

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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EXPEDIA, INC., ET AL.  
Petitioner

v.

AMERANTH, INC.  
Patent Owner

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Case CBM2015-00095  
Patent No. 8,146,077

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

*Submitted Electronically via the Patent Review Processing System*

**PATENT OWNER'S PRELIMINARY RESPONSE**

## **TABLE OF CONTENTS**

	<b><u>Page</u></b>
I. STATEMENT OF PRECISE RELIEF REQUESTED .....	1
II. INTRODUCTION.....	1
III. OVERVIEW.....	2
A. Background Of The Claimed Invention .....	3
B. Overview Of The Digestor Reference.....	8
C. Overview Of The Micros Reference .....	11
D. Overview Of The Blinn Reference.....	16
IV. THE PETITION SHOULD BE REJECTED FOR IMPROPER INCORPORATION BY REFERENCE .....	18
V. CLAIM CONSTRUCTION .....	20
A. The Independent Claims 1 and 9 Preambles Are Limiting .....	20
B. The Independent Claim 13 Preamble is Limiting .....	21
C. PO’s Proposed Constructions.....	22
VI. THE PETITION DID NOT ESTABLISH THAT ANY CLAIM IS MORE LIKELY THAN NOT INVALID.....	28
A. Petitioner Has Not Shown That Any Claim Of The ‘077 Patent Is More Likely than Not Indefinite Under 35 U.S.C. §112 .....	28
B. Petitioner Has Not Shown That Any Claim Of The '077 Patent Is More Likely Than Not Invalid As Obvious In View of the Combination of Micros 8700 and Digestor .....	30
1. The Digestor “Transformation” Approach Was Contrary To The Claimed Functionality And Admits Such .....	30
a. Digestor does not disclose the precisely recited output display requirements of all claims .....	31

b. Digestor does not teach or suggest real time synchronization of a programmed handheld [menu] configuration with/from a master menu/database.....	31
c. Digestor does not disclose any of the explicitly recited handheld device display requirements of all claims .....	35
2. The combination of Micros and Digestor would have been unworkable.....	37
3. The Proposed Micros/Digestor Combination Against Claims 1-18 is Fatally Flawed.....	39
C. The Combination Of Blinn And Digestor Fails .....	53
1. The Blinn Reference Is Not Prior Art .....	53
2. The Petition Cited To No Actual Disclosure Of Real Time Synchronous Functionality In Blinn .....	55
3. Blinn Does Not Disclose Hospitality Application Functionality As Required By Claim 13.....	55
4. Blinn Does Not Disclose Customizing Web Page Outputs Unique To Handheld Displays.....	56
5. Blinn Does Not Disclose Automatically Formatting A Programmed Handheld Configuration As “Cascaded Sets of Linked GUI Screens” For “Two Different” Handheld Device Display Sizes Including “A Different Number Of UI Screens” .....	57
6. Blinn Was Issued To Microsoft, An Early Investor In PO .....	58
D. Failure Of Both Combinations To “Automatically Format”.....	59
E. Petitioner’s Arguments Regarding Numerous Dependent Claims Fail.....	59
F. Objective Evidence Of Non-Obviousness.....	66
VII. CONCLUSION .....	80

## TABLE OF AUTHORITIES

	<u>Page</u>
<u>Cases</u>	
<i>ACTV, Inc. v. Walt Disney Co.</i> 346 F.3d 1082 (Fed. Cir. 2003).....	24
<i>Allen Archery, Inc. v. Browning Mfg. Co.</i> 819 F.2d 1087 (Fed. Cir. 1987).....	72
<i>Apple v. ContentGuard, Inc.</i> CBM2015-00046, Paper 12.....	1
<i>Apple v. Smartflash LLC</i> CBM2015-00033, Paper 11 at 15-18 (PTAB May 28, 2015) .....	49
<i>Biosig Inst., Inc. v. Nautilus, Inc.</i> No.12-1289 at 7 (Fed. Cir. Apr. 27, 2015).....	29
<i>Bloomberg L.P. v. Quest Corp.</i> CBM2014-00205, Paper No. 16.....	1
<i>CBS v. Sylvania., Inc.</i> 415 F.2d 719 (1st Cir. 1969), <i>cert. denied</i> , 396 U.S. 1061 (1970).....	69
<i>Cisco Systems, Inc., v. C-Cation Techs., LLC</i> IPR2014-00454, Paper 12 at 10 (PTAB Aug. 29, 2014).....	19
<i>Continental Can Co. v. Monsanto Co.</i> 948 F.2d 1264 (Fed. Cir. 1991).....	6
<i>DeSilva v. DiLeonardi</i> 181 F.3d 865 (7th Cir. 1999).....	19
<i>Energizer Holdings, Inc. v. USITC</i> 435 F.3d 1366 (Fed. Cir. 2006).....	28
<i>Festo Corp. v. Shoketsu Co.</i> 535 U.S. 722 (2002) .....	29

