

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

RESMED CORP,  
Petitioner,

v.

CLEVELAND MEDICAL DEVICES, INC.,  
Patent Owner.

---

Case IPR2025-00246  
U.S. Patent No. 11,857,333

---

**REPLY DECLARATION OF DR. MICHAEL T. GOODRICH  
IN SUPPORT OF PATENT OWNER'S REPLY TO  
PETITIONER'S OPPOSITION TO PATENT OWNER'S  
CONTINGENT MOTION TO AMEND**

**TABLE OF CONTENTS**

	<b>Page</b>
I. INTRODUCTION .....	1
II. LEGAL STANDARD .....	1
III. IN MY OPINION THE SUBSTITUTE CLAIMS ARE PATENTABLE OVER PETITION GROUNDS 1-4.....	2
A. In my Opinion the '899 and '715 Applications Provide Written Description Support for a Patient's Cell Phone Adjusting PAP/CPAP Therapy .....	2
B. In My Opinion a POSITA Would Not Have Combined Toge with Kumar to Arrive at a Patient's Cell Phone Adjusting the PAP/CPAP Therapy .....	7
C. In my Opinion A POSITA Would Not Have Added to Toge's Physician-Focused System a Patient's Cell Phone Downloadable Application to Receive and Display Patient PAP Data (Substitute Claim 30.e) .....	8
D. In my Opinion A POSITA Would Not Have Modified Toge to Include a "Remote Internet Site Hosted on at Least One Server" .....	11
IV. CONCLUSION.....	20

## **I. INTRODUCTION**

I, Dr. Michael T. Goodrich, declare as follows:

1. I have been asked by Patent Owner Cleveland Medical Devices, Inc. (“Patent Owner” or “CleveMed”) to submit this supplemental declaration in the matter referenced above.

2. My experience and qualifications were summarized in paragraphs 5-18 of the Declaration of Dr. Michael Goodrich in Support of Patent Owner’s Contingent Motion to Amend and Request for Preliminary Guidance (Ex. 2032).

3. I have reviewed Petitioner’s Opposition to Patent Owner’s (“PO”) Contingent Motion to Amend, the Declaration of Jason Kirkness, Ph.D. (Ex. 1071, “Kirkness”) and the Declaration of Dr. Sandeep Chatterjee (Ex. 1072, “Chatterjee”) along with the other exhibits and papers filed in this proceeding, including the transcript of Dr. Chatterjee’s deposition on February 18, 2026 (Ex. 2051) and the transcript of Dr. Kirkness’s deposition on February 4, 2026 (Ex. 2050).

4. I provide below my opinions in response to Petitioner’s Opposition and its experts’ declarations and deposition testimony.

## **II. LEGAL STANDARD**

5. I incorporate the applicable legal standards as set forth in my opening declaration as well as the written description standard as I set forth below.

6. I have been informed that a claim is valid under the written description requirement of 35 U.S.C. §112 when the descriptions in the patent reasonably convey to one of ordinary skill in the art that the inventor had possession of the claimed subject matter at the time of filing the patent application.

7. I understand that the application does not have to use any particular form of disclosure to describe the subject matter claimed. Rather, the test is whether the disclosure in the patent reasonably conveys to one skilled in the art that the applicant had possession of the claimed subject matter as of the filing date of the application. This test requires an objective inquiry into the specification from the perspective of a person of ordinary skill in the art. I also have been informed that the adequacy of the description of an invention depends on the nature of the claims and the complexity of the technology. Given this perspective, in some instances, a patent owner can rely on information that is well-known in the art to satisfy written description.

