

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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STARBUCKS CORP.  
Petitioner

v.

AMERANTH, INC.  
Patent Owner

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Case CBM2015-00099  
Patent No. 6,871,325

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MAIL STOP PATENT BOARD  
Patent Trial and Appeal Board  
United States Patent and Trademark Office  
Post Office Box 1450  
Alexandria, Virginia 22313-1450

*Submitted Electronically via the Patent Review Processing System*

**PATENT OWNER'S PRELIMINARY RESPONSE**

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**PATENT OWNER'S LIST OF EXHIBITS**

<b>Exhibit No.</b>	<b>Description</b>
2001	Food.com Internal Memorandum, "Ameranth Licensing Contract," Sept. 13, 1999
2002	iOS Simulator User Guide, March 9, 2015
2003	Ameranth/Par Technology Corp. License Announcement, Jan. 28, 2013
2004	<a href="http://blogs.wsj.com/digits/2014/04/02/apples-jobs-declared-holy-war-on-google-over-android/">http://blogs.wsj.com/digits/2014/04/02/apples-jobs-declared-holy-war-on-google-over-android/</a> , discussing Apple 2010 emails made public in <i>Apple v. Samsung</i> Litigation
2005	The House that Tech Builds, <a href="http://hospitalitytechnology.edgl.com/news/the-house-thattech-builds99460?referaltype=newsletter">http://hospitalitytechnology.edgl.com/news/the-house-thattech-builds99460?referaltype=newsletter</a> , Hyatt CTO Interview, April 8, 2015
2006	Domino's Press Release, <a href="http://www.prnewswire.com/news-releases/dominos-pizza-first-in-industry-to-offer-mobile-ordering58317297.html">http://www.prnewswire.com/news-releases/dominos-pizza-first-in-industry-to-offer-mobile-ordering58317297.html</a> , Sept. 27, 2007
2007	"Domino's app let's you voice-order pizza," <a href="http://www.usatoday.com/story/money/business/2014/06/16/dominos-voice-ordering-app-nuancefast-food-restaurants/10626419/">http://www.usatoday.com/story/money/business/2014/06/16/dominos-voice-ordering-app-nuancefast-food-restaurants/10626419/</a> , June 16, 2014

2008	“Starbucks to roll out innovations in mobile platform-- Company says new mobile features could be ‘holy grail’ of throughput,” <a href="http://nrm.com/quick-service/starbucks-roll-out-innovations-mobile-platform">http://nrm.com/quick-service/starbucks-roll-out-innovations-mobile-platform</a> , March 13, 2014
2009	“Starbucks’ mobile order and pay sees hot start, aided by Integration,” <a href="http://www.mobilecommercedaily.com">www.mobilecommercedaily.com</a> , April 27, 2015
2010	“Agilysys Introduces InfoGenesis Roam Mobile Software,” June 21, 2011
2011	<i>Ex parte McNally</i> , Appeal No. 2012-001503 (PTAB Nov. 4, 2014)
2012	Decision in Appeal No. 2010-000055 (BPAI March 3, 2011)
2013	Decision in Appeal No. 2009-011707 (BPAI Feb. 14, 2011)
2014	Decision in Appeal No. 2009-008033 (BPAI Jan. 28, 2011)
2015	Excerpts from Microsoft Computer Dictionary (4th ed. 1999)
2016	“The Computerworld Honors Program--Case Study,” Award to Marriott International, Inc. (2006)
2017	Decision in Appeal No. 2011-004999 (PTAB Oct. 17, 2013)
2018	Transcript of FS/TEC Awards Presentation (Feb. 2009)
2019	App. Ser. No. 11/112,990, Declaration under 1.131 (Jan. 2009)
2020	App. Ser. No. 11/112,990, Declaration under 1.132 (Aug. 2009)

2021	App. Ser. No. 11/112,990, Supplemental Declaration under 1.132 (May 2010)
2022	App. Ser. No. 11/112,990, Supplemental Response, Amendment, Nexus Declaration, Declaration under 1.132 (Dec. 2010)
2023	App. Ser. No. 11/112,990, Correction to Supplemental Response (Feb. 2011)
2024	Final Rejection in App. Ser. No. 09/897,292
2025	Appeal Decision, No. 2013-007728 (PTAB June 4, 2015)
2026	Appeal Decision, No. 2009-010272 (BPAI April 18, 2011)
2027	Appeal Decision, No. 2009-010632 (BPAI May 24, 2010)
2028	Appeal Decision, No. 2013-006445 (PTAB June 1, 2015)
2029	U.S. Pat. No. 6,384,850 Original Figures 1-7
2030	Helal Background Summary
2031	Helal U.S. Pat. Pub. No. 2005/0076327 (April 7, 2005)
2032	Helal Executed Inventor Declaration, U.S. App. Ser. No. 10/758,180 (April 2, 2004)
2033	Judge Everingham Claim Construction Order, CA No. 2:07-cv-271 (April 21, 2010)
2034	Edwards, et al., “Designing and Implementing Asynchronous Collaborative Applications with Bayou” (1997)
2035	App. Ser. No. 11/112,990, Interview Summary (Oct. 2011)
2036	Starbucks Investor Presentation (2014)

2037	“The Holy Grail Of Room Inventory Distribution – Cloud PMS” (June 15, 2015)
2038	“Hotel Brands must travel cross-channel route to bookings” (June 15, 2015)
2039	App. Ser. No. 10/015,729, Preliminary Amendment (Nov. 1, 2001)

## I. STATEMENT OF PRECISE RELIEF REQUESTED

In accordance with 37 C.F.R. §42.207(a), Patent Owner, Ameranth, Inc., (“PO”) submits this Preliminary Response to Petitioner Starbucks’ belated, second, Covered Business Method (“CBM”) review (“Petition” or “Pet.”) against U.S. Patent No. 6,871,325 (“the ‘325 patent”). For the reasons given below, the Petition for review of claims 11-13 and 15 should be denied because the claims are not invalid under 35 U.S.C. §§101, 103 or 112.

## II. INTRODUCTION

Petitioner Starbucks’ first attempt to invalidate claims 11-13 and 15 of the ‘325 patent based on 35 U.S.C. §§101/112 (filed 16 months earlier) failed entirely, just as this belated second attempt under 35 U.S.C. §§101/112/103 fails. This second Petition is in material respects a “do over” challenge to the failed §§101/112 grounds and is merely an attempt to circumvent the non-appealability<sup>1</sup> of the original non-institution ruling on these grounds. The only grounds in the Petition which is arguably not redundant of the grounds put forth in CBM2014-00016 is a baseless §103 challenge. First, this challenge asserts obviousness despite the fact that Petitioner and others have repeatedly referred to the inventive concepts of these claims as the “holy grail.” Second, Petitioner does not even identify references which disclose the recited “**hospitality applications**,” and compounds that error by absurdly attempting to equate a reservations embodiment with the food ordering and waitlist embodiments of claims 11 and 12.<sup>2</sup> In fact, it appears that

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<sup>1</sup> Under 35 U.S.C. §314(d), “The determination by the Director whether to institute an *inter partes* review (IPR) under this section shall be final and nonappealable.” The same “nonappealable” language is found in the AIA sections governing CBM review.

<sup>2</sup> Petitioner relies on a **travel/transportation** reference, despite the fact that neither

the §103 challenges were put forth merely to include some grounds which were not argued in the first Petition (CBM2014-00016). Petitioner and its expert, Helal, do not even acknowledge the first Petition or that the non-institution ruling regarding claims 11-15 **ever happened**. This is confirmed by the Petition's using the same verbiage in making its redundant §101 challenge, against these very same claims, as was used in the prior Petition, for example:

The Challenged Claims are “**do it on a computer**” claims. They are directed to fundamental and **abstract activities** in the hospitality industry **such as ordering, reservations, and waitlists.**

Pet. at 71 (emphasis added). But Petitioner made this **very same** allegation before:

Claims 11-15 cover nothing more than an **abstract idea of placing an order or reservation using a general purpose computer** and wireless handheld device

CBM2014-00016, Paper 8 at 10 (emphasis added). However, the PTAB rejected it:

We **do not** view **these claims** as reciting **merely the abstract idea of “placing an order or reservation using a general purpose computer and wireless handheld device,” but rather as a particular practical application of the idea of application and data synchronization.**

*Id.* Paper 19 at 25 (emphasis added). Further, the PTAB clearly recognized the multi-faceted specificity and hence non-abstractness of claims 11-15 in the prior proceeding:

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“travel” nor “transportation” appear **even once** anywhere in the intrinsic record, and the intrinsic-evidence based construction of “hospitality” excludes embodiments such as airline, rail, auto or other **transportation** applications. The patent and prosecution history usually provide “the technological and temporal context to enable the court to ascertain the meaning of the claim to one of ordinary skill in the art at the time of the invention.” *V-Formation, Inc. v. Benetton Group SpA*, 401 F.3d 1307, 1310 (Fed. Cir. 2005). Petitioner’s assertion that “**renting cars**” is a “hospitality application” fails, just as does its attempt to assert that “reservation” equates to “food ordering” or “waitlisting” applications under a proper construction as discussed below.

The **combination** of these components **interact in a specific way** to **synchronize applications and data** between the components and **outside application** that is **integral to the claimed invention** and **meaningfully limit** these claims.

*Id.* Paper 19 at 25 (emphasis added). Despite the Board’s clarity in its non-appealable ruling, Petitioner clearly is repeating the same failed arguments. This attempt is the hallmark of what the Board’s non-redundancy precedent was designed to prevent.

Petitioner tries essentially the same tactic in its “second bite at the apple” attempt under §112, serially lodging challenges to terms of the claims irrespective of the loss of prior challenges under §112 and the non-appealability thereof. PO submits that nothing has changed in the claims since Petitioner filed its first §112 challenges,<sup>3</sup> and thus there is no justification for allowing Petitioner to circumvent the non-appealability of the Board’s decision on the prior §112 grounds. Petitioner’s full awareness of its later-asserted challenge at the time of the earlier petition compels dismissal of the second Petition for redundancy:

[T]he present Petition amounts to a second bite at the apple for Petitioner ... We are not persuaded that allowing Petitioner to begin a second proceeding now to argue a claim deficiency of which it was aware, but did not assert in the earlier Petition, is an appropriate circumstance in which to grant covered business method patent review ... a decision on a petition for covered business method review is not simply part of a feedback loop by which a petitioner may perfect its challenges through a subsequent filing. ... [I]f this present petition is rejected on the merits, Petitioners would simply file yet another petition for a CBM review that (again) attempts to address any reasons for denial articulated by the Board.

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<sup>3</sup> See IPR2015-00555 Paper 20 at 8 (June 19, 2015) (“In this proceeding, however, we are not apprised of a reason that merits a second chance. Petitioner simply presents arguments now that it could have made in IPR ’892, had it merely chosen to do so.”).

CBM2015-00047, Paper 7 at 12-13 (June 15, 2015). Under Petitioner's approach, serial petitions could be filed indefinitely by simply challenging one term at a time a year and a half apart. PO submits that this is an abuse of the AIA intent.

In any event, the patent description and claims clearly meet all requirements of §112, as shown below. Petitioner has come nowhere close to establishing otherwise. For example, "there is a strong presumption that an adequate written description of the claimed invention is present in the Specification as filed" (Exh. 2026 at 3) and it is an indisputable fact that there has never been a §112-based rejection or determination relative to the challenged claims. This spans **15 years** of prosecution history (involving multiple patent examiners and multiple supervisory patent examiners), includes three different district court proceedings involving three different Federal Judges in claim construction proceedings, and includes a Panel of the PTAB reviewing the specification/drawings and rejecting all §112 challenges in the first petition filed by the present Petitioner. (CBM2014-00016).

The fact that numerous POSA have had no difficulty understanding the '325 disclosure clearly serves to nullify Petitioner's §112 arguments. Nevertheless, Petitioner and its expert incredibly **now** allege, in 2015, that everyone else was wrong in having no problem understanding the '325 patent and its claims and that Petitioner's unilateral litigation-induced "confusion" warrants invalidation of these claims on multiple bases under §112.

Further still, Petitioner's new challenge alleging non-enablement of the patent **ignores** Petitioner's own prior challenge/position, in which Petitioner

admitted to the “enablement” of the “database on the handheld” embodiment<sup>4</sup> in the first petition (CBM2014-00016). Black letter precedent requires only **one** embodiment to satisfy the enablement requirement—the “enablement requirement is met if the description **enables *any mode of making and using the invention.***”<sup>5</sup> But the PTAB has already rejected Petitioner’s contention that there was inadequate written description for the “web page” embodiments and in fact all claimed embodiments are enabled, but that is not even required to defeat the present enablement challenge. Additionally, Petitioner and its expert apparently did not even study the ‘325 file history; if they had, they would have seen that Ameranth’s original filing on September 21, 1999 included actual live **screen shots** from its only product at the time, the 21st Century Restaurant™ System, as evidenced by the logo on original Figures 1 and 6 (Exh. 2029), which clearly links this “working example” embodiment directly to the specification disclosure as a whole,<sup>6</sup> contrary to Petitioner’s argument. (Pet. at 27-28).

Evidence compelling rejection of the Petition comes from Petitioner Starbucks itself, in which Starbucks praised the inventions (discussed below),

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<sup>4</sup> CBM2014-00016, Paper 8 at 47 (“the original specification only **arguably supports one of these species—synchronizing information with a central database and a handheld device’s existing local copy of same**”) (emphasis added).

<sup>5</sup> *Ex parte Marcel*, No. 2009-010632 at 6 (BPAI May 26, 2010) (Exh. 2027) (emphasis added) (*quoting Johns Hopkins v. CellPro, Inc.*, 152 F.3d 1342, 1361 (Fed. Cir. 1998)).

<sup>6</sup> The contemporaneous and widespread acclaim that Ameranth received for the 21st Century Restaurant™ system (also ignored by Petitioner as discussed below) clearly demonstrates that Ameranth had developed and deployed working examples of its sole product as detailed in the application filing inclusion of “screen shots” of same.

and from **undisclosed** evidence of Starbucks' technical expert Helal. This undisclosed evidence not only directly contradicts and nullifies Helal's hindsight-based Declaration in support of the Petition, but actually serves as an expert opinion **confirming patentability** of the challenged claims as documented and explained below. The PTAB has recently confirmed that **earlier** expert opinions, **untainted by hindsight or bias**, are very compelling.<sup>7</sup>

After founding Phoneomena, Inc. in 2002 (the first of his two different mobile middleware companies in Ameranth's technical and product space<sup>8</sup>), Petitioner's expert Helal filed a patent application which included numerous core features of the '325 patent/claims (filed on January 15, 2004, claiming a priority date of January 15, 2003,<sup>9</sup> both several years **after** Ameranth's inventive priority date but years before he was retained by Petitioner in this case). In this application, which is discussed fully below in comparison to the subject matter of '325 claims 11-13, Helal claimed many of Ameranth's core inventive ideas for himself—even including a “hotel reservations” embodiment. However, none of this was disclosed in Helal's CV filed in this PTAB proceeding. This circumstance is just such a situation recognized by the Board as providing

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<sup>7</sup> *Ex parte PPG*, No. 2013-006445 at 12 (PTAB June 1, 2015) (Exh. 2028) (“Unlike the usual expert opinion, prepared either by the applicant himself, or on his behalf **after the controversy has arisen**, [the] opinion was formulated prior to the making of the claimed invention. **It was therefore completely untainted by either hindsight or bias.**”) (emphasis added) (*quoting In re Carroll*, 601 F.2d 1184, 1186 (CCPA 1979)).

<sup>8</sup> “[H]e is founder, President and CEO of Phoneomena, Inc., a mobile application and middleware company, and President of Pervasa, Inc., a University of Florida start-up focused on platform and middleware products for sensor networks.” (Exh. 2030 at 1).

<sup>9</sup> Ser. No. 10/758,180 (“Server Side Wireless Development Tool”) (Exh. 2031).

compelling evidence untainted by hindsight or bias. Helal’s 2004 application was accompanied by a sworn statement that “**I believe that I am the original and first inventor of the subject matter.**” (Exh. 2032) (emphasis added). This statement completely contradicts his new opinions as detailed below. The earlier application and sworn statement thus negates Helal’s hindsight-based, litigation-induced, obviousness opinions and in fact demonstrates non-obviousness. Helal’s current allegations<sup>10</sup> do not withstand even cursory scrutiny.

Thus, while now under retention to Petitioner, Helal asserted that he could not understand ‘325 claims 11-13 and 15, but nonetheless opined that all **features** in them were obvious and well known in 1999—but he did not mention that he had sought a patent for himself and asserted novelty of several of the **same features** present in ‘325 claims 11-13 **four years after** the ‘325 patent priority date. Beyond refuting his 2015 opinions, Helal’s earlier 2004 application and declaration asserting that he was the “first inventor” of those ideas actually **serves** as an expert opinion **confirming** patentability.<sup>11</sup>

The Petition also violates and/or ignores multiple case law directives, precedent, rules and regulations, each violation individually compelling denial.<sup>12</sup> Petitioner’s

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<sup>10</sup> Helal stated that “[n]one of the **features** described in **Claims 11-13 and 15** of the ‘325 patent was **novel** as of **the earliest priority date**, nor does the ‘325 patent teach a **novel and non-obvious way of combining** the known **features.**” (Exh. 1003 at ¶11) (emphasis added).

<sup>11</sup> *See Ex Parte PPG*, Appeal No. 2013-006445 at 12 (Exh. 2028) (“opinion [] formulated prior to the making of the claimed invention ... was therefore completely untainted by either hindsight or bias”) (*quoting In re Carroll*, 601 F.2d at 1186).

