

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TOAST INC.,

Petitioner,

v.

GRATUITY, LLC,

Patent Owner.

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

**PATENT OWNER'S RESPONSE TO
THE BOARD'S DECISION GRANTING INSTITUTION**

Under 37 C.F.R. § 42.120

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Patent Trial and Appeal Board
US Patent and Trademark Office
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TABLE OF EXHIBITS

Exhibit	Description
2006	Declaration of Dr. Ian Cullimore In Support of Patent Owner's Response To The Board's Decision Granting Institution of Inter Partes Review
2007	Transcript excerpts from Dr. Russ' May 31, 2024 Deposition

Pursuant to 37 C.F.R. § 42.120 and the Board’s Scheduling Order of March 27, 2024, (Paper No. 12), Patent Owner Gratuity, LLC (“Gratuity”) submits the following Patent Owner’s Response to the Board’s Decision Granting Institution, dated March 27, 2024. (Paper No. 11, “Institution Decision”).

I. INTRODUCTION

On September 18, 2023, Petitioner Toast filed its Petition for *Inter Partes Review* against U.S. Patent No. 9,741,050 (“’050 Patent”). On March 27, 2024, the Board issued its Institution Decision listing the following four Grounds for review:

Ground	Claims Challenged	35 U.S.C.	References
One	1-3, 8, 10	35 U.S.C. 103	Marshall
Two	4-7, 9, 11-13	35 U.S.C. 103	Marschall [sic] in view of Webb
Three	1-3, 8, 10	35 U.S.C. 103	Phillips in view of Marshall
Four	4-7, 9, 11-13	35 U.S.C. 103	Phillips in view of Marshall and Webb

(Paper No. 11 at 5.) The Board further states that “we institute an inter partes review of all challenged claims (i.e., claims 1-13).” (*Id.* at 26.) At the same time, however, the Institution Decision states “[a]s Petitioner’s evidence adequately establishes for purposes of institution that these features would have been obvious

from Marshall's teachings, Phillips and/or Webb need not be relied upon to disclose the allegedly missing features." (*Id.* at 27.)

Patent Owner hereby traverses each and every Ground raised in the Institution Decision, whether based on Grounds One to Four as originally asserted in the Petition, or based on Marshall alone, as the Board now indicates. As set forth below, Marshall does not teach or suggest several key claimed elements in the '050 patent, and one of ordinary skill in the art would **not** have found these features obvious in view of Marshall (or the combinations of Grounds 2-4) at the time of the inventions, as evidenced by the teachings of Marshall itself and as recognized by the Examiner during the original prosecution of the application that led to the '050 patent.

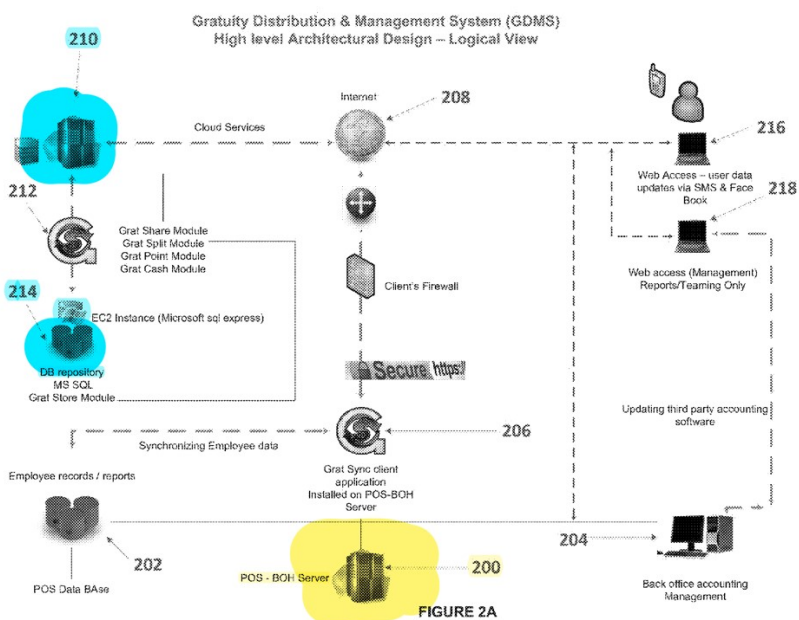
Respectfully, Petitioner's analysis of Marshall relied upon by the Board, whether alone or in the combinations set forth in the Petition Grounds 2-4, ignores fundamental differences between Marshall's client-side system architecture versus the cloud-based gratuity management system of the '050 patent. Further, Petitioner and the Board apply the wrong standard for obviousness, substituting Dr. Russ' hindsight analysis for actual contemporaneous motivation to totally re-imagine Marshall's client-side system into a cloud computing system—which the original Examiner properly concluded was **not** obvious in view of the same prior

art of record. As set forth more fully herein, Patent Owner respectfully traverses all grounds of rejection set forth by Petitioner and the Board.

II. BACKGROUND

A. The '050 Patent

The '050 patent is directed to a cloud-based gratuity management system that is remote from a plurality of client business systems, each of which are in communication with the remote management system's server. (Ex. 1001 at 22:39-64.) Figure 2A of the '050 patent illustrates the inventive architecture and the components that are specifically claimed in the independent claims, including a client business system having a point-of-sale server ("POS Server") **200** and associated database, and a remote, cloud-based management computing system having a separate server/processor **210/212** and a database **214**:



(Ex. 1001 at Fig. 2A.)

As the Board correctly notes in its Institution Decision, the '050 patent addresses problems associated with gratuity distributions in different industries, including manual systems used by clients locally that failed to share information effectively, (*id.* at 1:36-39), as well as differences in customs, practices, and regulations amongst different industries regarding gratuities that often resulted in different gratuity allocation rules for different clients. (Paper 11 at 3.)

The '050 patent addresses these and other issues through use of a cloud-based gratuity management system having a remote server and database, where the database stores: (1) gratuity distribution rules established individually by each client depending on the particular needs within their industry; and (2) information extracted and sent *from* each remote client business system, including transaction information and/or employee information used to determine gratuity allocations. (Ex. 1001 at 5:14-27; 7:44-64.) The cloud-based gratuity management system is configured to determine gratuity allocations on a client-by-client basis by applying each client's stored gratuity allocation rules to transaction information and/or employee information extracted and sent from each client business system's interface component. (*Id.* at 5:14-27; 8:46-57.)

By structuring the gratuity management system in this manner, each client can tailor its own gratuity distribution rules, as well as determine which specific employee and/or transaction information to extract and send *to* the remote

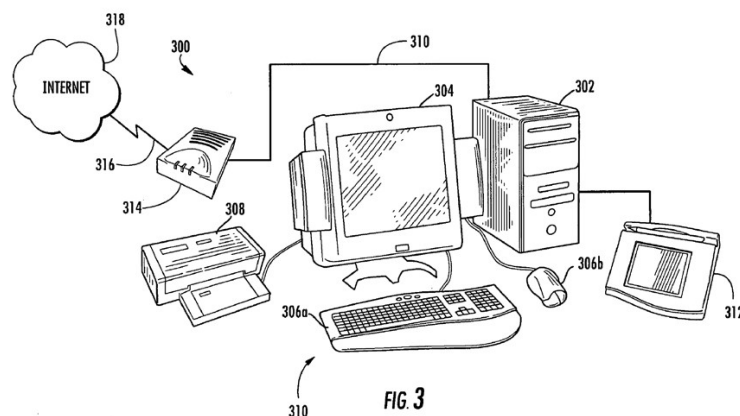
management system, based on that client's specific needs or industry requirements. Separately, the remote management system obtains and stores the information extracted and sent *from* each client, performs the actual gratuity allocation determinations for each client independently, and then provides the specific gratuity information back *to* each client business system. (Ex. 1001 at 5:14-27; 6:15-21; 7:44-64.)