### **III. IN MY OPINION THE SUBTITUTE CLAIMS ARE PATENTABLE OVER PETITION GROUNDS 1-4**

#### **A. In my Opinion the '899 and '715 Applications Provide Written Description Support for a Patient's Cell Phone Adjusting PAP/CPAP Therapy**

8. I understand that U.S. Patent Appl. No. 15/641,715 (“’715 application”), which the ’333 Patent matured from, is a continuation-in-part of U.S. Appl. No. 11/266,899 (Ex. 2033, “’899 application”). Ex. 1001 (“’333 Patent”) at

Cover. In my reading of both applications, they include statements of a cell phone receiving sensor data, determining level of severity data based on the sensor data, and the patient adjusting their therapy. Taking these statements together, it is my opinion that the applications reasonably convey that the inventors had possession of a patient's cell phone adjusting PAP/CPAP therapy at the time of filing the original application, which supports the proposed amendment, "wherein the therapy administered by the PAP or CPAP device is configured to be adjusted by the first software on the subject's cell phone," as I explain below.

9. Each application describes a remote communication device, such as a cell phone, including a processor that receives sensor data from a PAP device and determines the severity of the patient's sleep disorder. '899 application at 33:14-21 (describing that sensors are "tethered to a . . . *cell phone*" and that signals from sensors are analyzed using a "*processor*" to determine the "*severity* of the subject's sleeping disorder and/or symptoms") (emphasis added); Ex. 1002 ('715 application) at 29:22-29 (similar); '899 application at 33:22-23, 34:14-21 (the "*processor*" may be "part of a *remote* communications station" that can be a "*cell phone*") (emphasis added); Ex. 1002 ('715 application) at 30:9-31:12 (similar). I also note that the '715 application also discloses a cell phone as an "intermediary device" that receives the sensor data from a diagnostic device linked to a treatment device. Ex. 1002 ('715 application) at 5:5-8.

10. Each application also describes that the patient or the physician adjusts the patient's CPAP/PAP therapy, or, alternatively, this can be done as a part of a closed-loop system. '899 application at 5:8-16 ("diagnosing the level of severity of a subject's sleep apnea and with or without human intervention adjusting an apparatus . . . [t]he treatment device can be adjusted by either by a closed loop control system which uses, in part, the data or signals from the diagnosis device . . . or an open loop control system which can alert a human who then adjusts the treatment device . . ."); Ex. 1002 ('715 application) at 4:22-28 (same), 38:24-39:3 ("provide an output which is then used . . . by a clinician or the subject to adjust the device") *id.* at 34:20-23 (same). The '715 application further clarifies that a device can remote program the therapy of the PAP/CPAP device. *Id.* at 11:30-12:1.

11. It is my opinion that taken together, these statements clearly convey to a POSITA that the patient can adjust their PAP/CPAP therapy using their cell phone, which receives collected sensor data and determines the severity of the patient's sleep disorder that the adjustment is based on.

12. My opinion is consistent with the inventors' statements made during prosecution:

The present invention *allows not only the patient* but their clinicians to be aware of the efficacy of the patient's therapy as presently configured, *and to adjust or titrate the therapy efficiently, quickly and remotely.*

The **determination or calculation** of these apnea events are performed on either the PAP device or **the patient's cellular phone**.

Ex. 1002 at 308 (emphasis added).

13. Based on the applications' disclosures, it is my opinion that the inventors had possession of a patient's cell phone adjusting the PAP/CPAP therapy. I disagree with ResMed's and its expert's position to the contrary.

14. For instance, with respect to the '715 application, ResMed alleges that "[t]here is no disclosure of the 'intermediary device' . . . [that] adjusts the PAP/CPAP therapy." Paper 31 ("Opp.") at 3. But this is based on what is expressly disclosed in the passage for the term "intermediary device," not what is conveyed to a POSITA who has read the disclosure as a whole. I note that ResMed also looks for what is expressly recited in "remotely program[] the PAP or CPAP" and adjustment "by a clinician or the subject" passages. *Id.* at 3-4 (stating that the device that "'remotely programs' the PAP/ CPAP is not disclosed or described"), 4 ("by a clinician or the subject" does not "disclose or suggest that it is a patient's cell phone"). It is my opinion that in so doing, ResMed ignores the specification statements describing a cell phone acting as intermediary device that receives sensor data and determines a level of severity with that data used by the patient or as a part of a "closed-loop or partially closed-loop system" to adjust their therapy. For example, the '715

application discloses the following, which a POSITA would understand to include every element of the proposed claim amendment:

