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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RESMED CORP.,

Petitioner,

v.

CLEVELAND MEDICAL DEVICES INC.,

Patent Owner.

Case No. IPR2025-00159
U.S. Patent No. 11,375,921

**PETITIONER'S REPLY TO
PATENT OWNER'S RESPONSE**

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1029	Respironics, “Introducing the REMstar Auto. A simply smarter Smart CPAP” (2002)
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1032	F. Roux, et al., “Continuous Positive Airway Pressure: New Generations,” Clinics in Chest Medicine (2003)
1033	Loube, D., “Technologic Advances in the Treatment of Obstructive Sleep Apnea Syndrome,” CHEST 116:1426-1433 (1999)
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1072	LibreText Engineering 12.4: Data Partitioning available at: https://eng.libretexts.org/Courses/Delta_College/Introduction_to_Database_Systems/12%3A_Physical_Database_Design_and_Database_Security/12.04%3A_Data_Partitioning

I. INTRODUCTION

The Petition established that the challenged claims of the '921 Patent (directed to a networked PAP device) would have been obvious over Toge in view of the knowledge of a POSITA or in view of Kumar and Burton. The POR confirms this. Indeed, PO primarily argues that a POSITA would not have implemented the Toge system to include a “remote internet site.” But PO's arguments are unsupported, ignore disclosures in Toge and Kumar, and overlooks the law.

II. GROUND 1: THE CHALLENGED CLAIMS ARE UNPATENTABLE OVER TOGE IN VIEW OF THE KNOWLEDGE OF A POSITA OR IN VIEW OF KUMAR AND BURTON**A. A POSITA would have implemented Toge with a “remote internet site” as a well-known design option**

The Petition established that it would have been obvious for a POSITA to modify the Toge system to include a “remote internet site” given that it was a known design option. Specifically, the Petition explains that because Toge discloses remote monitoring of a PAP device via a wireless communication network like the “Internet,” that “it would have been obvious to a POSITA to utilize a ‘remote internet site’” to receive PAP data and send it to Toge's physician-side devices. Pet. 49; *see also* EX1044, [0009]. Dr. Kirkness details why this is the case, explaining that a POSITA would have found it obvious to use a remote internet site to receive a patient's data from Toge's PAP device because it would have been a “common way” “to access [patient] data transmitted over the internet.” EX1003 (Kirkness Decl.)

¶214. Dr. Chatterjee further confirms that a POSITA would have been motivated to incorporate a remote internet site into the Toge system by implementing the physician-side computer as a web server since it already receives the PAP data. EX1005 (Chatterjee Decl.) ¶146.

Despite the record evidence, PO complains that the Petition lacks “any articulated rationale” or reasoning why a POSITA would have implemented a remote internet site in the Toge system. POR 12-14. But it is PO who fails to rebut the articulated rationale in the Petition. Specifically, as Dr. Kirkness and Dr. Chatterjee explain, Toge discloses using the internet in its system’s communications, which would have immediately motivated a POSITA to implement the same protocols (i.e., remote internet site) in Toge’s system to access the data. *See* Pet. 49; EX1003 ¶214; EX1005 ¶146. Dr. Chatterjee even describes how a POSITA would have implemented a particular configuration of a “remote internet site” using Toge’s physician-side computer as a web server that could “host data on the physician-side computer to allow others to access the data through the Internet” broadening access to the data. EX1005 ¶146. Moreover, the Petition outlines numerous motivations to implement a remote internet site in Toge’s PAP system given the advances in telemedicine and networking. *See* Pet. 49-54, Section II.B *infra*.

At bottom, a POSITA implementing the Toge system would have needed to decide how to provide access to the data and would have naturally a remote internet

site given Toge's disclosure of the internet as a means of communicating data. PO's response is nothing more than unsupported attorney argument that ignores the evidence and positions in the Petition.

B. Toge in view of Kumar renders obvious a “remote internet site”

The Petition further established that a POSITA would have also been motivated to implement Toge's system using Kumar's telemedicine networking disclosures, which renders obvious the “remote internet site.” Pet. 48-54, EX1003 ¶¶213-230. Specifically, the Petition describes Kumar's disclosure of a system of “network-based monitoring of physiological data” that includes a “central server 106 that hosts a browser-based engine that can be accessed through web pages” and supports the “real-time streaming of raw, interpreted, and/or processed physiological data.” Pet. 49-51. EX1003 ¶¶150-153.