None of the prior art cited in this IPR teaches or suggests such a cloud-based gratuity management system as disclosed and claimed in the '050 patent, whether alone or in the combinations of Grounds 2-4 of the Petition.

B. Overview of the Prior Art

1. U.S. Patent Application Publication No. 2008/0065396 to Marshall (Ex. 1004)

Marshall teaches a client-based system as shown in Figure 3:



(Ex. 1004 at Fig. 3.) Marshall teaches that its client-side system of Figure 3 includes a processing unit **302** “capable of executing an algorithm and storing data may be substituted”:

[0097] Turning now to FIG. 3, and exemplary embodiment of a simplistic system for implementing the systems and methods of the present invention is depicted. System **300** includes processing unit **302**, printing device **308**, user interface **310** (i.e., monitor **304**, first user interface device **306a**, and a second user interface device **306b**), and signature device **312**.

(Ex. 1004 at ¶0097.) Marshall further discloses that its “Gratuity Reporting and Tip Allocation Software” resides on the client-side system shown in Figure 3:

[0105] Turning next to FIGS. 4 through 25, depicted are processes and exemplary reports of one embodiment of the present invention. This exemplary embodiment will be referred to herein as Gratuity Reporting and Tip Allocation Software (“GrataSoft”). In this exemplary embodiment, the processes and reports depicted in FIGS. 4 through 25 are implemented as software and software generated reports, respectively, which operate on or are created by a system such as those discussed in greater detail above with respect to FIG. 3.

[0106] Referring to FIG. 4, depicted in process **400**, which is an overview of the exemplary GrataSoft embodiment of the present invention. Process **400** begins at **402**, wherein a user enables the system upon which the GrataSoft software is executed. For example, when GrataSoft is operated on a system such as those described in greater detail with respect to FIG. 3, such enabling may include energizing processing unit **302**, monitor **304**, and, optionally, printing device **306**.

(Ex. 1004 at ¶¶0105-0106.)

To the extent Marshall teaches connecting its client-side system of Figure 3 to the Internet, it only teaches that such connectivity allows “receiving input from a user and/or providing output (e.g. reports) to a user via the Internet connection.”

(Ex. 1004 at ¶0102.) Marshall does not teach or suggest that its Gratuity Reporting and Tip Allocation software is ever installed anywhere other than the “local processing unit” *at the client-side system* of Figure 3:

[0107] At 404, process 400 determines whether the GrataSoft system is set to automatically load sales data. If no, process 400 proceeds to 408. If yes, process 400 proceeds to 406, at which the GrataSoft system will query its existing data set to determine whether it is up to date. If it is not, it will automatically download all missing data. Such data may include non-cash sales, cash sales, non-cash tips and gratuities, and the like, which may be downloaded or uploaded to local processing unit such as processing unit 302 from an IS.

(Ex. 1004 at ¶0107.)

2. U.S. Patent Application Publication No. 2014/0365322 to Phillips (Ex. 1005)

Phillips is directed to a system for tip monitoring, collection, distribution, and reporting. (Ex. 1005 at Abstract.) The system disclosed in Phillips is illustrated in Figure 1:

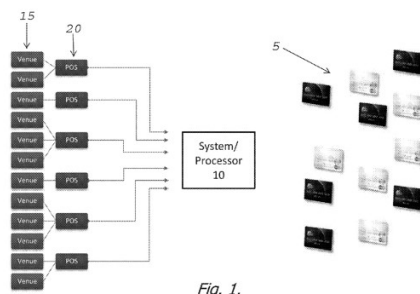


Fig. 1.

(Ex. 1005 at Fig. 1.) As Phillips explains, employee information is maintained on point-of-sale (POS) servers from which tips are calculated.

[0070] The invention preferably reduces the risk of human error in documenting and processing tips and related payments. As mentioned above, for restaurants already using POS systems **20** that track tips, preferred embodiments of the invention can use that data (from the existing POS system **20**) within the invention's other functions (e.g., calculating and paying tips, tip-funding, reporting, etc.). In such cases the invention still preferably identifies the employee and the amount of tips they earned, and calculate the shift and team to which they belong, and calculates the tip amounts that are due to each server and downstream employee. The system of the invention can also be integrated even more directly into the POS system **20**, to automatically populate the data into the invention, avoiding the need to enter it manually.

(Ex. 1005 at ¶0070.)

As Phillips discloses, the processing of tips is conducted by the employee's point-of-sale POS server, and not a remote, cloud-based gratuity management system. (*Id.*) To the extent Phillips teaches a system processor (**10**), that processor is disclosed as a third-party payment processor, and does not receive extracted

employee information and/or transaction information, or apply gratuity distribution rules to such extracted information on a client-by-client basis:

[0114] 2. The relevant manager or other person within the business (such as the shift manager at the actual venue/restaurant involved) can select an option within the software to indicate that they will wire the funds directly to a third party who is functioning as the System/Processor **10** (See FIG. **1**), for a “same day load” (meaning, the funds are expected to be paid out in tips later on the same day that the wire transfer is to occur). Preferably, this action by the shift manager (or other person) send to the third party (System/Processor **10**) an “instant” notice of some type (email, text, voice call, facsimile, etc.) that a wire transfer will be sent shortly to account of the System/Processor **10**. Once the System/Processor **10** has confirmed receipt of that wire transfer, the System/Processor **10** will complete the tip payment request, funding the MTFA **35**.

(Ex. 1005 at ¶0114.)

3. U.S. Patent No. 4,819,162 to Webb (Ex. 1006)

Webb is directed to a computerized “time clock” system designed to accurately track and log employee time and sales records for a given business by establishing various files at a client’s business:

The present invention provides a personal computerized time clock system wherein employee records, sales records and scheduling records are maintained in a personal computer (preferably the IBM TM PC) and wherein a remote computerized time clock interfaced with the personal computer is utilized by employees for time-in and time-out transactions. According to one aspect of the invention the computerized time clock includes computer means

having input keyboard means, output printer means, output display means and memory means. A real time clock means is included in the time clock and is used for maintaining the current time and date. The memory means holds a digital file indicative of valid employee codes, time-in and time-out times for scheduled employees, valid job codes indicative of what job the employee is scheduled to perform, the employee name associated with each of employee codes and time record files of time-in and time-out transactions recorded on the time clock.

(Ex. 1006 at 1:40-61.) While Webb's client-based system is disclosed as being able to create files that track employee jobs or tasks that may have tips associated with them, Webb merely discloses that the files have "tip codes" that distinguish only between jobs that have tips associated with them versus those that do not:

Each record in the JOB FILE 52 contains a four digit job code number which corresponds to a given job in a facility, for example a waiter, bartender, receptionist, bus boy etc. Associated with the job code number is a department name, the rate per hour for the job, and a tip code, which is either a "0" or a "1", designating whether or not tips are normally received in connection with the job.

(Ex. 1006 at 4:23-41.) Webb does not teach or suggest a remote, cloud-based gratuity management system that receives extracted transaction information and/or employee information from a client business system, and applies client-specific gratuity distribution rules to calculates gratuities on a client-by-client basis as claimed in the '050 patent.