<i>Gambro Lundia AB v. Baxter Healthcare Corp.</i> 110 F.3d 1573 (Fed. Cir. 1997).....	71
<i>Heidelberger v. Hantscho Prods.</i> 21 F.3d 1068 (Fed. Cir. 1994).....	76
<i>Hockerson-Halberstadt, Inc. v. Converse Inc.</i> 183 F.3d 1369 (Fed. Cir. 1999).....	20
<i>Hoechst Celanese Corp. v. BP Chem. Ltd.</i> 78 F.3d 1575 (Fed. Cir. 1996).....	7
<i>In re De Blauwe</i> 736 F.2d 699 (Fed. Cir. 1984).....	42
<i>In re Hoch</i> 428 F.2d 1341 (CCPA 1970).....	62
<i>In re ICON Health &amp; Fitness, Inc.</i> 496 F.3d 1374 (Fed. Cir. 2007).....	36
<i>In re Pearson</i> 494 F.2d 1399 (CCPA 1974).....	42
<i>In re Ratti</i> 270 F.2d 810 (CCPA 1959).....	9
<i>In re Roufett</i> 149 F.1350 (Fed. Cir. 1998).....	76
<i>In Re Sponnoble</i> 405 F.2d 578 (CCPA 1969).....	4
<i>Intel Corp. v. USITC</i> 946 F.2d 821 (Fed. Cir. 1991).....	60
<i>Interconnect Planning Corp. v. Feil</i> 774 F.2d 1132 (Fed. Cir. 1985) .....	5
<i>KSR Co. v. Teleflex, Inc.</i> 550 U.S. 398 (2007).....	48

<i>Medichem, S.A. v. Rolabo, S.L.</i> 437 F.3d 1157 (Fed. Cir. 2006) .....	11
<i>Oatey Co. v. IPS Corp.</i> 514 F.3d 1271 (Fed. Cir. 2008) .....	7
<i>Pacing Tech. v. Garmin</i> No. 14-1396 at 5 (Fed. Cir. Feb. 18, 2015) .....	21
<i>Plantronics, Inc. v. Aliph, Inc.</i> 724 F.3d 1343 (Fed. Cir. 2013) .....	6
<i>Power-One, Inc. v. Artesyn Tech., Inc.</i> 599 F.3d 1343 (Fed. Cir. 2010) .....	77
<i>Rackspace, Inc. v. Rotatable Tech. LLC</i> IPR2013-00248, Paper No. 10 at 8-9 (Oct. 1, 2013) .....	21
<i>Rambus Inc. v. Rea</i> 731 F.3d 1248 (Fed. Cir. 2013) .....	70
<i>Tempur Sealy Int'l, Inc. v. Select Comfort Corp.</i> IPR 2014-01419, Paper 7 (PTAB Feb. 17, 2015) .....	19
<i>Teva Pharm., Inc. v. Sandoz, Inc.</i> 723 F.3d 1363 (Fed. Cir. 2013) .....	70
<i>Texas Instr. Inc. v. USITC</i> 988 F.2d 1165 (Fed. Cir. 1993) .....	60
<i>Travelocity v. Cronos Tech.</i> CBM2014-00082, Paper No. 12, Oct. 16, 2014, p. 5 .....	49

### **Other**

37 C.F.R. §1.14(a)(vi) .....	54
37 C.F.R. §42.6(a)(3) .....	1
37 C.F.R. §42.22(a)(2) .....	1
37 C.F.R. §42.104(b)(4) .....	1, 66

