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

_____

Case CBM2015-00091
Patent No. 6,384,850

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United States Patent and Trademark Office
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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	http://blogs.wsj.com/digits/2014/04/02/apples-jobs-declared-holy-war-on-google-over-android/, discussing Apple 2010 emails made public in *Apple v. Samsung* Litigation
2005	The House that Tech Builds, http://hospitalitytechnology.edgl.com/news/the-house-thattech-builds99460?referaltype=newsletter, Hyatt CTO Interview, April 8. 2015
2006	Domino's Press Release, http://www.prnewswire.com/news-releases/dominos-pizza-first-in-industry-to-offer-mobile-ordering58317297.html, Sept. 27, 2007
2007	"Domino's app let's you voice-order pizza," http://www.usatoday.com/story/money/business/2014/06/16/dominos-voice-ordering-app-nuancefast-food-restaurants/10626419/, June 16, 2014
2008	"Starbucks to roll out innovations in mobile platform--Company says new mobile features could be 'holy grail' of throughput," http://nrn.com/quick-service/starbucks-roll-out-innovations-mobile-platform, March 13, 2014

2009	"Starbucks' mobile order and pay sees hot start, aided by Integration," www.mobilecommercedaily.com, April 27, 2015
2010	"Agilysys Introduces InfoGenesis Roam Mobile Software," June 21, 2011
2011	*Ex parte McNally*, Appeal No. 2012-001503 (PTAB Nov. 4, 2014)
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2034	Edwards, et al., "Designing and Implementing Asynchronous Collaborative Applications with Bayou" (1997)
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2036	Starbucks Investor Presentation (2014)

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. 6,384,850 ("the '850 patent"). For the reasons given below, the Petition for review of claims 12-16 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 **original** claims 12-16 of the '850 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 in actuality merely an attempt to circumvent the non-appealability of the original non-institution ruling on these grounds (which is prohibited by statute[1]). The only grounds in the Petition which is arguably not redundant of the grounds put forth in CBM2014-00015 is a baseless §103 challenge which does not even include a reference disclosing the recited "**hospitality** applications" and fails on numerous other bases as detailed below.[2] In fact, PO can only assume that the

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[1] 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.

[2] Petitioner relies on a **travel/transportation** reference, despite the fact that neither "travel" nor "transportation" appear **even once** anywhere in the intrinsic record, and the intrinsic-evidence based construction of "hospitality" <u>excludes</u> 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

§103 challenge was put forth merely to include some grounds which were not argued in the first Petition (CBM2014-00015). Petitioner and its expert, Helal, do not even acknowledge the first Petition or that the March 26, 2014 non-institution ruling regarding claims 12-16 **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 food and making reservations.**

Pet. at 69 (emphasis added). Petitioner made this **very same** allegation before:

> Claims 12-16 cover nothing more than an **abstract idea** of **placing an order** or **reservation using a general purpose computer** and wireless handheld device

CBM2014-00015, Paper 9 at 9 (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 20 at 24 (emphasis added). Further, the PTAB clearly recognized the multi-faceted specificity and hence non-abstractness of claims 12-16 in the prior proceeding:

> 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 20 at 24 (emphasis added). Despite the Board's clarity in its non-appealable

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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 under a proper construction as discussed below.

ruling, Petitioner clearly is repeating the same failed arguments in an attempt to circumvent the prior ruling and its non-appealability. 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 of the Board's decision on the prior §112 grounds. PO submits that nothing has changed in the claims since Petitioner filed its first §112 challenges,[3] and thus there is no justification for allowing Petitioner to circumvent the non-appealability of the Board's prior non-institution 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.

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

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[3] *See* CBM2015-00047, Paper 7 at 11-12 (June 15, 2015) ("Petitioner does not argue that these additional claims could not have been challenged in the earlier Petition or explain why the claims were not challenged in the earlier Petition.").

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.[4] 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. (CBM2014-00015).[5]

The fact that numerous POSA have had no difficulty understanding the '850 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 '850 patent

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[4] Exh. 2026 at 3 ("The Examiner has the initial burden of presenting evidence or reasoning to explain why persons skilled in the art would not recognize in the original disclosure a description of the invention defined by the claims.").

[5] Further, an **independent** examiner determined that the '850 patent specification/drawings **anticipated** a later and similar patent application (Final Rejection, App. Ser. No. 09/897,292, p. 5-7 (Exh. 2024). The examiner of this application was thus clearly able to read the specification/drawings, understand them, and then determine that the '850 patent **alone** taught every aspect of the claims of the application being reviewed.

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 <u>admitted</u> to the "enablement" of the "database on the handheld" embodiment[6] in the first petition (CBM2014-00015). 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**."[7] 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 '850 file history; if they had, they would have seen that Ameranth's original filing on September 21, 1999 included <u>actual</u> 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,[8] contrary to Petitioner's argument. (Pet. at 29-30).

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[6] Petitioner stated: "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**." CBM2014-00015, Paper 9 at 51 (emphasis added).

[7] *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).

[8] The contemporaneous and widespread acclaim that Ameranth received for the

Evidence compelling rejection of the Petition comes from Petitioner Starbucks itself, in which Starbucks praised the inventions (discussed below), 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.[9]

After founding Phoneomena, Inc. in 2002 (the first of his two different mobile middleware companies in Ameranth's technical and product space[10]), Petitioner's expert Helal filed a patent application which included numerous core features of the '850 patent/claims (filed on January 15, 2004 and claiming a priority date of January 15, 2003,[11] both several years **after** Ameranth's

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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.

[9] *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**, Dr. Merkal's 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)).

[10] "[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).

[11] Ser. No. 10/758,180 ("Server Side Wireless Development Tool") (Exh. 2031).

inventive priority date but years before he was retained by Petitioner to provide his 2015 Declaration). In this application, which is discussed fully below in comparison to the subject matter of '850 claims 12-16, 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 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). This statement completely contradicts his new opinions as detailed below. The earlier application and sworn statement thus negates all of Helal's 2015 hindsight-based, litigation-induced, obviousness opinions and in fact demonstrates non-obviousness. Helal's allegation that everything in the claims was known in 1999[12] does not withstand even cursory scrutiny.