III. THE LEVEL OF ORDINARY SKILL IN THE ART

In its Institution Decision, the Board adopted the definition of a “POSITA” as urged by Petitioner. (Paper No. 11 at 17-18.) Patent Owner maintains that the relevant technical field for the asserted patents covers computer hardware and software, and that a person of ordinary skill in the art (“POSITA”) in this technical field on September 4, 2012, would have had a Bachelor of Science in computer science, computer engineering, electrical engineering, or similar major with at least two years of experience related to research, evaluation, design, development, testing, etc. of computer hardware and software. (Ex. 2006, Cullimore Decl. at ¶26.)

IV. CLAIM CONSTRUCTION

As the Board correctly notes, claims in a post-grant review are construed using the same claim construction standard as in a civil action. 37 C.F.R. § 42.100(b). Under this standard, claims terms are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art (“POSITA”) at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (*en banc*). But claims are not read in a vacuum—a POSITA is deemed to read the claim term in the context of the entire patent, including the specification and prosecution history. *Id.* at 1313-1316.

Importantly, the Federal Circuit has cautioned that “a court should discount any expert testimony ‘that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent.’” *Phillips*, 415 F.3d at 1318.

The Federal Circuit has explained:

We have viewed extrinsic evidence in general as less reliable than the patent and its prosecution history in determining how to read claim terms, for several reasons. First, extrinsic evidence by definition is not part of the patent and does not have the specification’s virtue of being created at the time of patent prosecution for the purpose of explaining the patent’s scope and meaning.

Third, extrinsic evidence consisting of expert reports and testimony is generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in the intrinsic evidence.

(*Id.*) Thus, to the extent the litigation-driven opinions of Petitioner’s expert, Dr. Russ, conflict with the intrinsic evidence—and in particular the original Examiner’s understanding of the scope of the claimed invention as applied to the same prior art cited during prosecution—the Board’s reliance upon those opinions is misplaced. (Paper No. 11 at 14-17.)

Specifically, citing to Exhibit 1008 at 430-433, the Board states in its Institution Decision:

The prosecution history does not sufficiently show that the Examiner considered Marshall, Philips (sic), or

Web (sic), or the combinations of these references asserted in the Petition, with respect to the claims that issued as the '050 Patent. In particular, the Examiner asserted as Reasons for Allowance that the prior art did not teach

wherein the payment management system is further configured to execute, independently for each client, payment distribution rules based on at least the received based on at least the received extracted information and the independently configured payment distribution rules to generate payment information and return the payment information to the interface component of respective client business systems, without requiring the respective client business systems to execute the payment distribution rules

in combination with the other limitations of original independent claims 30 and 39 (i.e., issued claims 1 and 8). Ex. 1008, 430-433. On this record we determine that the Examiner erred because as shown in the Petition, Marshall and Phillips (sic) in combination with Marshall teaches this limitation.

(Paper No. 11 at 16.) Further, the Board states that the original Examiner “did not have the benefit of Dr. Russ’ testimony,” (*id.* at 17), and that thus accepts Dr. Russ’ opinions on what the Examiner considered versus the actual intrinsic prosecution history.

Respectfully, the Board’s conclusions are clearly erroneous, and contrary to *Phillips*, as the prosecution history itself shows that the Examiner understood the scope of the combined elements of the '050 patent as not being taught in the prior art—and in particular Marshall and Phillips—which were considered extensively

by the Examiner during prosecution, both individually and in combination, and were applied by the Examiner in numerous different rejections under 35 U.S.C. ¶103 over several different Office Actions.

For example, the Examiner cited Marshall as teaching a number of items, including to show “that it is well known for processing resources/processors/servers to be embodied as and include: a single system, a multi system (co-located or distributed), cloud computing system, or a combination of the above.” (Ex. 1008 at 215.) The Examiner also found Marshall, in combination with other references, disclosed multiple employers/employees having different tipping policies. (Ex. 1008 at 218.) Ultimately, however, the Examiner allowed the properly interpreted claims to issue over the prior art of record. (Ex. 1008 at 214-218; 221-225; 278-282; 328-329; 333-342.)

Dr. Russ opines that the Examiner erred by failing to consider the Marshall and Phillips prior art with respect to “later introduced claims (30-33, 36-39, and 41-45 that subsequently issued as claims 1-13 of the ’050 patent.” (Ex. 1002 at ¶¶77-80.) But this is demonstrably false. In its Request for Continued Examination dated January 15, 2016, the applicant added new system claims 30-32, and argued that these claims were patentable over the prior art cited by Examiner in the Final Office Action of October 16, 2015—including both the Marshall and Phillips references. (Ex. 1008 at 221-225 and 227-228.) Notably, in

the next Office Action, dated February 22, 2016, the Examiner expressly noted that applicant's arguments regarding the prior art "were considered." (Ex. 1008 at 265.)

Tellingly, while the Examiner did **not** reject newly added system claims 30-32 based on either the Marshall or Phillips, the Examiner continued to apply both Marshall and Phillips. Specifically, the Examiner maintained the obviousness rejections of application claims 7, 8 and 17 over the combination of Kessler, Delaney, and **Marshall**. (*Compare* Ex. 1008 at 278 *with* Ex. 1008 at 285.) Similarly, the Examiner maintained the obviousness rejection of application claims 10-12 over the combination of Kessler, Delaney, and **Phillips**, yet the Examiner never opted not to make any rejection based on Phillips with respect to the newly added system claims 30-32. (Ex. 1008 at 280.) Thus, the prosecution history clearly demonstrates that the original Examiner did consider the prior art against newly added claims 30-32—including the Marshall and Phillips references—but determined not to make any rejections against claims 30-32 based on either reference, despite doing so for other claims.

Application claims 37-42, were added in an amendment of April 7, 2017, (Ex. 1008 at 399-409), are similar in scope to claims 30-32, and were argued by Applicant to be patentable over the prior art, including Marshall. (Ex. 1008 at 402-403.) Thereafter, the Examiner entered an Examiner's Amendment and indicated

that *all* of the claims were considered and found patentable over the art of record, including Marshall, Phillips, and Webb:

The examiner notes the cited limitations above in combination with the other limitations found within the independent claims are found to be allowable over the prior art of record. Claims 31-33, 36-38 and 41-45 each depend from one of allowable claims 30 and 39, and therefore claims 31-33, 36-38 and 41-45 are allowable for reasons consistent with those identified with respect to claims 30 and 39.

(Ex. 1008 at 432.)

During his deposition, Dr. Russ confirmed that his opinion was based on the notion that Marshall and Phillips were not *actually applied* to the newly added claims, but this logic is completely circular. It would allow any Petitioner to simply assert that the Examiner “failed” to consider art when the Examiner *actually considered it but chose not to apply it*. Indeed, Dr. Russ admitted that it was possible that the Examiner considered Marshall and Phillips with respect to applicant’s amended claims:

Q: So it could be that the examiner considered them, but he considered the references overcome by applicant’s statements and, therefore, did not discuss them further. That is a possibility. Correct?

A: Well, I mean, I suppose a theoretical possibility. But I find it very telling that there was a time when Marshall and Phillips were applied and then the claims changed, So it looks to me like that they weren’t – they weren’t applied in connection with

the new claims, and therefore, they need to be studied now.

(Ex. 2007, Dep. Tr. of Russ at 17:4-15; *see also* 13:6-15:8; 17:16-19:13.) Here, this is more than merely a theoretical possibility; the prosecution history detailed above demonstrates that the Examiner considered the art, and maintained rejections based on Marshall and Phillips against certain claims, yet opted not do so with respect to the claims that issued as claims 1-13. Dr. Russ admits as much in his Declaration. (Ex. 1002 at ¶79.)

