the outcome of these proceedings.

I. Lorex Guide and Lorex Video

5. As explained in my First Declaration, from 2012 to 2016, I was employed as the Director of Engineering & Product Development at Lorex Technology, Inc. As part of this role, I was responsible for managing the product design of the Lorex LNC100 Series IP camera. Through my responsibilities as a Project Lead and IP Products Line Manager, I gained personal knowledge of the Lorex LNC100 Series of IP cameras, the Lorex Ping App, the network server system, and all of the instructions/user guides/literature/how-to videos that were published by Lorex Technology in 2012, including Lorex Guide and Lorex Video. *See* EX1011, ¶¶3-12. As explained in my First Declaration, I have personal knowledge of the publication of Lorex Guide and Lorex Video (along with two other videos also cited in my declaration as EX1009 and EX1010). *See* EX1011, ¶¶5 and 9-12). For the same reasons, regarding yet another video that Lorex published on YouTube on September 28, 2012 (referred to herein as EX1105 and available at <https://www.youtube.com/watch?v=YaCLjpJXqMg>), I have personally downloaded and viewed this video and confirm herein my personal experience in reviewing and approving it for publication in September 2012. I note that this additional Lorex video accurately indicates it was published on September 28, 2012:



See EX1105 (arrow added). Again, my earlier testimony (EX1011, ¶¶5 and 9-12) establishes my experience at Lorex and my personal knowledge of such publications related to the LNC100 Series camera and the Lorex Ping app.

6. Turning now to the Lorex Guide (EX1006) and Lorex Video (EX1008) cited in my First Declaration (and responsive to the allegations in the POR), I reiterate my earlier testimony that the subject matter disclosed in the 2012 Lorex publications including Lorex Guide and Lorex Video was not obtained either directly or indirectly from any individuals or employees associated with ThroughTek, and was certainly not obtained from any of the four individuals listed

as co-inventors on the face of the '842 Patent. EX1011, ¶13; *see also id.*, ¶¶5-12. Indeed, the subject matter disclosed in Lorex Guide and Lorex Video (including the LNC100 Series camera with the QR code on the back and the Lorex Ping mobile application) was developed and publicized well before the in-person meeting between Lorex and ThroughTek on October 11, 2012. Stated more simply, ThroughTek was surely not involved in any way with the development of the LNC100 Series IP Camera, the Lorex Ping app, and the subject matter disclosed in Lorex Guide or Lorex Video.

7. Contrary to Mr. Kao's false assertion (EX2005, ¶12), Lorex engaged a software development team earlier in 2012—a contractor named StarVedia Technology ("StarVedia")—to assist in the software development of the LNC100 Series IP Camera, the Lorex Ping app, and Lorex's P2P connectivity solution. All of this development work was completed long before I met with representatives at ThroughTek on October 11, 2012, as corroborated by the cited examples below. I began working on the LNC100 Series IP Camera and Lorex Ping app in Q1 of 2012. For this project, Lorex began working with StarVedia around that same time—early in 2012. StarVedia provided technical support for the development and manufacturing of the hardware and software for the LNC100 Series cameras and the Lorex Ping app, including the feature in which the QR code on the back on the LNC100 Series camera was captured (using the Lorex Ping app on a mobile phone)