Notably, the Petition details how a POSITA would have been motivated and found it obvious to implement Kumar's remote-monitoring feature, a browser-based engine, as a remote internet site to store and transmit patient data wirelessly or over the Internet from Toge's PAP device to a provider-side device. Pet. 52-54; *see also* EX1003 ¶¶221-224, 151-155. Drs. Kirkness and Chatterjee explain that a POSITA would have understood a benefit of using Kumar's browser-based engine as a remote internet site was its provision of “broad access to data collection and analysis” to physicians and providers, allowing them “to better leverage data and to perform

analyses to find patterns that they may not be able to identify without a large set of data” (EX1005 ¶155; EX1003 ¶¶222-224), particularly since Kumar also discloses this benefit. *See id.*; EX1008, [0083]. Indeed, PO does not dispute that Toge’s PAP system configured with Kumar’s browser-based engine as a remote internet site would “enable the PAP device to wirelessly transmit to the remote engine data associated the patient’s treatment.” Pet. 52-53; EX1003 ¶222; EX1005 ¶¶150-154.

PO takes issue with the implementation of Toge’s physician-side computer as a web server as taught by Kumar, stating that a POSITA “would not have made Toge’s physician-side computer, a client device, into a web server.” POR 14. PO’s arguments are unavailing.

First, PO alleges that such an implementation “violates the principle that ‘the client and server are not on the same computer.’” POR 15.¹ But, as Dr. Chatterjee explains, there is no such immutable “principle.” EX2018, 10:14-16 (“[I]n general, you can have a client on the same machine as the server”); *see also* EX1069 (Chatterjee Reply) ¶¶4-9. Indeed, at the relevant time, it was common to have the client and server on the same computer, which was known as a “localhost.” *See* EX1070; EX1069 ¶8. PO’s own cited references confirm that a machine often serves

¹ PO also ignores the fact that a computer can be implemented using multiple machines. *See, e.g.*, EX1001, 18:64-19:4.

as both a client and server, which was a well-known design choice. *See* EX2020, 4 (“In a typical client/server based application, the client process and server process can be on the same computer”). Thus, having the same machine as both a client and a server was a well-known and oft-employed system configuration that a POSITA would have naturally considered for implementation of a web server within Toge's PAP system using Toge's physician-side computer EX1069, ¶¶4-10.

Second, PO vaguely alleges that there would have been some type of “security risks” to the configuration, suggesting that Toge's physician computer implemented as a web server could not be made secure. POR 15-16. This is incorrect. As a threshold, all systems have security risks, and a POSITA implementing the networked PAP device of Toge would have considered known ways to mitigate such risks. *See* EX2018, 15:3-7 (“[T]he answer to your question about security limitations is going to be different [] if the client and server ***are implemented in a proper way***”). PO and its expert, Dr. Goodrich, ignore this fact. *See* EX1069, ¶¶11-17; *see also* EX1019 (Kirkness Tr.), 30:7-14. For example, the source of one of PO's cited references discloses different design options to provide database security that could have been implemented on a machine serving as both a client and server. *See* EX1071; EX1072; EX1069, ¶15.

Third, PO next makes superficial allegations regarding “decreased system performance” for implementation of Toge's physician computer as a web server,

without detailing any specifics of these ‘performance’ issues for the Toge-Kumar system. POR 16-17. But again, performance can be addressed in different ways as part of the implementation of the system, including “design enhancements” and “different hardware.” EX1069, ¶¶16-17. More importantly, PO and its expert suggest that the user layer and the database layer should be on separate machines, which could lead to different and potentially greater performance issues. *Id.* ¶16.

Finally, PO alleges that configuring Toge’s physician-side computer as a web server “would have interfered with Toge’s purpose” to “push ‘necessary’ or ‘crucial’ data to physician side devices” so that physicians could take “emergency action when needed.” POR 17-19. As a preliminary matter, PO has improperly limited Toge’s entire “purpose” to a singular embodiment for emergency situations. But Toge is broader. *See* EX1069, ¶21; DI, 35. For instance, Toge’s system monitors a patient’s breathing rate and oxygen saturation levels both “in real-time or at regular intervals” such that “physicians can also know the real-time or *periodic condition* of the patient.” EX1044, [0044], [0047] (emphasis added). In other words, Toge’s PAP can transmit treatment data both in “real-time [allowing] physicians [to] address emergencies involving the patient” (EX1044, [0046]) or can be stored in the memory of the PAP device and be later transmitted. *See* EX1044, [0007].