37 C.F.R. §42.104(b)(5) .....	1
37 C.F.R. §42.207(a) .....	1
37 C.F.R. §42.300(b) .....	20
35 U.S.C. §101 .....	1
35 U.S.C. §102(b).....	54, 55
35 U.S.C. §103 .....	1, 80
35 U.S.C. §112 .....	1, 7, 28, 29, 80
35 U.S.C. §312(a)(3) .....	1
IEEE Std. Dict. (6th ed. 1996).....	22
Microsoft Comp. Dict. (4th ed.1999) .....	26, 28, 59, 64

**PATENT OWNER'S LIST OF EXHIBITS**

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



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

## **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’s belated, second, Covered Business Method (“CBM”) review (“Petition” or “Pet.”) against U.S. Patent No. 8,146,077 (“the ‘077 patent”). For the reasons below, the Petition for review of claims 1-18 should be denied because the claims are not invalid under 35 U.S.C. §112 and/or 35 U.S.C. §103.<sup>1</sup>

## **II. INTRODUCTION**

Petitioner’s first attempt to invalidate Ameranth’s ‘077 patent based on 35 U.S.C. §101/112 (filed 16 months earlier) failed entirely, just as this belated attempt should. Petitioner’s three asserted references, comprising two different obviousness combinations, each have fatal shortcomings individually and even more so in combination. They teach away from the claimed invention, would require substantial changes to their principles of operation, and fail to teach or suggest critical claimed features (mostly ignored by the Petition, while relying on incorrect constructions and failing to even consider the most important claim terms).

The Petition also violates multiple case law directives, rules and regulations,<sup>2</sup> each violation individually compelling denial. For example, Petitioner and its expert

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<sup>1</sup> Petitioner’s standing argument merely references CBM2014-00014, discusses only one element of one claim, and is thus insufficient. PO submits that Petitioner was required to provide, in the Petition, the basis for standing. Also note that the PTAB has recently held that claims having structural similarities to the ‘077 claims were directed to a technological invention. *See Bloomberg L.P. v. Quest Corp.*, CBM2014-00205, Paper 16; *Apple v. ContentGuard, Inc.*, CBM2015-00046, Paper 12.

<sup>2</sup> The Petition violated numerous rules/requirements promulgated under the AIA including 37 C.F.R. § 42.6(a)(3), 37 C.F.R. § 42.22(a)(2), 37 C.F.R. § 42.104(b)(4), 37 C.F.R. § 42.104(b)(5) and 35 U.S.C. § 312(a)(3).

entirely ignored the vast quantity of objective evidence on record confirming the non-obviousness of the '077 claims, rendering the Petition fatally defective.

Further, the '077 patent issued post-*KSR*, after a thorough seven-year review—including the direct involvement of multiple supervisory examiners. Its highly detailed and multi-faceted claims resulted from this process, and were allowed over 200+ references including the core *Micros* reference put forth in the Petition. Further, Ameranth was just issued its **5th** patent in this patent family (U.S. 9,009,060), after a panel of three ALJs once again determined the inventions to be non-obvious.<sup>3</sup>

Ameranth was **first** to identify the actual problem to be solved, **first** to invent the synchronous technology to solve it, **first** to introduce products based on the inventive solution, **first** to win multiple best-product awards for the products and technology embodying the claims of the '077 patent, **first** to receive public praise for its products and the inventive technology (including from Petitioner companies),<sup>4</sup> **first** to patent that technology and **first** to license the patented technology.

### III. OVERVIEW

Analyzing obviousness at the time of the invention, as required, is not a simple or easy task, particularly because the invention was first conceived in 1998, many years ago and long before many technological advancements which are today taken for granted. The burden is on Petitioner to prove obviousness. The Petition fails in meeting that burden in numerous ways (technically, factually, procedurally, and

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<sup>3</sup> *Ex Parte McNally*, No. 2012-001503 at 4 (PTAB Nov. 4, 2014) (Exh. 2011) (“Appellant argues that the references **do not disclose** application software enabled to **configure hospitality data for display** on the non pc standard display sized screen of a wireless handheld device. **We agree. . .**”) (emphasis added).