The signals from the *one or more sensors* used in various embodiments of the present invention are preferably *analyzed using a processor and software* that can quantitatively estimate or *determine the severity* of the subject's sleeping disorder or symptoms. Using either a microcontroller of a data acquisition system, a separate computer, base station or processor, *a PDA, a processor on a device for treating the subject's sleeping disorder or a combination of these processors*, the *severity of the subject's sleeping disorder* and/or symptoms including apneas is determined and is *used at least in part to regulate the physical or chemical treatment of the subject*. Also optionally, the one or more sensors used in the system of the present invention can also be tethered to a computer, base station, *cell phone, a PDA* or some other form of processor or microprocessor.

Ex. 1002 ('715 application) at 30:9-18 (emphasis added)].

15. Taken together, a POSITA would understand that the patient can adjust their therapy with their cell phone, as I discuss above.

16. With respect to the '899 application, it is my opinion that ResMed performs the same incorrect analysis. Opp. at 5-7.

**B. In My Opinion a POSITA Would Not Have Combined Toge with Kumar to Arrive at a Patient's Cell Phone Adjusting the PAP/CPAP Therapy**

17. Neither Toge nor Kumar discloses PAP/CPAP therapy adjusted by the patient's cell phone. I understand that ResMed relies on its experts testimony to gap fill this limitation. Ex. 2050 at 53:5-18; Ex. 2051 at 35:15-21, 38:22-39-23.

18. I note that ResMed's experts' testify that (i) because Toge's physician cell phone adjusts PAP/CPAP therapy, it would have been obvious for Kumar's patient's cell phone to do the same, and (ii) because Kumar's patient cell phone does so, it would have been obvious to "modify the software on Toge's cell phone." Opp. at 22-23 (Ex. 1071, ¶ 16; Ex. 1072, ¶¶ 41-43). I disagree that a POSITA would have made this combination to reach the claimed invention, as I explain below.

19. First, Toge's system would not be modified because the physician's cell phone is already mobilized and used to adjust the PAP therapy when necessary, so there is no need for a patient's cell phone. I understand that ResMed and its experts allege that it "would have been beneficial to adjust the PAP/CPAP with the patient's cell phone" once "a physician 'mobilize[s]' the patient's cell phone" with the "prescription pressure." Opp. at 23-24. I disagree. Toge's physician cell phone *is* already "mobilized," *i.e.* used, to adjust a patient's PAP device, therefore there is no benefit to have the patient cell phone do the same. Toge, ¶¶ [0019], [0047]; Ex. 2050 at 55:10-23. This extra step is entirely unnecessary and would add extra time

in Toge's emergency situations. Ex. 2050 at 35:17-36:17, 58:8-59-7 (testifying that the physician remotely adjusts therapy).

20. Second, it is my opinion that a patient's cell phone receiving quantified level of severity/therapy efficacy data, displaying the data to the patient, and adjusting the therapy based on that data was not known in the art. Specifically, during prosecution, the inventors articulated that "[t]here was nothing like this using cellular phones, PAP therapy, cellular systems and the Internet at the time" where "not only the patient but their clinicians [can] be aware of the efficacy of the patient's therapy as presently configured, and to adjust or titrate the therapy efficiently, quickly and remotely." Ex. 1002 at 307-08. Certainly, at the time of filing the invention, only two percent of cell phone subscribers even had a cell phone capable of downloading software necessary for the claimed functionality. Ex. 2052 at 2.