Further, the Examiner added the language “a cloud computing system remote from the plurality of client business systems” to independent issued claims 1 and 8 (application claims 30 and 39) via Examiner’s Amendment, filed concurrently with the Notice of Allowance that issued on June 7, 2017. (Ex. 1008 at 425, 427.) In the Reasons for Allowance, the Examiner expressly stated “the inventive concept is found in the non-conventional and non-generic arrangement of the additional elements, *i.e. the installation of a gratuity sync client application/interface component on client business systems which extracts and transfers specific information to a gratuity management system/payment management system remote from the client business system configured to*

independently execute gratuity/payment distribution rules on a client-by-client basis.” (Ex. 1008 at 429-430.)¹

The Institution Decision seemingly ignores this Examiner’s Amendment and focuses solely on a single isolated portion of the Reasons for Allowance. (Paper No. 11 at 16.) But as the Examiner expressly noted, it is the ***combination*** of all limitations—not just the one limitation the Board focuses on—that rendered the claims allowable over the prior art of record, including Marshall, Phillips, and Webb. (Ex. 1008 at 432.) Accordingly, Patent Owner maintains that Petitioner’s and Dr. Russ’ characterization of the prosecution history, and in particular adoption of claim constructions that fail to acknowledge key claimed features of the ’050 patent, is at odds with the scope of the claims as understood by applicant and the original Examiner throughout the prosecution history. The original Examiner did not err, but rather considered all of the art of record as shown in the prosecution history, and correctly determined that the prior art did not render the issued claims 1-13 obvious under the proper claim construction. As such, the Board’s conclusion that the Examiner erred is not supported by the intrinsic record.

V. ARGUMENT

A. Petitioner Has Failed to Meet Its Burden Under 35 U.S.C. § 316(e)

1. Ground 1: Claims 1-3, 8, and 10 Obvious over Marshall

¹ Emphasis added by Patent Owner unless indicated otherwise.

The Board’s Institution Decision states that “Petitioner asserts claims 1-13 are unpatentable over Marshall.” (Paper 11 at 19.) The Petition, however, asserts only that claims 1-3, 8, and 10 are unpatentable over Marshall. Regardless, the Board cites to claim 1 of the ’050 patent as illustrative, and indicates that its analysis is applicable as against claims 1-13. Patent Owner hereby respectfully traverses the Board’s conclusions regarding each of the following claim terms.

a. “gratuity management system”

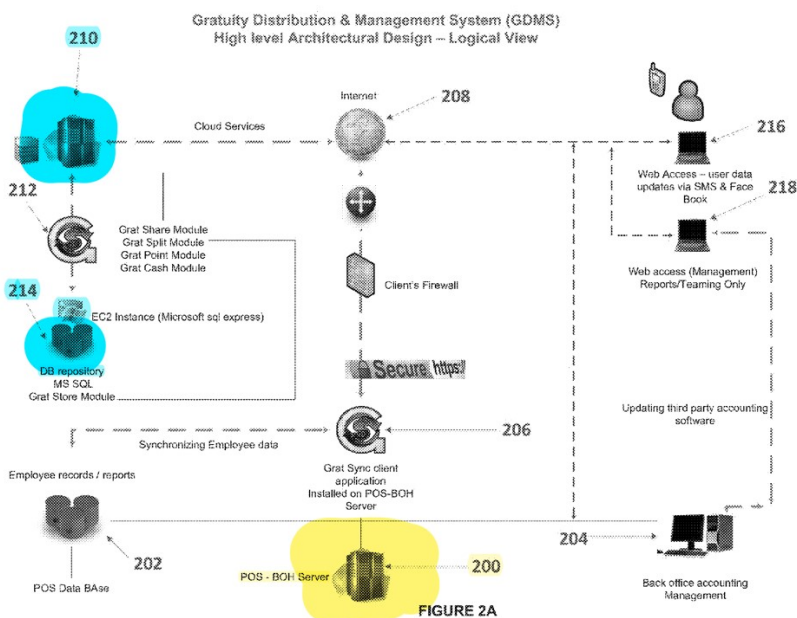
The Board indicates that for purposed of institution, “Petitioner adequately establishes that Marshall would have suggested the claimed features to a POSITA.” (Paper 11 at 20.) Patent Owner respectfully submits that, not only does Marshall *not* disclose a “gratuity management system” as that term is claimed and as properly understood in light of the ’050 patent specification and prosecution history, the system disclosed by Marshall is expressly designed for client-side processing—precisely the opposite of the system claimed in the ’050 patent. The Board and Petitioner’s reliance on Marshall’s teachings, as well as Petitioner’s Declarant, Dr. Russ, are misplaced for several reasons.

(1) The Board Misapprehends The ’050 Patent’s Gratuity Management System

A fundamental aspect of the ’050 patent, as claimed, disclosed, and elaborated upon by the Examiner during the original prosecution history, is that the

claimed “gratuity management system” is not simply a client system connected the Internet as shown in Marshall Figure 3, as both Petitioner and the Board suggest. (Paper No. 11 at 20.) The ’050 patent expressly claims that the remote gratuity management system must be “configured to independently execute gratuity distribution rules on a client-by-client basis” based on gratuity distribution rules stored in a “cloud computing system remote from the plurality of client business systems.” (Ex. 1001 at 22:39 and 22:58-23:8.)

These express claim elements demonstrate critical differences between prior art client-side processing of tips versus the inventive remote, cloud-based gratuity management system disclosed in the ’050 patent that stores information extracted from a plurality of client business systems, and applies client-specific distribution rules stored by each client depending on each client’s preferences or requirements.



Referring now to FIG. 2A, a logical view of a gratuity management system is illustrated. A client, such as a restaurant, may have a server **200** and a database **202** for storing transaction information and employee information, as well as a back office accounting management system **204** that handles accounting and payroll functions. In embodiments, the gratuity management system includes an interface component **206** that integrates with the business's systems to extract the transaction information and employee information to be used in determining the gratuity allocations. The example of an interface component **206** in FIG. 2A is labeled "Grat Sync Client Application" and is indicated as being installed on server **200**.

In an embodiment, the interface component **206** extracts transaction and employee information and creates a computer-readable file containing at least a portion of the transaction information and the employee information for use by the gratuity management system. The computer-readable file is communicated to the database **214** and stored for use by the processor **212** in determining the gratuity allocations for each of the employees. The computer-readable file may be

(Ex. 1001 at 5:44-64.) As this excerpt clearly states, in the system disclosed and claimed in the '050 patent, the gratuity distribution rules and the employee information and/or transaction information extracted from each client are stored in the remote gratuity management system database, and the determination of gratuity allocations is made at the remote server, and **not** the client-side business systems. Indeed, as noted previously, during original examination of the application that matured into the '050 patent, the Examiner set forth in the Reasons for Allowance why such a cloud-based remote gratuity management system is patentable over the same art of record:

REASONS FOR ALLOWANCE

3. Claims 30-33, 36-39 and 41-45 are allowed as amended/presented above and claims 1-29, 34, 35 and 40 are cancelled. The following is an examiner's statement of reasons for allowance:

Applicant's remarks filed in the Reply and Amendment ("Response") 7 April 2017 are compelling and commensurate with both the original disclosure and the claims as amended. Similar to *Bascom*, the inventive concept is found in the non-conventional and non-generic arrangement of the additional elements, i.e. the installation of a gratuity sync client application/interface component on client business systems which extracts and transfers specific information to a gratuity management system/payment management system remote from the client business system configured to independently execute gratuity/payment distribution rules on a client-by-client basis. Further, similar to *Amdocs*, the present claims purposefully arrange the components in a distributed architecture to achieve a technological solution to a technological problem