<sup>12</sup> The Petition violated numerous rules/requirements promulgated under the AIA, including: 37 C.F.R. §42.6(a)(3); 37 C.F.R. §42.22(a)(2); 37 C.F.R. §42.104(b)(4); 37

expert Helal in fact followed Petitioner counsel’s opinions on the law,<sup>13</sup> not the actual law or AIA implementing Regulations. However, counsel failed to advise him, *inter alia*, that his 35 U.S.C. §103 analysis was required to consider the **objective evidence** of non-obviousness. Having failed to acknowledge that requirement, and more importantly not having done it, Helal’s obviousness opinions innately fail as violative of established Supreme Court precedent. Further still, despite criticizing almost every term in the claims as either indefinite, lacking written description and/or not enabled, seemingly miraculously, Helal was **still** able to opine that his hindsight-based prior art combinations render the claims obvious—despite, by his own admission, being “bewildered”<sup>14</sup> by the core synchronization of these claims. In fact, it is only his inconsistent and self-contradicted opinion that is truly “bewildering.” Helal did not provide a single claim construction (merely proclaiming that he was relying on BRI constructions, yet never defining what they were) and did not explain how he determined that alleged prior art teachings rendered allegedly “indefinite” claims obvious. It is black letter law that claims must be construed before they can be compared to the prior art,<sup>15</sup> and an indefinite claim does not “inform those skilled in

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C.F.R. §42.104(b)(5) and 35 U.S.C. §312(a)(3).

<sup>13</sup> Helal Dec., Exhibit 1003 ¶12 (“It is my opinion that each of Claims 11-13 and 15 of the ‘325 patent is invalid for being obvious **under the patentability standards** of 35 U.S.C. §§102 and 103 **explained to me by Starbucks counsel**”) (emphasis added).

<sup>14</sup> Helal Dec. at ¶101 (Exh. 1003) (“**Synchronizing** applications between a database, a handheld device, a web server, and a web page is **bewildering.**”) (emphasis added).

<sup>15</sup> *See Ex parte Kritzer*, No. 2013-007728 at 3 (PTAB June 4, 2015) (Exh. 2025) (“A determination that a claim is **obvious** requires a comparison of **the properly construed claim** with the prior art.”) (emphasis added) (*citing Oakley, Inc. v. Sunglass Hut Int’l*, 316 F.3d 1331,1339 (Fed. Cir. 2003)).

the art about the scope of the invention with reasonable certainty.”<sup>16</sup> By definition, Helal thus did not provide a factual or legal basis to support rendition of *any* competent opinion on obviousness.<sup>17</sup>

These hospitality based claims of the ‘325 patent represent an extraordinarily visionary and multi-faceted “system of systems”—with both the applications **and** the data innovatively and uniquely synchronized **and** integrated—between both hospitality **and** non-hospitality applications, and including web, wireless, and handheld devices (for both consumer **and** staff use)—all leveraging a single central database storing the hospitality applications and data. The PTAB clearly recognized the multi-faceted specificity of these five claims in the prior proceeding as discussed above:

[C]laims 11-13’s limitation “**applications and data are synchronized** between the central database, at least one wireless handheld computing device, at least one Web server and at least one Web page” is a further limitation that is **directed to** the system’s ability to **synchronize applications and data.**

CBM2014-00016, Paper 19 at 15-16 (emphasis added); *see also id.* at 25 (“these components **interact in a specific way ... and meaningfully limit** these claims”) (emphasis added). The claimed inventive features recognized by the PTAB as meaningfully specific were clearly core to the 1998-99 invention, the claims of the ‘850 patent and to Ameranth’s 21st Century Restaurant™ and 21st Century Hotel™

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<sup>16</sup> *Nautilus, Inc. v. Biosig Inst., Inc.*, 134 S. Ct. 2120, 2129 (2014). If the scope of the claimed invention cannot be determined with reasonable certainty, as Helal alleges, the precision necessary for claim construction and an obviousness analysis would seemingly not be possible.

<sup>17</sup> For all of these reasons and more, as further explained below, the Petition should be rejected, including exercise of the Board’s authority to deny repetitive aspects of the Petition as redundant.

“system of systems.” Such “systems of systems” are now a ubiquitous reality in 2015, and are in widespread use across the entire spectrum of hospitality companies and applications. The recognition of this claimed subject matter as innovative and non-obvious has been repeatedly confirmed by petitioners and defendants themselves whom, after copying Ameranth’s inventions, cannot refrain from boasting about their own uses of those inventions—often claiming the ‘850 inventions as **their own** breakthroughs.<sup>18,19</sup> This copying and claiming for themselves by giant company infringers has continued unabated into 2015, including Starbucks who now uses even the “**holy grail**” term to describe its technology copied from Ameranth’s 21st Century Restaurant™ embodiment of the ‘325 claims, just as this term recently has been used by industry experts to describe the technology encompassed by the ‘325 claims as embodied in Ameranth’s 21st Century Hotel™ technology.<sup>20</sup> Still further, additional experts, just a few days ago, highlighted the core synchronization focus of the ‘325

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<sup>18</sup> Starbucks, Starwood, Marriott, Pizza Hut, Hilton, Dominos, Papa John’s, QuikOrder, Micros, Agilysys and many others all received detailed briefings or demonstrations of Ameranth’s patented technology during the inventive time frame or thereafter from Keith McNally, Ameranth’s lead inventor, or from his staff.

<sup>19</sup> Contemporaneous facts detailing the conception of the invention, secondary factors demonstrating non-obviousness and nexus to the claimed invention is further provided below in the section titled “Objective Evidence of Non-Obviousness.”

<sup>20</sup> (Exhibit 2037 at 2) (“[T]his **real-time distribution of room inventory** to the various channels like OTAs, GDSs, **social media [outside applications]**, the **hotel’s own website, mobile platforms [wireless handhelds]** and more could only be facilitated and furnished by **end-to-end automation [synchronization and integration]** made possible by a **Cloud PMS [central database]**. For these reasons, we believe that the Cloud PMS is the ‘**Holy Grail** of distributing room inventory’”) (emphasis added, comparison to ‘325 claim elements shown in brackets).

invention and claims, *e.g.*, the “synchronization,” “**consistency**” and “**integration**” across devices/channels aspects of the challenged claims as vital to modern hotel operations, just as the ‘325 inventors first recognized (and conceived a solution incorporating same) over 15 years ago (and the Board also recognized):

Travelers interacting with brand properties *across devices and platforms* are expecting a *unifying, consistent* experience... Developing a comprehensive *system for syncing* shopper profiles *across channels* ... [U]rges hoteliers to leverage *integrated technology systems* to share data *across channels* and devices so travelers have a *unified and consistent experience at every stage* of the purchase path, regardless of where they book.

Exhibit 2038 (emphasis added and citations omitted). This is clearly a hallmark of non-obviousness as well as countering Petitioner’s §101 arguments that the challenged ‘325 claims do not include an “inventive concept.”

Further, Starbucks claimed the entirety of Ameranth’s inventions/claims as its own self-described “holy grail” in 2014,<sup>21</sup> just before filing Petitions of its own (CBM2015-00091, -00099) asserting the opposite—*i.e.*, that everything Starbucks now refers to as a “holy grail” **for itself** was obvious in 1998. The very subject matter of ‘325 claims 11-13 and 15, including the visionary integration of a **mobile** application on handhelds with a larger system was, in 2014 and again less than two months ago, praised by Starbucks as its own “ecosystem” which is providing Starbucks the very benefits Ameranth envisioned, invented and claimed long ago:

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<sup>21</sup> “Starbucks to roll out innovations in mobile platform,” March 13, 2014 (Exh. 2008) (“Starbucks is poised to unveil innovations **within** its **mobile platform** that will include ordering ahead and new payment features that the company has called a potential “**holy grail**” for throughput. ... Management referred to **mobile ordering** as the potential “**holy grail**” of throughput”) (emphasis added).

Kevin Johnson, Starbucks' president and COO, said the company is seeing the benefits of having a **mobile** commerce platform that **integrates loyalty, a mobile application, a loyalty card program and in-store point of sale system**. . . This is not a bolt-on, this gets to **leverage** that existing **ecosystem**.

Exh. 2009 (emphasis added); *see also* Exh. 2036 (Starbucks' "mobile ecosystem").

Ameranth was the **first** to identify the actual problem to be solved, **first** to invent the synchronous and integrated technology to solve it, **first** to introduce products based on its inventive solution, **first** to win multiple best-product awards for the products/technology embodying the claims of the '325 patent, **first** to receive public praise for its products and the inventive technology (including from Petitioner companies), **first** to patent that technology and **first** to license the patented technology.

In fact, the '325 inventions first publicly disclosed in the Fall of 1998 were almost immediately recognized as such by the entire hospitality market (and they were not inventions by Starbucks), as demonstrated by the overwhelming objective evidence in the record of the family of the five issued patents, as discussed below. Just recently, and once again, claims in this family were determined to be non-obvious, this time unanimously by a panel of three other ALJs, when Ameranth's 5th patent of the family (U.S. 9,009,060), issued on April 14, 2015.<sup>22</sup> Only by a fictionalized hindsight-induced telling of the actual story of what happened in the hospitality field could '325 claims 11-13 and 15 be determined to have been obvious in 1998. However, 35 U.S.C. §103 requires actual evidence, not fiction, and in accordance with precedent

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<sup>22</sup> *Ex Parte McNally*, No. 2012-001503 at 4 (PTAB Nov. 4, 2014) (Exh. 2011) ("Appellant argues that the references **do not disclose** application software enabled to **configure hospitality data for display** on the non pc standard display sized screen of a wireless handheld device. **We agree**. . .") (emphasis added).

and the Rules of the Board. The Petition clearly fails.

### **III. THE PETITION DOES NOT ESTABLISH STANDING**

The Petition argues that claim 11 is not directed to a technological invention. (Pet. at 11-12). The Petition simply lists claim terms and asserts that they are in the prior art, without addressing the functionality of the recited elements or the claim as a whole. Critically, the Petition omits even a mention of the claimed synchronization functionality, application and data storage on a handheld device or “integration” with “outside applications” as recited in claim 11. The technological feature question cannot be resolved without considering the claim elements in context and as a whole.

The inventive solution as manifested in claim 11 is in fact a very highly technological functionality. There is no basis under the Board’s developing “technological invention” precedent to find standing for claim 11 when this claim and all of its elements are properly considered by their express terms and/or in light of the specification.<sup>23</sup> The Petition may not simply cast express limitations aside; an actual analysis of at least one claim is required—which the Petition did not provide.<sup>24</sup>

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<sup>23</sup> The Petition also makes no attempt to explain how synchronous generation of a hierarchically-structured (multi-level) menu at a central computer and transmission of said menu to a handheld device or web page is not a novel and non-obvious technological feature. In fact, the Petition does not even mention any of these aspects of claim 1, a claim on which the Petition also rests its standing argument. The Petition instead makes arguments based on the specification, which are nonetheless indicative of a technological invention, in an attempt to obfuscate or avoid the actual claimed subject matter.

<sup>24</sup> PO submits that Petitioner was required to provide, in the Petition, the basis for standing and that reference to CBM2014-00016 cannot suffice. Note that the PTAB has recently held that claims having structural similarities to the ‘325 claims were directed to a technological invention. *See Bloomberg L.P. v. Quest Corp.*, CBM2014-

#### IV. OVERVIEW

##### A. 35 U.S.C. §103 Overview

Analyzing obviousness at the time of the invention, as required, is not a simple or easy task, particularly because the invention was first conceived in 1998, many years ago and long before many technological advancements which are today taken for granted. But the burden is on Petitioner to prove obviousness, which it fails in multiple ways (technically, factually, procedurally, and legally). Petitioner is simply **wrong** in its characterizations of the invention/claims, the asserted prior art and everything in the Petition which bears on either.

The inventive **solution** simply was not obvious to any POSA<sup>25</sup> in the Fall of 1998, and was not apparent to Mr. McNally (Ameranth’s founder and lead inventor—clearly a POSA) or his co-inventors until they conceived it. In fact, until the Fall of 1998, like the entire hospitality marketplace, the inventors had not themselves previously recognized the actual underlying multi-dimensional synchronization, integration and menu generation **problem** needing to be **solved** in the industry (aspects of which are encompassed by claims 11-13 and 15).

The hospitality market challenge faced by the ‘325 inventors was unlike those in any other field.<sup>26</sup> Nowhere else did a customer expect to have a customized product produced and delivered to them “on the spot” and made “their way” and, in the quick-service restaurant or pizza markets, literally

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00205, Paper No. 16; *Apple v. ContentGuard, Inc.*, CBM2015-00046, Paper 12.

<sup>25</sup> PO does not materially dispute Petitioner’s definition of the skill level of a POSA.

<sup>26</sup> Exh. 1002 at 1:38-42 (“[U]ser-friendly information management and communication capability not requiring extensive computer expertise **has not heretofore been available** for use in everyday life such as for **restaurant ordering, reservations and wait-list management.**”) (emphasis added).

created/delivered to the customer in a matter of “minutes.”<sup>27</sup> The challenge/problem that the inventors first recognized in 1998 was how to seamlessly integrate wireless handheld and web-based ordering to the existing restaurant/hospitality systems using their existing database, without requiring a wholesale and fundamental change to the existing systems, without manual programming of each handheld and while still yielding an easy to use and customized operator interface for both restaurant staff and remote customers to place precise orders, so that customers would have it “their way”—all the while maintaining synchronization across the system, as clearly explained in the patent:

These challenges include building a menu using their existing database and transferring the menu onto hand-held devices or Web pages that will interface with servers wirelessly or to restaurants/customers over the internet. ... the first coherent solution available to accomplish these objectives easily and allows one development effort to produce **both the handheld and web page formats**, link them **with the existing POS systems** ...

Exh. 1002 at 3:54-62 (emphasis added). Further, this problem needed to be solved as part of an overall synchronized and integrated “system of systems”—not only across technology modes—but also with and between other hospitality and non-hospitality applications as well.

The salient question is whether both the “problems” and the “solution” were obvious to a POSA in August 1998. Both must have been obvious to warrant the sanction of invalidation—being the first to identify a previously unrecognized

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<sup>27</sup> The *time criticality* of the hospitality market challenge is clearly stated in the ‘325 specification. Exh. 1002 at 1:59-60 (“the time criticality of ordering, reservation and wait-list management and other similar applications.”) (emphasis added).

underlying problem indicates non-obviousness.<sup>28</sup> The ‘325 inventors *were the first* to identify the actual underlying problems and the first to solve them as evidenced by the specification and claims. However, using the specification, drawings and claims as a guide, as well as the very extensive prosecution history files (from the entire patent family) and the benefit of observing the technological advancements of the last 15+ years, Petitioner and its expert Helal now, in 2015, allege that everything claimed was obvious by little more than a wave of the hand, devoid of any serious examination of the claims, specification or alleged prior art. But it is well recognized that what might appear via hindsight to have been obvious long ago, in fact often was not.<sup>29</sup>

Fortuitously, the actual factual history is documented, as shown herein and in the record of U.S. Pat. No. 8,146,077 (“‘077”)<sup>30</sup> (which is fully available in consideration of the present Petition against the ‘325 patent), and compels a conclusion of non-obviousness. If objective evidence exists as to what the marketplace truly thought about the uniqueness of the invention at the time and subsequent thereto such evidence *must* be considered in an obviousness analysis. That evidence exists in spades in this case, yet the Petition ignored it entirely,

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<sup>28</sup> “[A] patentable invention may lie in the discovery of the source of a problem.” *In Re Spinnoble*, 405 F.2d 578,832 (CCPA 1969).

<sup>29</sup> We are admonished that “[t]hat which may be made clear and thus ‘obvious’ to a court, with the invention fully diagrammed and aided . . . may have been a breakthrough of substantial dimension when first unveiled.” *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138 (Fed. Cir. 1985).

<sup>30</sup> The only reason that the §1.131 and 1.132 Declarations present in the ‘077 file (reflecting the then-contemporaneous events) were not filed in the ‘325 prosecution, was that the ‘325 claims were allowed without any need for same.

despite its ready availability in the prosecution history of the ‘850 family (salient portions of Exh. 2020-2023 are discussed below in the Objective Evidence section) and citation in CBM2014-00016. This was error. The Federal Circuit “has consistently pronounced that **all evidence** pertaining to the objective indicia of non-obviousness ***must be considered before*** reaching an obviousness conclusion.”<sup>31</sup>

Evidence from the time of the invention, from actual market participants, is the most accurate determinant of obviousness.<sup>32</sup> What did IBM (owner of Petitioner’s primary §103 reference Brandt), the world’s largest computing company (then and now) and Microsoft, the world’s largest software company (then and now), **truly** think as to the “obviousness” of Ameranth’s inventions at the time of the invention? IBM partnered with Ameranth on its 21st Century Restaurant™ System launch at the NRA Show in Chicago in May 1999 and Microsoft praised,<sup>33</sup> partnered with and invested in Ameranth to gain access to Ameranth’s technology, *i.e.*, as manifested by the then-pending ‘850 patent application, which was Ameranth’s only relevant intellectual property asset at the time. Extensive contemporaneously-documented objective evidence of non-obviousness, including extensive and multi-faceted confirmations of nexus of the

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<sup>31</sup> *Plantronics, Inc. v. Aliph, Inc.* 724 F.3d 1343, 1355 (Fed. Cir. 2013) (emphasis added) (“The significance of this fourth *Graham* factor ***cannot be overlooked*** or be relegated to ‘secondary status.’”) (emphasis added).