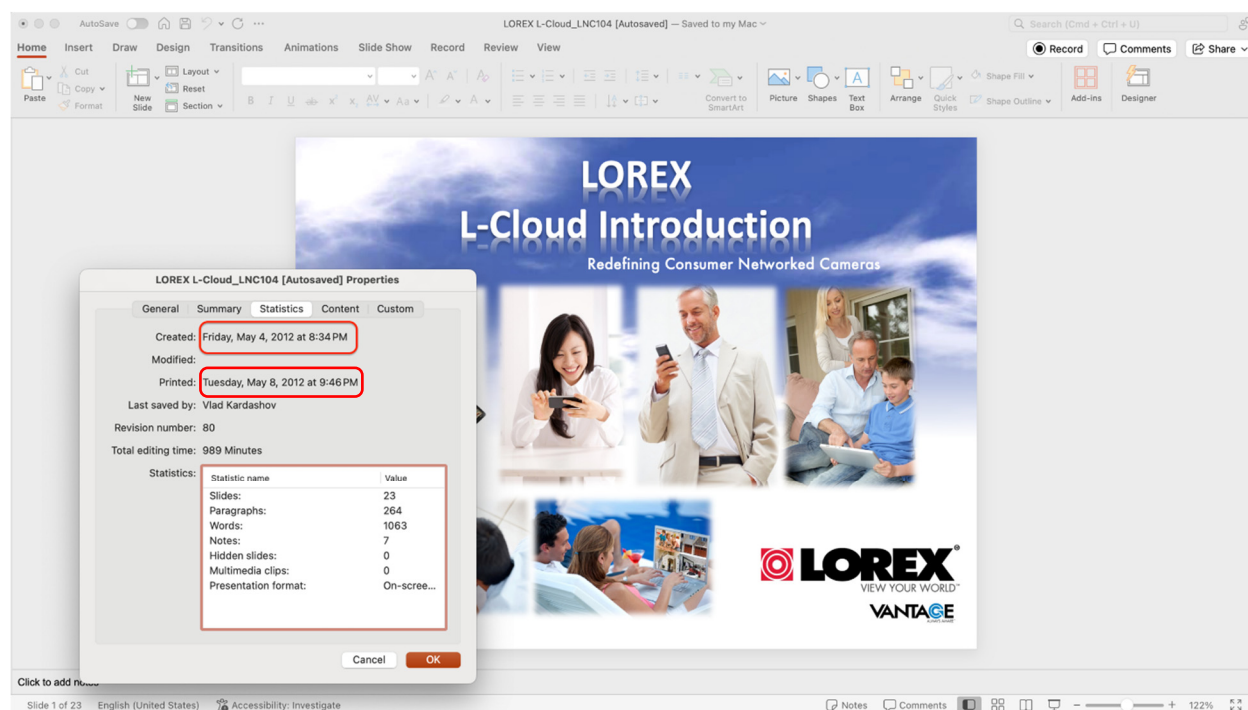
so as to input the camera ID and then establish the P2P connection via a traditional hole-punching technique. All of this work was finalized in a working prototype and successfully tested in mid-2012, and Lorex was meeting with large retailers (e.g., Best Buy, Amazon, etc.) no later than June 2012 in preparation for the final public launch of the LNC100 Series cameras, which were then publicly sold (and Lorex Ping app was freely downloaded) no later than September 2012. The LNC100 Series IP Camera and the Lorex Ping app were developed by the internal efforts at Lorex (including with the help of the contactor team from StarVedia), all without input from anyone at ThroughTek. None of it was obtained directly or indirectly from anyone at ThroughTek.

8. I, along with several colleagues from Lorex, initially met with ThroughTek in person on October 11, 2012, which was one of many meetings in an Asian tour for purpose of identifying vendors for future projects. This meeting was unrelated to the LNC100 Series IP Camera or the Lorex Ping app, which was already publicly launched prior to that time. To be clear, based upon my personal knowledge and the corroborating examples described below, the development of the LNC100 Series IP Camera and the Lorex Ping app, including the entire subject matter of Lorex Guide and Lorex Video, was completed well before the October 11, 2012 introductory meeting with ThroughTek. *See, supra*, ¶7. This is corroborated by the “SEP 12 2012” date on Lorex Guide (EX1006, 3-6), which was a month before the

in-person meeting with ThroughTek. For further corroboration, Lorex published other “how-to” videos on YouTube before the October 11, 2012 in-person meeting, including EX1105 and EX1009 which demonstrate the same subject matter that matches the Lorex Guide and Lorex Video. EX1105 (dated September 28, 2012), 0:10-1:45; EX1009 (dated October 5, 2012), 2:08-2:52. In accordance with our ordinary and customary business practice back in 2012, Lorex would not and did not release these materials before completing development of the LNC100 Series IP Camera and the Lorex Ping app. Additionally, Lorex would not have released these types of materials before offering or preparing to offer to sell the product shown in the materials.