<sup>4</sup> Petitioner companies in one or more of CBM2014-00013, -14, -15, -16 or CBM2015-00080, -81, 82, -91, -95, -96, -97, -99.

legally) as is discussed below. Most importantly, Petitioner is simply **wrong** in its characterizations of the invention/claims, the asserted prior art, and everything in the record which bears on either.

**A. Background Of The Claimed Invention**

The inventive solution, as defined in the very detailed claims of the '077 patent, simply was not obvious to any POSA<sup>5</sup> in the Fall of 1998, and was not apparent to Mr. McNally (Ameranth's founder and lead inventor—clearly a POSA) or his co-inventors until they conceived it. In fact, until then (Fall of 1998), like the entire hospitality marketplace, Mr. McNally and his co-inventors had not previously recognized the actual underlying synchronization and menu generation **problem** needing to be **solved** in the industry.

The hospitality market challenge faced by the '077 inventors was unlike the challenges in any other field.<sup>6</sup> Nowhere else did/does 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 '077 specification.<sup>7</sup> The challenge/problem that Mr. McNally and his co-inventors first recognized in 1998 was how to seamlessly integrate wireless handheld and web-based ordering

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<sup>5</sup> PO does not materially dispute Petitioner's definition of the skill level of a POSA.

<sup>6</sup> Exh. 1004 at 1:45-49 (“[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).

<sup>7</sup> Exh. 1004 at 1:65-67 (“**the time criticality** of ordering, reservation and wait-list management and other similar applications.”) (emphasis added).

to the existing restaurant/hospitality systems using their existing database, without requiring a wholesale and fundamental change to the existing systems, without manual programming of each handheld, and while still yielding an easy to use and customized operator interface for both restaurant staff and remote customers to place **precise** orders, so that customers would have it “**their way**”—all the while maintaining synchronization across the whole system. This is clearly explained in the ‘077 patent:

These challenges include building a menu using their existing database and transferring the menu onto hand- held devices or Web pages that will interface with servers wirelessly or to restaurants/customers over the internet. The 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. 1004 at 4:60-5:2 (emphasis added). Further, this problem needed to be solved as part of an overall synchronized and integrated “**system of systems**”—not only across technology modes, but also with other hospitality and non-hospitality applications as well. These problems were solved by the inventors, and various aspects of that solution are encompassed by the ‘077 claims.

The salient question regarding the present Petition is whether both the “problems” and the “solution” were obvious to a POSA back in August 1998. Both must have been obvious to warrant the sanction of invalidation, because being the first to identify a previously unrecognized underlying problem indicates non-obviousness.<sup>8</sup> Ameranth’s inventors *were the first* to identify the actual

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<sup>8</sup> “[A] patentable invention may lie in the discovery of the source of a problem.” *In Re Spinnoble*, 405 F.2d 578, 585 (CCPA 1969).

underlying problems and the first to solve them as evidenced by the specification disclosure and claims. However, using the '077 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 Turnbull now, in 2015, allege that everything claimed was obvious by little more than a wave of the hand, devoid of any serious examination of the claims, specification or alleged prior art. But it is well recognized that what might appear via hindsight to have been obvious long ago, in fact often was not.<sup>9</sup>

The Board need not rely on speculation. The actual factual history is documented in the '077 record, and it compels a conclusion of non-obviousness. As required by Supreme Court precedent, if objective evidence exists, as to what the marketplace truly thought about the uniqueness of the invention at the time of the invention and subsequent thereto, such evidence **must** be considered in an obviousness analysis. Such evidence exists in spades, yet the Petition entirely ignored it, despite Petitioner's own expert's acknowledgement that he was **required** to consider it,<sup>10</sup> and Petitioner filing an exhibit including numerous objective evidence declarations. (Exh. 1012 at 541-724, 860-906, 944-70, 972-1017, 1025-26). This was error. The Federal Circuit "has consistently pronounced

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<sup>9</sup> We are admonished that "[t]hat which may be made clear and thus 'obvious' to a court, with the invention fully diagrammed and aided . . . may have been a breakthrough of substantial dimension when first unveiled." *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138 (Fed. Cir. 1985).