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Art Unit: 3627

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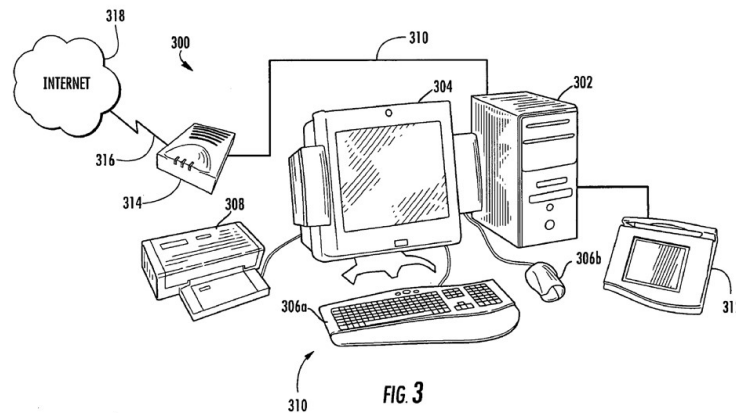
specific to certain computer networks (Response: pgs. 8 and 9). The prior art of record neither anticipates nor supports a conclusion of obviousness with respect to the allowable subject matter which is present in independent claims 30 and 39:

(Ex. 1008 at 429-430.)

(2) Marshall Discloses Client-Side Tip Calculations

Marshall, which undisputably was of record and considered during original prosecution, nowhere teaches or suggests the claimed allocation of gratuities, on a client-by-client basis, using gratuity distribution rules stored at the remote cloud-based gratuity distribution system and applying them to employee and/or transaction information extracted *from* the individual client business systems and provided *to* the remote cloud-based management system. Instead, by design, Marshall's system calculates gratuities locally at the client using the Gratuity

Reporting and Tip Allocation Software “which operate on or are created by a system such as those discussed in greater detail above with respect to FIG. 3.” (Ex. 1004 at ¶105; Ex. 2006, Cullimore Decl. at ¶¶69-70.) As noted previously, Marshall’s Figure 3 shows the client-side system designated a **300**, and which includes various components:



(Ex. 1004, Fig. 3.) While Marshall indicates that some of these components may be varied, (*id.* at ¶¶97-100), nowhere does Marshall indicate the Gratuity Reporting and Tip Allocation Software is installed anywhere but the client-side system of Figure 3. (Ex. 2006, Cullimore Declaration at ¶73.)

To the extent that Marshall teaches Internet connectivity, it does so with respect to such tasks as obtaining and downloading information files having specific formats *from* a client’s POS server *to* a client, such as Marshall Figure 3, where the tips are then calculated at the client-side. (Ex. 1004 at ¶¶107, 109.) The system disclosed in Marshall is structured and operates exactly the opposite of the

system disclosed and claimed in the '050 patent, where transaction information and employee information is extracted *from* each client, and transferred *to the remote cloud-based gratuity management system*, where the gratuity distribution rules for each client are stored and applied to the extracted information on a client-by-client basis to determine gratuity allocations for each client.

The Board relies on mischaracterizations from Petitioner's expert, Dr. Russ, suggesting that Marshall teaches the claimed remote gratuity management system server that is "*configurable to independently execute gratuity distribution rules on a client-by-client basis.*" In particular, the Board relies on Dr. Russ's arguments at, inter alia, paragraphs 123 and 124 of his Declaration, (Paper No. 11 at 20), where Dr. Russ refers to Paragraphs 110-117 of his Declaration related to "element 1[a.1]" regarding the "server" of the claimed remote gratuity management system. Paragraph 117, in particular, states:

117. In referring to process 400, Marshall describes certain default settings of GrataSoft that a user (e.g., a restaurant business) may configure. According to Marshall, GrataSoft is (to use the language of claim 1 of the '050 patent) "configurable to independently execute gratuity distribution rules on a client-by-client basis." For example, in the system default function 430k (which includes

(Ex. 1002 at ¶117.)

Critically, at his deposition, Dr. Russ clarified that the language he seemingly attributes to Marshall’s server—*i.e.*, that it is “configurable to independently execute gratuity distribution rules on a client-by-client basis”—is *not* a quote from Marshall, but rather is *a quote from claim 1*. (Ex. 2007 at 24:10-25:9.) As Patent Owner notes above, to the extent Marshall discloses a “web-based” system, it does not disclose the GrataSoft software of Marshall being installed on a remote gratuity management system server as suggested by Petitioner and Dr. Russ. (Ex. 2006, Cullimore Decl. at ¶76.)

Indeed, Marshall notes that its “web-based individualized systems” facilitate uploads of reports on declared tips and tipouts (*i.e.*, tips previously calculated at the client-side), as well as downloads of “software patches, updates, upgrades, software enhancements and the like from the software provider”:

[0104] Furthermore, web-based individualized systems facilitate upload of employee information such as declared tips, contributed and/or received tipouts, 4070 forms, 4070A forms, and the like to the employee’s employer(s). Additionally, web-based systems facilitate downloading, purchasing, testing and delivery of software patches, updates, upgrades, software enhancements and the like from the software provider. For example, software changes may be required to accommodate items including, but not limited to, changes and/or customizations of an IS and new taxing authority programs.

(Ex. 1004 at ¶104.) As this excerpt shows, Marshall expressly teaches that to ensure its client-side systems remain compatible with any new “taxing authority

programs,” such information is *downloaded to* the client system. (Ex. 2006, Cullimore Decl. at ¶¶69-73.) This further confirms that Marshall does not teach or suggest a remote management system with a server configured to store client gratuity distribution rules for determining gratuity allocations on a client-by-client basis. Otherwise, there would be no need to download software updates or to customize the client’s tip calculations based on changes to tax compliance rules.

Moreover, once Marshall’s tips are calculated at the client’s system, those “declared tip” calculations may be reported back *to* a POS server via the Internet connection for tax compliance or other reporting purposes. (Ex. 1004 at ¶104.) Here again, Marshall contemplates a system that is purposely configured and operates differently than the system claimed in the ’050 patent, which calculates and communicates gratuity allocation calculations *from the remote management system to the client*. (Ex. 1001 at 22:65-23:8; 24:17-25.)

Despite Marshall’s disclosure of a “web-based” system, that system does not disclose the remote cloud-based “gratuity management system” as disclosed and claimed in the ’050 patent.

(3) It Would Not Have Been Obvious to Modify Marshall Contrary to Its Teachings

Despite Marshall’s exclusive disclosure of client-side processing of tips, the Board credited Dr. Russ’s unsupported conclusion that “it would have been

obvious to a POSITA at the time of the '050 patent filing to implement the Marshall system *in any number of ways*.” (Paper No. 11 citing Ex. 1002 at ¶124.) Of course, when using hindsight in view of the '050 patent, nearly any system architecture “could be” envisioned by an expert during litigation. *TQ Delta, LLC v. Cisco Sys.* 942 F.3d 1352, 1357 (Fed. Cir. 2019) (rejecting as improper hindsight expert testimony that a POSITA *could* have arrived at the claimed invention).