<sup>32</sup> *See, e.g., Continental Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 1273 (Fed. Cir. 1991) (“The significance of a new structure is often better measured **in the marketplace** than in the courtroom.”) (emphasis added).

<sup>33</sup> “Ameranth provides a total turnkey solution integrating Pocket PC’s with wireless networks, and linking them to PC servers, and the internet” (Doug Dedo, Product Manager, Microsoft, May 22, 2000 (Exh. 2020 at 3, 12 and Exh. 38 attached thereto)).

documented licensing, praise/awards, copying, failure of others and commercial success to the claimed invention, is further provided below.

**B. Overview Of Helal Declaration Errors And Omissions**

The Petition's reliance on the Helal Declaration is misplaced and the Declaration itself is fatal to the entire Petition on numerous bases.

**First**, as was shown above, it is clear that Helal did not read or even consider the Board's conclusion as to the challenged claims from the first petition (CBM2014-00016) including the rejection of the very same 35 USC §101 theory put forth in the new Petition, did not consider the Board's prior claim constructions and did not even fully read or consider the specification nor the '325 or '077 file histories.

**Second**, in his own words, Helal admitted that he was "**bewildered**" by the same patent specification, drawings and claims that multiple patent examiners, patent supervisory examiners, multiple panels of PTAB ALJs and multiple judges in multiple district courts over a period of 15 years **clearly understood**—hardly confirming Helal as an "expert," or even having rudimentary knowledge, in this subject area.

**Third**, by relying on the undisclosed "legal opinions" of Starbucks' counsel for the legal tenets supporting his conclusions, those conclusions certainly could not be based on a proper foundation. This is evidenced, *inter alia*, by the fact that Helal did not recognize the requirement to consider, and did not consider, objective evidence of obviousness which is of record in the '850/'325 family prosecution history.

**Fourth**, by not disclosing a single claim construction proposal of his own, it simply is not possible to ascertain the **actual** bases for Helal's arguments. His flawed analysis as to written description and obviousness is amplified by his admission of

being “bewildered” by the synchronous aspect of these “synchronization” claims.<sup>34</sup>

**Fifth**, Helal challenged the **enablement** of the patent description, while **ignoring** Petitioner’s prior challenge/position which already **admitted** to enablement of the “database on the handheld” embodiment.

**Sixth**, when unable to find a disclosure of critical claim functionality, Helal simply parsed out those terms from his constructions and from his review overall.

**Seventh**, of the claim terms he actually considered, Helal repeatedly misstated the actual meanings of not only individual terms, but also entire claim elements.

**Eighth**, on top of the aforesaid critical errors, Helal compounded the mistakes by misinterpreting the actual inventions/disclosures and the principles of operation of his chosen prior art selected by hindsight to attempt to fill voids irrespective of how anything actually operated or of their conflicts with each other. Yet, while alleging he could not understand the synchronization aspects of the invention/claims (which “bewildered” him), he supported Petitioner’s argument that the asserted prior art still disclosed the very features he alleged to not be definite/explained/disclosed. (Pet. at 56 (“Brandt discloses systems wherein applications and associated application data are synchronized [] between a database, handheld device, web server, and web page.”)).

**Ninth**, despite the black letter requirement to consider objective evidence in the

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<sup>34</sup> See *Ex parte Kritzer*, No. 2013-007728 at 3 (PTAB June 4, 2015) (Exh. 2025) (“A determination that a claim is **obvious** requires a comparison of **the properly construed claim** with the prior art.”) (emphasis added) (*citing Oakley, Inc. v. SunGlass Hut Int’l*, 316 F.3d 1331,1339 (Fed. Cir. 2003)); *Ex Parte Azar*, No. 2009-010272 at 4 (BPAI April 18, 2011) (Exh. 2026) (“**Claim construction** is an **essential element** in determining **adequacy of the written description.**”) (emphasis added) (*citing* MPEP § 2163).

record, Helal entirely ignored the overwhelming amount of objective evidence compelling a non-obviousness conclusion. This evidence includes the fact that IBM, the purported source of the material in Petitioner's base reference Brandt, had partnered with Ameranth in the launch of its 21st Century Restaurant™ system at the May 1999 NRA Show in Chicago. Thus the Petition innately fails, for lack of evidence and ignoring copious objective indicia of non-obviousness, in addition to Helal's numerous other errors and omissions.

**Tenth**, and finally, Helal's failure to disclose **his own** patent application which included many of the same inventive ideas of the '325 claims is fatal to his entire opinion and to the Petition overall, both because the non-disclosure calls into question the objectivity of the present opinions as well as demonstrating that Helal **himself** believed these aspects were truly novel and non-obvious well after the priority date of the '850 patent. This is discussed in detail in the next section.

### C. Overview Of Helal 2004 Patent Application

While alleging that he did not understand the '325 specification or claims, and opining that everything in them (individually and in combination) was known prior to September 1999, Helal did not disclose in his Declaration that in January 2004 he sought claims for nearly the same inventive ideas as recited in Ameranth's '325 claims. This is clear, *e.g.*, from a comparison of element "g" of '325 claim 1 (**"application software for generating a second menu from said first menu and transmitting said second menu to a wireless handheld computing device ..."**) with Helal's application claim 6 (which depended from claim 1):

Claim 1: An **integrated development tool** for constructing a **server-side proxy** for interacting **with a wireless, mobile device**, said

**integrated development tool** comprising: at least **one module**, wherein said at least one module is configured to **generate program code** to perform a specific function of **the server-side proxy**; and means for **accessing said at least one module**.

Claim 6: The **integrated development tool** of claim 1, wherein said at least **one module** is configured to **generate program code** to **convert images from a first graphics format to a second graphics format**, wherein **the second graphics format** is **suitable for transmission over a wireless communications link to a mobile device**.

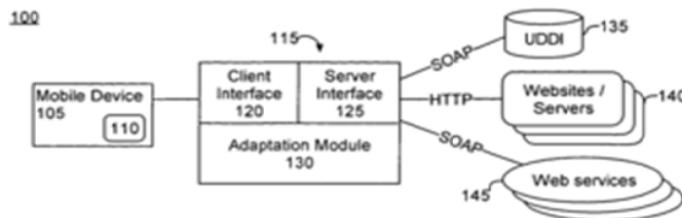
Exh. 2031 (emphasis added). Clearly, Helal claimed his “integrated development tool” (corresponding to the claimed “information management and synchronous communications system”) as his “server side proxy” embodiment which encompassed converting images from a **first** graphics format to a **second** graphics format (corresponding to the claimed generation of a “**second** menu” from a “**first** menu” for “wireless transmission” to “mobile handhelds,” just as recited in ‘325 claim 1).

The disclosure of the Helal application also included aspects similar to elements of the challenged claims including “communications control module” (Helal’s “adaptation module”), “API” (Helal’s API) and “central database” (Helal’s “in a centralized fashion”). In fact, although Helal asserted that the inventors did not disclose or “enable” **how** to make the embodiments claimed in the ‘325 patent, the Helal description included a similar level of specificity, *e.g.*, as to the database (*compare* Helal application, Exh. 2031 at ¶¶0041-0042,<sup>35</sup> with ‘325

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<sup>35</sup> “The proxy IDE can include an API or module for maintaining user profiles within a data store such as a database. . . For this API to function properly, the system must include a user profile database as well as Open Database Connectivity (ODBC) drivers for the selected database product.”

patent, Exh. 1002 at 10:50-59<sup>36</sup>). Helal even used the same “wizard” terminology long used by Ameranth with respect to its “menu wizard” and “communications wizard” (discussed below in the context of objective evidence of non-obviousness) in describing **features** of his own embodiments. This is shown in Helal’s Figure 1 below (and Figures 6-9), and the specification, highlighting functionality similar to the **features** of the ‘325 patent which Helal deemed “well known” as of 1999:



Pertinent extracts from Helal’s specification are as follows:

**ABSTRACT** - An **integrated development tool** for constructing a **server-side proxy** for **interacting** with a **wireless, mobile device** can include at least one module.

**[0003]** The present invention relates to the field of **application development for wireless mobile devices** and, more particularly, to developing **the server-side components** which **interact** with **wireless mobile devices** and **mobile clients**.

**[0006]**... **The proxy** acts as **an interface between** the **mobile application** or **client** and **one or more other servers**.

**[0007]**... The proxy **115** can include a **third component** referred to as

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<sup>36</sup> “In the preferred embodiment, the menu generation system of the present invention uses an API called Active Data Objects (“ADO”) for database access. ADO is useful in a variety of settings. It is built on top of OLE DB and can be used to talk to databases and, in the future, any data source with any OLE DB driver. Advanced querying is supported. The database can be queried on virtually all fields. Queries can be built using SQL syntax for experienced users or can be created using a query builder which guides users through the creating process.”

**an adaptation module 130** which can **transform data** according to the **needs of the mobile client 110**.

[0008]... More complex proxy functionality can include the **adaptation of a server output stream to a format** and bandwidth that is suitable for **use by the mobile client**.

[0014]... The **wizard module** can control operation of the module(s) to **automatically generate** program code specifying a **programmatically architecture** for the **server-side proxy** according to the **user specified attributes**.

[0015]... **a module** configure[d] to **generate program code** to **convert images from a first graphics format to a second graphics format**, wherein the **second graphics format is suitable for transmission** over a **wireless communications link to a mobile device**

[0033] The functions disclosed herein can be provided **through an application programming interface (API)**.

[0042]... For this API to function properly, the **system must include** a user profile database as well as **Open Database Connectivity (ODBC) drivers** for the selected **database product**.

[0124]... Travel WSDL document can provide details on travel information services such as **hotel reservations and room availability**.

[0163]... By selecting the **appropriate client device option**, the display **length**, display **width**, and display color **of the device** can be included in the proxy shell.

[0170]... The **present invention** can be realized **in a centralized fashion** in one computer system

Exh. 2031 (emphasis added). Helal's "server side proxy" patent application thus included a significant number of claimed features/elements as similarly disclosed in

the '325 specification/drawings/claims, directed to a substantially similar problem and even including similar claim recitations, including dealing with, *e.g.*, "height/width" of the handheld display sizes and even including a **hotel reservations** embodiment.

Irrespective of the non-disclosure of the Helal application in this proceeding, which PO submits was improper, the indisputable fact of **its existence**, and that it was filed **four** years **after** Ameranth's priority date by Petitioner's own expert declarant, demonstrates that Helal's refrains of "I don't understand" Ameranth's invention and/or that everything claimed in the '325 patent was known, not novel and obvious in 1998/1999 are baseless and are directly contradicted by Helal's own sworn declaration to the USPTO claiming he was the "first" inventor of this substantially similar subject matter four years after Ameranth filed its priority application.

**V. THE PETITION SHOULD BE REJECTED FOR IMPROPER INCORPORATION BY REFERENCE**

The Petition relies very heavily on evidentiary cites to evidence and supporting documents not included within it, especially (but not limited to) the **135-page Helal Declaration**, for arguments, support, and proffered evidence not included or adequately discussed in the Petition itself. This tactic has been repeatedly rejected by the Board, which should apply its Rules here and refuse to consider all information "presented in a supporting declaration [or exhibits] but not discussed sufficiently in a petition." This is not a situation in which just a few supporting external references are cited. Rather, it is pervasive throughout the entirety of the Petition arguments, occurring in dozens of instances and including improper citations not only to text but to almost all of the Brandt figures/diagrams as well, seeking to "incorporate by reference" into the Petition without adequately explaining what portions were supposedly being relied on

or an adequate explanation of their supposed significance. *E.g.*, Pet. at 44, 45, 51, 53, 55, 59, 61, 62 (bottom of pages), 48, 49, 50, 52 (middle of pages) and 44, 45, 47, 58, 62 (top of pages) (this is merely for the first §103 challenge of the first claim; the improper incorporation by reference is repeated throughout). For illustrative purposes, and certainly not as an exhaustive list, the Petition provides less than one page of argument regarding claims 11-13 element b in the context of the Brandt/NetHopper/Carter combination (Ground 9) (Pet. at 49-50) and not a single cite to any actual evidence relative to Carter, but attempts to incorporate by reference over three pages of argument, reference text **and** figures from the Helal Declaration (Exh. 1003 at ¶¶163-70) which is largely not discussed within the Petition itself (even trying to add the Carter reference although it is not mentioned in the Petition argument). As a further example, and even more egregiously, the Petition provides a little over two pages of argument regarding the claims 11-13 “wherein applications and data are synchronized ...” limitation in the context of the Brandt/NetHopper/Carter combination (Ground 9) (Pet. at 56-58), but attempts to incorporate by reference over fourteen pages of argument, reference text **and** figures from the Helal Declaration (Exh. 1003 at ¶¶205-227). This is clearly a systematic attempt to circumvent the 80-page limit.<sup>37</sup>

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<sup>37</sup> In *Tempur Sealy Int'l, Inc. v. Select Comfort Corp.*, IPR 2014-01419, Paper 7 (PTAB Feb. 17, 2015) the Board held that a defective petition could not be “saved” by a massive expert declaration or other supporting documents. The Board has rejected attempts to incorporate a large expert declaration into a petition because incorporation “by reference amounts to a self-help increase in the length of the [] brief” ... “a pointless imposition on the court’s time.” *Cisco Systems, Inc., v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12 at 10 (PTAB Aug. 29, 2014) (emphasis added), *citing DeSilva v. DiLeonardi*, 181 F.3d 865, 866-67 (7th Cir. 1999). Use of the Helal Declaration is, per *Cisco* and *Tempur Sealy*, a “self-help increase in the length of the

The Petition itself lacks sufficient explanation as to numerous claim elements and cannot resuscitate itself via improperly incorporated exhibits. The "obviousness" portion of the Petition is chock-full of conclusory "It would have been obvious that...", or "a POSITA would be motivated to..." or "a POSITA would understand that..." assertions that have no support or explanation other than in the Helal Declaration, and mostly not even there. The effect of packing the Petition with these mere conclusory statements is, again, that Petitioner has improperly availed itself of "a self-help increase in the length of the brief," which should be rejected.

## **VI. CLAIM CONSTRUCTION**

The Petitioner and the Board must construe all claims before performing any validity analysis. However, neither Petitioner nor its expert Helal construed even a single claim or a single claim element, rather they simply alleged that everything was according to BRI<sup>38</sup> and/or they imply reliance on extrinsic evidence to seemingly lead to an unstated but "implied" construction. They point to PO arguments in a different forum,<sup>39</sup> but do not actually propose any constructions of their own. Further, they

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brief." The Helal Declaration is even larger than the declaration in *Tempur Sealy*.

<sup>38</sup> Pet. at 24 ("The proposed BRI construction of each term is the ordinary meaning of the term, including 'communications control module' (*e.g.*, Exh. 1002 at 9:35-54, 11:37-55; 4:10-28, 4:54-56) and 'hospitality applications' (*e.g.*, *Id.* at 1:56-60; 1:64-2:37, 4:10-13, 11:37-55)."). This admits that the specification defines the terms.

<sup>39</sup> Petitioner's attempt to incorporate extrinsic evidence from a different forum (Pet. at 23) fails. First, Petitioner mischaracterized PO's statements. Second, claim construction standards in district court are different. Third, that proceeding occurred prior to the Board's constructions in the first '325 Petition (CBM2014-00016 (also ignored by Petitioner)), and prior to numerous other decisions from both the Federal Circuit and Supreme Court. Intrinsic evidence is the controlling determinant in claim construction. *See Travelocity v. Chronos*, CBM2014-00082, Paper 10 at 14, n.3

entirely ignored the Board's prior constructions across this family of patents, which established the BRI for many terms. Without referring to any actual construction of a claim term nor how any structure of the cited references actually meets the properly construed claims, Petitioner's arguments are an exercise in obfuscation and do not provide anything actually identifying **what** Petitioner's position is on **anything** relative to the claims. This evasiveness reflects an approach of essentially proposing a "multiple choice" test to PO and the Board requiring guessing as to just **which** structures of **which** references apply against which elements and/or are combined with each other (or **how**) as regards **any** of the critical synchronization elements.

Critically, despite the requirement to do so,<sup>40</sup> Petitioner failed to consider the claims **as a whole** and failed to consider all of the pertinent elements of any claim. Petitioner simply provided random, often contradictory, material from its extrinsic references, relying on incorporation by reference as to both the references and the figures of those references as well as attorney argument, and conclusorily stating that every claim element was obvious, without any substantive explanations or facts

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("Patent Owner's infringement contentions are, at best, extrinsic evidence of the meaning of the claim terms, and extrinsic evidence is not favored over intrinsic evidence."). Petitioner's assertions at page 24 of the Petition regarding PO's prior alleged contentions are a red herring. PO's arguments related to construction of the preamble, not claims 11-13 element b, and moreover Judge Payne declined to construe the preamble of claims 11-13 as limiting. PO is not required to conform every future argument to an argument which was never adopted. Moreover, as stated, PO never took a position on the scope of element b in the prior proceeding in any event.

<sup>40</sup> See, e.g., *Hockerson-Halberstadt, Inc. v. Converse Inc.*, 183 F.3d 1369, 1374 (Fed. Cir. 1999) ("Proper claim construction . . . demands interpretation of the entire claim in context, not a single element in isolation.").

supporting those conclusions. It is not surprising, in light of Helal's "bewilderment" as to how the claimed synchronization works (Exh. 1003 at ¶101), that he does not understand the claims and was unable to provide constructions for same.