Regardless, PO erroneously interprets the combination of Kumar’s web-based engine with Toge’s PAP system as eliminating the ability of Toge’s PAP to push

data to physician-side devices, insisting that those devices must “request[]” or “pull[]” data from the web-based engine/remote internet site. POR 20. PO points to no support in Toge or Kumar for its limiting conclusion because it cannot. The Kumar networking system is, in fact, designed for the type of real-time transmissions that PO alleges its implementation “destroys.” For example, like Toge, Kumar describes “*real-time streaming*” of data “from a patient/client to a health care provider” and a telemedicine networking system that allows the “*transmi[ssion] [of] signals in real-time*, while *simultaneously storing* data,” in addition to “providing *treatment in real-time* to the patient.” EX1008, [0009], [0010], [0014]; Pet. 50-54, EX1003 ¶223; EX1005 ¶154.

Dr. Chatterjee confirms the ability of Kumar's system to transmit patient data in real-time, for use in emergency situations, for example. EX1005 ¶83 (“internet-based, *real-time access*” to patient information could “*help identify medical emergencies*, for example, if the patient stopped breathing altogether”); *see also* EX1008, [0007]; EX1044, [0054]-[0057]. Thus, PO's conclusion that patient data could only be accessed from Kumar's web-based engine upon “request” is erroneous. *See* EX1069, ¶¶19-20. Put simply, even in a pull system, data can be sent effectively in real-time. *See, e.g., id.* ¶20 (the server could “automatically push out,” or the client could “continuously query the server” for data).

C. A POSITA would have been motivated to implement Toge's system with Kumar's remote internet site and have a reasonable expectation of success in doing so

The Petition extensively details the significant benefits of using a remote monitoring system like Kumar's browser-based engine in Toge's PAP system. Pet., 15-17; 52-53. PO cherry-picks a few of Petitioner's motivations to combine Toge and Kumar and asserts that they are "nonexistent motivations" for being "either generic, already achieved by Toge, or would have introduced ['non-motivating'] technical obstacles." POR 20-21. PO's conclusory allegations are inaccurate and ignore both the context of the motivations, and the numerous other motivations articulated in the Petition and by Drs. Kirkness and Chatterjee. *See* DI, 36-37.

First, PO denigrates as "generic" rationales for motivation to combine like "advances in mobile computing" and the "general market trends." POR 21. PO's conclusion takes these rationales out of their proper context. Dr. Chatterjee describes the "core benefits" in using the internet in telemedicine (i.e., IoT) such as "automation, real-time access to information, data collection, improved efficiency, and cost reduction." EX1005 ¶¶81-85. As Dr. Chatterjee explains, a POSITA's knowledge of these "core benefits" coupled with the concomitant "advances in mobile computing" and the "general market trend[]" of combining the internet with (e.g., medical) devices would have provided the motivation for a POSITA to combine Toge's networked PAP system with Kumar's remote internet, web-based

engine. *See, e.g.*, EX1005 ¶80. A POSITA would have been motivated to increase computing efficiency and patient compliance and treatment through the implementation of mobile computing advances and wireless communications in the Toge system. Pet., 16; EX1003 ¶¶138-139; EX1005 ¶¶48-53, 76-79.

Second, PO dismisses motivating benefits such as the convenience and efficiency of a Toge-Kumar PAP system for physicians and patients, as being “already achieved by Toge.” POR 20. As the Petition established, however, in a combined Toge-Kumar system the use of a remote internet site would have allowed patient data to be transmitted to and accessible from “anywhere in the world” via the Internet, increasing the convenience for physician-providers. Pet., 15-16, 53; EX1003 ¶¶136, 223; EX1005 ¶¶78, 154, 160. A POSITA would have understood that a Toge-Kumar system would have allowed physicians to remotely “monitor the data, assess therapy and prescribe modifications and/or changes” including using, for example, artificial intelligence to “track trends” in PAP data in real-time and “predict future behaviors and physiological responses” based on a particular patient’s habits. *See* Pet., 17, 53; EX1003 ¶¶138-39, 223; EX1005 ¶¶149, 154-55. Use of Kumar’s remote internet site also would have allowed for the PAP data of one or multiple patients to be transmitted to and stored in a secured server database for “later access, replay, and/or analysis” from anywhere in the world. Pet., 53; EX1003 ¶223; EX1005 ¶154; EX1008, [0083]. Such stored data could have been

used to create or add to a system of electronic medical records. EX1003 ¶223. Toge's unmodified system, limited to the access of patient data using a physician's cell phone, would not have had these vastly improved accessibility benefits.