But one skilled in the art would have to be motivated to completely change the architecture of Marshall from a client-based system to a remote, cloud-based management system which, based on Marshall alone, would not have been obvious since Marshall never suggests that its Gratuity Reporting and Allocation Software should reside anywhere but the client-side processor. (Ex. 2006, Cullimore Decl. at ¶¶69-73.) Moreover, there were numerous reasons why such modifications would not have been obvious to one of ordinary skill in the art at the time of the invention. For example, problems associated with scale-up and transitioning to a cloud-based system, and associated cost and security issues, would not have been a simple modification for a POSITA. (Ex. 2006, Cullimore Decl. at ¶¶87-91.) Moreover, because of problems associated with calculations of gratuities based on client-specific information extracted from disparate, ad hoc client business systems, there would be no reasonable expectation that such a system would work

for its intended purpose of servicing a plurality of different client business systems, as required for a finding of obviousness. (*Id.*; Ex. 1001 at 1:36-44; 8:2-5.)

As such, Dr. Russ’ broad statement that a POSITA *could* envision Marshall’s implementation “*in any number of ways*” suffers from hindsight bias and should be rejected. *TQ Delta*, 942 F.3d at 1357; *In re Gianelli*, 739 F.3d 1375, 1380 (Fed. Cir. 2014); *In re Rouffet*, 149 F.3d 1350, 1358 (Fed. Cir. 1998). The Federal Circuit has cautioned repeatedly that such hindsight is not a substitute for a motivation as to why one skilled in the art would have been specifically motivated to modify Marshall and change its entire client-based architecture to a cloud-based architecture that would calculate gratuities at a remote management system in direct contravention to Marshall’s own teachings:

This court’s opinions have repeatedly recognized that conclusory expert testimony is inadequate to support an obviousness determination on substantial evidence review.

In cases like *InTouch*, *ActiveVideo*, and *DSS*, we rejected obvious determinations based on conclusory and unsupported expert testimony. We repeatedly expressed concerns that crediting such testimony risks allowing the challenger to use the challenged patent as a roadmap to reconstruct the claimed invention using disparate elements from the prior art—*i.e.*, the impermissible *ex post* reasoning and hindsight bias that KSR warned against.

TQ Delta, 942 F.3d at 1359-60 (citing cases). The Federal Circuit has also stressed the importance of considering objective evidence of non-obviousness, such as industry skepticism, to “help to place a scientific advance in the proper temporal and technical perspective when tested years later for obviousness against charges of making only a minor incremental improvement.” *InTouch Techs., Inc. v. VGo Communs., Inc.*, 751 F.3d 1327, 1347 (Fed. Cir. 2014).

Here, the only motivation for modifying Marshall’s client-side system and making it a remote, cloud-based system is found in the ’050 patent itself. Dr. Russ’ broad conclusions that a POSITA could envision any number of configurations based on Marshall is based on hindsight. As the original Examiner noted in the Reasons for Allowance, the prior art of record, including Marshall and Phillips, do not render the claimed system obvious. (Ex. 1008 at 429-430.)

b. “server”

The Board correctly recognizes that independent claim 1 sets forth that the remote gratuity management system comprises “a server coupled to a computer network” and “a database accessible by the server.” (Paper 11 at 21.) The Board also correctly notes that the claimed server is “coupled to a computer network and accessible by the plurality of clients” and must be “configurable to independently execute gratuity distribution rules on a client-by-client basis.” (*Id.*) Yet, according to the Board, for purposes of institution, “Petitioner adequately establishes that

these features of the claimed system Marshall would have suggested the claimed features to POSITA by the teachings of Marshall.” (Paper 11 at 21.)

Patent Owner respectfully submits that Marshall does not disclose the distinct remote management system “server” as claimed and properly understood in light of the ’050 patent specification. As noted previously with respect to the claim term “gratuity management system,” both the Petitioner and the Board seemingly ignore fundamental aspects of the independent claims of the ’050 patent regarding the remote gratuity management system’s “server.”

Specifically, the “server” is disclosed and claimed in the ’050 patent as part of the remote cloud-based system—*separate and distinct* from any client’s “POS server”—and is configured to process gratuity distribution rules on a client-by-client basis for a number of client business systems operating remotely from the cloud-based management system. (Ex. 1001 at Figure 2A; *compare* 22:40 with 22:50; *see also* Ex. 2006, Cullimore Decl. at ¶72.) Further, the cloud-based server applies the client-specific distribution rules to employee information and transaction information that is extracted *from* each client and communicated *to* the cloud-based system, where it is stored in a database for use by the server in allocating gratuities according to each client’s defined distribution rules. Even in situations where the client’s point-of-sale system is cloud based, the point-of-sale server and the gratuity management system server are separate and distinct:

As illustrated in FIG. 2A, the processor 212 is remote from the client's point of sale. In this manner, the processor 212 may service multiple points of sale for a client as well as multiple clients. In yet other embodiments, the point of sale system may be implemented in a cloud computing system, and the gratuity management system 100 interfaces with the cloud-based point of sale system using a cloud to cloud replication or synchronization. *In a cloud to cloud system, the interface component 206 still facilitates transfer of the data from the point of sale system to the gratuity management system for use in determining the gratuity allocations.*

(Ex. 1001 at 8:46-57.)

Marshall nowhere teaches or suggests a cloud-based server as part of any remote gratuity management system, that is separate and distinct from any client point-of-sale (POS) server, and that determines on a client-by-client basis, gratuity allocations using client-specific gratuity distribution rules (stored in the database of the cloud-based gratuity distribution system) and applying them to client-specific employee and transaction information extracted *from* the individual clients and provided *to* the cloud based system. Rather, Marshall's system calculates gratuities locally by design, and to the extent Marshall teaches a "server," it is a point-of-sale (POS) server connected to a client for the purpose of permitting certain information stored at the POS server to be sent to the client's local system, where the actual processing of tips occurs. (Ex. 1004 at ¶¶107, 109; see also Ex. 2006, Cullimore Decl. at ¶¶72-73.)

The Marshall system also discloses the distribution of reports via the server after the tips have been calculated at the client. Other than hindsight, Marshall provides no suggestion of the benefits of having a separate remote server perform any gratuity calculations as part of a cloud-based gratuity management system. (Ex. 2006 at ¶72.)

Moreover, for the same reasons set forth previously with respect to the term “gratuity management system,” it would not have been obvious for one of ordinary skill in the art to modify Marshall to arrive at the invention claimed in the ’050 patent. Marshall is directed to client-side processing of tips, and absent hindsight, there is no motivation to re-configure the basic architecture taught by Marshall to convert it to a remote, cloud-based gratuity management system having a separate “server” as claimed in the ’050 patent. (Ex. 2006, Cullimore Decl. at ¶72.) To be sure, while the ’050 patent does disclose that a client’s point-of-sale system may be web-based, (Ex. 1001 at 8:49-53), in such situations, the “server” of the remote gratuity management system is still separate and distinct from the client’s point-of-sale server. (*Id.*)

c. “client business systems”

The Board correctly recognizes that independent claim 1 sets forth that the client business systems are “in electronic communication with the server of the gratuity management system.” (Paper 11 at 21.) Further, the Board correctly notes

that each client business system comprises “at least one point of sale server” and an interface component “installed on the respective client business system.” (*Id.*) Yet the Board concludes that for purposes of institution, “these features would have been suggested to POSITA by the teachings of Marshall.” (Paper 11 at 21.)

As before, however, both the Petitioner and the Board seemingly ignore fundamental aspects of the independent claims of the ’050 patent. First, as noted previously, the claimed “server” that is part of the remote gratuity management system is separate and distinct from any point-of-sale (POS) server associated with any client business system. (Ex. 1001 at Fig. 2A; *compare* 22:40 with 22:50.)