Thus, while now, under retention to Petitioner, Helal asserted that he could not even understand '850 claims 12-16 and that all **features** in them were obvious and well known in 1999, he did not mention or disclose that he had sought a patent for himself and asserted novelty of several of the **same features** present in '850 claims 12-16 **four years <u>after</u>** the '850 patent priority date and after it was publicly announced and available to him and others. Beyond refuting

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[12] Helal stated that "[n]**one** of the **features** described **in Claims 12-16** of the '850 patent was **novel** as of **the earliest priority date**, nor does the '850 patent teach a **novel and non-obvious way** of **combining** the known **features**." (Exh. 1003 at ¶11) (emphasis added).

his 2015 opinions, Helal's earlier 2003 application and declaration asserting that he was the "first inventor" of those ideas actually **serves** as an expert opinion **for** Ameranth–**confirming** the patentability of all challenged claims. *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).

The Petition also violates and/or ignores multiple case law directives, precedent, rules and regulations, each violation individually compelling denial.[13] Petitioner's expert Helal in fact followed Petitioner counsel's opinions on the law,[14] not the actual law or AIA implementing Regulations. However, counsel **failed** to advise him, *inter alia*, that his 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"[15] by the core synchronization of these claims. In fact, it is only his

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

[14] Helal Dec., Exhibit 1003 ¶12("It is my opinion that each of Claims 12-16 of the '850 patent is invalid for being obvious **under the patentability standards** of 35 U.S.C. §§ 102 and 103 **explained to me by Starbucks counsel** as stated below.").

[15] Helal Dec. at ¶101 (Exh. 1003) ("**Synchronizing** applications between a database, a

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,[16] and an indefinite claim does not "inform those skilled in

the art about the scope of the invention with reasonable certainty."[17] By definition,

Helal thus did not provide a factual or legal basis to support rendition of **any**

competent opinion on obviousness.

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. Petitioner's attempt to obfuscate and trivialize the

teachings of the patent and the subject matter of the claims becomes readily apparent

on examination of the record evidence, which Petitioner and its expert ignored.

These hospitality based claims 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

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handheld device, a web server, and a web page is **bewildering**.") (emphasis added).

[16] *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)).

[17] *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.

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]laim 12'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.**

CBM2014-00015, Paper 20 at 15-16 (emphasis added); *see also id*. at 24 ("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™

"system of systems." Such "system 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.[18,19] This copying and claiming for themselves by giant company

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[18] Starbucks, Starwood, Marriott, Pizza Hut, Hilton, Dominos, Papa John's, Micros,
Agilysys and many others all received detailed briefings and/or demonstrations of
Ameranth's patented technology during the inventive time frame or thereafter from
Keith McNally, lead inventor of Ameranth's '850 patent family, or from his staff.
[19] Contemporaneous facts detailing the conception of the invention, secondary factors

infringers has continued unabated into 2015, including Starbucks who now uses even more self-laudatory terms to describe what it copied from Ameranth.

For instance, Starbucks claimed the entirety of Ameranth's inventions/claims as its own self-described "holy grail" in 2014,[20] 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 '850 claims 12-16, including the visionary "single point of entry" for all hospitality applications (claim 13)–integrated with a **mobile** application on handhelds 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:

> 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

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demonstrating non-obviousness and nexus to the claimed invention is further provided below in the section titled "Objective Evidence of Non-Obviousness."

[20] "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).

the products/technology embodying the claims of the '850 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 '850 inventions first publicly disclosed in the Fall of 1998 were

almost immediately recognized as such by the entire hospitality market (and they were

<u>not</u> 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.[21] Only by a fictionalized hindsight-

induced telling of the actual story of what happened in the hospitality field could '850

claims 12-16 be determined to have been obvious in 1998. However, 35 U.S.C. §103

requires actual evidence, not fiction, and in accordance with precedent and the Rules of

the Board. The Petition clearly fails.

III.   THE PETITION DOES NOT ESTABLISH STANDING

The Petition argues that claim 12 is not directed to a technological invention.

(Pet. at 12-13). However, no analysis of the actual elements of claim 12 is provided.

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

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[21] *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).

applications" as recited in claim 12. The technological feature question cannot be resolved without considering the claim elements in context and as a whole.

However, this inventive solution as manifested in claim 12 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 12 when this claim and all of its elements are properly considered by their express terms and/or in light of the specification.[22] The Petition may not simply cast aside the express recitations of the claims; an actual analysis of at least one claim must be provided to support standing. This the Petition did not provide.[23]

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

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[22] 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.

[23] PO submits that Petitioner was required to provide, in the Petition, the basis for standing and that reference to CBM2014-00015 cannot suffice. Note that the PTAB has recently held that claims having structural similarities to the '850 claims were directed to a technological invention. *See Bloomberg L.P. v. Quest Corp.*, CBM2014-00205, Paper No. 16; *Apple v. ContentGuard, Inc.*, CBM2015-00046, Paper 12.

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[24] 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 12-16).

The hospitality market challenge faced by the '850 inventors was unlike the challenges in any other field.[25] 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 created/delivered to the customer in a matter of "minutes." The ***time criticality*** of the hospitality market challenge is clearly stated in the '850 specification.[26] The challenge/problem that Mr. McNally and his co-inventors first recognized in

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[24] PO does not materially dispute Petitioner's definition of the skill level of a POSA.
[25] Exh. 1001 at 1:32-36 ("[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).
[26] Exh. 1001 at 1:54-55 ("**the time criticality** of ordering, reservation and wait-list management and other similar applications.") (emphasis added).