As detailed in the Petition, such expanded access to patient data would have also benefited patients, providing them with increased physician access given the increasingly widespread internet availability for both patients and physicians—use of a remote internet site “would allow anyone with an Internet browser to access the data.” Pet. 16, EX1003 ¶137, EX1005 ¶¶79-86. A Toge-Kumar system would have similarly reduced the need and expense of in-person appointments. *See* Pet. 15-18; EX1005 ¶85; EX1003 ¶91, 139 (describing involvement in the development of home monitoring equipment to record “sleep patterns for all-night monitoring at the patients home rather than in a hospital”).

Other benefits (ignored by PO) flow from the increased accessibility the Toge-Kumar combination provides, including better patient care, that would have motivated a POSITA to modify and improve the Toge system. For example, patient data stored at the remote internet site (as opposed to the patient PAP) could have been shared with and analyzed by other physicians, e.g., to allow “a provider to seek expert consultation for clinically difficult cases,” resulting in better diagnosis and treatment through the shared analysis of collected data. Pet. 53, 58-59, EX1003 ¶138 (describing how “collecting data and providing universal access to that data would

create bigger and better data sets to find patterns and treatments”); *see also* EX1003 ¶223. As such, a POSITA would have been motivated to expand the above-described convenience and efficiency benefits by incorporating Kumar's remote internet site.

Finally, PO argues that the many of the benefits derived from “allow[ing] anyone with an Internet browser to access . . . data” is not motivating “because of the obstacles a POSITA would have encountered in making the proposed modification.” POR 22-23. Specifically, PO declares that the Toge-Kumar modification is a “two-tier client/server application” and alleges that it is “not suitable” to allow outside access via a web application because “it would encounter a loss of performance and be exposed to security vulnerabilities.” POR 22. Petitioner has already rebutted the PO's alleged “performance” and “security” issues above. *See* Section II.B *supra*. A POSITA would not have been discouraged from making Kumar-based remote internet site modifications to the Toge PAP system based on such reasons. *See* EX1069, ¶¶4-17.

Moreover, performance and security issues would not have been “obstacles” to modifying Toge with Kumar's remote internet site. The Petition outlines why a POSITA would have had a reasonable expectation of success in making the modifications to Toge. *See* Pet., 19. Dr. Chatterjee also further explains why a POSITA would not have considered PO's alleged “obstacles” as such. EX1069,

¶¶11-17; *see also* EX2018, 15:3-7. A POSITA would have been more than capable of overcoming implementation details like security and performance issues using “ordinary creativity.” *See Elekta Ltd. v. ZAP Surgical Sys., Inc.*, 81 F.4th 1368, 1374 (Fed. Cir. 2023) (motivation to combine “assumes that a skilled artisan is a person of ordinary creativity with common sense, common wisdom, and common knowledge.”).

Finally, PO's admonishments ignore that fact that motivation to combine does not require a combination to be the most preferred or most desirable prior art combination, just that it be an option known to a POSITA. *See Novartis Pharms. Corp. v. West-Ward Pharms. Int'l Ltd.*, 923 F.3d 1051, 1059 (Fed. Cir. 2019); *In re Fulton*, 391 F.3d 1195, 1200 (Fed. Cir. 2004); *see also* DI, 36.