While the ’050 patent discloses that the server associated with the remote gratuity management system may be in communication with the point-of-sale (POS) server for a client business system, (Ex. 1001 at 8:49-53), this merely confirms that the point-of-sale (POS) server for any client business system is separate and distinct from the claimed server of the remote gratuity management system. Marshall certainly does not teach or suggest adding a remote cloud-based gratuity management system or associated server that is separate and distinct from any client business system’s point-of-sale (POS) server.

Moreover, the ’050 patent’s independent claims also expressly recite that the “gratuity sync client application/interface component” of each “client business systems” be configured to “extract” and “initiate transfer” of “transaction

information” and/or “employee information” *from* each client *to* the remote gratuity management system. (Ex. 1001 at 22:53-57; 24:4-9.) These claimed features are nowhere found in Marshall.

Indeed, to the extent Petitioner and the Board rely on the Gratuity Reporting and Allocation Software application taught in Marshall, that software application is never disclosed as extracting information *from* the client and then *initiating transfer* of that extracted information *to* a distinct remote server of a cloud-based gratuity management system for processing of such information, as set forth previously. Rather, the client disclosed in Marshall communicates with a point of sale (POS) server to either download tip or sales information *from* the client’s point-of-sale server, or to report the tip calculations performed at the client *to* the point-of-sale server. (Ex. 1004 at ¶¶107-109.) Marshall’s system is structured to operate exactly the opposite of the ’050 patent’s claimed system. (Ex. 2006, Cullimore Decl. at ¶¶69-73.)

Once again the Petitioner and Board rely heavily on Dr. Russ for what “could” be envisioned, without any explanation, absent impermissible hindsight, of why a POSITA would have been motivated to essentially abandon Marshall’s locally-determined-tips architecture in favor of the ’050 patent’s cloud-based management system. (Ex. 2006, Cullimore Decl. at ¶¶77-79.) Nor do Petitioner or the Board explain how or why a POSITA would have been motivated to add a

separate and distinct remote server to perform the gratuity allocations rather than have the clients' systems perform those calculations as taught by Marshall. *In re Gianelli*, 739 F.3d 1375, 1380 (Fed. Cir. 2014); *In re Rouffet*, 149 F.3d 1350, 1358 (Fed. Cir. 1998). Nor would a POSITA have any reasonable expectation that such a cloud-based system would operate successfully given disparities between client business systems, differences in industry compliance and reporting rules, and for the reasons noted above with respect to the terms “server” and “gratuity management system.” (Ex. 2006 at ¶¶87-91.)

d. “interface component”

The Board is correct that the claimed “interface component” is “configured to extract transaction information and employee information from the client business system and to initiate transfer of the extracted information to the gratuity management system.” (Paper 11 at 21-22.) The Board is also correct that the gratuity management system is “configured to receive the extracted transaction information and employee information from the plurality of client business systems and to store the received extracted information in the database.” (*Id.*)

As before, however, both the Petitioner and the Board seemingly ignore other fundamental aspects of the independent claims of the '050 patent that are not

² Patent Owner notes that the claimed “interface component” appears in independent claim 8, and that the term “gratuity sync client application” appears in claim 1. Patent Owner’s response and arguments regarding the term “interface component” applies equally to claim 1.

taught or suggested by Marshall. Specifically, the “interface component” or “gratuity sync client application” of claims 1 and 8, respectively, are disclosed and claimed as part of each client’s business system to extract and transfer transaction and/or employee information *to* the remote, cloud-based gratuity management system, which calculates gratuity allocations on a client-by-client basis, and reports those calculations *from* the remote gratuity management system back *to* each client business system. These claimed features are not taught or suggested by Marshall, whose system performs gratuity allocations locally at the client as set forth previously. (Ex. 1004 at ¶¶107-109; Ex. 2006, Cullimore Decl. at ¶73.)

Because Marshall does not teach or suggest a remote, cloud based gratuity management system, having a server that is separate and distinct from any client point-of-sale (POS) server, and which receives and stores client-specific gratuity distribution rules, then by logical extension, Marshall also cannot teach the claimed “interface component” that is specifically claimed as “configured to extract at least one of transaction information and employee information from the client business system” and to initiate transfer of that information to the remote gratuity management system. (Ex. 2006, Cullimore Decl. at ¶73.)

Further, as before, Petitioner’s Declarant, Dr. Russ, provides no motivation, absent hindsight, for why one of skill in the art would be motivated to completely re-design the Marshall system to be a cloud-based based system, as well as

reconfigure any software application to extract and initiate transfer of transaction and/or employee information to an undisclosed, separate and distinct server of a remote gratuity management system, contrary to every teaching in Marshall. (Ex. 2006, Cullimore Decl. at ¶¶87-91.) And for the reasons set forth previously with other claim terms, there would have been no reasonable expectation that such a system would be operable given the differences in client business systems. (*Id.*)

e. “gratuity distribution rules and allocations”

The Board is correct that claim 1 sets forth that the gratuity management system is further configured to execute, independently for each client “gratuity distribution rules for allocating gratuities among at least a portion of the employees, to determine “a gratuity allocation based on at least the received extracted transaction information, the received extracted employee information, and the gratuity distribution rules” and to return “the gratuity allocation” to the interface component of each respective client business system, “without requiring the client business systems to execute the gratuity distribution rules.” (Paper 11 at 22.) Once again, however, the Board concludes that for purposes of institution, “these features of the claimed system would have been suggested to POSITA by the teachings of Marshall.” (*Id.*) Patent Owner respectfully traverses the Board’s conclusions regarding the teachings of Marshall and what they would have suggested to a person skilled in the art.

As before, both the Petitioner and the Board ignore fundamental aspects of the independent claims of the '050 patent. Specifically, the independent claims expressly recite that the application of the “gratuity distribution rules” to the extracted transaction information and employee information occurs at the server of the remote cloud-based gratuity management system. (Ex. 1001 at 22:58-64; 24:17-25.) As noted repeatedly, Marshall does not teach or suggest such an architecture. (Ex. 2006, Cullimore Decl. at ¶¶69-73.) Marshall is clear that the calculation of tips occurs locally at each client as shown in Fig 3. (Ex. 1004 at ¶¶106-109.)

Moreover, to the extent Marshall discloses communication between a client and a server, it is with respect to either downloading information *from* a point of sale server *to* the client, or reporting any tip calculations made at the client *to* the point of sale server. (*Id.*) Marshall does not teach or suggest a separate and distinct remote gratuity management system server as claimed in the '050 patent, that stores each client's gratuity distribution rules, and applies them to transaction and/or employee information extracted *from* each client business system to calculate gratuity allocations on a client-by-client basis, and report those calculation back *to* each client business system—an architecture that operates precisely the opposite of the system disclosed in Marshall. (Ex. 2006, Cullimore Decl. at ¶¶69-73.)

Dr. Russ’s opinion that one skilled in the art could have envisioned the claimed system based on Marshall, (Ex. 1002 at ¶124), provides no motivation for why one of ordinary skill in the art would have abandoned Marshall’s client-side tip calculation architecture in favor of the exact opposite—the cloud-based gratuity management system of the ’050 patent, that expressly claims that gratuity allocations are not performed by the clients. (Ex. 1001 at claims 1, 8.) Nor would the POSITA have any reasonable expectation that such a system would be operable for the reasons discussed above with respect to the other claim terms. (Ex. 2006 at ¶¶75-73; 87-91.)

f. “cloud computing system”

The Board correctly notes that claim 1 of the ’050 patent requires the gratuity management system to be “a cloud computing system remote from the plurality of client business systems.” (Paper 11 at 22-23.) But again, the Board concludes that for purposes of institution, “these features would have been suggested to POSITA by the teachings of Marshall.” (*Id.*) Specifically, the Board relies upon Petitioner’s expert Dr. Russ who opines that various file formats support the conclusion that “Marshall’s gratuity management system would be a cloud computing system remote from the plurality of client business systems.” (Paper No. 11 at 23-24 citing Ex. 1002 at ¶148.) Respectfully, the Board’s

conclusion reflects a continued fundamental misunderstanding of the '050 patent and the teachings of Marshall.