**C. In my Opinion A POSITA Would Not Have Added to Toge's Physician-Focused System a Patient's Cell Phone Downloadable Application to Receive and Display Patient PAP Data (Substitute Claim 30.e)**

21. Toge does not disclose the use of a patient's cell phone and instead mobile phone use in the Toge system is strictly limited to physicians and nurses, as it is disclosed only as a possible embodiment of the mobile terminal 5. Toge, ¶[0019]. Furthermore, in my opinion there was no problem with how patients viewed their PAP data that would have motivated a POSITA to integrate a patient's cell phone with a downloadable application into Toge's system, particularly when

the majority of patients did not have such cell phone capability at the relevant time period.

22. As a preliminary matter, ResMed misreads the claims, which recite that the subject's cell phone must "receive and display the quantified level of severity data and/or therapy efficacy data:"

[F]urther determining therapy efficacy data with either the processor of the PAP or CPAP device, the second processor configured with a second software stored on a computer readable medium at the at least one server or the subject's cellular phone using the first software *further provided to receive and display the quantified level of severity data and/or therapy efficacy data to the subject.*

Ex. 2032, App'x A (claim 30) (emphasis added). Regardless of whether PAP/CPAP "processor," the "second processor," or the "subject's cellular phone" determines therapy efficacy data, the recited patient cell phone "further provided to receive and display the quantified level of severity data and/or therapy efficacy data" is an additional claim requirements. Paper 28 ("Mot."), App'x A. A POSITA would understand based on the claim language that the therapy efficacy data is determined and *then* the patient's cell phone displays the therapy efficacy data/quantified level of severity to the patient. I note that such a display of data for the patient is integral to the claimed invention. Ex. 1002 at 307 ("[t]he present invention allows not only the patient but their clinicians *to be aware of the efficacy* of the patient's therapy as

presently configured.”) (emphasis added). Thus, in my opinion, this additional step is a requirement of the claims, it is not a mere alternative as ResMed suggests. Opp. at 17.

23. It is my opinion that a POSITA would not have modified Toge’s system based on Kumar to arrive at the claim requirement. First, the addition of a patient cell phone so they can view their PAP data would solve a problem that Toge does not have since Toge’s patients can already view data on their PAP machine. A POSITA would appreciate that Toge is a physician-focused system that enables physicians to remotely monitor and provide medical intervention when patients are asleep, and it merely includes a PAP machine with a “traditional screen,” as all machines did, to allow a patient to review their data. Opp. at 14; Toge, Abstract, ¶¶ [0005], [0018].

24. Second, I understand that ResMed’s alleged benefits are a smaller PAP device, adjusting parameters anywhere, later viewing of the data, and increased treatment compliance. Opp. at 11-13, 25. In my opinion, these alleged benefits would not have prompted a POSITA to add a patient cell phone because they require a cellular phone capable of running downloadable applications that only two percent of patient subscribers had. Ex. 2052 at 2. The rest either did not have cell phones or had simple flip phones (dumb phones) capable of only voice conversation and short text messages. 2052 at 2. Because patients lacked cell phones with such

capability, there would not have been a design need or market demand for ResMed listed alleged benefits at the relevant time frame. This is corroborated by the fact that in 2011—roughly six years after the original filing—there still existed a lack of certainty and predictability in integrating patient cellular phone applications into medical device systems. Ex. 2053 at 4.

**D. In my Opinion A POSITA Would Not Have Modified Toge to Include a “Remote Internet Site Hosted on at Least One Server”**

25. Toge does not disclose a “remote internet site hosted on at least one server,” and, in my opinion, a POSITA would not have been motivated to configure Toge’s system with a “remote internet site” as allegedly disclosed in Kumar. *See* Ex. 2032, ¶¶ 33-48. I disagree with ResMed’s experts’ opinions for the reasons that follow.

26. I understand that ResMed and its experts propose two configurations, one where Kumar’s web server could be implemented at “various locations” and another where Toge’s physician-side computer is implemented as the web server. Ex. 2051 at 21:25-24:15; Opp. at 17 (citing Ex. 1072, ¶¶22-26). Neither configuration would have been implemented in Toge.