<sup>10</sup> "[O]bviousness requires consideration of four factors . . . Whatever objective factors indicating obviousness or non-obviousness **may be present** in any particular case." Turnbull Dec., Exh. 1002 at 22-23 (emphasis added).

that **all evidence** pertaining to the objective indicia of non-obviousness ***must be considered before*** reaching an obviousness conclusion.” *Plantronics, Inc. v. Aliph, Inc.* 724 F.3d 1343, 1355 (Fed. Cir. 2013)) (“The significance of this fourth Graham factor ***cannot be overlooked*** or be relegated to ‘secondary status.’”) (emphasis added).

Evidence from the time of the invention, from actual market participants, is the most accurate determinant of obviousness.<sup>11</sup> Petitioner’s base references, Micros and Blinn, were from Petitioner Micros (CBM2014-00014) and Microsoft/Expedia.<sup>12</sup> What did Micros (the world’s largest hospitality IT company, then and now) and Microsoft (the world’s largest software company, then and now) **truly** think as to the “obviousness” of Ameranth’s inventions at the time of the invention? Micros sought an exclusive license to Ameranth’s intellectual property embodying the claims of the ’077 patent and Microsoft praised,<sup>13</sup> partnered with and invested in Ameranth to gain access to Ameranth’s technology, *i.e.*, as manifested by the then-pending ’850 patent application, which was Ameranth’s only relevant intellectual property asset at the time. It is preposterous for Petitioner to allege now, 15+ years later, that a POSA would have found Ameranth’s inventions obvious at the time based on any combination

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<sup>11</sup> See, e.g., *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1273 (Fed. Cir. 1991) (“The significance of a new structure is often better measured **in the marketplace** than in the courtroom.”) (emphasis added).

<sup>12</sup> Note that Microsoft owned Petitioner Expedia (CBM2015-00095, -96, -97) at the time of the invention and up until the Summer of 2001.

<sup>13</sup> “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. 1012 at 552, 661) (emphasis added).

involving documents or technology of Micros or Microsoft. Clearly, the actions of Micros and Microsoft, at the time, compel a conclusion of non-obviousness. Extensive contemporaneously-documented objective evidence of non-obviousness, including extensive and multi-faceted confirmation of nexus of the documented licensing, praise/awards, copying, failure of others, and commercial success to the claimed invention, is provided herein below.

Initially, Petitioner's current arguments are belied by, and inconsistent with, arguments it put forth in the prior Petition (CBM2014-00014). First, Petitioner sought to invalidate the '077 claims in the prior Petition based on a 35 U.S.C. §112 theory, alleging that the specification did not even teach "web page" implementations and only taught the preferred embodiment of a "database on the handheld." But, inexplicably, Petitioner now has reversed course and bases all grounds for invalidity *only* on a "mobile web page" being displayed on the handheld. However, this would impermissibly read out the preferred embodiment<sup>14</sup> of a handheld database/application as is encompassed by all '077 claims, *i.e.*, storage on the handheld of the "programmed handheld menu configuration" in claims 1-12 or "programmed handheld configuration" in claims 13-18.<sup>15</sup> Further, Petitioner ignored the indisputable fact that

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<sup>14</sup> This is because "it is unlikely that an inventor would define the invention in a way that excluded the preferred embodiment, or that persons of skill in this field would read the specification in such a way." *Hoechst Celanese Corp. v. BP Chem. Ltd.*, 78 F.3d 1575, 1581 (Fed. Cir. 1996). Moreover, absent express disavowal of claim scope, claims cannot be construed to exclude a disclosed embodiment. *Oatey Co. v. IPS Corp.*, 514 F.3d 1271, 1276 (Fed. Cir. 2008).

<sup>15</sup> Despite clearly being the single most important terms of the claims, *e.g.*, recited **11 times** in just independent claims 1, 9 and also in claim 13, Petitioner did not even propose constructions, nor actually consider or discuss the meaning of these terms or how they were met in their prior art arguments. Rather, Petitioner simply read them out



“web page” was removed from claims 1-12 during prosecution, which is clear from the record, after an April 22, 2008 interview in which the Examiner recommended that a “web page” limitation be removed to address a prior art rejection.<sup>16</sup> Further, there is no “web server” or “web page” in claims 1-12 (as there is in claims 13-18) and thus having specifically excluded “web page menu generation” in claims 1-12, Petitioner’s Micros/Digestor “web page” based approach against claims 1-12 fails.