1998 was how to seamlessly integrate wireless handheld and web-based ordering to the existing restaurant/hospitality systems <u>using their existing database</u>, without requiring a wholesale and fundamental change to the existing systems, <u>without</u> 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 whole system. This is clearly explained in the '850 patent:

> These challenges include building a menu <u>using their existing database</u> 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 menu generation approach of the present invention is 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. 1001 at 3:49-57 (emphasis added). Further, this problem needed to be solved as part of an overall synchronized <u>and</u> integrated "system of systems"–not only across technology modes–but also with and between other hospitality and non-hospitality applications as well. These problems were solved by the inventors, and various aspects of that solution are encompassed by '850 claims 12-16.

The salient question regarding the present Petition is whether both the "problems" and the "solution" were obvious to a POSA in August 1998. <u>Both</u> must have been obvious to warrant the sanction of invalidation, because being the first to identify a previously unrecognized underlying problem indicates non-

obviousness.[27] Ameranth's 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 <u>appear</u> via hindsight to have been obvious long ago, in fact often was not.[28]

Fortuitously, the actual factual history is documented, as shown herein and in the record of U.S. Pat. No. 8,146,077 ("'077")[29] (which is fully available in consideration of the present Petition against the '850 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, despite its ready availability in the prosecution history of the '850 family (salient

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[27] "[A] patentable invention may lie in the discovery of the source of a problem." *In Re Sponnoble*, 405 F.2d 578,832 (CCPA 1969).

[28] 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).

[29] 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 '850 prosecution, was that the '850 claims were allowed without any need for same.

portions of Exh. 2020-2023 are discussed below in the Objective Evidence section) and citation in CBM2014-00015. This was error. The Federal Circuit "has consistently pronounced that **all evidence** pertaining to the objective indicia of non-obviousness ***must be considered <u>before</u>*** reaching an obviousness conclusion."[30]

Evidence from the time of the invention, from actual market participants, is the most accurate determinant of obviousness.[31] 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 <u>at the time of the invention</u>? IBM partnered with Ameranth on its 21st Century Restaurant™ System launch at the NRA Show in Chicago in May 1999 and Microsoft praised,[32] 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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[30] *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).

[31] *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).

[32] "Ameranth provides a **total turnkey solution** integrating Pocket PC's with wireless networks, and **linking them** to PC servers, and the internet" (Statement of Doug Dedo, Group Product Manager, Mobile Devices Division, Microsoft, May 22, 2000 (Exh. 2020 at 3, 12 and Exh. 38 attached thereto)) (emphasis added).

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 (CBM2014-00015) 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 '850 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 even recognize the requirement to consider, and did not consider, objective evidence of obviousness which is of record in the '850 family prosecution history.

Fourth, by not having disclosed a single claim construction proposal of his own, it simply is not possible to ascertain what the **actual** bases for Helal's arguments were. Whether in respect to written description or obviousness, Helal's flawed analysis is amplified by his admission of being "bewildered" by the synchronous aspect of these

"synchronization" claims.[33]

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 simple 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.[34]

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

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[33] *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).

[34] "Brandt discloses systems wherein applications and associated application 20 data are synchronized [] between a database, handheld device, web server, and web page." (Pet. at 55).

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 '850 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 '850 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 '850 claims. This is clear, *e.g.*, from a comparison of element "g" of '850 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 '850 claim 1).

The specification and figures of the Helal application also included several 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, notwithstanding that Helal asserted that the inventors had not disclosed or "enabled" **how** to make the embodiments claimed in the '850 patent, the Helal description included a similar level of specificity as the '850 patent, *e.g.*, as to the operations and interactions with the database (*compare* Helal application, Exh. 2031 at ¶¶0041-0042,[35] with

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[35] "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

'850 patent, Exh. 1001 at 10:37-46[36]). 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 (as well as Figures 6-9), and in selected passages from

his specification, highlighting the functionality that is similar to the **features** of the

'850 disclosure (which Helal deemed "well known" as of 1999):
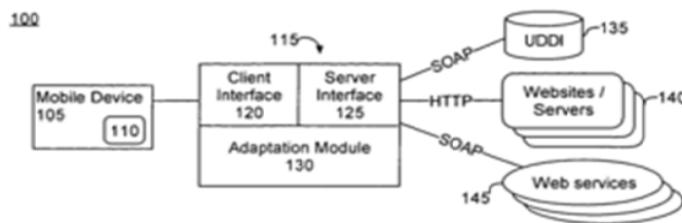
Pertinent extracts from Helal's specification are as follows:

> 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**

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for the selected database product."

[36] "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."

or **client** and **one or more other servers**.

[0007]… The proxy **115** can include **a third component** referred to as **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 programmatic 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 '850 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 '850 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 **128-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 48, 50, 51, 52, 55, 58 (bottom of pages), 49, 50 (middle of pages) and 49, 53, 60, 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 <u>one page</u> of argument regarding claim 12 element b in the context of the Brandt/NetHopper combination (Pet. at 49-50), but attempts to incorporate by reference <u>three pages</u> of argument, reference text **and** figures from the Helal Declaration (Exh. 1003 at ¶¶157-63) which is largely not discussed within the Petition itself. As a further example, and even more egregiously, the Petition provides less than <u>three pages</u> of argument regarding the claim 12 "wherein the applications and data are synchronized …" limitation in the context of the Brandt/NetHopper combination (Pet. at 55-58), but attempts to incorporate by reference over <u>fourteen pages</u> of argument, reference text **and** figures from the Helal Declaration (Exh. 1003 at ¶¶195-216). This is clearly a systematic attempt to circumvent the 80-page limit.

In *Tempur Sealy Int'l, Inc. v. Select Comfort Corp.*, IPR 2014-01419, Paper 7 (PTAB Feb. 17, 2015) the Board held that a petition had several deficiencies that 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:

> **Incorporation "by reference amounts to a self-help increase in the length of the [] brief**" … "a pointless imposition on the court's time.[37]

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[37] *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). Petitioner's use of the Helal Declaration is, as in *Cisco* and

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 Turnbull Declaration, and mostly not even there. The effect of packing the Petition with these 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, including all dependent claims, before performing any analysis of validity. 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[38] and/or they imply reliance on extrinsic evidence to seemingly lead to an unstated but "implied" construction. They point to PO positions as to some terms in a different forum,[39] but do not actually

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Tempur Sealy, a very large "self-help increase in the length of the brief." The Helal Declaration is even larger than the declaration *Tempur Sealy*.