27. To start, it is unclear what ResMed means when it states that Kumar’s web server configuration can be implemented at “various locations” in Toge’s system. Specifically, the Toge system includes only a PAP device, relay device for sending the data, and physician-side devices. *See* Toge at Cover. While ResMed’s

other configuration provides an exact location, a POSITA would *not* have implemented Toge's physician-side computer as a web server because such arrangement is not suitable for web-based application proposed in the combination. Ex. 1072, ¶26; Ex. 2051 at 24:16-25:20 (discussing the combination's "web-based system[]").

28. More specifically, a POSITA would not have modified a physician's personal computer to operate as web server and client because such arrangements were "not suitable for [] web application[s]." Ex. 2054 at 4. Other record evidence confirms that that this architecture "is rarely used today" because it cannot "take advantage of the distributed computing environment." Ex. 2055 at 4; Ex. 2056 at 3. For example, I understand that in a co-pending IPR proceeding, Dr. Chatterjee testified that a "distributed computing environment[]" means "computing resources and functionality that's distributed and connected by a network" and "allow[s] access to data from different devices." Ex. 2057 at 20:6-20.

29. Also, for security and performance reasons, a POSITA would not have implemented a web server and client on the same personal computer. Separating the user layer and database layer onto different machines is a fundamental security practice for web applications, which is known as the "Separation of Duties" (SoD) principle, and this is particularly apt with respect to web server vulnerabilities. Ex. 2059 at 372-378 (discussing the types of web server vulnerabilities). Because a web

server introduces multiple security vulnerabilities, implementing a system as a multiple tier distributed architecture that embodies the SoD principle ensures multiple defenses to protect sensitive data from cybersecurity attacks. For example, an attacker who gains a foothold through a client-side application might be able to exploit vulnerabilities in the operating system to gain administrative control over an entire machine. Thus, if this machine is also a web server, then the attacker can then access, modify, and/or destroy server data. That is, with a collocation of web client and web server (in violation of the SoD principle), as suggested by Dr. Chatterjee and ResMed, a malicious actor who gains access to the local machine has direct access to both the client and server software and data. *See, e.g.*, Ex. 2060. As another example, a failure of the underlying hardware, operating system, or software on that single machine will cause both the client and server applications to fail simultaneously, which is known in computer security circles as a “Single Point of Failure,” and a POSITA would know that this is also something to be avoided whenever possible. For example, a POSITA would understand that creating an additional single point of failure in the Toge system could result in increased downtime for the application and would be a major risk for the patient monitoring for potentially emergency situations. *See, e.g.*, Ex. 2061.

30. Indeed, a POSITA would recognize that data security is especially critical in Toge’s system, which contains the patients’ personal, sensitive

information and allows physicians to adjust on their machines patients' therapy in real-time. *See* Ex. 2062 at 9 (“hacking to cause intentional harm”); Toge at ¶ [0047] (disclosing that the physician-side devices can remotely adjust the PAP therapy). A POSITA, therefore, would not have implemented Toge's physician-side client computer as a web server in the client-server-based application given the security risks involved.

31. Apart from security, a POSITA would also appreciate that performance is also critical for real-time medical systems that need to respond to patient emergencies, such as disclosed in Toge. Toge at ¶¶ [0019], [0039]-[0042], [0044], [0046]-[0047], [0055]-[0057]. For example, a POSITA would understand that implementing multiple services, such as a web server and the client software on the same machine would create contention for the CPU(s), memory, network bandwidth, and input/output resources on that machine, which would lead to decreased system performance. As shown in a whitepaper discussing “Factors Impacting Scalability,” there are “[s]everal factors must be considered when plans to upscale involve increasing the number of concurrent connections to the server” and that “[t]rying to run a database server on a system that is running competing services, such as a web server, Exchange server, domain server, etc., will risk having those other services steal resources (RAM and CPU time) from the database server, denying Superserver even the 2 Gb that it is capable of using or limiting the number of connections to

Classic, and slowing down database response time.” Ex. 2063 at 1, 3. A POSITA, therefore, also would not have implemented Toge’s physician-side client computer as a web server given the performance reductions that would have ensued.

