UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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TOAST INC.,
Petitioner,

v.

GRATUITY, LLC,
Patent Owner.

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IPR2023-01408
U.S. Patent No. 9,741,050 B2

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PATENT OWNER'S SUR-REPLY
IN RESPONSE TO PETITIONER'S REPLY

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
US Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
Submitted Electronically via P-TACTS

Pursuant to the Board's Scheduling Order of March 27, 2024, (Paper No. 12), Patent Owner Gratuity, LLC ("Gratuity") submits this Sur-Reply in response to Petitioner's Reply ("PR") of September 12, 2024. (Paper No. 16.)

INTRODUCTION

Petitioner's Reply argues, in essence, that because certain cloud-based systems were known at the time of Patent Owner's invention, one of ordinary skill in the art would have found it obvious to modify the entire client-based architecture of Marshall's system to arrive at the invention claimed in the '050 patent. Citing *KSR*, Petitioner argues that a person skilled in the art is "creative," but fails to explain, given the client-side system disclosed by Marshall and the drawbacks recognized with cloud-based systems in 2012 as outlined by Dr. Cullimore, why or how a skilled artisan would have been motivated to create an entirely different cloud-based architecture having all of the limitations claimed in the '050 patent, absent hindsight in view of the '050 patent disclosure.

Petitioner points to purported advantages of cloud-based systems to argue that one skilled in the art would have re-designed the Marshall system to be: (1) a cloud-based system; (2) capable of being scaled for extracting transaction and employee information from multiple different client systems, and communicating that information to; (3) a dedicated cloud-based server separate from any client's business system (POS server); and which (4) maintains each client's individual

gratuity distribution rules for calculating gratuities; and (5) returns those calculations to each individual client. Notably, while Marshall discloses that certain components of its system may be modified, it never suggests that its overall client-side architecture should be fundamentally redesigned to include the specific components claimed in the '050 patent in a cloud-based architecture. Such a drastic overhaul of Marshall's client-based system was neither obvious at the time, nor reasonably likely to be successful, for the reasons Dr. Cullimore noted in his Declaration (Ex. 2006). Simply because other cloud-based systems were known, and even if they offered certain advantages alleged by Petitioner, they still suffer from numerous drawbacks—especially at the time of the invention, as Dr. Cullimore explained in his Declaration. (*Id*. at 25-27.) Indeed, Petitioner's expert, Dr. Russ, acknowledged during his deposition that a cloud-based system would not be obvious for all client-based systems. (Ex. 2008, 10/7/24 Russ Tr. at 4:7-21.)

Further, as Patent Owner set forth in its Response, the motivation to overhaul Marshall as suggested by Petitioner is not supplied by Marshall alone, or in combination with either Webb or Phillips. (Paper. No. 14 at 27-44.) Absent hindsight in view of the '050 patent disclosure, one of ordinary skill in the art would not have found it obvious to modify Marshall, whether alone or in combination with the Phillips or Webb references, to arrive at the specific arrangement of components in the cloud-based system claimed in the '050 patent.

Accordingly, for the reasons set forth herein and in Patent Owner's Response, the Board should confirm the patentability of the challenged claims over the art cited by Petitioner, whether alone or in combination.

ARGUMENT

As an initial matter, Petitioner faults Patent Owner for pointing out the Board's discounting of the original prosecution history of the '050 patent, where the original Examiner considered, and issued the '050 patent over, the same art of record. However, Patent Owner maintains that the Board erred in this regard by ignoring the Federal Circuit's *Phillips* legal framework regarding claim construction, and accepting Dr. Russ' extrinsic evidence that is clearly at odds with the intrinsic record set forth in the prosecution history. (Paper No. at 11-18.) Because the Board's claim construction is legally erroneous in view of *Phillips* and factually erroneous in view of the intrinsic record, the Board's validity analysis is fundamentally unsound, and the patentability of the challenged claims should be confirmed.

GROUND 1: Claims 1-3, 8 and 10 are Not Obvious in View of Marshall Because Marshall's System Is <u>Not</u> a Remote Gratuity Management System As Petitioner Contends.

Contrary to Petitioner's contentions, (Paper No. at 4-8), Patent Owner has considered Marshall as a whole and, as Marshall itself notes, it is ***not*** a remote gratuity management system as claimed in the '050 patent. Marshall teaches

calculation of gratuities using software that is executed at the client-side system as shown in Figure 3. And while Marshall details various modifications that can be made to its client-side system—including Web-based connection through the Internet—such connectivity would not transform Marshall into a "remote gratuity management system" as disclosed and claimed in the '050 patent.

As Patent Owner noted in its Response, (Paper No. 14 at 18-26), Marshall expressly discloses that such connectivity only allows a client to either: (1) upload any gratuity calculations made at the client to an IS (*e.g.*, POS server), or (2) download sales information from an IS or a business establishment's ***tip and gratuity management system*** to his or her home computer for calculation of gratuities at the client. (Ex. 1004 at ¶103 (emphasis added).) Thus, to the extent Marshall discloses any "tip and gratuity management system," it is separate and apart from the client-side system of Figure 3 where the actual software for calculating tips and gratuities resides. As Patent Owner noted in its Response, Marshall's architecture is the exact opposite of the system claimed in the '050 patent, which extracts transaction and employee information from individual clients and communicates it to a remote, dedicated gratuity management system where each client's information is used to calculate gratuities based on gratuity distribution rules maintained at the remote server tailored to each client's specific needs or requirements.