As discussed repeatedly above, the system taught by Marshall never teaches or suggests an architecture where gratuity allocations are performed by a cloud-based gratuity management computing system server that is remote from a plurality of client business systems. (Ex. 2006, Cullimore Decl. at ¶¶69-73.) At best, Marshall teaches a plurality of client-side systems connected to a common point-of-sale (POS) server, which is not a distinct and separate remote cloud-based gratuity management system server as claimed in the '050 patent. (*Id.*)

To the extent Marshall teaches use of specific file formats, those formats allow the client system to receive downloaded files from a point-of-sale server that the client system may use for calculating tips, further confirming that the point-of-sale server is ***not*** configured to receive information from a client to calculate tips—and is certainly not configured to handle clients having disparate systems using different data formats. (Ex. 1004 at ¶¶107-109.)

g. “gratuity sync client application”

Patent Owner notes that the term “gratuity sync client application” is addressed previously in with respect to term “*d. interface component*” which is incorporated by reference.

2. Ground 2: Obviousness over Marshall in View of Webb

The Board indicates in its Institution Decision that Marshall alone would have suggested the recited claimed features of the independent claims of the '050 patent, (Paper No. 11 at 27), and thus Patent Owner has set forth above why Petitioner and the Board are incorrect with respect to each recited claim feature.

However, to the extent Petitioner relies on the combinations cited in Ground 2, Patent Owner maintains that Webb does not cure the deficiencies set forth above with respect to Marshall, and separately does not teach or suggest to a person skilled in the art the invention claimed in the '050 patent. (Ex. 2006, Cullimore Decl. at ¶80.)

More specifically, Webb is directed to a computerized “time clock” system, and does not teach or suggest a number of the claimed features of the gratuity management system claimed in the '050 patent. By way of example, Webb does not teach a remote, cloud-based gratuity management system that calculates gratuities on a client-by-client basis using transaction information and/or employee information that is extracted from and transferred to the remote system, which then uses a dedicated server to apply client-specific gratuity distribution rules to the extracted information to determine gratuity allocations, and then reporting those allocations to each client’s business system. (Ex. 1001 at claims 1, 8; Ex. 2006, Cullimore Decl. at ¶73.) Moreover, the Board provides no analysis of how Webb

would render the '050 patent obvious, either alone or in combination with Marshall. (Paper No. 11 at 27.)

Webb's "computerized time clock system" is designed to accurately track and log employee time and sales records for a given business by establishing various files at a client's business. (Ex. 1006 at 1:40-61.) While Webb's client-based system is disclosed as being able to create files that track employee jobs or tasks that may have tips associated with them, Webb merely discloses that the files have "TIP CODES" that distinguish only between jobs that have tips associated with them versus those that do not. (Ex. 1006 at 4:23-41.)

Webb does not teach or suggest a remote, cloud-based gratuity management system that calculates gratuities on a client-by-client basis as claimed in the '050 patent. (Ex. 2006, Cullimore Decl. at ¶73.) Thus, even if combined with Marshall, which also does not teach a remote, cloud-based gratuity management system as set forth previously, one of ordinary skill in the art still would have had no motivation to modify either Marshall or Webb to obtain the invention disclosed and claimed in the '050 patent.

3. Ground 3: Obviousness Over Phillips in View of Marshall

The Board indicates in its Institution Decision that Marshall alone would have suggested the recited claimed features of the independent claims of the '050

patent, (Paper No. 11 at 27). Thus, Patent Owner has set forth above why Petitioner and the Board are incorrect with respect to each recited feature.

However, to the extent Petitioner relies on the combinations cited in Ground 3, Patent Owner maintains that Phillips does not cure the deficiencies set forth above with respect to Marshall, and separately does not teach or suggest to a person skilled in the art the invention claimed in the '050 patent. (Ex. 2006, Cullimore Decl. at ¶¶69-73.) More specifically, Phillips is directed to client-side tip calculations at the client's point-of-sale system, and does not teach or suggest a number of the claimed features of the gratuity management system claimed in the '050 patent including a remote, cloud-based gratuity management system having a server that is separate and distinct from any client point-of-sale (POS) server. (Ex. 1001 at claims 1, 8; Ex. 2006, Cullimore Decl. at ¶72.)

Accordingly, by logical extension, Phillips cannot teach or suggest such a remote, cloud-based gratuity management system that calculates gratuity allocations on a client-by-client basis using transaction information and/or employee information extracted from each client business system, and applying client-specific gratuity distribution rules to that information. Moreover, the Board provides no analysis of how Phillips would render the '050 patent obvious, whether alone or in combination with Marshall. (Paper No. 11 at 27.)

Thus, even if combined with Marshall, which also does not teach a remote, cloud-based gratuity management system as set forth previously, one of ordinary skill in the art still would have had no motivation to modify either Marshall or Phillips to obtain the invention disclosed and claimed in the '050 patent. (Ex. 2006, Cullimore Decl. at ¶¶87-91.)

4. Ground 4: Obviousness Over Phillips in View of Marshall and Webb

The Board indicates in its Institution Decision that Marshall alone would have suggested the recited claimed features of the independent claims of the '050 patent. (Institution Decision at 27.) Thus, Patent Owner has set forth above why Petitioner and the Board are incorrect with respect to each recited feature.

However, to the extent Petitioner relies on the combinations cited in Ground 4, Patent Owner maintains that neither Phillips nor Webb cures any of the deficiencies set forth above with respect to Marshall, whether considered individually or combined. (Ex. 2006, Cullimore Decl. at ¶¶69-73.) More specifically, as noted above, Webb is directed to a computerized “time clock” system, and does not teach or suggest a number of the claimed features of the gratuity management system claimed in the '050 patent. Similarly, Phillips is directed to a client-based systems that calculates tips using client point-of-sale servers, rather than a separate and distinct server associated with the claimed remote, cloud-based gratuity management system. The Board provides no analysis

of how Webb and Phillips in combination with Marshall would render the '050 patent obvious. (Paper No. 11 at 27.)

Indeed, as noted previously, none of these prior art references teach or suggest a wholesale change in system architecture from client-side processing to a remote, cloud-based gratuity management system that calculates gratuity allocations on a client-by-client basis using transaction information and/or employee information extracted from each client business system, and applying client-specific gratuity distribution rules to that information. (Ex. 2006, Cullimore Decl. at ¶¶69-73.) As the original Examiner correctly noted, the prior art of record including Marshall, Phillips, and Webb do not teach the specific combinations claimed in the '050 patent.

VI. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests the Board to confirm the patentability of claims 1-13 over the prior art.

Dated: June 20, 2024

Respectfully submitted,

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that there are 9,371 words in this paper, excluding any table of contents, table of authorities, mandatory notices under 37 C.F.R. § 42.8, certificate of word count, certificate of service, or appendix of exhibits. This certification relies on the word count of the word-processing system used to prepare this paper.

Respectfully submitted,

/ Timothy Devlin /
Timothy Devlin

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on June 20, 2024 the foregoing document is being served via electronic mail upon the following counsel of record for Petitioner:

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