However, it is axiomatic that before patentability can be assessed and determined, the claims must be properly construed. PO has done so, as is shown below, by considering, as it must, the **intrinsic** evidence as the guiding principle including the specification/drawings, the prosecution history and other related claims. PO's proposals were formulated by adherence to the following oft-cited guidance, frequently cited by the PTAB for its own BRI constructions:

The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

*In re Papst Licensing Digital Camera Patent Litigation*, 778 F.3d 1255, 1261 (Fed. Cir. 2015) (citations omitted). PO urges the Board to carefully consider and adopt all construction proposals herein, as they are entirely supported by the intrinsic evidence, knowledge in the art at the time of the invention, and were formulated using Federal Circuit claim construction mandates.

**A. PO's Proposals In Juxtaposition To Petitioner's Flawed Invalidity Challenges**

Petitioner's challenges include errors, misinterpretations and/or omissions of claim terms including: (1) "communications control module"("CCM"), (2) "synchronization" (3) "wireless handheld computing device on which hospitality applications and data are stored," (4) "outside applications ," (5) "application program interface," (6) "hospitality applications," (7) "integration," "relates to orders/waitlists/reservations," (8) "central database," (9) "data is sent to a wireless

paging device” and (10) “web page.” These errors are discussed in the context of the correct constructions proposed by PO below. However, again, most important is the failure to consider the claims as a whole or the interrelationships between these terms.

**1. “wireless handheld computing device”**

PO proposes “a wireless computing device that is sized to be held in one’s hand.” This is straightforward. *See* Judge Everingham Order (Exh. 2033 at 24, and discussed below). Petitioner ignored this construction, especially in respect to Alonso, which did not recognize the unique requirements/aspects of wireless handhelds at all.

**2. “central database”**

PO proposes “a database file structure connected to the system in association with a central server, comprised of records, each containing fields, together with a set of operations for searching, sorting, recombining and other functions.” Microsoft Comp. Dict. (4th ed.1999) (Exh. 2015 “database”); Exh. 1002 at 2:24, 11:47-48 (“backoffice server (central database”); *id.* at 2:8-10, 11:26-28 (“synchronization between a central database and multiple handheld devices”). Petitioner’s ignoring of the meaning and import of this term led, in part, to its complete misunderstanding of the overall synchronization functionality recited in the claim.

**3. “web page”**

The PTAB has construed to mean “a document, with associated files for graphics, scripts, and other resources, accessible over the internet and viewable in a web browser.” CBM2014-00015 (Exh. 1048 at 8).

**4. “communications control module”**

This is a software element. As Judge Payne concluded in prior district court litigation, “the specification itself provides the best construction for the term at issue.” (Exh. 1044 at 13). Judge Payne correctly construed the CCM as “a software layer that

sits on top of a communications protocol and acts as an interface between hospitality applications and the communications protocol” relying entirely on intrinsic evidence.

**5. “synchronized”**

In its non-institution ruling in CBM2014-00014, the Board defined “synchronized” as “made to happen, exist, or arise at the same time.” However, this was not determined in the context of the claims of the entire patent family, nor does it take into consideration that the “timing” aspect of the claims is governed by, *e.g.*, the “real time” term in the ‘077 patent. PO thus submits that “synchronized” simply means “made or configured to make consistent” pursuant to the specification and usage in the challenged claims and in other claims of the patent family.<sup>41</sup>

**6. “*applications and data are synchronized between the central database, at least one wireless handheld computing device, at least one web server and at least one web page*”**

PO submits that the construction of “synchronized” proposed above obviates any need for further construction of this element. The remaining terms of this element are clear on their face as discussed above. Further, “synchronization” is not the same as “integration,” a uniquely claimed function discussed below, in respect to integration between outside (non-hospitality) applications and hospitality applications.

**7. “*wireless handheld computing device on which hospitality applications and data are stored*”**

Clearly, just as Petitioner argued in the first Petition (CBM2014-00016), the preferred embodiment for the wireless handheld device recited in claims 11-13 and 15 is the application and database stored on the handheld device. The express claim language separately requires that “hospitality applications and data” are stored on both

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<sup>41</sup> See Exh. 1002 at 2:28-31, 4:20-23, 11:47-49 (“*in synch* with the backoffice server (central database) so that the different components are in equilibrium at any given time and an *overall consistency* is achieved”) (emphasis added).

a wireless handheld device and a web page. The law is clear that different limitations in a claim are to be given effect.<sup>42</sup> Moreover, the specification clearly and consistently states that a handheld menu/display is different from a web page menu/display, *e.g.*:

means to instantly download the menu configuration onto, *e.g.*, a handheld device or Web page (Exh. 1002 at 3:22-25 (emphasis added))

the menu can be downloaded to either a handheld device or Web page (*Id.* 3:41-42 (emphasis added))

Transferring the menu onto handheld devices or Web pages (*Id.* 3:50-51 (emphasis added))

A PDA or Web page format (*Id.* 10:36 (emphasis added))

Still further, neither the specification nor the claims envision synchronizing between “web pages.” If claims 11-13 and 15 elements “b” and “d” were both web pages and were the “same” element, there would be no need to synchronize them.

In addition to the plain language of claims 11-13 and 15 element b, which contains no reference to **a browser**, and the clear discussion in the specification requiring no such browser with respect to a wireless handheld device, the structure and language of claims 11-13 and 15 (outside element b) further supports the conclusion that a web browser is not required on the wireless handheld computing device, by making the wireless handheld computing device a distinct element of the system apart

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<sup>42</sup> A reference disclosing a “web page” cannot meet **both** the handheld device and the web page limitations. *See Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1563 (Fed. Cir. 1991) (two distinct claim elements should each be given full effect). Moreover, “[c]onsistent with the principle that all limitations in a claim must be considered to be meaningful, it is improper to rely on the same structure in the [alleged] reference as being responsive to two different claim elements.” *Ex parte Brud*, BPAI Appeal 2009-011707 at 3, 4 (Exh. 2013).

from a web server and a web page.<sup>43</sup> If every wireless handheld computing device in the system required a web browser, there would be no need to synchronize the handheld component of the system with the web-page component; that would be entirely redundant. Such an intrinsically unsupportable reading of the claims must be rejected. Petitioner’s attempt to read “applications” out of claims 11-13 and 15 thus fails. Element b of these claims cannot be browser-dependent.

#### 8. *“hospitality applications”*

As to “hospitality applications,” claims 11-13 are directed to three different embodiments thereof. Petitioner mostly ignored the limitation, despite the fact that every challenged claim is uniquely focused on the hospitality market and that market’s specialized applications and needs. In light of the fact that Petitioner’s base references are not hospitality references, it is clear why Petitioner hoped to escape the import of this critical limitation. However the Board has already properly construed it, in effect, as “applications used to perform services or tasks in the hospitality industry.”<sup>44</sup> The three ‘325 independent claims indisputably recite separate functionality. Further, the ‘325 prosecution history clearly defines “hospitality applications” and that the ordering in claim 11 is “**food** ordering”—which is **different** from waitlists and/or reservations:

As known in the art, a **hospitality software application** is, for example, a piece of software used to provide operational solutions in hospitality industries such as **restaurants and hotels** concerning, for example, **food**

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<sup>43</sup> See, e.g., ‘325 claim 11, first wherein clause (“applications and data are synchronized between the central data base, at least one wireless handheld computing device, at least one Web server and at least one Web page”) (Exh. 1002).

<sup>44</sup> CBM2014-00014, Non-Inst. Dec. at 16-17; see also, e.g., Exh. 1002 at 4:11-12 (“hospitality applications, e.g., reservations, frequent customer ticketing, wait lists, etc.”); 4:4-5, 11:31-32 (“computerized hospitality applications”).

**ordering**, menus, **wait-lists** and **reservations**.

App. Ser. No. 10/015,729, Amendment, Nov. 1, 2001 at 6 (Exh. 2039) (emphasis added). The Federal Circuit held just days ago that BRI must be consistent with the specification<sup>45</sup> and the **prosecution history** must be applied in determining the BRI.<sup>46</sup>

Clearly, **travel/transportation** references (*e.g.*, a “car rental” application) are not “hospitality” references as a POSA would understand from the specification and/or prosecution history. No POSA would believe that a “car rental” application meets the “hospitality application” limitation of these claims any more than they would believe that a “reservations” embodiment is **also**<sup>47</sup> a “food ordering” and/or a “waitlist” application. A POSA would also have known that some venues take “reservations” and some do not (but may nonetheless allow for waitlists); these applications are **entirely different** from one another. This is **not** an issue of “combinability” based on non-analogous art, rather it is an issue of Petitioner not having a reference disclosing or suggesting the specifically claimed “hospitality application” limitations of entirely different claims, as correctly construed, as recited in `325 claims 11-13.

#### 9. “API,” “outside applications” and “integration”

These three terms are very closely related, and compel the correct construction

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<sup>45</sup> *Microsoft, Inc. v. Proxyconn, Inc.*, No. 2014-1542 at 7 (Fed. Cir. June 16, 2015) (“Even under the broadest reasonable interpretation, the Board’s construction “cannot be divorced from the specification and the record evidence,” and “must be consistent with the one that those skilled in the art would reach”) (citations omitted).

<sup>46</sup> *Id.* (“The PTO should also consult the patent’s prosecution history in proceedings in which the patent has been brought back to the agency for a second review.”).

<sup>47</sup> *See CAE Screenplates Inc. v. Heinrich Fiedler GmbH & Co. KG*, 224 F.3d 1308, 1317 (Fed. Cir. 2000) (“In the absence of any evidence to the contrary, we must presume that the use [of] different terms in the claims connotes different meanings.”).

of each other when the claim is considered as a whole, which Petitioner did not do. Petitioner misread the first term and/or ignored the proper constructions of the second and third terms altogether. Reading these terms out, and reading **integration** to be the same as **synchronization**, served to make Petitioner’s analysis even more erroneous.

Further, Petitioner impermissibly read out two crucial terms: “outside applications” and “integration.” Clearly the BRI for “outside applications” is simply “**non-hospitality applications**” as compelled by the claim language and structure itself—they clearly cannot be “hospitality applications” because the outside applications are what are being integrated with the hospitality applications. Petitioner entirely failed to address the critical “integration” term—which is manifestly different from “synchronization.” In fact, “integration” is what APIs do—they enable “integration” between applications, and not just mere data/message exchanges. The proper construction for “integration” is clear from the 1999 Microsoft Computer Dictionary definition of same as well as the definition of “integrated software:”

Integration: “In computing, the combining of different activities, programs, or hardware components into a functional unit.”

Integrated software: "A program that combines several applications .... in a single package.”

(Exh. 2015). These definitions are also consistent with the specification, which states: a well-defined API that enables third parties such as POS companies, affinity program companies and internet content providers to ***fully integrate with computerized hospitality applications***

(Exh. 1002 at 4:2-5; 11:28-32). This language is also key to the proper construction of the claim overall and to the full claim term “applications ***and*** data are synchronized...”

#### ***10. “data is sent to a wireless paging device”***

Petitioner ignored the import of this element of claim 15 entirely. First, this

claim depends from independent claims 11-13 and each of their final terms, which recite **hospitality data** which “relates to” “orders,” “waitlists” and “reservations.” Claim 15 adds “paging” functionality as to **this hospitality data**, which clearly is “to update the status of the order, reservation or other information.” (Exh. 1002 at 12:8-10). A POSA would understand, when reading the claim as a whole, that this added claim 15 functionality is directed to the system “updating” the customer as to the status of the customer’s order, reservation or place on the waitlist, **after** the order was placed or the customer made a reservation or was added to a waitlist. PO thus submits that the BRI for this term must be construed to require same.

**VII. PETITIONER HAS NOT SHOWN THAT ANY OF CLAIMS 11-13 OR 15 ARE MORE LIKELY THAN NOT INVALID UNDER 35 U.S.C. §112**

Petitioner challenges alleging that certain ‘325 claim elements are invalid for lack of enablement, indefiniteness, and/or lack of written description fail as set forth herein. Clearly, the Board in the prior proceeding understood that not only are the claims as a whole integrated, defined and complete, but that the components interact with each other **systemically**, including the **structure** for all the recited components:

These claims each recite **a tangible embodiment** of a **system** having **structural components** – a central database, wireless handheld computing devices, web servers, web pages, hospitality applications, an application program interface, and a communications control module.

These claims further **define** these **components** by **reciting** their **functions**

CBM2016-00016, Paper 19 at 25 (emphasis added).

Proof of invalidity under §112 for lack of enablement requires a showing that a person of ordinary skill in the art would be unable to practice the invention without “undue experimentation.” *See In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988).

To prove invalidity under §112 for indefiniteness, Petitioner must show that the

challenged claims "read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014); *see also Biosig Instruments, Inc. v. Nautilus, Inc.*, No. 2014-1289, at 6-7 (Fed. Cir. Apr. 27, 2015) (on remand from the Supreme Court).

Proof of invalidity under §112 for lack of written description requires Petitioner to establish that the disclosure does not reasonably convey to a skilled artisan that the inventor was in possession of the claimed invention at the time of the application. *See Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc).

**A. "Hospitality Applications And Data"**

Petitioner alleges that the term "hospitality applications and data" ('325 claims 11-13, elements a-d) is not enabled, and indefinite, and lacks sufficient written description, but quizzically had no difficulty presenting its §103 challenges against same. (Pet. at 27-33 (what Petitioner labels as "Grounds 1-3")). In fact, '325 claims 11-13 and their dependent claims are valid and meet the enablement, definiteness, and written description requirements. The Board has already rejected a previous §112 challenge to these claims brought by the same parties. *See Agilysys, Inc. v. Ameranth, Inc.*, CBM2014-00016, Paper 19 at 14-20 (Mar. 26, 2014).

**1. *Enablement***

Regarding enablement, the specification describes a preferred embodiment for synchronizing hospitality applications and data "between handheld devices, internet and desktop infrastructure," compatible with common handheld and desktop computer operating systems, and incorporating "programming steps that are commonly known" and "can be written in any commonly used computer language:"

In the preferred embodiment, the menu generation approach of the present

invention uses Windows CE® as the operating system for the handheld devices. Windows CE® provides the benefits of a familiar Windows 95/98/NT® look and feel, **built-in synchronization between handheld devices, internet and desktop infrastructure, compatibility with Microsoft Exchange®, Microsoft Office 9®** and TCP/IP quick access to information with instant-on feature.

Windows CE® provides a basic set of database and communication tools for developer use. However, interfacing with these tools to provide application specific results can be a complex task. In addition to the menu generation described above, a set of software libraries described herein in conformance with the present invention not only enhances the basic Windows CE® functionality by adding new features but also maximizes the full potential of wireless handheld computing devices. Such features include **fast synchronization between a central database and multiple handheld devices, synchronization and communication between a Web server and multiple handheld devices, a well-defined API that enables third parties such as POS companies, affinity program companies and internet content providers to fully integrate with computerized hospitality applications, real-time communication over the internet with direct connections or regular modem dialup connections and support for batch processing that can be done periodically throughout the day to keep multiple sites in synch with the central database.**

The synchronous communications control module discussed above provides a single point of entry for all hospitality applications to communicate with one another wirelessly or over the Web. This communications module is a layer that sits on top of any communication protocol and acts as an interface between hospitality applications and the communication protocol. This layer can be easily updated to work with a new communication protocol without having to modify the core hospitality applications. The single point of entry works to keep all wireless handheld devices and linked Web sites in synch with the backoffice server (central database) so that the different components are

in equilibrium at any given time and an overall consistency is achieved. For example, a reservation made online is automatically communicated to the backoffice server which then synchronizes with all the wireless handheld devices wirelessly. Similarly, changes made on any of the wireless handheld devices will be reflected instantaneously on the backoffice server and the other handheld devices.

**The software applications for performing the functions falling within the described invention can be written in any commonly used computer language. The discrete programming steps are commonly known and thus programming details are not necessary to a full description of the invention.**

‘325 patent (Exh. 1002 at 11:9-61) (emphasis added).

The specification enables the claims, under the longstanding test articulated in *In re Wands*. Petitioner fails to apply the *Wands* factors at all.<sup>48</sup> As the *Wands* court explained, when “there was considerable direction and guidance” in the specification; there was “a high level of skill in the art at the time the application was filed;” and “all of the methods needed to practice the invention were well known,” then the claims at issue are enabled. *Wands*, 858 F.2d at 740. All of those factors are present here: The ‘850 specification provides direction and guidance regarding the synchronization of hospitality applications and data, as noted above; there was and is a "high level of skill

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<sup>48</sup> The eight *Wands* factors are: (a) The breadth of the claims; (b) The nature of the invention; (c) The state of the prior art; (d) The level of one of ordinary skill; (e) The level of predictability in the art; (f) The amount of direction provided by the inventor; (g) The existence of working examples; and (h) The quantity of experimentation needed to make or use the invention based on the content of the disclosure. *In re Wands*, 858 F.2d at 737. The *Wands* court held that it is improper to conclude that a disclosure is not enabling based on an analysis of only one of the eight *Wands* factors, while ignoring one or more of the others. *Id.*

in the art" of software development, and, as noted in the specification itself, there were and are multiple programming languages in which the required code could be written, and the steps to implement this synchronization were well-known to POSAs.

Further, even if one were to argue (which Petitioner does not) that multiple ways of implementing the claimed invention must be disclosed, that argument would be wrong. *See, e.g., Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1320 (Fed. Cir. 2003) ("the law makes clear that the specification need teach only one mode of making and using a claimed composition").