32. Regardless of the location, a POSITA would not have implemented in Toge’s system a web server, where data is transmitted only upon client request. As I explained in my opening declaration, such implementation would have interfered with Toge’s purpose of pushing crucial data without waiting for a request. Ex. 2032, ¶¶46-48. More particularly, Toge’s purpose of pushing data to physicians in emergencies would have been defeated with the client/server architecture of Kumar where a client (i.e., physician device) must request data using a pull mechanism. *Id.*

33. ResMed’s assertion that “even in a pull system[] data would be effectively ‘pushed’ in real time” finds no support. Opp. at 17. To start, a web server push protocol did not exist at the relevant time period. At the time of the priority date of the ’333 Patent, a POSITA would understand that if a web client wished to get updated data from a web server, the general method would be for the web client to refresh a web page from the web server, which would be implemented with a *new* HTTP request. That is, the web client would need to perform repeated data *pull* actions rather than receiving a single data push from the web server to receive an update. Of course, requiring repeated data pulls instead of a single push would reduce the ability of the Toge system to push urgent patient data to a physician’s

mobile terminal 5 in an emergency. It would not be until after the priority date for the '333 Patent that general web push solutions such as HTTP/2 Server Push<sup>1</sup> and Google Cloud Messaging<sup>2</sup> would be introduced, for instance. For example, in the HTTP/1.1 specification of 1999 (dictating how web servers behave) a web connection could be terminated after a timeout period.<sup>3</sup>

34. Next, I note that Dr. Chatterjee opines that a POSITA could implement a push system for pushing out emergency data in an alleged combination of Kumar and Toge using “standard WebSockets, a well-known concept and technology typically used to implement push notification.” Ex. 1072, ¶31. However, the standard WebSockets protocol did not exist at the relevant time period, as it was introduced several years after the original filing date and Dr. Chatterjee does not provide any evidence that this concept existed as of the priority date for the '333

---

<sup>1</sup> See, e.g., HTTP/2 Server Push,

[https://en.wikipedia.org/wiki/HTTP/2\\_Server\\_Push](https://en.wikipedia.org/wiki/HTTP/2_Server_Push).

<sup>2</sup> See, e.g., Google Cloud Messaging,

[https://en.wikipedia.org/wiki/Google\\_Cloud\\_Messaging](https://en.wikipedia.org/wiki/Google_Cloud_Messaging).

<sup>3</sup> See, e.g., RFC 2616, Hypertext Transfer Protocol -- HTTP/1.1,

<https://datatracker.ietf.org/doc/html/rfc2616>.

Patent. Ex. 1072, ¶ 31; Ex. 2058. Thus, I find Dr. Chatterjee’s suggestion to be anachronistic and not available to a POSITA.

35. At his deposition, Dr. Chatterjee apparently “walked back” his opinion regarding WebSockets and suggested as alternatives “TCP sockets” and “HTTP long polling.” Ex. 2051 at 28:15-32:15. However, both of these suggestions fail, as I explain below.

36. First, with respect to TCP sockets, while it true that this technology existed as of the priority date of the ’333 Patent, a POSITA would understand that the HTTP protocol (used by web servers) and TCP sockets operate at different layers in the OSI networking stack, with TCP operating at the Transport Layer (Layer 4) and HTTP operating at the Application layer (Layer 7). Indeed, a POSITA would understand that HTTP connections are established using TCP connections, not the other way around. By way of analogy, TCP is the “plumbing” for network connections, while HTTP is the specific way you would ask for a glass of water. Thus, a POSITA would understand that a server that is using raw TCP sockets, as Dr. Chatterjee is suggesting, would not be operating in those instances as a web server, e.g., as required in the “browser-based engine/central server” of Kumar that Dr. Chatterjee opines would allegedly be combined by a POSITA with the Toge system. Ex. 1072, ¶¶ 22, 23, 27, 34. Accordingly, this suggestion fails, since it would effectively be replacing the “browser-based engine” of Kumar with an

entirely different type of server, for which there is no evidentiary support as of the priority date of the '333 Patent.