D. Toge in view of the knowledge of a POSITA or Kumar renders obvious retransmission (Claim 1)

1. Toge in view of the knowledge of a POSITA renders obvious retransmission

The Petition establishes how a POSITA would have found it obvious to modify Toge to retransmit data from the physician cell phone to a remote internet site in view of the knowledge of a POSITA, detailing the disclosures in Toge that would have made it obvious for a POSITA to configure software on Toge's cell phone/PDA (Toge mobile terminal 5) to retransmit PAP therapy efficacy data to the physician's computer (remote internet site/web server) when it has been “mobilized”

to do so by the physician's computer. *See* Pet., 55; EX1003 ¶¶225; EX1005 ¶159. Specifically, the Petition outlines Toge's disclosure of mobile terminal 5 (cell phone/PDA) that could be "mobilized in emergencies" by physician-side computer 4 (e.g., physician's computer modified as a web server). EX1005 ¶159; *see also* Pet. 55; EX1003 ¶225. Dr. Chatterjee notes that a POSITA would have understood cell phone/PDA "mobilization" to indicate "communications," e.g., the data transmission, between the cell phone/PDA and physician's computer (modified as a web server). EX1005 ¶¶157-159; *see also* DI 39-40.

Although PO alleges that Petitioner's arguments are "about what Toge's physician-side computer and mobile device 'can' do in their unmodified form[]" (POR 24-25), the Petition actually discusses a Toge PAP system to which a remote internet site had been added based on a POSITA's knowledge of the art. *See supra* Section II.B (discussing "remote internet site"). In other words, the prior incorporation of the remote internet site into the Toge system in view of the POSITA's knowledge (Pet., 48-51) is part of the discussion of the further limitation of claim 1 regarding data retransmission. Indeed, this modification of Toge is based on several disclosures in Toge itself. *See e.g.*, Pet., 55; EX1003 ¶¶225-229; EX1005 ¶¶156-159. Accordingly, the discussion of retransmission of PAP data from the cell phone/PDA to the remote internet site is that of Toge in a modified form.

2. Toge in view of Kumar renders obvious retransmission

The obvious modification of Toge's PAP system with Kumar's networking system to retransmit data from Toge's cell phone/PDA (mobile terminal 5) to Kumar's remote internet site (browser-based engine or physician-side computer implemented as web server) is also described in the Petition. *See* Pet. 55-56; EX1003 ¶¶229-230, EX1005 ¶¶156-162. The Petition describes how Kumar's disclosure of patient data that could be stored at the secure storage device of the browser-based engine suggests the data would be later retransmitted. Pet., 55-56; EX1003 ¶229; EX1005 ¶160. The Petition also details annotation of patient data transmitted from the PAP to Toge's physician-side cell phone/PDA with "the care provider's comments/analysis," making it obvious to retransmit annotated data from the physician cell phone/PDA to the remote internet site for storage and subsequent access (e.g., in a patient's record). Pet., 55-56; EX1003 ¶¶228-229; EX1005 ¶¶160-162; *see also* DI 38-40.

PO makes the conclusory statement that "[a]ny of the 'care provider's comments/analysis' sent from the mobile device to the web server would not be or involve **retransmissions** of data from the PAP device to the web server under any reasonable interpretation of the term since that data came from the web server in the first place." POR 26-27 (emphasis in original). But PO does not explain the metes and bounds of a "reasonable interpretation" of the term "retransmissions." Nor does PO provide a construction of "retransmissions," or support for any construction. To

the extent PO is arguing that the data transmitted from the PAP to cell phone must be unmodified when retransmitted to the remote internet site (POR 26-27), PO is mistaken, as discussed in Section II.E.1 *infra*. The language of Claim 1 itself indicates both implicitly and explicitly that the data transmitted from the PAP device to the cell phone need not be the same as that retransmitted to the remote internet site. First, claim 1 specifies retransmission of data “in whole *or in part*, to the remote internet site,” explicitly signaling that the data transmitted “in whole” from the PAP to the cell phone, need only be retransmitted “in part” to the remote internet site. EX1001, claim 1. PAP data retransmitted “in part,” then, is not identical to (i.e., unmodified from) the data originally transmitted “in whole.” Second, PO ignores that claim 1 implicitly distinguishes “the data” sent from the PAP to the cell phone from “a data”² retransmitted from the cell phone to the remote internet site. *Compare* “a software...adapted to be used with and to display *the* data” to a care provider’s cell phone/PDA *with* “wherein the software is further adapted to retransmit *a* data ... from [the] PAP device ... to the remote internet site.” *Id.* (emphasis added). Overall, then, the patentee appeared to contemplate that the data retransmitted to the remote internet site would be different (modified) from that originally transmitted from the PAP.