The Petition’s attempt to transform Ameranth’s claimed synchronization system invention (pursuant to clearly defined principles of operation) into something which operates by different principles innately fails as to claims 1-12 because these claims are not directed to a “web page only” approach. The Petition fails for this and numerous other reasons set forth herein.

#### **B. Overview Of The Digestor Reference**

Petitioner and its expert either simply ignored or failed to appreciate, in asserting their new “mobile web page” theory (relying entirely on the Digestor reference) for both of their proposed combinations, that Digestor simply was not what they characterized it as being. Digestor’s self-described “**bag of tricks**” fails in numerous critical respects.<sup>17</sup> Ameranth’s pioneering patents and ’077 claims, which are uniquely focused on the hospitality market and the special problems therein as discussed above (inclusive of “**using their existing database**”), cannot be invalidated

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of the claims because they cannot be met by the Digestor “small web page” approach.

<sup>16</sup> App. Ser. No. 11/112,990, May 28, 2008 Amend. at 11 (Exh. 1012 at 236) (“Claims 103 and 118 have been further amended to **delete web page menu generation** recitations.”) (emphasis added).

<sup>17</sup> Exh. 1022 at 4 (“In conclusion, to perform document re-authoring two things are required: a set of re-authoring techniques (**a 'bag of tricks'**), and **a strategy** for applying them.”) (emphasis added).

by nebulous “trickery.” Moreover, Digestor’s purported “strategy” (principles of operation) for applying these so-called “tricks” teaches away from, and would have to be fundamentally changed to even come close to, the ‘077 claims.<sup>18</sup>

Digestor’s “bag of tricks” has at least **seven** fatal flaws as applied to the ‘077 claims: (1) it relies on “heuristic conversions”<sup>19</sup> (*i.e.*, “guestimates”) of web page documents that were “authored” and thus admittedly created by **not** using the parameters of the **existing database/menu**, *i.e.*, the ‘077 claimed “master database/menu” and their file structure to create the user interfaces for handhelds (this thus teaches away from the ‘077 claims, which precisely and exactly define “how” the “menus” and “handheld configurations” are to be created and from what, and without “guessing” and without a “bag of tricks,” (2) indisputably, Digestor was not a “real time” system<sup>20</sup> (considering that it takes 20 seconds per calculation per handheld, whereas the ‘077 claims require multiple concurrently connected devices—thus exacerbating Digestor’s slowness, even if the Digestor system was not limited to only a single connection at a time, as it is, (3) Digestor was **not** (despite its marketing spin to the contrary) “automatic” but instead relied on manual actions and **user configuration** on/from a handheld device<sup>21</sup>—and thus teaches away from and fails to

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<sup>18</sup> “If the proposed modification or combination of the prior art would ***change the principle of operation*** of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” MPEP 2143.01 (*citing In re Ratti*, 270 F.2d 810, 813 (CCPA 1959)) (bold emphasis added).

<sup>19</sup> Exh. 1022 at 4 (“Some of the **design heuristics** learned during this process were ... An automatic re-authoring algorithm has been developed which captures **many of the heuristics used** in the manual re-authoring exercise”) (emphasis added).

<sup>20</sup> Exh. 1022 at 6 (“In the worst case the planner produces 80 versions of the document in its search space and takes **about 20 seconds** to complete”) (emphasis added).