If, as Petitioner contends, Marshall's system were a remote cloud-based gratuity management system as disclosed and claimed in the '050 patent, then Marshall could have simply disclosed such a system architecture just as the '050 patent does, with a remote gratuity management system that obtains such individual client transaction and employee information from each client, and sends that information to a cloud-based management system, where a dedicated non-POS server performs gratuity calculations based on each client's individualized gratuity distribution rules maintained at that dedicated cloud-based server. But that is not the architecture Marshal discloses, despite having every opportunity to do so, indicating that such a modification was ***not*** suggested by Marshall and certainly not obvious. Thus, despite the teachings relied upon by Petitioner, when considered as a whole Marshall does not suggest reconfiguring its client-based system as a remote gratuity management system as claimed in the '050 patent for the reasons set forth in Patent Owner's Response (Paper No. 14 at 18-26.)

Marshall Does Not Disclose A Remote Gratuity Management Server That Determines Gratuities Separate From the Client Business System/POS

Similarly, as Patent Owner also noted in its Response, (Paper No. 14 at 29-35), and again contrary to Petitioner's Reply, Marshall does not disclose a cloud-based server, separate from any client's POS server or business system, which performs the gratuity calculations for multiple clients with individualized gratuity

distribution rules. While Marshall discloses connection to a Web-based system, the gratuity calculations are still made at the client as set forth previously. At best, Marshall discloses reporting gratuity calculations made at a client to a Web-based system and, despite recognizing Web-based connectivity, does not disclose reconfiguring the client-based gratuity software to execute on a separate cloud-based management system server, separate from each client's POS system.

Dr. Russ Agrees That Some Cloud-Based Systems Would *Not* Have Been Obvious In 2012

Dr. Russ agreed during his deposition it would not have been obvious to make any client-side system a cloud-based system in 2012. (Ex. 2008, 10/7/24 Russ Tr. at 4:7-21.). Indeed, literature at the time suggests that the concerns raised by Dr. Cullimore prevented many companies from adopting cloud-based systems. (*See, e.g.,* Ex. 2009, https://www.computerworld.com/article/1470815/moving-to-the-cloud-in-2012-look-out-for-these-pitfalls.html; Ex. 2010, https://techcrunch.com/2012/04/08/what-the-cloud-doesnt-do/). Accordingly, one skilled in the art in view of Marshall's teachings would not have found it obvious to re-configure Marshall's client-based system based merely on other companies' use of cloud architecture for precisely the reasons Dr. Cullimore outlined.

GROUND 2: Marshall and Webb Combined Do Not Render Claims 4-7, 9, and 11-13 Obvious

For essentially the same reasons set forth above, nothing in Webb provides any further motivation to re-configure Marshall to be a cloud-based system. Here again, while Petitioner argues that cloud-based systems and their advantages were known to those skilled in the art, that does not explain how one would arrive at the '050 patent, absent hindsight. (Paper No. 14 at 41-42.) Petitioner argues that Patent Owner waived arguments in its Response, but Patent Owner addressed Petitioner's arguments that the Webb reference would have supplied a person skilled in the art with the motivation to modify Marshall to include all of the limitations of the cloud-based gratuity managements system as set forth above regarding Marshall alone. And, because Marshall does not teach or suggest each and every limitation of the challenged claims, as set forth above and in Patent Owner's Response, (Paper No. 14 at 18-26), nothing in Webb can "cure" the deficiencies of Marshall. There is no waiver, just simply no motivation to combine Marshall and Webb which, even if combined, do not teach or suggest each and every limitation of the challenged claims.

GROUND 3: Phillips and Marshall Combined Do Not Render Claims 1-3, 8 and 10 Obvious.

For essentially the same reasons set forth above for Ground 2, nothing in Phillips provides the requisite motivation to re-configure Marshall to be a cloud-

based system. Here again, while Petitioner argues that cloud-based systems and their advantages were known to those skilled in the art, but that does not explain how one would arrive at the '050 patent, absent hindsight. (Paper No. 14 at 42-44.) Petitioner again argues that Patent Owner waived arguments in its Response, but Patent Owner fully rebutted Petitioner's arguments that the Phillips reference would have supplied a person skilled in the art with the motivation to modify Marshall. As before for Ground 2, because Marshall does not teach or suggest each and every limitation of the challenged claims, as set forth above and in Patent Owner's Response, nothing in Phillips can "cure" the deficiencies of Marshall. Again, there is no waiver, just no motivation to combine Marhsall and Phillips which, even if combined, still do not teach or suggest the cloud-based gratuity management system of the '050 patent, absent hindsight.

CONCLUSION

For these reasons, as well as those in Patent Owner's Preliminary Response, the Board should confirm the patentability of the challenged claims.

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on October 10, 2024, the foregoing document is being served via electronic mail upon the following counsel of record for Petitioner:

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