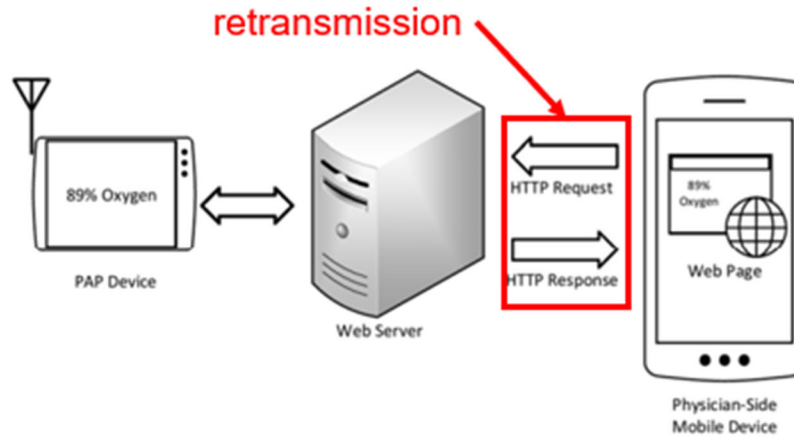
² “[A] data” is neither defined nor described in the specification.

PO also quibbles with PAP data retransmission where Toge's physician-side computer is configured as a web server operating as the remote internet site, erroneously concluding that the cell phone could only receive data if it "request[ed]" that data from the web server and could not "receive data directly from the PAP device," then retransmit it "to the server as in the manner required by the Challenged Claim." POR 26-28. But Claim 1 does not require that the cell phone/PDA receive data "directly" from the PAP (i.e., independent of the remote internet site). Claim 1 does not recite the term "directly." *See* EX1001, claim 1. PO points to no language in the claim or support in the specification for importing such a limitation into claim 1. Indeed, the language of claim 12 belies PO's argument that 'direct' transmission from the PAP to the cell phone/PDA is required by claim 1. Claim 12 requires "independent" (e.g., direct) transmission from the PAP to the cell phone. *Id.* at claim 12 ("wherein the [cell phone] software and the remote internet site ***independently receive***, in whole or part, the [PAP] data...") (emphasis added). Thus, the patentee knew how to specify direct transmission from the PAP to the cell phone and chose a broader scope for claim 1. *See Promos Techs., Inc. v. Samsung Elecs. Co., Ltd.*, 809 F. App'x. 825, 833 (Fed. Cir. 2020) ("If the patentee wanted to import that same restriction . . . into the . . . [limitation], he could have used similar language. But he did not"); *see also Weber, Inc. v. Provisur Techs., Inc.*, 92 F.4th 1059, 1069-70 (Fed. Cir. 2024) ("Had the patent drafter intended to limit the claims . . . narrower language

could have been used in the claim”) (quotation marks omitted). PO’s conclusory statement that the PAP in Toge’s modified system could not transmit data directly to the physician cell phone is unsupported and unsound. *See supra* Section II.F; *see also* EX1069, ¶19 (PAP still able to “‘push’ data to physician-side devices as needed”).

E. Toge in view of the knowledge of the POSITA or Kumar renders obvious retransmission (Claim 7)

PO does not dispute that Toge’s implementation of Kumar’s web-based engine meets the limitations of claim 7 requiring retransmission of PAP data from the remote internet site to the cell phone/PDA. *See* Pet., 56-59; EX1003 ¶¶231-236. However, PO argues that “the web server does not ‘retransmit’ data to the physician’s mobile device.” POR 31. PO’s statement directly contradicts PO’s prior assertions. *See* POR 26. Indeed, PO illustrates these retransmissions in its own figure showing PAP data transmissions back and forth from the web server to the physician cell phone/PDA:



POR 27 (annotated).

Despite PO's admission, PO attempts to narrow "retransmit" to exclude the asserted prior art combinations. But not only is PO's construction wrong, the asserted prior art combinations still meet the "retransmit" limitation even under PO's incorrect construction.

1. PO's construction of "retransmit" is unsupported

"retransmit"	
Petitioner's Construction	PO's Construction
plain and ordinary meaning	receiving data and then sending [by itself, the same unprocessed] data to another device

PO attempts to evade the asserted prior art by limiting the term "retransmit" to (1) exclude any processing of the retransmitted data and (2) limit to automatic transmissions (device by itself transmitting data) as opposed to a transmission in response to a request. POR 32. PO's construction of "retransmit" is directly contrary to the specification.