[38] Pet. at 24 ("The proposed BRI construction of each term is the ordinary meaning of the term, including "communications control module" (*e.g.*, Exh. 1001 at 9:21-40 and 11:24-42; 4:5-23, 4:49-51) and "hospitality applications" (*e.g., Id.* at 1:51-55; 1:59-2:32, 4:5-8, and 11:24-42)."). This admits that the specification defines the terms.

[39] Petitioner's attempt to incorporate extrinsic evidence from a different forum fails. While offering no constructions of its own, Petitioner alleged that Ameranth's prior infringement contentions should limit construction of claim terms here. (Pet. at 23). 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 '850 Petition (CBM2014-00015 (also ignored by

propose any constructions of their own. Further, they entirely ignored the Board's prior

constructions across this family of patents, which already 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 claim elements.

Critically, despite the requirement to do so,[40] 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

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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 ("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
arguments at page 24 of the Petition regarding PO's prior alleged contentions are a red
herring. The referenced arguments were made in regard to construction of the
preamble, not claim 12 element b, and moreover Judge Payne declined to construe the
preamble of claim 12 as limiting. PO is not required to conform every future argument
it makes to an argument which was never adopted. Moreover, as stated, PO never took
a position on the scope of claim 12 element b in the prior proceeding in any event.
[40] *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.").

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 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) "single point of entry," (7) "hospitality applications," (8) "integration," (9) "automatic," (10) "central database," (11) "digital data transmission" and (12) "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 a straightforward construction. *See* Judge Everingham Order (Exh. 2033 at 24, and discussed below). Petitioner ignored this construction, especially in respect to Alonso, which had no recognition of 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. 1001 at 2:24, 11-34-35 ("backoffice server (central database)"); *id*. at 2:8-10, 11:13-15 ("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 construction 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. *See* Exh. 1001 at 2:23-26, 4:15-18, 11:34-36 ("***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).

6. *"applications and data are synchronized between the central database, at least one wireless handheld computer, 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 <u>not</u> 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 (CBM2014-00015), the preferred embodiment for the wireless handheld device recited in claims 12-16 is the application and database stored on the handheld device. This element must be interpreted to require that a hospitality application/data is stored locally on the wireless handheld device. The express claim language 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.[41] Moreover, the specification clearly and consistently states that a handheld menu/display is different from a web page menu/display. For example:

means to instantly download the menu configuration onto, e.g., a handheld device or Web page (Exh. 1001 at 3:17-19 (emphasis added))

the menu can be downloaded to either a handheld device or Web page (*Id*. 3:37-38 (emphasis added))

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

A PDA or Web page format (*Id*. 10:23 (emphasis added))

Still further, neither the specification nor the claims envision synchronizing

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[41] 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).

between "web pages." If claim 12 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 claim 12 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 claim 12 (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. *See, e.g.*, '850 claim 12, 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. 1001). 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 claim 12 thus fails. Claim 12 element b cannot be browser-dependent.

8. *"hospitality applications"*

As to "hospitality applications," Petitioner ignored the limitation entirely, 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 none of Petitioner's references are 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." CBM2014-00014, Non-Inst. Dec. at 16-17; *see also, e.g.,* Exh.

1001 at 4:6-7 ("hospitality applications, e.g., reservations, frequent customer ticketing, wait lists, etc."); 3:66-67, 11:18-19 ("computerized hospitality applications"). 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. Neither the words "travel" nor "transportation" appear even once in the specification nor in the entirety of the massive prosecution files of the family of patents. No POSA would believe that a "car rental" application meets the "hospitality application" limitation of these claims. This is **not** an issue of "combinability" based on non-analogous art, rather it is an issue of Petitioner not having a reference disclosing/teaching the <u>specifically claimed</u> "hospitality application" limitation as correctly constructed.

9.   *"API," "outside applications" and "integration"*

These three terms are very closely related, and compel the correct construction of each other when the claim is considered as a whole, which Petitioner did <u>not</u> 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 <u>integrated with</u> 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. 1001 at 3:63-67; 11:15-19). This "**fully integrate"** language is also key to the

proper construction of the claim overall and to the construction of the full claim term

"applications ***and*** data are synchronized …"

10.   *"single point of entry for all hospitality applications"*

Petitioner failed to propose a construction for this term, nor consider it properly

as to any of the asserted references and of course a claim involving "**all**" hospitality

applications cannot be met by any combination of references which do not disclose

any hospitality applications. Therefore, none of the Petition's limited and off-the-

mark citations to those references are applicable, nor do they disclose this limitation.

The proper construction is one that leverages Judge Payne's focused

construction as to "single point of entry" itself, but **the element** needs to be considered

as a whole to be consistent with the claim and the specification cites directly related to

this element. Judge Payne construed "a single point of entry" as "a center of

communication." (Exh. 1044 at 18).[42] PO submits that this is the proper BRI

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[42] "The communication module also provides a **single point of entry** for **all**

construction and that the full term, including "**all** hospitality applications," should be construed as "a center of communication for all hospitality applications."

11. "automatic"

Petitioner simply read out this vital term, as discussed below, merely alleging that data being "**reflected**" at a later time somewhere in the system, somehow teaches "automatic" communications functionality. It does not. PO proposes "done or produced as if by machine." This is the ordinary and customary definition of "automatic" established by the BPAI/PTAB. *See* BPAI Appeal No. 2010-000055 at 5 (Exh. 2012) (relying on Merriam Webster Collegiate Dictionary (http://www.merriam-webster.com/dictionary/automatic). Petitioner's expert ignoring the import of "automatic" as to patentability of claims 14 and 15 is particularly disconcerting in light of the fact that he included "automatic" functionality in fully **26** claims (13-39) of **his own** patent application (Exh. 2031), thus clearly acknowledging that he believed "automatic" functionality was patentably distinctive as applied to similar technology.