9. The technical solution disclosed in Lorex Guide and Lorex Video—including the use of a smartphone to capture an image of a QR code affixed to an LNC100 Series camera for purposes of inputting the camera ID to establish the P2P connection between the mobile phone and the LNC100 Series camera—was implemented in a working prototype no later than June 2012. I have personal knowledge of this fact, and this fact is also corroborated by a slide presentation that Lorex started sharing in June 2012 with retailers that were interested in distributing/selling Lorex’s LNC100 Series cameras. EX1105, Slide 7 (showing the concept for obtaining a camera ID via a QR code on a camera). I have personal knowledge that this slide presentation was shared with those outside of Lorex (e.g.,

with retailers) starting in June 2012 because, as part of my above-described role at Lorex in June 2012, I personally participated in such presentations using these exact slides to communicate this subject matter to the audience. This presentation has been in my custody since May 2012, and I have personal knowledge that this image/information in Slide 7 (showing the concept for obtaining a camera ID via a QR code on a camera) is unmodified from May 2012. To corroborate the facts of my testimony above, I note that the file properties show that this file was created on May 4, 2012 and printed on May 8, 2012:



This capability (as described on Slide 7 of EX1104) was fully tested and operational in the prototype of the LNC100 Series IP camera and Lorex Ping app, and it further confirms the subject matter disclosed in the Lorex Video and Lorex Guide was

internally developed by Lorex and certainly not obtained directly or indirectly from anyone at ThroughTek.

10. As I discussed above, Lorex Guide was published at least as early as September 12, 2012, and the Patent Owner appears to acknowledge this fact. *See* POR, 4; EX1006, 3-6 (“SEP 12 2012”). Lorex Guide describes various features of the LNC100 Series IP camera including the capability presented to retailers starting in June 2012 for wirelessly connecting an IP camera by scanning a QR code on the back of the camera. EX1104, Slide 7; EX1006, 13-14, *see generally* 4-20. The subject matter of the Lorex Guide was therefore developed long before the meeting with ThroughTek on October 11, 2012.

11. The features shown in Lorex Video were likewise developed long before the meeting with ThroughTek on October 11, 2012. Lorex Video was published on October 19, 2012. Lorex Video demonstrates the same concept that we presented to retailers in starting in June 2012 and that is described in the Lorex Guide. EX1104, Slide 7; EX1006, 13-14; EX1008. As I discussed above, Lorex published another video demonstrating the same features on September 28, 2012 further corroborating that Lorex developed the subject matter in the Lorex Video well before the October 11, 2012 meeting. *See* EX1105.

12. Moreover, contrary to the implication in the POR regarding the October 11, 2012 in-person meeting and the October 19, 2012 publication of the Lorex

Video, the LNC100 Series IP Camera and the Lorex Ping app product shown in the Lorex Video was surely not developed within the short timeframe—just eight days. Rather, based upon my personal experience in actually developing the LNC100 Series IP Camera and the Lorex Ping app product shown in the Lorex Video, the development of this solution from concept to the product shown in the Lorex Video took many months. To the extent that the POR contends ThroughTek somehow shared a “solution” on October 11, 2012, and it was then fully developed and implemented eight days later in the October 19, 2012 Lorex Video, the POR is unrealistic and ignores the timeframe required for such a complex development. Lorex completed this development long before any meeting with ThroughTek and without any input from any person at ThroughTek.

13. In summary, none of the subject matter in the Lorex Guide or Video was obtained directly or indirectly from ThroughTek or any of the individuals listed as inventors on the face of the '842 Patent.

II. Mr. Kao's Declaration

14. As noted above, I have reviewed Mr. Kao's declaration testimony (EX2005). The fact that I do not address all of Mr. Kao's testimony should not be interpreted as agreement with them.