PO disingenuously summarizes the one line in the entire specification that uses “re-transmit” as “describing ‘re-transmit’ as a device that receives and then sends data to another device.” *See* POR 32 (citing EX1001, 19:35-41). But the full text plainly contemplates that the retransmitted data can be processed and simply transmitted with no limitation on whether it is by itself or in response to a request:

Another example is where the remote communication system is a PDA, computer or cell phone, which receives the physiological data transmission, *optionally re-processes* the information, and *re-transmits* the information via cell towers, land phone lines, satellite, radio frequencies or cable to a remote site for analysis.

EX1001, 19:35-41. The specification itself states that the data are “*optionally re-processe[d]*” before retransmission, indicating that ‘retransmit’ cannot solely mean “receiving data and then sending [by itself that same unprocessed] data to another device.”

Dr. Chatterjee repeatedly made this very point during his testimony. *See* EX2018, 37:17-24 (“Q: So in this instance is this communication, remote communication system acting as an intermediary device that receives and then relays the data to another device? A: That's what I pointed out to you earlier. It's expressly stating optionally reprocesses the information in that sentence that I read to you as well.”); *see also* 37:6-16; 37:25-39:8; EX1069, ¶32. PO and Dr. Goodrich twice mischaracterize Dr. Chatterjee's testimony in an attempt to support its construction.

First, PO and Dr. Goodrich wrongly state that Dr. Chatterjee 'explained' that "in the '921 Patent, 'retransmit' refers to receiving and then sending data to another device." POR 32; Goodrich ¶79 (citing EX2018, 38:9-39-2). PO then mischaracterizes the same testimony again, alleging that Dr. Chatterjee stated that Toge's web server "transmit[s][the data] by itself" upon receiving a request." POR 32. But Dr. Chatterjee's actual testimony is clear:

Q. So then what's the difference in a retransmission versus just a transmission?

A. Well, again, I'm understanding your question to be limited to this sentence in a vacuum, and as I've explained to you a couple of times, I have not memorized everything in the '921, and if there is other disclosure about that question. But I think what it's trying to get at is that it's information that device, that PDA, computer, or cell phone, is first receiving the information. It optionally processor or reprocesses the information and then retransmits the information via cell towers, land phone lines, satellite, radiofrequencies or cable to a remote site for analysis. At a minimum it's not transmitting it by itself; it's first receiving it, as is expressly stated in that sentence.

EX2018, 38:9-39:2. As to the first, Dr. Chatterjee merely restates the specification underscoring that the data can be optionally processed or reprocessed. As to the second, Dr. Chatterjee noted that because the device first receives information, "it's not transmitting it by itself." EX2018, 38:17-39:1. There is no discussion of a request.

Accordingly, there is no basis for PO's construction other than its expert's unsupported say so.

2. The asserted combinations disclose “retransmit” even under PO's incorrect construction

Based on its flawed construction, PO argues that “Toge's web server stores data and not until an HTTP request does it transmit the data. ... In this regard, Toge's web server does not receive and send that data on to another device.” POR 32. But even under PO's construction, the Toge-Kumar combination still renders obvious the “retransmit” limitation.

First, data that are “requested” are still “retransmitted.” PO appears to suggest that data that are stored are somehow “processed,” and therefore, not the same data that are stored on the web server. But the data that are stored are still the same data. Any time data are transmitted or stored, processing occurs to identify the data. EX1069, ¶¶22-25. This does not change the data itself. *Id.* Thus, in the Toge-Kumar system, when the physician-side computer sends the PAP data in response to an HTTP request, it is the same data that are received and stored. *Id.*; *see also* Pet., 51.

Second, even if the Toge-Kumar combination sends data in response to HTTP request, there is nothing that precludes the system from automatically pushing data once it has been received. EX1069 ¶¶18-21, 26. As discussed in Section II.B., a

POSITA could have implemented the Toge-Kumar system as a push system, or configured the system to automatically push data in emergencies. *See* EX2018, 39:9-22. This is further suggested by Toge itself which explains that servers can be used as relays. *See supra* Section II.E.2; Toge Abstract (“The relay device 3 receives the treatment data transmitted from the positive pressure artificial respiration assisting device 2, and transmits all or part of the received treatment data to the physician-side computer 4 or mobile terminal 5 via the communication network 1. The physician-side computer 4 or mobile terminal 5 receives all or part of the treatment data transmitted from the relay device 3.”); *see also id.*, [0009] (The communication network 1 may be any of a public telephone network, *the Internet*, a mobile communication network, or a dedicated line network) (emphasis added); *id.*, [0049] (“The relay device 3 can be constructed using computers, *server devices*, or similar equipment) (emphasis added).