12. "digital data transmission"

Petitioner also ignored the import of this term of claim 16 entirely. This terminology had a precise definition as reflected in the 1999 Microsoft Computer Dictionary, which is exactly as a POSA would have understood it. *See* Exh. 2015 (Digital data transmission: "Exchange of communications in which all information is transmitted in binary encoded (digital) form."). While "all digital" system deployments may well be viewed as the norm today, that was not the case at the time of the invention, when high speed digital access was rarely available either wirelessly

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hospitality applications, e.g., reservations, frequent customer[,] ticketing, wait lists, etc. to communicate with one another wirelessly and over the Web. (Exh. 1001 at 4:5-13) (emphasis added).

or in the home. The sound of a 28.8K analog modem dialing over an analog telephone line is something the millennial generation has never heard, yet that was commonplace in 1998-99. Thus, the inventors recognized that an "all digital" system incorporating all of the other elements of claim 12 for providing the claimed synchronization was unique at the time of the invention. Therefore, such functionality across all elements of the asserted prior art, as combined, must actually be shown in order to disclose this limitation in the context of the claim as a whole. That was not done in the Petition.

VII.   PETITIONER HAS NOT SHOWN THAT ANY OF CLAIMS 12-16 ARE MORE LIKELY THAN NOT INVALID UNDER 35 U.S.C. §112

Petitioner alleges that certain '850 claim elements are invalid for lack of enablement, indefiniteness, and/or lack of written description. Petitioner's challenges fail, as set forth herein. Additionally, the extensive incorporation of Mr. Helal's expert declaration, which is not permitted under the Board's "incorporation by reference" prohibition, as discussed hereinabove, is both unhelpful to Petitioner's arguments and must be disregarded in any event as a blatant violation of the Petition page limit.

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 mistakenly alleges that the term "hospitality applications and data"

('850 claim 12, elements a-d) is not enabled, and indefinite, and lacks sufficient

written description. (Pet. at 28-35 (what Petitioner labels as "Grounds 1-3")). In fact,

'850 claim 12 and its 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., CBM2014-00015, Paper 20 at 14-19 (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.

'850 patent (Exh. 1001 at 11:3-48) (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.[43] 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 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

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[43] 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*.

(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 9, 29) 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).[44]

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.

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[44] 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.

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 <u>are</u> 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. 1001 at 3:59-63).

3.   *Written Description*

Petitioner's arguments here also have no merit. Petitioner's arguments on "Ground 3" are merely circular: Petitioner argues (Pet. at 34-35) 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 '850 patent specification at col. 11, lines 3-48.

Also, Petitioner attempts to evade the fact that the challenged claims are original claims (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 these original claims are of no significance because they are nothing more than a "wish" or a "plan"–but Petitioner's allegation is untrue for the reasons set forth above*, i.e.,* the '850 specification fully describes a preferred embodiment of the invention and explains to a POSA how to implement it. *See, e.g.,* Exh. 1001 at 11:3-48.

The original claims of 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 37) 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. 1001 at 4:8-13).

But, Petitioner wrongly and inexplicably then goes off on a tangent (Pet. at 37-38) and posits a design for this "layer" completely different from what is in the specification, then argues 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. 1001 at 11:24-36) 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. 1001 at 11:43-48). 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 3-48, 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 original claims 12-16) 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 specification with Petitioner's own made-up hypothetical system in which the communications module would have to be present on all client-side 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 this 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 claim terms referenced by Petitioner in "Ground 7"–the same claim terms discussed above–are enabled by the specification, as discussed above. The case cited by Petitioner (Pet. at 42), *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 '850 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. 1001 at 11:43-48.) Petitioner's contrived challenge therefore fails.

Further, the Petition concedes that <u>no</u> undisclosed proprietary "software libraries" are needed to implement the '850 claimed inventions. *See, e.g.*, Pet. at 9 ("the '850 patent specification states that the software is generic") and at 12 ("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 attempt to stitch together the same misguided enablement arguments made in Grounds 1, 4, and 7. Petitioner's catch-all argument fails for the reasons already explained herein. 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 3-48 of the specification. All relevant details regarding the design and implementation of the communications control module are also set forth therein, and Petitioner even conceded that a POSA would understand and be able to implement the communications control module to be "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 or practice the invention.

Accordingly, Petitioner's catch-all "Ground 8" fails, just as Petitioner's Grounds 1-7

fail to prove any form of invalidity under Section 112.

VIII.   PETITIONER HAS NOT SHOWN THAT ANY OF CLAIMS 12-16 ARE MORE LIKELY THAN NOT OBVIOUS
A.   Overview

Patent Owner responds to §103 challenges 9 and 10 together because they both

depend on the Brandt "web based" disclosure from IBM as their primary reference,

and thus a combined analysis is appropriate. [45] In fact, however, challenge 10 merely

"adds" the Demers and Alonso material to the material of Brandt from challenge 9

(which entirely relied on **both** Brandt **and NetHopper).** But Petitioner **did not**

include NetHopper in challenge 10, nor did it replace the mobile "web browser" of

NetHopper which it relied on in the Brandt/NetHopper combination of challenge 9.[46]

Thus, because Brandt could **only** operate with client devices equipped with a "web

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[45] 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.

[46] Again and again (Pet. at 64-68) Petitioner pointed to the **same disclosures** from challenge 9, *i.e.*, "Brant in View of NetHopper," but cited only to Brandt in its challenge 10 arguments (*e.g.*, "**Brandt** discloses") while referencing the prior cites of Brandt/NetHopper **combined**.

browser," and challenge 10 includes no teaching of such, challenge 10 fails entirely.

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 valid 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.[47] However, Petitioner seeks to improperly shift the burden 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.

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

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 technical approaches teach away from the actual 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 both challenges, but Petitioner either did not recognize or chose to ignore that Brandt's approach of relying on a "**common user interface**"[48] teaches away from the core synchronization purpose of the '850 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)) across an entire system including "wireless handhelds" and all types of "non PC standard" type 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 '850 patent, as exemplified by 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 '850

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[48] Brandt 0088 ("The **present invention** provides a **common graphical user interface** for each **web client**" (emphasis added) (all of Brandt's claims 1-27 rely on the "common user interface").

patent and recited in claims 12-16. *See* Exh. 1001 at 3:49-57 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 '850 approach.