15. Regarding ¶4 of Mr. Kao's declaration, I agree that IP cameras using point-to-point (P2P) connections with hole punching were well known before the

earliest claimed priority date of the '842 Patent (April 16, 2013). EX2005, ¶4. The fact that this technology was well known underscores that the subject matter of Lorex Guide and Lorex Video was not obtained from ThroughTek or the inventors of the '842 Patent.

16. Regarding ¶5 of Mr. Kao's declaration, I agree that using image recognition to covert bar codes, QR codes, and other images into data was well known before the earliest claimed priority date of the '842 Patent (April 16, 2013). EX2005, ¶5. Other products also used this same type of solution in 2012 and earlier. The fact that this technology was well known underscores that the subject matter of Lorex Guide and Lorex Video was not obtained from ThroughTek or the inventors of the '842 Patent.

17. Regarding ¶6 of Mr. Kao's declaration, my team at Lorex (including the contractor software development team from StarVedia) developed the LNC100 Series IP Camera and the Lorex Ping app (which included the use of image recognition of a QR code to establish a P2P connection using a hole punching technique) no later than September 2012, and certainly long before the earliest claimed priority date of the '842 Patent (April 16, 2013). EX2005, ¶6.

18. Regarding ¶9 of Mr. Kao's declaration, I met with Mr. Kao on October 11, 2012 at ThroughTek's office in Taipei. It appears the photograph shown in EX2007 was taken at this meeting. After the meeting the Exclusivity Agreement was

apparently executed by Martin Worndl, who was responsible for a different category of Lorex products such as analog recorders and baby monitors. Neither the Exclusivity Agreement nor our discussion at this meeting pertained to the development of the LNC100 Series IP Camera or the Lorex Ping app. In fact, as mentioned above in ¶¶6-12, the development of the LNC100 Series IP Camera and the Lorex Ping app was complete well before this in-person meeting on October 11, 2012. To be clear, none of the subject matter in either the Lorex Guide and Lorex Video was obtained from any ThroughTek representative—not at this meeting and not at any other time. EX2005, ¶9.

19. Regarding ¶10 of Mr. Kao's declaration, ThroughTek's "complete P2P solution" was not used in connection with the LNC100 Series IP Camera. EX2005, ¶10. In fact, as mentioned above in ¶¶6-12, the development of the LNC100 Series IP Camera and the Lorex Ping app resulting in the solution disclosed in Lorex Guide and Lorex Video was completed and publicly disclosed well before I met with ThroughTek.

20. Regarding ¶11 of Mr. Kao's declaration, I agree that it was common practice for technical solution providers to not be involved with client's marketing material. I also agree that ThroughTek was not involved in any of the 2012 Lorex Publications described herein or in my First Declaration. EX2005, ¶11.

21. Regarding ¶12 of Mr. Kao's declaration, as discussed above in ¶¶7, 17, the LNC100 Series camera and Lorex Ping app were developed/managed by Lorex (including with Lorex employees and the contracted software development team from StarVedia), and StarVedia was engaged to provide the software development support to implement the P2P solution used to connect the LNC100 Series camera to the mobile phone. The working prototype was completed no later than June 2012 (refer to ¶¶8-9) and the resulting final product was publicly sold to end users no later than September 2012 (refer to ¶¶6-8). Lorex did not rely on "ThroughTek's P2P solution" for the LNC100 Series camera that was disclosed in Lorex Guide and Lorex Video. EX2005, ¶12.

22. Regarding ¶13 of Mr. Kao's declaration, I agree that the Lorex Guide and Lorex Video did not describe "how to implement ThroughTek's P2P solution" because the LNC100 Series cameras did not rely on "ThroughTek's P2P solution" at all. EX2005, ¶13.

III. CONCLUSION

23. I hereby declare that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true. I further declare that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of the Title 18 of the United States Code.

Dated: February 25, 2025

By:  _____
Vlad Kardashov