Petitioner's other arguments are without merit. Petitioner weakly argues that the specification does not teach how to store hospitality applications and data in a database, but it is well-known in the art that databases can store software code (*i.e.*, applications) and not just raw data (*e.g.*, menu items and prices). Similarly, it is well-known that software code (again, applications) and data are temporarily stored in dynamic web pages when the page is generated; there is no requirement in the art (or in the patent specification) that a web page continue to exist permanently after it is generated. And, one wonders if Petitioner or its expert delved into the file history at all, given their erroneous argument (*see, e.g.*, Pet. at 27) that "none of the figures" show "working examples" of an embodiment of the claimed system. The true facts are that the file history contains **seven** originally-filed **actual screenshots** of a "working example" of a system embodying the claimed invention. (Exh. 2029).<sup>49</sup>

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<sup>49</sup> The PTO required that replacement "formal" drawings be generated from the actual product screen shots filed with the original application on September 21, 1999, which are in the issued patent in lieu of the actual, original, live product screenshots.

## 2. *Definiteness*

Petitioner's definiteness argument also fails because the claims, read in light of the specification, do "inform with reasonable certainty those skilled in the art about the scope of the invention." *Nautilus*, 134 S. Ct. at 2124. With respect to the claim terms including "hospitality applications and data," it is more than reasonably certain. The specification and claims indicate that "synchronized" means "made or configured to make consistent" as discussed above in the context of claim construction.

Thus, it is absurd for Petitioner to argue that there is "ambiguity" as to whether the "hospitality applications and data" stored in the claimed system are the same or different applications and data. A central purpose of the claimed invention, as any POSA would understand, is to "synchronize" said applications and data so that they thus are the same. "The information management and synchronous communications system of the present invention features include fast synchronization between a central database and multiple handheld devices, synchronization and communication between a Web server and multiple handheld devices..." (Exh. 1002 at 3:64-4:1).

## 3. *Written Description*

Petitioner's arguments here also have no merit. Petitioner's arguments on "Ground 3" are merely circular: Petitioner argues (Pet. at 32-33) that written description is not satisfied because "as discussed above" the specification does not describe synchronization between applications and data—but this is just a regurgitation of Petitioner's argument re enablement. And, the regurgitated argument fails for the same reasons, specifically, the synchronization of hospitality applications and data is described (and enabled) in the '325 patent specification at col. 11, lines 9-55.

Also, Petitioner attempts to evade the fact that the pertinent limitations of the challenged claims are original (and thus part of the original specification. *See In re*

*Gardner*, 480 F.2d 879 (CCPA 1973) and *In re Koller*, 613 F.2d 819 (CCPA 1980) (holding that original claims constitute their own written description)). Petitioner wrongly argues (without support) that the original subject matter of these claims is of no significance because they it is nothing more than a "wish" or a "plan"—but Petitioner's allegation is untrue for the reasons set forth above, *i.e.*, the '325 specification fully describes a preferred embodiment of the invention and explains to a POSA how to implement it. *See, e.g.*, Exh. 1002 at 11:9-55.

The original limitations of the challenged claims of the '325 patent (which were originally filed in the application that issued as the '850 patent), together with the specification, satisfy the written description requirement, as discussed in *Ariad*, where the court explained "[w]e have made clear that the written description requirement does not demand either examples or an actual reduction to practice; a constructive reduction to practice that in a definite way identifies the claimed invention can satisfy the written description requirement." *Ariad*, 598 F.3d at 1351 (*citing Falko-Gunter Falkner v. Inglis*, 448 F.3d 1357, 1366-67 (Fed. Cir. 2006)).

**B. "Communications Control Module"**

**1. *Enablement***

Petitioner concedes (*see* Pet. at 35) that a POSA would readily recognize a communications control module as set forth in the specification, *i.e.*, "a layer that sits on top of any communication protocol and acts as an interface between hospitality applications and the communication protocol and can be easily updated to work with a new communication protocol without having to modify the core hospitality applications." (Exh. 1002 at 4:14-18). But then Petitioner inexplicably goes off on a tangent (Pet. at 35-36), positing a design for this "layer" completely different from

what is in the specification, then arguing that the specification is not compatible with Petitioner's own, made-up, design for a hypothetical communications module.

The specification explains that the communications control module of this invention is not a "layer" present on each client device, as Petitioner wrongly posits. It is a "single point of entry" (*see* Exh. 1002 at 11:37-49) on the server side that "works to keep all wireless handheld devices and linked Web sites in synch with the backoffice server (central database) so that the different components are in equilibrium at any given time and an overall consistency is achieved, " and "... the backoffice server ... synchronizes with all of the wireless handheld devices wirelessly."

Further, as the specification sets forth—and Petitioner fails to prove otherwise—a POSA could easily implement the required steps without undue experimentation. "The software applications for performing the functions falling within the described invention can be written in any commonly used computer language. The discrete programming steps are commonly known and thus programming details are not necessary to a full description of the invention." (Exh. 1002 at 11:56-61). The communications control module is thus fully enabled by the specification.

## **2. *Definiteness***

Petitioner's indefiniteness argument as to "communications control module" fails because, like Petitioner's misguided enablement argument, it is based on falsely trying to claim "confusion" between the actual server-side communications module described in the specification and Petitioner's made-up hypothetical "abstraction layer" that, in this made-up system, would have to be present on every client-side device.

But there is no confusion and no indefiniteness here. The specification, at col. 11, lines 9-55, explains, with "reasonable certainty" to a POSA (*Nautilus*, 134 S. Ct. at

2124), as discussed immediately above, that the communications module is server-side software that "works to keep all wireless handheld devices and linked Web sites in synch with the backoffice server (central database) so that the different components are in equilibrium at any given time and an overall consistency is achieved" and can be implemented by a POSA with "programming steps [that] are commonly known."

### 3. *Written Description*

Petitioner's written description allegation as to the "communications control module" also fails because the specification and claims (including the same limitation recited in original claim 12 of the '850 patent) are not just a "wish" or a "plan." As discussed above, the specification describes to a POSA that the communications module is server-side software that "works to keep all wireless handheld devices and linked Web sites in synch with the backoffice server (central database) so that the different components are in equilibrium at any given time and an overall consistency is achieved" and can be implemented by a POSA with "programming steps [that] are commonly known." Petitioner again relies solely on trying to confuse the actual system described in the patent with Petitioner's own made-up hypothetical system in which the communications module would have to be present on all client devices.

### C. "Software Libraries"

Petitioner's alleged "Ground 7" mistakenly argues that "software libraries" are not enabled by the specification. The term "software libraries" (merely a general term referring to the specification disclosures overall) appears **nowhere** in any of the challenged claims (or for that matter, in any claims in the entire patent family).

The only relevant question, with respect to the enablement issue raised in "Ground 7," is whether the challenged claims (not a generic, broad term that appears

only in the specification) are enabled by the specification. And the terms referenced by Petitioner in "Ground 7"—the same claim terms discussed above—are enabled as discussed above. The case cited by Petitioner (Pet. at 40), *Union Pacific Res. Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 690-691 (Fed. Cir. 2001), is not applicable because, in that case, the claims could not be fully enabled by the specification, in that enablement required the use of some proprietary software not disclosed in the specification and as **admitted** by that PO. But in the '325 patent, the specification explicitly says that proprietary software is **not** required to implement the claimed invention: "The software applications for performing the functions falling within the described invention can be written in any commonly used computer language. The discrete programming steps are commonly known and thus programming details are not necessary to a full description of the invention." (Exh. 1002 at 11:56-61.) Petitioner's contrived challenge therefore fails.

Further, the Petition concedes that no undisclosed proprietary "software libraries" are needed to implement the '325 claims. *See, e.g.*, Pet. at 9 ("The '325 patent specification states that any other necessary software is generic") and at 11 ("the specification confirms that any software necessary to practice the purported invention can be implemented using 'commonly known' programming steps."). Petitioner has thus fatally undermined each of its own "Grounds" that rely on any argument relating to "software libraries" or allegedly undisclosed "proprietary software."

**D. "Claims As A Whole" Are Enabled**

Petitioner's "Ground 8" is an inadequate "catch-all" attempt to stitch together the same misguided enablement arguments made in Grounds 1, 4, and 7, and thus fails for the reasons explained above. The relevant details about the storage and

synchronization of applications and data, those that would not have been already well-known to a POSA (and some were already well-known), are set forth at col. 11, lines 9-55 of the specification. All relevant details regarding the design and implementation of the communications control module are also set forth therein, and Petitioner conceded that a POSA would understand and be able to implement the communications control module as "a layer that sits on top of any communication protocol and acts as an interface between hospitality applications and the communication protocol." Finally, Petitioner's "software libraries" argument is nonsensical, as discussed above, because— as explicitly stated in the specification, and conceded by Petitioner—the specification explicitly states that the disclosed functionality can be implemented with commonly-known programming steps; no undisclosed proprietary software is needed to implement the invention. Accordingly, Petitioner's catch-all "Ground 8" fails.

**VIII. PETITIONER HAS NOT SHOWN THAT ANY OF CLAIMS 11-13 OR 15 ARE MORE LIKELY THAN NOT OBVIOUS**

**A. Overview**

PO responds to §103 Grounds 9-12 together because they all depend on the Brandt “web based” disclosure from IBM as their primary reference and they share common flaws; thus a combined analysis is appropriate.<sup>50</sup> Initially, Grounds 9, 11 and 12<sup>51</sup> merely seek to “add” one or more of the NetHopper, Demers, Alonso, Carter and

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<sup>50</sup> Reliance on this IBM material fails because it does not disclose the claimed invention, which is supported by the fact that IBM was an Ameranth 21st Century Restaurant™ May 1999 launch partner and clearly believed Ameranth’s technology to be non-obvious, as discussed elsewhere herein.

<sup>51</sup> The Petition vaguely identified a “Ground 10,” but did not identify any particular challenge denominated as such and thus it innately fails.

Rossmann references to the “web browser” dependent Brandt. But this does not work because Petitioner **did not include** NetHopper and its “web browser” in Grounds 11 and 12, nor did it provide **any evidence** that Brandt could operate **without** a “web browser”—rather relying only on attorney argument as to what a POSA would allegedly “understand” and a prohibited “incorporation by reference” attempt to import 63 pages of the Helal report. (Pet. at 46-47). Because Brandt could **only** operate with client devices equipped with a “web browser,” and Grounds 11-12 include no teaching of such, Grounds 11 and 12 fail entirely.<sup>52</sup>

Further still, Grounds 9 and 10 clearly fail without the need for detailed analysis because **any details/evidence** as to just what Ground 10 was supposed to be were **excluded** from the Petition and Petitioner improperly relied on the Rossmann reference **throughout** Ground 9 despite it **not being a stated part** of Ground 9. The Petition states that “Details of Grounds 9 and 10 are provided below” (Pet. at 47), but it failed to provide **any details** as to ground 10—while relying on Rossmann as to ground 9, referring to it as part of the combination (Pet. at 48), even though it was clearly intended to be part of Ground 10, not Ground 9 (although Ground 10 was not specified). This is clear from the heading on page 47 of the Petition as well as the headings on pages 63 and 119 of the Helal Declaration (Exh. 1003), which demonstrate that Rossmann was intended as part of Ground 10 only. All references in Ground 9 as to Rossmann must be ignored entirely because Rossmann simply is not in

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<sup>52</sup> The Carter reference was added in an attempt to address the specific hospitality functionality in each of claims 12 and 13, yet it is clearly only a “reservations” based reference, and is thus inapplicable to the separate “waitlisting” functionality recited in claim 12 as well as the “food ordering” of claim 11.

Ground 9, making it impossible to determine what challenge 9 actually is. Challenge 9 thus fails. Likewise, Ground 11 is identified as *excluding* Rossmann. (Pet. at 66; Exh. 1003 at 124, 128). All references in Ground 11 as to Rossmann must be ignored entirely because Rossmann simply is not in Ground 11, making it impossible to determine what Ground 11 actually is. Ground 11 thus fails.

As highlighted in the claim construction section above, Petitioner proposed **no constructions**. Consequently, the Petition does not include the level of **specificity** and **basis** that *KSR*, *Graham* and AIA/PTO precedent/rules require due to the fact that the purported prior art “match ups” do not depend on actual constructions of **any** terms. Moreover, even where apparent constructions can be fairly deduced or assumed, and where it is clear that Petitioner read out or ignored terms, it is clear that such constructions/interpretations are wrong in multiple, material, respects as to critical claim terms/elements and unquestionably to the claims overall.

By avoiding taking any construction positions and citing to multiple, alternative, technical approaches against the most important claim elements with no specificity as to just **what** it asserts actually aligns with a particular claim element, Petitioner seems to hope that the Board will “find” a viable combination in its multitude of inconsistent, inoperative and non-functional proposals. However, it is not the proper function of the Board to have to develop obviousness theories and combinations for Petitioner. It is Petitioner’s burden in accordance with *KSR*, *Graham* and AIA rules to be **specific** as to the proposed combinations.<sup>53</sup> However, Petitioner seeks to improperly shift the burden

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<sup>53</sup> IPR2015-00276, Paper 8 at 13(June 1, 2015) (“Petitioner ‘fails to explain why a person of ordinary skill in the art would have combined elements from specific references *in the way the claimed invention does.*’”) (citing *ActiveVideo Networks, Inc.*

to PO to prove that somewhere in the disparate, incompatible, amalgam of cited materials, there **is not** a disclosure of each of the individual elements as properly construed. That is not how §103 works.

In fact, Petitioner appears to shy away from specifics precisely because of the shortcomings of its arguments. Not only do each of Brandt/NetHopper, Demers and Alonso and their different approaches teach away from the claimed synchronization, but they each teach away from each other and are thus not combinable nor would a POSA have seen them to be. Indisputably, Brandt is the base reference for all challenges, but Petitioner either did not recognize or chose to ignore that Brandt’s approach of relying on a “common user interface”<sup>54</sup> teaches away from the core synchronization purpose of the ‘325 invention and claims, which clearly focus on solving the problem of maintaining consistency (*compare, e.g.*, Brandt’s criticism of the need for “porting” or “translating” (Brandt ¶0007, see below (Exh. 1005))) across an entire system including “wireless handhelds” and all types of “non PC standard” displays (*compare, e.g.*, Brandt’s generic disclosure of “various different hardware and software systems” (Brandt ¶0007, see below)) in an entirely **different** and **more novel and universal** way than IBM’s Brandt—which explains why IBM partnered with Ameranth in May 1999. Further, in addition to Brandt’s entirely different “web based only” approach, and confirming his teaching away from the claimed invention, Brandt clearly **disparages** and **criticizes** an approach like the ‘325 patent, as exemplified by

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*v. Verizon, Inc.*, 694 F.3d 1312, 1328 (Fed. Cir. 2012)).

<sup>54</sup> Brandt ¶0088 (“The **present invention** provides a **common graphical user interface** for each **web client**”) (Exh. 1005) (emphasis added) (all of Brandt’s claims 1-27 rely on the “common user interface”).

Brandt’s use of terms such as “concomitant problems,” which are described as “tedious,” “time consuming” and “non productive.” In fact, Ameranth’s invention solved the very issues that Brandt identified and did not think were solvable—clearly Brandt did not even appreciate the actual underlying problems solved by the ‘325 patent and recited in claims 11-13 and 15. *See* Exh. 1002 at 3:55-63 and discussion above. Exemplary statements from Brandt evidencing teaching away include:

[0005] ... [T]he rapid growth and expansion of computer users accessing the WWW has brought along with it **concomitant problems**.

[0006] ... The process of generating a **custom GUI for a software application is time consuming and expensive**, and typically results in a **proprietary user interface that cannot be used for communicating with other software applications**.

[0007] ... The existence of these **various different hardware and software systems** will typically require a **completely new programming and development effort to “port” or translate the custom GUI for a given software application to each different hardware platform**.

[0010] ... The process of re-learning a new interface for **each new application** tends to be **tedious, time-consuming and nonproductive**.

Exh. 1005 (emphasis added). Thus both §103 challenges innately fail because they rely on the Brandt reference which teaches away from the ‘325 approach.<sup>55</sup>

Moreover, Brandt would also require a change of its principles of operation (“**common** user interface”)—the ‘325 patent/claims are focused on just the

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<sup>55</sup> “A prima facie case of obviousness can be rebutted if the applicant . . . can show ‘that the art in any material respect taught away’ from the claimed invention.” *In re Haruna*, 249 F.3d 1327, 1335 (Fed. Cir. 2001) (*quoting In re Geisler*, 116 F.3d 1465, 1469 (Fed. Cir. 1997) (citing cases)).

opposite, *i.e.*, creating a custom (“uncommon” but “consistent”) user interface for each of the individual wireless handhelds and/or for the other elements in the synchronized system.<sup>56</sup> Further, to access its “common user interface,” Brandt indisputably relies on “web browsers” for **all** client computers,<sup>57</sup> including those that would supposedly be matched against the claimed “wireless handhelds,” which would inappropriately require a “web browser” for all client computers, which would impermissibly import this “embodiment” into the claims and exclude other embodiments, including the preferred embodiment which does not rely on a web-browser enabled wireless handheld device. Further, Petitioner’s attempt to rely **solely** on web browser-enabled wireless handheld devices for its present purposes is diametrically opposed to its argument in the prior petition (CBM2014-00016) that a “web page” approach was not even taught by the ‘325 patent. Moreover, Brandt was directed to making software **applications** which were **stored somewhere else** usable on **a remote device** via a **web browser**. In contrast, the claimed invention (*e.g.*, claim 11 element b) requires local storage of hospitality application software on the handheld device itself. Further, neither Alonso nor Demers disclose “web browsers” within their own solutions, thus they simply are

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<sup>56</sup> See IPR2015-00576, Paper 7 at 11 (June 12, 2015), *relying on In re Ratti*, 270 F.2d 810, 813 (CCPA 1959) (holding that a proposed combination of references was not proper because it would change the “basic principles” of operation); *Tec Air, Inc. v. Denso Inc.*, 192 F.3d 1353, 1360 (Fed. Cir. 1999) (finding that where a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, the proposed modification would not have been obvious).