Moreover, Brandt would also require a change of its principles of operation ("**common** user interface")–the '850 patent/claims are focused on just the 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.[49] Further, to access its "common user interface," Brandt indisputably relies on "web browsers" for **all** client computers,[50] including those

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[49] *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).

[50] 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

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 (CBM2014-00015) that a "web page" approach was not even taught by the '850 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 (claim 12 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 not even combinable with "browser based" Brandt, nor was this conflict even identified, explained or resolved via any proposed modifications by Petitioner.[51]

Further confirming that Brandt did not recognize nor appreciate the actual underlying synchronization problems later recognized and solved by the '850 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

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include **handheld,** portable or laptop computers, standard desktop computer systems, **Personal Digital Assistants (PDAs),** nonprogrammable terminals connected to a mainframe, etc.") (emphasis added).

[51] 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.

inventive concepts and tenets of claims 12-16 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,[52,53] 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 made to the references. In fact, the disparate technical approaches in the references versus the '850 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.   Neither 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

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[52] 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).

[53] 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.

"**central database**" as the fulcrum to enable the claimed synchronization, Petitioner attempted to align all three <u>separate</u> databases of its disparate references (Brandt, Demers and Alonso) against the same claim element which requires a "central" database.[54] 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 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

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[54] 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).

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 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. **Neither 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 24). Based on that assertion, Petitioner then proceeds to try to read out claim 12 element b in its entirety. However, this assertion is directly contrary to the express claim language, which <u>separately</u> requires that "hospitality applications and data" are stored on <u>both</u> a wireless handheld device <u>and</u> a web page. The law is clear that different limitations in a claim are to be given effect.[55] 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 <u>either</u> a handheld device <u>or</u> Web page."

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[55] 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).

(Exh. 1001 at 3:37-38 (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. 1001 at 5:10-11 ("Generally, a particular application program presents information to a user through a window of a GUI"); *id.* 6:53-54 ("the POS application on the handheld device")).

Still further, neither the specification nor the claims envision or allow for synchronizing <u>between</u> "Web pages." If claim 12 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 claim 12 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 claim 12 (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 claim 12 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 claim 12 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,"[56] which cannot be part of element b as detailed above.[57] In 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 49-50). This statement 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 claim 12 element b. Petitioner's argument is merely a conclusory statement

based on the incorrect proposition that claim 12 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. That is because the Petition entirely

mischaracterized the claimed invention as entirely "Web" based, as opposed to

interpreting claim 12 for what it actually is, *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

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[56] 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 49-50).

[57] 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 states the function of web pages without explaining how that functionality satisfies a mobile app limitation as embodied in claim 12 element b.

or web browser. Critically, as the PTAB has made clear, a proper obviousness analysis must explain the <u>differences</u> between claims and prior art.[58] Not only is such consideration absent from the Petition, the Petition ignores numerous critical claim elements entirely, including claim 12 element b. However, the Petition is consistent in characterizing the claims as requiring "stor[ing] applications and data in the <u>four recited locations</u>" and "synchroniz[ing] applications between the <u>four recited locations</u>." (Pet. at 43 (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 <u>different</u> locations cannot be the <u>same</u> 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 claim 12 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 66). 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

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[58] *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").

in combination, provides a disclosure of a locally-stored "hospitality app" and associated data for the claimed wireless handheld device as recited in claim 12 element b nor one that could be synchronized as the claim requires.

D.   Neither Challenge Identifies A Teaching or Suggestion Of "At Least One Web Page On Which Hospitality Applications And Data Are Stored" As Recited By Claim 12

The proper construction of "web page" includes "**viewable** in a **web browse**r" 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.   Neither Challenge Provides A Teaching Or Suggestion Of The "Communications Control Module" Functionality Of Claim 12

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. 1001 at 9:21-27. 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 claim 12 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.   Neither 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 combinations' failure to disclose

or suggest element b of claim 12, 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.

With regard to the disclosure of Brandt, Petitioner attempts to read out the terms

"synchronized" and "between" in '850 claim 12 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 is yet another attempt to read element b out of claim 12.[59] But element b requires that application data, as well as applications themselves, actually be stored on the wireless handheld device. It 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 central database to store application data" (Pet. at 58) 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" on an "as-needed" basis to meet a limitation which explicitly requires local storage on the handheld device.

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.

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[59] Pet. at 57 ("Because application data is retrieved from the database on an as-needed basis, consistency is maintained throughout the system and the current data is available for display to all users on all client devices.").

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[60] 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.

Further, for the reasons discussed above involving the failure to disclose or suggest claim 12 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 interface is completely antithetical to the requirement of claim 12 element b that "applications" are stored on the handheld device and are synchronized with the central

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[60] 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).

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. **Neither Challenge Provides Disclosure Or Suggestion Of Hospitality Application Functionality As Required By Claims 12-16**

Additionally, the Petition and the Helal declaration both ignored the significance of the "hospitality" application language and thus failed to make any argument as to why the hospitality application requirement of claim 12 would be satisfied by the combination of Brandt and NetHopper, nor of/with Demers/Alonso.

Moreover, the Petition argues that a "car rental" application (Brandt) was a "hospitality**"** application based on extrinsic evidence. However, the extrinsic evidence relied on by Petitioner, Exh. 1035, actually defines "hospitality" consistently with the '850 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.

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 '850 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. 1001 at 3:63-67; 11:15-19). 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 teaching the

entire claim element and/or of the claim overall, as a whole.