37. Second, with respect to long polling, a POSITA would understand this technique to be a “hack” for getting around the standard way HTTP requests are done—where a client makes an HTTP request, but the web server waits and doesn’t respond right away. A POSITA would understand that the HTTP protocol is not stateful, in that it was built as a request-response protocol, e.g., where a client requests a webpage and a web server responds with the data for that page and then disconnects. Instead, “long polling” effectively uses a loophole in the HTTP protocol, where the web server delays its response until there is new data to send or a timeout expires. Ex. 2051 at 28:15-33:12. A POSITA would understand this to be a “hack,” however, that had many downsides and it would not be a viable implementation technique for the alleged combination of the “browser-based engine” of Kumar and the Toge system. For example, a POSITA would understand that the use of long polling required a web server to keep many more connections open, e.g., waiting for new data to finally respond to the requests that initiated these connections. Such threads would require memory overhead, for example, which a POSITA would understand would degrade the performance and responsiveness of the server. This, in turn, would naturally lead to “zombie” connections, which would be kept alive by a web server but for which a client has long ago closed the browser

or tab that made the request. A POSITA would therefore be aware that to deal with such zombie connections, relatively short timeout windows (30 to 60 seconds) would be required; hence, “long polling” suffers from the same drawbacks as polling solutions do generally, in that they require lots of open connections, which degrade performance. *See, e.g.*, Ex. 2058, Abstract. A POSITA would understand that such performance degradation could lead to delays, which could lead to undesirable outcomes in life-or-death emergency situations, as contemplated by Toge. *See, e.g.*, Toge at ¶¶ [0019], [0039], [0046], [0047], [0055]-[0057]. Accordingly, I conclude that this suggestion of Dr. Chatterjee fails.

38. Finally, I note that Dr. Chatterjee suggests continuously querying the server to “[i]ncreas[e] the ‘pull’ frequency,” but that would not have been done because of these same performance issues and practicality reasons. Ex. 1072, ¶31. Indeed, a POSITA would understand that continuously querying a web server to see if there is any new data, as would be required by increasing pull frequency, would amount to an *abuse* of the HTTP protocol by frequently polling a server for updates as distinct HTTP requests, which is what occurs, for instance, in denial-of-service attacks on web servers. *See, e.g.*, Ex. 2058 at 4 (“1.1 Background”). Moreover, a POSITA would recognize that continuously polling *all* of a physician’s patient PAP devices to see if any of them are in an emergency situation would be a significant waste of network resources and would lead to performance degradation such that the

server could no longer function effectively. Accordingly, a POSITA would not be motivated to combine the web server of Kumar with the Toge system as contemplated by Dr. Chatterjee in this suggestion. Thus, this suggestion of Dr. Chatterjee also fails.

39. Further, ResMed's reliance on Kumar's web server teaching also does not rectify the above issues because even in Kumar's real-time streaming embodiment Kumar still requires the physician to log into the website to request the data. Ex. 1008 at ¶¶ [0089]-[0093], [0140]-[0141] (disclosing a physician logged into a web page), Figs. 5 & 8. Thus, this is still a pull solution, and, for at least the above reasons, a POSITA would not be motivated to modify the push system of Toge to become a pull system as in Kumar. Indeed, the word "push" does not appear in Kumar hence, a POSITA would understand that in Kumar a provider client had to submit pull actions to receive data from the web server. Ex. 1008, ¶¶ [0089]-[0093]. Accordingly, this argument also fails.

#### **IV. CONCLUSION**

40. In view of the foregoing, it is my opinion the contingent substitute claims find written description support and are patentable over the Petition grounds.

41. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and that these statements were made with knowledge that willful false statements and

the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code.

Executed on the 25th day of February 2026 in Irvine, California.



---

Dr. Michael T. Goodrich