<sup>57</sup> Exh. 1005 at ¶0014 (“**Client** workstation 210 may be **any computer** that is **capable** of providing access to the WWW **by using web browser** 212. This would include **handheld, ... Personal Digital Assistants (PDAs)**”) (emphasis added).

not even combinable with “browser based” Brandt, nor was this conflict even identified, explained or resolved via any proposed modifications by Petitioner.<sup>58</sup>

Further confirming that Brandt did not recognize nor appreciate the actual underlying synchronization problems later recognized and solved by the ‘325 inventors, the terms “synchronized,” “synchronous” and “integration” do not appear even once in Brandt’s massive specification. While Ameranth recognizes that exact terms are not necessarily required to be used, these terms represent vital inventive concepts and tenets of claims 11-13 and 15 and the reality is that Brandt had no appreciation whatsoever as to these issues nor their solution, rather teaching away from them by relying on a “web browser” (which did not manifest the claimed synchronization) approach for everything. Petitioner’s attempt to infuse a “synchronization” disclosure into the Brandt reference when none is there clearly and impermissibly depends on the use of hindsight.

Further, while not being combinable with each other,<sup>59,60</sup> but even if they were, the asserted references still would not yield the actual claimed invention. Nor does the Petition explain in any way **how** the references would be combined nor **how** they are **different** from the actual claims and/or explain any “modifications” that would be

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<sup>58</sup> Which also points to the Petition’s failure to identify the differences between the cited references and the actual claimed subject matter—a fatal malady throughout.

<sup>59</sup> Pet. at 64 (“The **combined teachings** of Brandt, Demers and Alonso also **disclose all features** of Claims 12-16 and render them invalid.”) (emphasis added). Note that there is no claim 16 in the ‘325 patent, and the Petition did not include claim 11 in this summary of challenges 11 and 12.

<sup>60</sup> Further, an exhortation that the **combined teachings** “disclose all features” does not yield an obviousness conclusion, since *KSR* clearly held that the mere disclosure of the various claim elements/terms in prior art does not mean the combination was obvious.

made to the references. In fact, the disparate technical approaches in the references versus the ‘325 patent as to **synchronization** are like “oil and water”—they simply do not mix with each other. But it is not surprising that Petitioner did not understand this considering that its expert Helal admitted he was “bewildered” by the actual claimed synchronization of both applications and data. Further, trying to combine three “non-hospitality” references to match up to a **hospitality based** claim fails from the start.

**B. No Challenge Provides A Teaching Or Suggestion Of “A Central Database Containing Hospitality Applications And Data”**

Illuminating the fact that Petitioner mischaracterized or did not understand the actual synchronization which is core to the invention and its dependence on the “**central database**” as the fulcrum to enable the claimed synchronization, Petitioner attempted to align all three separate databases of its disparate references (Brandt, Demers and Alonso) against the same claim element<sup>61</sup> which requires a “central” database. This was fundamentally erroneous because, for example, the “disconnected” approach of Demers (disclosing “distributed” databases throughout the system) was entirely counter to the “common user interface” of Brandt which relied entirely on “web browsers,” and without distributed databases. The Petition simply did not recognize the critical role played by the “central database” in these claims. Moreover, “databases” include both applications functionality as well as data. Consequently, one cannot simply “combine” entirely different databases of, *e.g.*, Brandt, Demers and

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<sup>61</sup> Pet. at 66 (“a central database containing hospitality applications and data” **Brand[t] discloses** this element. See supra § V(B)(1)(a)(ii). **Demers discloses** network databases including a ‘primary’ database. Ex. 1009 at 2, 5. **Alonso also discloses** a central database. Ex. 1012 at 32 and Fig. 2. These aspects of Demers and Alonso provide a reason to combine with Brandt with respect to the claimed central database containing hospitality applications and data.”) (emphasis added).

Alonso together without changing their structure and fundamental purpose, and certainly one cannot do so without explaining what “modifications” would be made between the databases and how any such modification would be made. This fatal flaw alone dooms all of the ¶103 arguments.<sup>62</sup>

The material in Brandt cited by the Petition against this element is merely a standard server serving web pages. There is no mention of these elements of Brandt satisfying the “central” aspect of this claim element, which when read in the context of the claim as a whole (*inter alia*, when read in light of the first wherein clause requiring synchronization of hospitality applications and data on the central database with other devices/components of the system) disqualifies a simplistic reference to a “database” as disclosing this element. Nor is there any mention in Brandt of hospitality applications as the terms have been properly construed as discussed above.

Alonso does not disclose a central database. The material cited by the Petition (Pet. at 66) discloses nothing of the sort. The assertion regarding Demers is even more misleading. The Bayou system clearly did not involve a central computer, and in fact was antithetical to such a concept. (Exh. 2034 at 1) (“Bayou is a true distributed system—meaning that there is no single centralized location at which data is stored—with weak consistency among replicated data.”). By virtue of the absence of any actual discussion or evidence in the Petition as regards the alleged teaching of any aspect of this claim element by Demers and Alonso, there is no basis for combining

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<sup>62</sup> See *Orthopedic Equip. Co. v. United States*, 702 F.2d 1005, 1013 (Fed. Cir. 1983) (“The fact that features of one reference cannot be substituted into the structure of a second reference may indicate that the claims were nonobvious in view of the combined teachings of the two references.”).

these references with Brandt to produce the claimed central database containing hospitality applications and data and as discussed above all of these references teach away from each other, depending on different database structures for their different approaches, which was entirely ignored by Petitioner.

**C. No Challenge Provides Disclosure of A Teaching Or Suggestion Of “Hospitality Applications And Data” Which Are “Stored” On A Wireless Handheld Computing Device**

The most fundamental flaw in Petitioner’s allegations of obviousness is its failure to consider or give effect to the “applications” aspect of the challenged claims. Petitioner states that “Patent Owner contends that the claims cover handheld devices which access web-based hospitality applications.” (Pet. at 23). Based on that assertion, Petitioner then proceeds to try to read out claims 11-13 element b in its entirety. However, this assertion is directly contrary to the express claim language, which separately requires that “hospitality applications and data” are stored on both a wireless handheld device and a web page. The law is clear that different limitations in a claim are to be given effect.<sup>63</sup> Moreover, the specification clearly and consistently states that a handheld menu/display is different from a web page menu/display. For example, stating that “the menu can be downloaded to either a handheld device or Web page.” (Exh. 1002 at 3:42-43 (emphasis added)). Further, the specification differentiates between an “application” and “data.” It is clear, consistent with the ordinary meaning as would be understood by a POSA, that an application is a software program, not data. (Exh. 1002 at 5:14-16 (“Generally, a particular application program

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<sup>63</sup> Petitioner’s contention that a reference disclosing a “web page” can meet **both** the handheld device and the web page limitations of the claims is improper. *See Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1563 (Fed. Cir. 1991) (two distinct claim elements should each be given full effect).

presents information to a user through a window of a GUI”); *id.* 8:66-9:1 (“the POS application on the handheld device”)).

Still further, neither the specification nor the claims envision or allow for synchronizing between “Web pages.” If claims 11-13 elements “b” and “d” were both web page implementations and were the “same” element, there would be no need to synchronize them, nor does the specification disclose any capability to synchronize a web page with another web page. In addition to the plain language of claims 11-13 element b, which contains no reference to a browser, and in addition to the clear discussion in the specification requiring no such browser with respect to a wireless handheld device, the structure and language of claims 11-13 (outside element b) further supports the conclusion that a web browser is not required on the wireless handheld computing device, by making the wireless handheld computing device a distinct element of the system apart from a Web server and a Web page. Because all of Petitioner’s arguments for this combination respecting claims 11-13 element b involve a web browser on a wireless handheld device, and none of Petitioner’s asserted references disclose hospitality applications and data stored on the handheld device (*i.e.*, they do not disclose a mobile “app” approach), Petitioner’s arguments fail as to claims 11-13 element b. For the Brandt/NetHopper combination, all of Petitioner’s arguments regarding the teachings of the references as to element b involve a “web browser” and “web pages,”<sup>64</sup> which cannot be part of element b as detailed above.<sup>65</sup> In

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<sup>64</sup> The Petition relies only on Brandt’s alleged teaching of “any type of computer with a web browser” and NetHopper’s alleged teaching that “web pages may be cached on a handheld wireless device.” (Pet. at 49).

<sup>65</sup> Petitioner cites to NetHopper, but does not even attempt to explain how a browser-enabled handheld device satisfies the limitations of element b. The Petition merely

fact, Brandt explicitly states that it is directed merely to “**accessing** software applications over the WWW.” Exh. 1005 Abstract, ¶0039. “Accessing” is simply and clearly not the claimed “synchronization.”

For example, the Petition states “NetHopper discloses that web pages may be cached on a handheld wireless device.” (Pet. at 49). This and the other arguments made by Petitioner fail to address the requirement that the hospitality applications stored on the wireless handheld device do not involve a web browser or web pages. Caching web pages is not storing hospitality applications and data as recited in claims 11-13 element b. Petitioner’s argument is merely a conclusory statement based on the incorrect proposition that claims 11-13 elements b and d can be met by the exact same thing, *i.e.*, a web page. This is clearly incorrect as explained above.

Moreover, nothing the Petition says has anything to do with storing of either applications or data on the handheld device—because it mischaracterized the claimed invention as entirely “Web” based, as opposed to interpreting claims 11-13 for what they actually are, *i.e.*, directed to both web aspects and native mobile application aspects, with the handheld device limitation of element b clearly being a recitation of a native mobile “app” which is not satisfied by a web page or web browser. Critically, as the PTAB has made clear, a proper obviousness analysis must explain the differences between claims and prior art.<sup>66</sup> Not only is such consideration absent from the Petition, the Petition ignores numerous critical claim elements entirely, including

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states the function of web pages without explaining how that functionality satisfies a mobile app limitation as embodied in claims 11-13 element b.

<sup>66</sup> *Travelocity.com v. Cronos*, CBM2014-00082, Paper 12 at 4-5 (PTAB Oct. 16, 2014) (“[T]he obviousness inquiry is based on factual inquiries including the *differences* between the claimed invention and the prior art”).

claims 11-13 element b. However, the Petition is consistent in characterizing the claims as requiring “stor[ing] applications and data in the four recited locations” and “synchroniz[ing] applications between the four recited locations.” (Pet. at 41 (emphasis added)). The “four recited locations” are (1) a central database, (2) a wireless handheld computing device, (3) a Web server and (4) a Web page. Thus, as admitted by Petitioner, four different locations are recited. Clearly, two different locations cannot be the same location. This illustrates just how badly the Petition missed the mark in interpreting the claims, and argued contrary to its principal position throughout. The Petition and Helal Declaration entirely ignored the explicit app-based, non-web browser dependent, requirement of claims 11-13 element b.

The Petition did not provide any supporting argument for **why** “Demers and Alonso, in combination with Brandt, further disclose storage of hospitality applications and data on a PDA.” (Pet. at 67). There is no cite to any specific disclosure of Demers or Alonso relative to this limitation nor explanation of how Brandt, entirely dependent on “web browsers,” could work with the client devices of Demers/Alonso, which did not have them. Further, Alonso is additionally distinguishable from the claimed invention because it does not disclose a wireless handheld computing device, as properly construed, in **any** manner. Thus neither Demers nor Alonso, either alone or in combination, provides a disclosure of a locally-stored “hospitality app” and associated data for the claimed wireless handheld device as recited in claims 11-13 element b nor one that could be synchronized as the claims require.

**D. No Challenge Identifies A Teaching or Suggestion Of “At Least One Web Page On Which Hospitality Applications And Data Are Stored” As Recited By Claims 11-13**

The proper construction of “web page” includes “**viewable in a web browser**”

and thus that construction requirement aligns with **this** element, but **not** with claim element “b.” Petitioner’s Brandt/NetHopper combination relies simply on disclosure of “web pages” by both Brandt and NetHopper. With respect to Brandt, Petitioner points to “forms” and a “button” which allow “interaction” by a user, and argues that hospitality applications and data are stored (Pet. at 52), but does not explain how the “forms” and “button” discussed in Brandt are “applications” or how they relate to “hospitality.” The Petition fails on this claim element because it makes no argument as to how any Web pages served by Brandt would have stored applications, hospitality or otherwise. Nor does the Petition attempt to explain how anything in Brandt teaches or suggests a hospitality application as claimed. The Petition’s assertions as to this element thus fail completely for lack of any relevant supporting argument.

**E. No Challenge Provides A Teaching Or Suggestion Of The “Communications Control Module” Functionality Of Claims 11-13**

As discussed above in the context of claim construction, the specification clearly states that the communications control module is specialized software:

A communications control program . . . continuously monitors the wireless network access point and all other devices connected to the network such as pagers, remote devices, internet Web links and POS software. Any message received is decoded by the software, and then routed to the appropriate device

Exh. 1002 at 9:35-41. Petitioner fails to acknowledge the specialized software functionality/capability of the explicitly-recited system components, including the communications control module/software, thus failing to make any credible argument that either Brandt or NetHopper discloses such software functionality.

The Petition relies on Brandt’s statement that “any other data transmission formats that may be generated by web browser 212 are contemplated and are within

the scope of this invention.” Pet. at 60. However, as discussed above, the handheld device limitation of claims 11-13 element b is not web browser based. Thus protocols which may be generated by a web browser do not meet at least element b. There is no disclosure in either Brandt or NetHopper of any functionality to “interface between the hospitality applications and any other communications protocol” where the “other communication protocol” relates to a non-web browser protocol used on a handheld device or with a handheld application. The Petition thus pointed to nothing to provide this critical link in the claimed system.

**F. No Challenge Identifies A Teaching Or Suggestion Of “Wherein Applications And Data Are Synchronized Between The Central Data Base, At Least One Wireless Handheld Computing Device, At Least One Web Server And At Least One Web Page”**

For the reasons discussed above regarding the absence of any disclosure of claims 11-13 element b, it is impossible for any combination to teach or suggest synchronizing the wireless handheld device of element b with other recited elements.

With regard to the disclosure of Brandt, Petitioner attempts to read out the terms “synchronized” and “between” in ‘325 claims 11-13 first wherein clause. A function of the claimed system is to “synchronize” hospitality applications and data *between* the central database, wireless handheld computing device, web server and web page. The Petition simply tries to rely on Brandt for its disclosure of web pages transmitted to a browser. However, there is no inherent synchronization “between” a central database and all of the other recited components simply by virtue of serving web pages.

Moreover, the Petition’s attempt to reduce the claims to providing application data on an “as-needed” basis in response to “form” submission is yet another attempt to read element b out of claims 11-13. Pet. at 57 (“The central database includes application data ‘such as which cars are available, etc.’ Customers submit reservation

requests using a web-based form.”). Element b requires that application data, as well as applications themselves, actually be stored on the wireless handheld device. The data is not retrieved on an as-needed basis without being stored on the handheld device, *i.e.*, “synchronizing” requires “storing.” Petitioner appears to argue that Brandt’s approach of using a server-side database to “send application data” to a client (Pet. at 57) obviates the need to store any data on the wireless handheld device. However, element b requires such storage. Petitioner cannot rely on a central database to serve out “data” when requested to meet a limitation which explicitly requires local storage on the handheld device. Note also that the Petition’s reference to the fact that “[r]ental agents view pending reservation requests and may select from available cars to fill the requests” (Pet. at 57) demonstrates that there is no synchronization as claimed at all in Brandt. Brandt simply provides a system that allows a rental agent in one location to communicate with a person who would like to rent a car. It is little more than a glorified telephone reservations system.

Likewise, Petitioner’s argument that NetHopper’s disclosure of caching of web pages can satisfy element b fails because element b cannot be satisfied by a web browser approach as explained above. Petitioner’s argument regarding “forms” submission via NetHopper fails for the same reason—these were HTML forms, which are antagonistic to the mobile “app” based approach which is encompassed by element b. Further, Petitioner does not explain how NetHopper’s form submission and transmitting data to a web server could satisfy the requirement that data, and applications, must be stored on the handheld device.

Demers also does not disclose a central database or synchronization as claimed because true synchronization was not its objective. In fact, the “asynchronous” Bayou

system<sup>67</sup> involved many different databases distributed across many devices, any one of which could have controlled certain aspects of a collaborative activity, with other databases controlling other aspects. Demers was thus antagonistic to synchronization involving a central database and thus teaches away from same.

Alonso is likewise antithetical to the claimed invention because it requires that a user of a client device “lock” an activity so that no other user in the system can work on the activity. (Exh. 1012 at 238). This is the opposite of the claimed invention in view of the fact that synchronizing hospitality applications/data is the opposite of disallowing other users on other devices in the system to operate on such activity.<sup>68</sup>

Further, for the reasons discussed above involving the failure to disclose or suggest claims 11-13 element b, it is impossible for any combination of references to teach or suggest synchronizing the wireless handheld device of element b with other system elements as required by this claim element. Petitioner’s conclusory reliance on Brandt’s discussion of a web browser implementation for providing a common

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<sup>67</sup> Exh. 2034 at 1 (“Asynchronous collaboration is characterized by the degree of independence collaborators have from one another. In particular, collaborators working asynchronously typically have little need for frequent and fine-grained coordination with one another, and typically do not need to be notified immediately of changes made by others to any shared artifacts they are working with.”) (later paper written by authors of Demers paper explaining that Bayou was directed to asynchronous collaborative applications).