I.   Dependent Claims

'850 dependent claims 13-16 contain <u>additional</u> elements that further distinguish them over the prior art. Yet in all instances Petitioner deemed these claims to be met by the same structures as independent claim 12, thus making the dependent claims "superfluous." In fact, Petitioner cited to nothing new whatsoever as to all dependent claims for challenge 10, despite the replacement of NetHopper with Demers/Alonso, while relying solely on cites to Brandt alone and not explaining modifications/differences unique to challenge 10. This is impermissible, as recently confirmed by the PTAB.[61] For example, Petitioner's arguments regarding the recited "single point of entry" functionality (claim 13) fails as they all are based on an incorrect construction of "single point of entry" which, once again, Petitioner did not construe and chose to ignore, and effectively read out the correct "center of communications for all hospitality applications" construction mandated by the intrinsic evidence. The Petition does not refer to any additional reference from any of Petitioner's challenges which actually teach the "single point of entry" for all hospitality applications limitation, which of course cannot be met by any combination involving four "**non**-hospitality" references.

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[61] IPR2015-00284 non-Inst. Dec. at 7, May 27, 2015 ("Additionally, under the doctrine of claim differentiation, **claim 1 is presumed to be broader than dependent claim 7**, which specifically recites a temperature gradient in the physical object. Therefore, Petitioner's proposed construction **would make dependent claim 7 superfluous**.") (emphasis added) (*citing Free Motion Fitness, Inc. v. Cybex Int'l, Inc*., 423 F.3d 1343, 1351 (Fed. Cir. 2005)).

Also, Petitioner's flawed characterization of the alleged prior art fails to address in any manner the "automatic" requirement of dependent claims 14 and 15. Claims 14 and 15 require that information entered on a Web page or wireless handheld device is "automatically communicated" to other system components. But the Petition does not actually cite to evidence of "automatic" functionality. It simply reads out the term, and thus tries to negate the entirety of synchronous system claims 14 and 15, by implying that automatic is meaningless, *i.e.*, that all systems were inherently synchronous and automatic, without any evidence of such. Further the Petition's reference to the possibility of updated data being **reflected** in the **database** (Pet. at 63) misses the mark because the claim includes "is" and "communicated" and "automatically," none of which are shown by Petitioner to be in the references. In fact, beyond the listing of the "automatic" term from the claim itself, the word **automatic** does not even appear in the Petition, nor as being disclosed by anything, thus the Petition fails entirely as to claims 14/15 on this basis. Further, the Petition merely presents either attorney argument or improper incorporation by reference as to these claims, mandating the failure of this challenge. A disclosure of a system set up to **perform** the functionality **automatically** was required, but such disclosure was not identified by Petitioner. Once again, as to challenge 10, Petitioner relied only on cites to challenge 9, despite the significantly different handhelds of 10.

In respect to claim 16, the proper construction of "digital data transmission" was ignored and read out by Petitioner in regards to both challenges. Again relying only on attorney argument and incorporation by reference, Petitioner simply alleges:

All communications between the various computer systems and software

applications disclosed in Brandt **involves** "digital data transmission."

Pet. at 64 (emphasis added). However, the claim does not recite the term "involves," rather it requires all **synchronization** to occur **by** digital data transmission. Further, Petitioner did not analyze this claim from the perspective of a POSA **at the time of the invention,** as required. In the late 1990s, at the time of the invention, **all** such communications were **not** inherently digital. Many communications at the time, if not most, were in fact not all digital, as discussed above regarding claim construction. This was nonetheless simply ignored by the Petition and thus the challenge to claim 16 fails. Instituting a CBM review of any of the dependent claims would be improper because their unique inventive functionality was effectively ignored by the Petition and thus a challenge to those claims has been waived.

J.   Objective Evidence Of Non-Obviousness

The present Petition, filed seventeen years after the conception of the inventions of the '850 patent, now alleging obviousness in 1998, does not merely ask the Board to *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 and nearly instantaneous industry-wide recognition followed for the breakthrough products/technology embodying the inventions described in the patents, attesting to the novel and innovative nature of the patented technology. This is evidenced 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.[62] PO submits that objective factors including praise/awards, commercial

success, copying, failure of others and licensing confirm the non-obviousness of all

challenged '850 claims as is detailed herein.

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,[63] Microsoft/Expedia, Starwood,[64]

Oracle/Micros, IBM[65] 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

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[62] In an Interview Summary, the Examiners noted: "The Applicant explained how the secondary factors show non-obviousness." (Exh. 2035).

[63] While now claiming Ameranth's inventions were obvious, Agilysys licensed Ameranth's 21st Century Restaurant System™ technology and later-issued patents, first in 1999 (Exh. 2022 Supp. 1.132 Nexus Dec., p. 10) and continuing for **13 years** through 2012–at which time they abruptly stopped paying license fees and then blatantly copied.

[64] 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).

[65] 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).

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 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.[66] 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

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[66] *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).

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., Exh. 4 thereto) thus further confirming nexus between the 21st Century Restaurant™ product and '850 claims 12-16[67] (also shown in the original drawings (Exh. 2029)).

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[67] 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).