F. Toge in view of the knowledge of the POSITA or Kumar renders obvious the cell phone/PDA and remote internet site independently receiving PAP data (Claim 12)

PO argues that Kumar only discloses transmission of PAP data to the cell phone through the remote internet site/web server (POR 28-30) so does not disclose independent transmission of PAP data to the cell phone. But as explained above, Kumar discloses that its remote engine can configure the system's devices to transfer data directly from one device to the other. Pet. 59-60; EX1003 ¶239, EX1005 ¶171.

PO takes umbrage with Kumar's disclosure that the web engine can direct device-to-device data transfer, arguing that it "does not apply to data transferred over the Internet." POR, 30. But there's nothing in Kumar suggesting that the device-to-device transfer disclosed therein would not or could not occur over the Internet, and PO points to no evidence that this is the case.

Rather, PO relies on a singular hypothetical implementation of a configuration neither advanced by Petitioner nor disclosed in Kumar (or the '921 Patent). PO asserts that "[a] POSITA would understand that the web server manages and configures the transfer of Internet data because the PAP and physician-side devices are behind network address translation (NAT) devices that assign public IP addresses to communications and thereby block the devices' private IP addresses from direct communication." POR, 30. But Kumar is not limited to PO's hypothetical implementation and does not even discuss implementation details like network IP addresses.

PO argues that Dr. Chatterjee supports its position. But PO mischaracterizes Dr. Chatterjee's testimony. Rather Dr. Chatterjee explains that a NAT device does translate IP addresses but does not state that the NAT device would block direct communications:

Q. So let's do the example where you have the client device operating on a private network, and the web server that's on the Internet. So where the client device sends an

HTTP request to the web server, that request is going to go through a NAT device where the IP address is going to get translated from a private IP address to a public IP address, and then sent to the web server; is that correct?

A. *If a NAT device is implemented in that situation*, then, yes, the NAT device will, for example, translate the source IP address to the external or public-facing IP address and then forward the packet based on that.”

EX2018, 33:19-34:7 (emphasis added). Importantly, as Dr. Chatterjee's testimony makes clear, it only addresses situations in which a NAT device is implemented, which need not be in all situations (“*If* a NAT device is implemented in that situation”). Petitioner also notes that Dr. Chatterjee was not asked about, nor did his answer refer to any implementation details disclosed in Kumar, which, again, discusses neither NAT devices nor IP addresses. But even under PO's hypothetical implementations, the Toge-Kumar system would still enable independent data transmission from the PAP to both the cell phone and remote internet site based on the disclosures outlined in the Petition.

III. GROUND 2: THE CHALLENGED CLAIMS ARE UNPATENTABLE OVER TOGE IN VIEW OF THE KNOWLEDGE OF A POSITA OR KUMAR, BURTON, AND KISNER

PO does not make any arguments regarding Ground 2 beyond “the same reasons [for] Ground 1.” POR, 33. Accordingly, for the reasons discussed above, Toge in view of Kumar and Burton and further in view of Kisner, render obvious the challenged claims.

IV. CONCLUSION

The Board should find all challenged claims unpatentable.

Dated: December 9, 2025

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CERTIFICATE OF COMPLIANCE WITH 37 C.F.R. § 42.24

I hereby certify that Petitioner's Reply to Patent Owner's Response complies with the word count limitation of 37 C.F.R. § 42.24(a)(1)(i) because the Reply contains a total of 5,547 words, calculated by Microsoft Word's word-count feature. This total excludes the cover page, signature block, and the parts of the Reply exempted by Rule 37 C.F.R. § 42.24(a)(1).

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CERTIFICATE OF SERVICE

I hereby certify that on December 9, 2025, a true and correct copy of the foregoing **PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE** is being served by electronic mail on Patent Owner's counsel of record listed below, pursuant to it Mandatory Notices:

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