<sup>68</sup> Also, Carter is directed to determining which server responds to a client request, not synchronization with a central database. Exh. 1052 at Abstract, 4:46-56. Rossmann also teaches away from synchronization via a central database. Exh. 1053 at 10:41-46 (“[S]ince all the information needed by the client ... is included in the message, the computer server does not retain any state information concerning the information transmitted to the client process.”) (emphasis added).

interface is completely antithetical to the requirement of claims 11-13 element b that “applications” are stored on the handheld device and are synchronized with the central database applications, as discussed above with respect to Petitioner’s first combination. Further, there is no explanation whatsoever as to how the “web based” Brandt system/database would “synchronize” with Demers or Alonso, nor via a “web server.”

**G. No Challenge Provides Disclosure Or Suggestion Of The Specific Hospitality Application Functionality As Required By Independent Claims 11-13 And 15**

The Petition and the Helal declaration both ignored the significance of the “hospitality” application language and thus failed to make any credible argument as to how the specific hospitality application requirement of claims 11-13 are met by the combination of Brandt and NetHopper (or with Demers, Alonso and/or Carter).

Moreover, the Petition argues, based on extrinsic evidence, that a “car rental” application (Brandt) was a “hospitality” application. However, the extrinsic evidence relied on by Petitioner, Exh. 1035, actually defines “hospitality” consistently with the ‘325 specification, and extrinsic evidence cannot vary the meaning of a term provided by the specification in any event. (Exh. 1035 at 5-6) (“If the word hospitality refers to the act of providing food, beverages, or lodging to travelers, then the **hospitality industry** consists of businesses that do this. ... we will define the hospitality industry as businesses that provide food, beverages, or lodging to travelers.”). There is nothing in this definition about “car rental.” Exhibit 1035 actually refers to the “traditional” definition of hospitality as related to delivery of food and lodging services, consistent with the specification. Petitioner’s oblique assertion that car rental is within a “Travel and Tourism” sector of the hospitality industry (Pet. at 49) is not supported by the pages Petitioner cites in Exhibit 1035, and the actual definition conflicts with any such

definition. Indisputably, neither Demers nor Alonso are hospitality applications and Petitioner does not explain how a combination with them teaches such. It does not.

Petitioner violated the prohibition against the same structure being used to align against entirely different elements (in this case entirely different independent claims with different elements) and all of Petitioner's attempts to align "reservations" based or generic "ordering" applications against the "**food ordering**" aspect of claim 11 as properly construed thus fail Petitioner parsed out the term "order data" from the claim as whole (including "hospitality applications and data") and thus did not consider this term as part of the claim as a whole as required. None of the disclosures relied on by Petitioner teach the "food ordering" of claim 11. For example, Petitioner stated:

Requests for rental cars are orders. Carter also discloses synchronization of orders data. Rossmann also discloses synchronizing order information.

Pet. at 62. Further, Petitioner actually understood the correct construction, as indicated in its §101 arguments:

Activities such as **ordering food** have always been fundamental in the hospitality industry

Pet. at 71 emphasis added). Also, a POSA would understand that a "**pending**" or a "**waitlisted**" reservation is still a **reservation** application, and thus does not meet the different waitlist functionality of claim 12, which is for applications without "reservations" such as in, *e.g.*, a casual restaurant chain such as a TGI Friday's.

Petitioner's attempts to twist reservations disclosures into "waitlist" disclosures<sup>69</sup> fails,

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<sup>69</sup> The Petition states, *e.g.* at p. 63: "The rental agent sees a list of pending reservations. ... Carter also discloses synchronization of waitlists data. Ex. 1052 at 10:33-35 (inquire as to status of waitlisted reservation); 11:3-8 (make / cancel waitlisted reservation)." (emphasis added).

particularly because “waitlisting” is recited in an entirely different independent claim. It is simply indisputable that waitlist and reservations functionality are **different** from one another and that waitlisting is not a species of a reservations genus.

#### **H. Integration/API/Outside Applications**

Petitioner entirely read out “**integration**,” as properly construed, incorrectly confused the API to be part of “messaging protocols”—which it is not, and failed to appreciate that “outside applications” are “**non-hospitality**” applications. Communications protocols are encompassed by the CCM function of the claim, while the API’s function is to “integrate” the different “non-hospitality/outside applications” with hospitality applications by integrating the different applications from **within** the applications themselves, and not via external messaging protocols. As reflected in the ‘325 patent, the inventors realized, 17 years ago, that in Ameranth’s 21st Century Restaurant™ or 21st Century Hotel™ system embodying the patent claims, not only would the central database, wireless handhelds, web servers and web pages containing the **hospitality applications** be synchronized (both at the application **and** data level), but that all of this would also need to **fully integrate** with the recited “non-hospitality” third party “outside applications.” Facebook or Twitter are exemplary “affinity program groups” (commonly referred to today as “social media/networks”) and Google (with Google Maps) is an exemplary “internet content provider.” (Exh. 1002 at 4:1-5; 11:28-32). And this would not be **only** “exchange” of data/messages, as Petitioner mistakenly asserted. The “hospitality” and “non-hospitality” applications themselves are actually **integrated with each other** according to the proper construction of “integration.” Today, the “outside/third party,” *e.g.*, GPS/Google Maps functionality, “fully

integrates” with, *e.g.*, the Domino’s in-store POS pizza application for its delivery drivers, while also integrating information with, *e.g.*, “outside/third party” Facebook/Twitter applications. Petitioner cites to no actual evidence in any reference teaching the entire element and/or of the claim overall, as a whole.

**I. Dependent Claim 15**

As discussed in the claim construction section above, claim 15 contains a unique and additional element that further distinguishes over the prior art. Petitioner did not consider the claim as a whole and apply the proper construction which includes updating of orders, waitlist and/or reservations status. Petitioner simply misapplied the additional limitation of claim 15 to be simply a paging device involving a user “request” for more information.<sup>70</sup> However, the recited “paging” functionality is clearly a limitation regarding “updates” of the recited data, when considered as a whole and in accordance with the specification, and must include additional “data” sent out to update customers as to the “status” of their order, reservation etc. Further, as discussed, the challenges did not even include the actually claimed underlying hospitality applications/data, and thus the challenge of claim 15 must be considered relative to **each** of claims 11-13. Also, Petitioner did not explain how the “browser based” functionality of Brandt could have interfaced with the Rossmann paging disclosure, which indisputably did not include a “browser.”

**J. Objective Evidence Of Non-Obviousness**

The present Petition, filed seventeen years after the conception of the inventions of the ‘325 patent, now alleging obviousness in 1998, does not merely ask the Board to

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<sup>70</sup> Pet. at 64 (“Rossmann discloses using a wireless paging device to request and display order information from a network-based application, for example.”).

*ignore* history (which Petitioner and its expert did), it seeks to *change* history, *i.e.*, replace the actual factual circumstances of what really happened when the Ameranth inventors first recognized the underlying problem to be solved, and conceived its solution, publicly demonstrated the inventions embodied in the 21st Century Restaurant™ system (Nov. 1998) and then introduced products embodying the claims of Ameranth’s patents into the hospitality market (Nov. 1998 - May 1999).

Unprecedented industry-wide recognition is shown in the comprehensive Secondary Factors Declarations provided to the Patent Office in the prosecution of the ‘077 patent (Exhs. 2020-2023), including detailed explanations of nexus to the claimed subject matter (Exh. 2022) and as elaborated below.<sup>71</sup> PO submits that objective factors including praise/awards, commercial success, copying, failure of others and licensing confirm the non-obviousness of all challenged ‘325 claims.

Ameranth’s 1998-99 product introductions/demonstrations actually involved many of the petitioner companies as well as owners of the alleged prior art references asserted in the slew of “second round” CBM Petitions recently filed against the Ameranth family of patents, which include Agilysys,<sup>72</sup> Microsoft/Expedia, Starwood,<sup>73</sup>

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<sup>71</sup> In an Interview Summary, the Examiners noted: “The Applicant explained how the secondary factors show non-obviousness.” (Exh. 2035).

<sup>72</sup> While now asserting obviousness, Agilysys licensed Ameranth’s 21st Century Restaurant System™ technology and later-issued patents (Exh. 2022 Supp. 1.132 Nexus Dec., p. 10) for **13 years** from 1999-2012, at which time it abruptly stopped paying license fees and then blatantly copied.

<sup>73</sup> Starwood adopted Ameranth’s technology and partnered with Ameranth in 2000 (Exh. 2020 at 12). “Starwood is very excited to be able to offer Ameranth's software to our hotels in North America” (Exh. 2020 at Exh. 48 thereto).

Oracle/Micros, IBM<sup>74</sup> and Marriott. Thus, this is an *extraordinary* situation where the contemporaneous objective evidence does not merely retrospectively **imply** non-obviousness. Rather, indisputable facts and events which actually occurred at the time of the invention (directly involving many of the very references being asserted now), prove that Ameranth's inventions were **not** deemed to be obvious at the time of the invention, including involvement of many of the present Petitioners (in this and other recently-filed Petitions) and the very companies which Petitioner now alleges would have "combined" their products in lieu of using/licensing Ameranth's technology.

However, these companies did **not do** in 1998/1999 what Petitioners now allege via hindsight would have been "obvious" for them ***to do***. This is the "history" of what actually happened in 1998-99, which directly and indisputably refutes Petitioner's 2015 assertions—yet Petitioner now effectively asks the Board to "ignore" this evidence as evidenced by the fact that Petitioner itself ignored it. These very companies partnered/worked with Ameranth (IBM/Marriott/Starwood), or sought to license Ameranth's inventions exclusively for themselves (Oracle/Micros), or licensed it (Agilysys), or they invested directly in Ameranth (Microsoft/Expedia) to secure the use of Ameranth's intellectual property for themselves. That the world's largest hospitality IT company, Micros, sought to exclusively license Ameranth's technology at the very time of the invention is overwhelming and directly **on point** objective evidence of what actually happened during the inventive timeframe.

IBM was the world's largest computing company, Microsoft (then owner of Expedia) the world's largest software company, Micros the world's largest POS/PMS

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<sup>74</sup> IBM was a launch partner with Ameranth as to the 21st Century Restaurant™ System, in May 1999, at the Chicago NRA Show. (Exh. 2019 at 9 & attached Exh. 8).

company and Marriott/Starwood were two of the world's largest hotel companies.

These facts, actions and statements thus compellingly confirm the non-obviousness of the inventions.<sup>75</sup> Further, Ameranth was a tiny company and had no “market power” to influence these companies to adopt its innovations and partner with it—rather, all it had was the innovations/technology itself and thus, conclusively, the third party actions in 1998/1999 were all based on the merits of the technology. Also, it was not only these renowned companies that believed Ameranth's technology was a breakthrough. Rather, it was literally the entire hospitality marketplace and across the entire spectrum of independent experts, press/writers and decision-makers. Beyond Micros, Marriott, Microsoft/Expedia, Starwood and IBM, Symbol (then the world's largest LAN and mobile device supplier), Food.com (then the world's largest online food ordering company), JTECH (then the world's largest hospitality paging company) and six other of the largest hospitality POS companies all partnered with, licensed, sought to license and/or invested in Ameranth—whose sole product at the time was the soon to be “patent pending” 21st Century Restaurant™ system.

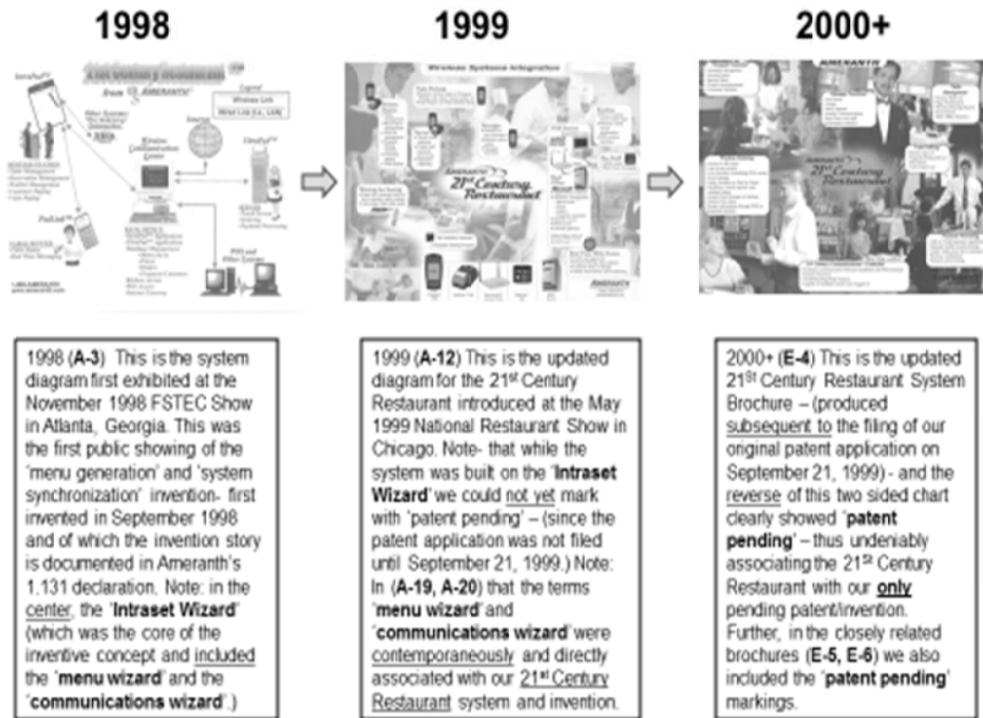
The claimed system functionality is shown in the evolution of the 1998-2000 21st Century Restaurant System™ Brochures (‘077 Nexus Declaration (Exh. 2022 at Supp. 1.132 Nexus Dec., Exh. A thereto, p. 8)) below, and include “patent pending” markings—shortly after the original ‘850 application was filed, which included specific “screen shots” of the operational 21st Century Restaurant™ system at the time (Exh. 2029). These Brochures included the disclosure of key claim features, *e.g.*, system synchronization, communications and integration (*e.g.*, Exh. 2022 at Supp. 1.132 Dec.,

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<sup>75</sup> *CBS v. Sylvania, Inc.*, 415 F.2d 719, 728 (1st Cir. 1969) (“the leader in color television development chose to license”), *cert. denied*, 396 U.S. 1061 (1970).

Exh. 4 thereto) thus further confirming nexus between the 21st Century Restaurant™ product and ‘850 claims 12-16<sup>76</sup> (also shown in the original drawings (Exh. 2029)).

**Ameranth – ‘21<sup>st</sup> Century Restaurant’ - Evolution**



Further, the entire hospitality market press and numerous nationally renowned publications including the Wall Street Journal, Time Magazine and Harvard Business review praised Ameranth’s 21st Century Restaurant™ technology.

Showing still more objective evidence of non-obviousness were independent writers describing Ameranth’s 21st Century Restaurant product technology with titles such as “**Brainstorm** Eases Restaurant Ordering Process.” (1.132 Dec. (Exh. 2020 at Exh. 54 thereto)) (emphasis added). Contemporaneous praise such as “Brainstorm” in

<sup>76</sup> There is a "presumption of a nexus" when a product is "coextensive" with a patent claim. *Teva Pharm., Inc. v. Sandoz, Inc.*, 723 F.3d 1363, 1372 (Fed. Cir. 2013). “Objective evidence of nonobviousness need only be ‘reasonably commensurate with the scope of the claim.’” *Rambus Inc. v. Rea*, 731 F.3d 1248, 1257 (Fed. Cir. 2013).

respect to Ameranth’s inventions shows the hindsight-based allegations of obviousness from accused infringers to be entirely untrue. Further still, at the time of the invention, multiple technology award committees (each consisting of numerous recognized experts in their fields at the time of the invention) selected the Ameranth 21st Century product/technology as the winner of numerous best technology awards, over all other IT technologies offered or available—one of which was personally nominated by Bill Gates. For Bill Gates to have personally nominated Ameranth for an award with the praise “[Ameranth] is one of the leading pioneers of the information technology revolution for the betterment of mankind” (Exh. 2020 at 3; Exh. 2022 at Supp. 1.132 Nexus Dec., p. 10), is the most compelling endorsement that Ameranth’s technology was **not** obvious. Further, Microsoft/Expedia then made the strategic decision to not only partner with, but also to invest in, Ameranth.

Additionally, a Business Week article about Ameranth’s technology, and its co-founder and lead inventor, Keith McNally (Ameranth's current President), commented: Keith McNally's eMenu technology is his latest bid to speed service... in the restaurant and hotel industries . . . it’s **not quite Star Trek** Exh. 2021 at attached Exh. 9; Exh. 2022 at Supp. 1.132 Nexus Dec. Exh. A thereto, p. 11) (emphasis added). Before pilot testing Ameranth’s technology in 2000, Steve Glen, vice-president of Marriott, wrote:

Marriott International is **very interested** in [Ameranth’s] **21st Century Restaurant System technology** and we believe that **many of its innovative features** will enhance the efficiency of our operations, increase customer satisfaction and help increase profitability in our operations.