Ameranth – '21ˢᵗ Century Restaurant' - Evolution
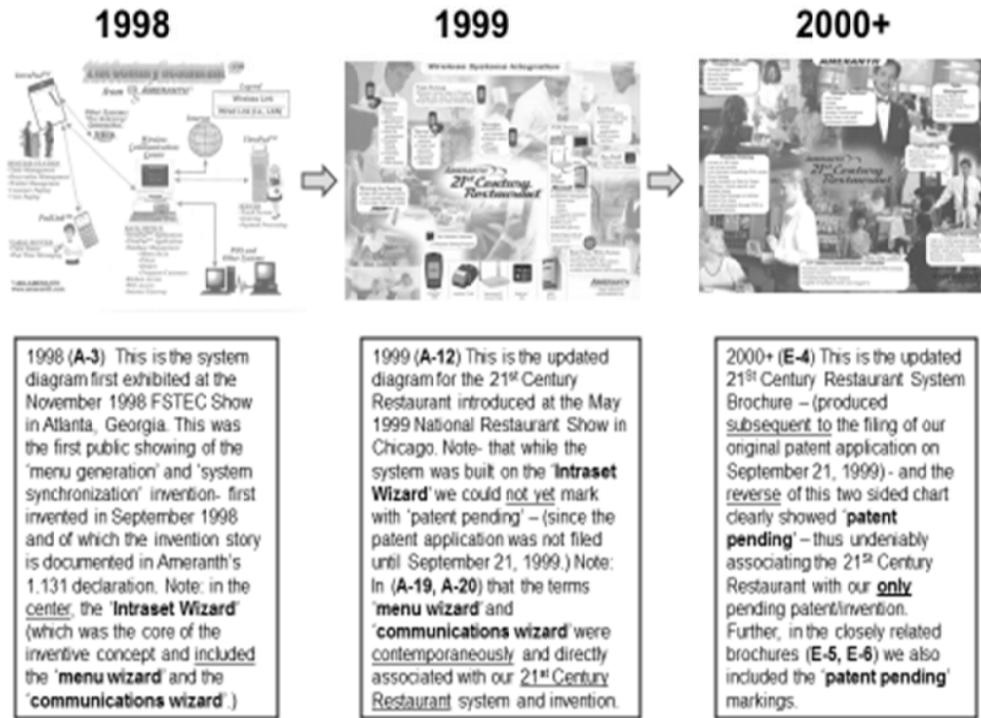
Beyond the undisputed and dispositive actions taken to partner with Ameranth by the largest and most well-financed companies across the technical and hospitality market spectrum, the entire hospitality market press and numerous nationally renowned publications including the Wall Street Journal, Time 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 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, arguably the single most respected IT entrepreneur/executive in

the world, at least at the time of Ameranth's inventions, 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, and
> gain efficiencies, 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:

> As you are aware, 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).[68] Also, Ameranth was notified that:

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[68] *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/'077 patents] to agree on the deal points on a Licensing Agreement. Here are the products and services we would want…
1. Communications Wizard—this tool creates a standard that can be used to integrate with any POS terminal and establishes the online ordering protocol.

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

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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).

that "Ameranth's main product, 21st Century Restaurant is *poised to become the 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 of which was 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^{TM} 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™ 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,[69] and with the majority of these licenses occurring entirely outside of litigation.[70] 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."[71]

Further examples of copying include Petitioner (CBM2014-00014) Hyatt

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[69] *E.g.,* Par License Announcement (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).

[70] *See In re Roufett*, 149 F.1350, 1355 (Fed. Cir. 1998) ("licenses showing industry respect for the invention" is objective evidence of nonobviousness).

[71] *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).

Hotel's CTO claiming that **it** invented the "single point of entry" of '850 claim 13.[72]

Dominos also copied Ameranth and claimed a "breakthrough" on September 27, 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")[73] (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

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[72] Hyatt Hotels CTO Interview, April 2015 (Exh. 2005).

[73] 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)

in filing petitions against the '850 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™ product/technology, and launched its copycat "IG Roam" mobile ordering product which embodied the claimed inventions[74] and halted license payments to Ameranth after paying those fees for 13 years.

Ameranth was/is entirely focused on the very products and technology that it has pioneered and uniquely introduced into the **hospitality** market. The copying, praise/awards, failure of others, commercial success and licensing confirmed above to have a nexus with key inventive aspects of the '850 claims compel a conclusion of non-obviousness at the time of the invention (especially because Petitioner and its expert <u>entirely ignored</u> all of the objective evidence–which is in the record and clearly was known to Petitioner, as pointed out by PO in CBM2014-00015, Paper 11).

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 **<u>all</u>** have to have been ***<u>wrong</u>*** at the time of and following the invention for Petitioner's 2015 obviousness contentions to now, in conflict with the record evidence, be ***<u>right</u>***. Petitioner's litigation-induced hindsight view is shown to be wrong by the clear record evidence.

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[74] 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).

IX.   PETITIONER HAS NOT SHOWN THAT ANY OF CLAIMS 12-16 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 CBM2014-00015.

Petitioner argued that its §101 challenge is not redundant simply because *Alice* was decided after the Board denied institution of trial as to claims 12-16. (Pet. at 80) (arguing conclusorily that "[u]nder the *Alice* framework, the Challenged Claims are not patent-eligible"). However, Petitioner simply ignored the Board's prior ruling and does not point to anything in *Alice* which makes a difference in the argument Petitioner provided in 2014-00015.[75]   Petitioner now tries to argue that *Alice*'s mention of "communications controllers" makes claims 12-16 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 12-16. 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***. Claim 12 recites 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. The claim further defines these

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[75] 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.

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 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***. … Claim 12 claims ***a specific way of doing something with a combination of components***.

CBM2014-00015, Paper 20 at 24-25. *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 CBM2014-00015, claims 12-16 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.*[76] 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 claim 12, "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 claim 12). As discussed above, the CCM should be construed consistent with 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 protocol." The CCM is not a "purely

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[76] 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).

functional and generic" hardware component as 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). 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. However, again, the Petition entirely ignores what the claims actually recite, *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." Petitioner's arguments -regarding "synchronized" (after being "bewildered" by the terminology when trying to construct §112 arguments) likewise misses the mark. Petitioner cites to a passage in the '850 patent which states, as background, the functionality of Windows CE (Pet. at 76), but ignores that the '850 patent states that the inventive synchronization and integration (as actually recited in claim 12) 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 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. 1001 at 11:8-19 (emphasis added). This is a statement of the critical aspects of

claim 12, which Petitioner completely ignored 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.

Attempting an impermissible appeal of the Board's prior non-institution

decision while repeating the same failed arguments from the prior Petition (CBM2014-

00015), Petitioner also did not even address dependent claims 13-16, merely stating

what they recite. (Pet. at 77-78).[77] This is not sufficient to make a §101 argument,

even apart from the overall failure to get past the redundancy of Petitioner's claim 12

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 12-16 of the '850 patent are more likely than not invalid under 35

U.S.C. §§101, 103 or 112.

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[77] Claims 13-16 recite additional unique and non-conventional functionality as
discussed above in regards to §103 (*see* Sections (VI)(A)(10-12) 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 15, 2015   Respectfully Submitted,

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<u>CERTIFICATE OF SERVICE</u>

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 15, 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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