Exh. 2020 at attached Exh. 33; Exh. 2022 at Supp. 1.132 Nexus Dec. Exh. A thereto, p. 10 (emphasis added).<sup>77</sup> Also, Ameranth was notified that:

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<sup>77</sup> See *Allen Archery, Inc. v. Browning Mfg. Co.*, 819 F.2d 1087, 1092 (Fed. Cir. 1987)

The case study of your **exceptional** use of information technology-Ameranth Wireless Improv Comedy Club Solution-has been included in the Computerworld Honors Online Archive as an example of a **revolutionary change** you have **created** at the commencement of a **new century**.

Exh. 2020 at Exh. 50 thereto (emphasis added). A September 2000 press release for the Moby Award won by Ameranth states:

This award, from Mobile Insights honors “the **best and finest implementations** of mobile computing and wireless data communications”

Exh. 2020 at Exh. 45 thereto (emphasis added) (the actual “best and finest implementation” clearly would not have won this award if was an “obvious idea”);

Exh. 2022 at Supp. 1.132 Nexus Dec. Exh. A thereto, p. 10.

Just one week before the original application from which the ‘850 patent claims priority was filed, Food.com, an early mover in the online ordering market, sought to obtain the exclusive right to Ameranth’s technology with specific reliance on the technical features of the ‘850 claims—thus further confirming the nexus:

I have met with Keith McNally [Ameranth Founder and lead inventor of the ‘850/‘325/‘077 patents] to agree on the deal points on a Licensing Agreement. Here are the products and services we would want...  
Communications Wizard—this tool creates a standard that can be used to integrate with any POS terminal ...

Internal Food.com Memo between its entire Executive Team (Exh. 2001); *see also* Exh. 2022 Supp. 1.132 Nexus Dec. at Exh. A, pp. 3, 8, 16 (item “A-20”).

In yet another confirmation of non-obviousness, and from an independent and compellingly knowledgeable source, the Harvard Business School Press (2005) stated that “Ameranth’s main product, 21st Century Restaurant is *poised to become the*

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(**praise** in the industry for a patented invention, specifically **praise from a competitor** tends to "indicat[e] that the invention was **not obvious**") (emphasis added).

*industry standard* for mobile wireless ordering and payment processing in restaurants.”) (Exh. 2022 Supp. 1.132 Nexus Dec. at Exh. A, p. 11; *id.* at Supp. 1.132 Dec. Exh. 13, p. 35 thereto (emphasis added)). Ameranth’s technology has indeed become the industry standard, through infringers such as Petitioner affirmatively choosing to **copy** and use Ameranth’s technology without license. The above evidence of praise/awards (all simply ignored by Petitioner), characterizing the technology as a “breakthrough,” “not quite Star Trek,” “pioneering,” “revolutionary change,” “best and finest,” and “innovative” are conclusive objective evidence of non-obviousness.

Also confirming nexus, and that the technical features which received praise and awards were **not** based on technology that was **previously available** or from **other sources**, the Computerworld Honors Program Award summary (nominated by Bill Gates) stated that “Ameranth could develop and install the entire Web, PC, and wireless system—**something no other company could match**” (Exh. 2020 at Exh. 51, p. 1 thereto), “the 21st Century Communications<sup>TM</sup> middleware [] routes data, regardless of programming language, across a variety of platforms” (*id.* at 2), the Ameranth product provided “a wireless **interface to the databased information**,” (*id.* at 3), was “**unique** in its ability to **route and synchronize data across the three platforms**” (*id.*) and was “**the only application of its kind**” (*id.*) (emphasis added). This functionality including, *e.g.*, “interface to the databased information” and “**route and synchronize** data across [**all**] **three** platforms,” aligns with the critical inventive aspects of the ‘850 “**synchronization**” claims—thus a nexus exists between the patent claims (embodying technology not previously known) and the awards, praise, and commercial success of PO’s 21st Century Restaurant System<sup>TM</sup> family of products.

Still further, the non-obviousness of the claimed inventions has been confirmed

over and over again, recently, through the licensing of the ‘850 patent family, across a wide spectrum of the world’s largest to smallest companies (36 in total) and including praise from the CEOs of the licensees,<sup>78</sup> and with the majority of these licenses occurring entirely outside of litigation.<sup>79</sup> These licensees includes, *e.g.*, Taco Bell (subsidiary of Yum Brands (the world’s largest restaurant company)), Cognizant Inc., a Fortune 500 company, Xpient and Par POS systems (among the top ten largest POS companies in the world) and many of the largest online/mobile ordering companies.

Additionally, while now alleging that Ameranth’s inventions were obvious in 1998, the infringing defendants have copied and continue to publicly claim key inventive elements of Ameranth’s claims (if not Ameranth’s claims in their entirety), as “breakthroughs” of *their own*—essentially alleging that they were the true inventors of these alleged “non-inventions.”<sup>80</sup>

Further examples of copying include Petitioner (CBM2014-00014) Hyatt Hotel’s CTO claiming that it invented the “single point of entry” of ‘850 claim 13.<sup>81</sup> Dominos also copied Ameranth and claimed a “breakthrough” on September 27,

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<sup>78</sup> *E.g.*, Exh. 2003 (“Reaching an agreement with Ameranth for the use of its **novel patents** was important to Par, since we provide **many of the restaurant and hotel industry’s top brands and renowned properties** with our industry leading hospitality products, solutions and services,” stated Paul Domorski, Chairman & CEO of Par Technology Corporation”) (emphasis added).

<sup>79</sup> *See In re Roufett*, 149 F.1350, 1355 (Fed. Cir. 1998) (“licenses showing industry respect for the invention” is objective evidence of nonobviousness).

<sup>80</sup> *Heidelberger v. Hantscho Prods.*, 21 F.3d 1068, 1072 (Fed. Cir. 1994) (“litigation argument that an innovation is really quite ordinary carries diminished weight when offered by those who had **tried and failed to solve the same problem**, and then **promptly adopted the solution** that they are **now denigrating**”) (emphasis added).

<sup>81</sup> Hyatt Hotels CTO Interview, April 2015 (Exh. 2005).

2007–alleging that it was the first to provide a solution for configuring menus for mobile screens (“It also **automatically adapts to the size** of any cell phone screen”)<sup>82</sup> (emphasis added). This too confirms non obviousness and nexus. *Power-One, Inc. v. Artesyn Tech., Inc.*, 599 F.3d 1343 (Fed. Cir. 2010) (“Artesyn's position that Power-One's invention was obvious is **inconsistent** with its position that its own infringing product was **an advancement** in the industry.”) (emphasis added).

All three major pizza company defendants copied the claimed technology after receiving presentations from Ameranth, and they received a joint technology innovation award in 2009 for deploying it,

Anyone who’s ever wondered what restaurant chains might do to take advantage of new media marketing, **web 2-0** such as **social networks**, or the proliferation of **cellular phones** and **internet capable mobile devices**, need look no further than the big three pizza players.

Presentation of Rob Grimes (FS/TEC CEO), FS/TEC 2009 Awards transcript at 10:33 (Exh. 2018) (emphasis added) (video/audio in possession of PO). Confirming the “failure of others,” in receiving its award for Ameranth’s copied technology, Pizza Hut admitted that it had tried in the late 90’s but failed: “[I]n the late 90s, we really made a run at this ***and it wasn’t successful.***” (Statement of Delaney Bellingers - Pizza Hut, FSTEC 2009 Awards transcript at 12:29 (Exh. 2018) (emphasis added).

Further proving nexus and copying, and again from the very companies involved in filing petitions against the ‘325 patent, after having licensed Ameranth’s technology/products from 1999 to 2012 and thus clearly having had direct access to it, Agilysys (formerly Infogenesis [“IG”]) copied Ameranth’s 21st Century Restaurant™

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<sup>82</sup> Exh. 2006 (“With the addition of yet another order-taking channel, Domino's is thrilled to lead the market with this **breakthrough** technology.”) (emphasis added).

product/technology, and launched its copycat “IG Roam” mobile ordering product which embodied the claimed inventions<sup>83</sup> and halted license payments to Ameranth after paying those fees for 13 years.<sup>84</sup>

All of these leading companies, press/writers, experts, prestigious publications, customers, partners, multiple technology awards committees, 36 current licensees—along with multiple examiners, supervisory examiners and PTAB ALJs, and many companies who are now petitioners themselves, would **all** have to have been **wrong** at the time of and following the invention for Petitioner’s 2015 obviousness contentions to now, in conflict with the record evidence, be **right**. Petitioner’s litigation-induced hindsight view is shown to be wrong by the clear record evidence.

**IX. PETITIONER HAS NOT SHOWN THAT ANY OF CLAIMS 11-13 OR 15 ARE MORE LIKELY THAN NOT INVALID UNDER 35 U.S.C. §101**

Petitioner has made the §101 argument before and failed. The present argument should be rejected for the same reasons stated by the Board in CBM2014-00016. Petitioner argued that its §101 challenge is not redundant simply because *Alice* was decided after the Board denied institution of trial as to claims 11-13 and 15. (Pet. at 80) (arguing conclusorily that “[u]nder the *Alice* framework, the Challenged Claims are not patent-eligible”). Petitioner asserts that these claims represent “fundamental practices” common in the U.S. “for centuries” (Pet. at 71), and simply ignores the

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<sup>83</sup> Exh. 2010 (“Agilysys ... today announced the general availability of the **InfoGenesis™ Roam mobile software solution**, a food and beverage ordering assistant for the company's award-winning InfoGenesis™ POS system.”) (emphasis added).

<sup>84</sup> The plethora of objective evidence and nexus compels a conclusion of non-obviousness (especially because the Petition entirely ignored it even though it is in the record and clearly was known to Petitioner, as pointed out by PO in CBM2014-00016, Paper 10).

Board’s prior ruling rejecting that argument and recognizing that synchronization between disparate *computing* elements was new, unconventional and had no equivalent in prior manual practices (the very reality shown in *DDR Holdings* to confer patent eligibility, as discussed below). The Petition does not point to anything in *Alice* which makes a difference in the argument Petitioner provided in 2014-00016.<sup>85</sup> Petitioner now merely tries to argue that *Alice*’s mention of “communications controllers” makes claims 11-13 and 15 abstract simply because the claims recite a “communications control module” (“CCM”) (Pet. at 75-76). However, the recited communications control module is vastly **different** and is merely one of the many recited elements as part of the systemic claim as a whole which conferred patent eligibility as concluded by the Board in its prior decision not to institute trial on claims 11-13 and 15. In the prior decision, the Board stated:

We do not view these claims as reciting merely the abstract idea of “placing an order or reservation using a general purpose computer and wireless handheld device,” but rather as *a particular practical application of the idea of application and data synchronization*. Independent claims 11-13 are all directed to similar synchronous communication systems for use with wireless handheld computing devices and the internet. These claims each recite *a tangible embodiment of a system having structural components* – a central database, wireless handheld computing devices, web servers, web pages, hospitality applications, an application program interface, and a communications control module. These claim further defines these components by reciting their functions – *synchronizing data and applications between the central data base and other devices, enabling integration of outside applications with the hospitality*

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<sup>85</sup> Petitioner also ignores that the Board confirmed other claims in the patent family, post-*Alice*, thereby showing that *Alice* did not broadly negate patentability of the claims; rather, the uniqueness of the individual claims themselves is determinative.

*applications, and interfacing between the hospitality applications and other communication protocols...*

*The combination of these components interact in a specific way to synchronize applications and data between the components and outside application that is integral to the claimed invention and meaningfully limit these claims. ... Claims 11-13 claim a specific way of doing something with a combination of components.*

CBM2014-00016, Paper 19 at 25. *Alice* said nothing which would call into question the Board’s straightforward conclusion in the prior proceeding based on an appreciation of the explicitly-recited functionality considered as a whole. Moreover, even if the claims were directed to an abstract idea, which they are not, *Alice* explicitly requires analysis of the elements of each claim, “both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice Corp. v. CLS Bank Intl.*, 134 S. Ct. 2347, 2355 (2014). The Board’s analysis in CBM2014-00015 quoted above was just such an analysis. Still further, since *Alice* was decided, the Federal Circuit has held claims reciting computers, networks and the internet are patent eligible where the claimed solution is in overcoming problems in such environments:

[T]hese claims stand apart because they do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.

*DDR Holdings, LLC v. Hotels.com, LP*, No. 2013-1505 at 20 (Fed. Cir. Dec. 5, 2014) (precedential opinion). As observed by the Board in CBM2014-00016, claims 11-13 recite “a specific way of doing something with a combination of components” and thus

these claims fall under the ambit of *DDR*, not *Alice*. Petitioner's second attempt to invoke the superficial "do it on a computer" talisman flies in the face of the Board's prior characterization of these claims and should be rejected.

Moreover, the recited CCM is not analogous to the "communications controller" mentioned in *Alice*. In *Alice*, the "communications controller" was "hardware." *Alice*, 134 S. Ct. at 2360. As the Supreme Court pointed out in *Alice*, "nearly every computer will include a "communications controller." *Id.*<sup>86</sup> However, in contrast to *Alice*, the CCM of the recited claims is a unique and specific piece of *software* which functions to provide the overall claimed synchronization and integration functionality of both applications and data and, per claims 11-13, "is an interface between the hospitality applications and any other communications protocol." There was no "off-the-shelf" component at the time of the invention which would have provided the claimed CCM functionality (nor is there any such off-the-shelf CCM component available even today; such software functionality must be specially configured for individual systems incorporating the subject matter of claims 11-13). As discussed above, the CCM should be construed consistent with the claim overall (as the PTAB defined it to be one of the "structural components" interacting with the other structural elements of the claim to provide the overall recited functionality), the specification and intrinsic evidence to mean "a software layer that sits on top of a communications protocol and acts as an interface between hospitality applications and the communications

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<sup>86</sup> The patents at issue in *Alice* make clear that the communications controller **hardware** devices at issue in *Alice* were available **from commercial suppliers** such as Encore, IBM and Cisco and that the "controllers effect communications between the processing units [] and the various **external hardware devices.**" U.S. Pat. No. 5,970,479 at 7:60-65 (emphasis added).

protocol.” As recognized by the Board in CBM2014-00016, the recited CCM is part of the claim structure overall and it is not a “purely functional and generic” hardware component as incorrectly alleged by Petitioner in attempting to shoehorn its contrived argument to fit *Alice*. (Pet. at 76). Petitioner’s entire argument based on *Alice* thus fails, and is completely redundant in any event.

Without relying on *Alice*, and thus effectively conceding that its arguments are redundant, Petitioner also alleges that the recited API is “conventional.” (Pet. at 74-75). However, the Petition does not even address the functionality of the recited API, particularly the “integration” of hospitality **and** non-hospitality (“outside”) applications as discussed above. Petitioner likewise argues, *inter alia*, that wireless handheld computers were conventional, but again entirely ignores what the claims actually recite.<sup>87</sup> Petitioner’s arguments regarding “synchronized” (after being “bewildered” by the terminology when trying to construct §112 arguments) likewise missed the mark. Petitioner cites to a passage in the ‘325 patent which states, as background, the functionality of Windows CE (Pet. at 77), but ignores that the ‘325 patent states that the inventive synchronization and integration (as actually recited in claims 11-13) is different from, and goes beyond the capabilities of, Windows CE:

[A] set of software libraries described herein in conformance with the present invention not only enhances the basic Windows CE functionality by ***adding new features*** but also maximizes the full potential of wireless handheld computing devices. ***Such features include fast synchronization between a central database and multiple handheld devices, synchronization and communication between a Web server and multiple***

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<sup>87</sup> *I.e.*, storage of “hospitality applications and data” on a handheld device, and synchronization of said hospitality applications and data with a central database, web server and web page, as well as integration with “outside applications.”

*handheld devices, a well-defined API that enables third parties such as POS companies, affinity program companies and internet content providers to fully integrate with computerized hospitality applications*

Exh. 1002 at 11:21-32 (emphasis added). This is a statement of the critical aspects of claims 11-13, completely ignored by Petitioner in its attempt to reduce the claimed invention to an off-the-shelf handheld operating system. Petitioner's conclusory remarks are thus meaningless, as well as being redundant.<sup>88</sup>

Attempting an impermissible appeal of the Board's prior non-institution decision while repeating the same failed arguments from the prior Petition (CBM2014-00016), Petitioner also did not even address dependent claim 15, merely stating what it recites. (Pet. at 77).<sup>89</sup> This is not sufficient to make a §101 argument, even apart from the overall failure to get past the redundancy of Petitioner's claims 11-13 arguments.

## **X. CONCLUSION**

For at least the reasons set forth above, the Board should not initiate a CBM review in this case. Petitioner has not established standing, and has failed to establish that any of claims 11-13 and 15 of the '325 patent are more likely than not invalid under 35 U.S.C. §§101, 103 or 112.

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<sup>88</sup> Petitioner essentially argues, without support, that the machine or transformation test precludes patentability of any system incorporating a computer. That argument is a non-starter.

<sup>89</sup> Claim 15 recites additional unique and non-conventional functionality as discussed above in regards to §103 (*see* Sections (VI)(A)(10) and (VIII)(I) above) which was ignored by Petitioner relative to §101 as well as §103, similar to prior errors by petitioners. *See* CBM2014-00013, Paper 37 at 39 ("Petitioner, however, does not specifically address these dependent claims, which require the menu to have functionality to perform handwriting capture or voice capture.").

June 22, 2015

Respectfully Submitted,

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**CERTIFICATE OF SERVICE**

I certify that, in accordance with 37 C.F.R. §42.6, a true and correct copy of the foregoing Patent Owner's Preliminary Response was served on June 22, 2015 by causing said documents to be delivered via electronic mail, per agreement of the parties, to counsel for Petitioner at the following addresses:

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