<sup>21</sup> Exh. 1022 at 6 (“To do this, **the user requests** a specific control URL from the proxy,

meet the “automatic configuration” limitations of all the ‘077 claims,<sup>22</sup> (4) Digestor was limited to a single connected handheld at a time<sup>23</sup> whereas all ‘077 claims require at least **two different** handhelds synchronized in the system, (5) Digestor’s “**good enough**” performance is not sufficient to meet the ‘077 claimed functionality because Digestor admits that its reduced web pages are not actually customized to the handheld screens/display and yields outputs which are no closer than 2.5 times the area/size of the handheld display,<sup>24</sup> whereas all ‘077 claims require the user screens to be **customized** for, **unique to** and displayed **on** the handheld display itself and (6) by not creating the handheld configurations from the actual **existing** “master database/menu” file structure data, Digestor handheld display outputs cannot meet any of the precision and synchronization aspects of the claims. Still further, Digestor was not, and Petitioner does not assert that it was, a “hospitality based” product/solution. (7) All ‘077 claims have a limitation of the generated handheld menus/displays to be “**appropriate for**” the handhelds, yet Petitioner relies on the Digestor approach which openly admits that its displays are not designed to be “appropriate for” the handhelds.

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resulting in delivery of the form shown in Figure 5. Once **users** have **configured** the system, they can **start** retrieving documents from the web.”) (emphasis added).

<sup>22</sup> While Petitioner briefly cited to other approaches mentioned in Digestor, none were explained in the Petition or by Digestor. Moreover, Digestor’s authors and Petitioner concluded that the only possibly viable approach was the alleged “automatic re-authoring” approach, while overlooking its flaws. However, as just explained, it actually was not even truly automatic itself, rather requiring user actions.

<sup>23</sup> Exh. 1022 at 7 (“Digestor can only be configured for one user at a time.”)

<sup>24</sup> Exh. 1022 at 6 (“The current condition for ‘**good enough**’ is fairly simplistic; the search is stopped when the area required by a document version is **2.5 times the screen area** of the client display (which assumes that the user doesn’t mind scrolling the display a little in one direction).”) (emphasis added).

(See Exh. 1022 at 3 (“the focus of this work is on minimizing page retrieval time, **not** on producing the **most appropriate** page layout for the display device”) (emphasis added)). This further teaches away from the '077 claims.

Thus, before even considering a combination with the Micros or Blinn systems (which create even more problems for Petitioner), Digestor’s own fatal flaws teach away from the '077 claims, thus compelling a conclusion of non-obviousness of all claims. No POSA would have even considered applying such a fundamentally flawed reference to the very exacting and time sensitive requirements of hospitality-based systems and which did not directly integrate with and depend on the **existing database** of the system.<sup>25</sup>

Further, as detailed below, Digestor’s own innate problems are exacerbated, not solved, by the proposed combinations. Further, Petitioner did not propose any actual modifications to the asserted references to meet the '077 claim limitations, instead just repeatedly and conclusorily declaring everything to have been obvious.<sup>26</sup>

### C. Overview Of The Micros Reference

Petitioner’s first combination, asserted against all claims, relies on the Micros 8700 and Micros HHT (the very same base reference combination that the '077 claims were issued over), which combined together had absolutely zero web/internet, i.e.,

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<sup>25</sup> “When a [reference] suggests that the line of development flowing from the reference’s disclosure is unlikely to be productive of the result sought by the applicant, the [reference] is said to ‘*teach away*’ from the claimed invention.” *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1165 (Fed. Cir. 2006) (emphasis added).

<sup>26</sup> Nor did the Petition explain the differences between the Digestor disclosure and the claimed subject matter (nor the differences between the other references and the claimed subject matter), thus compelling rejection of the Petition for failure to address an explicit requirement of *Graham v. John Deere*.

“web page” functionality at the time of the invention—despite Petitioner now relying on a “web page” only approach. There is absolutely no disclosure or suggestion, not even a “hint,” in these Micros documents that the Micros system could interface with anything via HTTP/HTML and or send/receive, or produce a “web page” of any kind. In fact, the Micros system could not and did not work with anything **but itself**. It was, as Petitioner and its expert acknowledge, a **proprietary**, closed system with its own custom hardware, wireless network, communications protocols/messages, and an antiquated, archaic HHT, which taught away from an “automatic menu generation” approach and which required the user **menus/displays** to be “manually programmed” on the HHT itself, and on each HHT individually, and by a “programmer”—the exact opposite of the “automatic menu generation” approach of the ’077 claims. In fact, the entire proprietary Micros 8700 architecture was the opposite of a web based system (the web is an “open” system using industry standard HTTP protocols). Petitioner in fact recognized the inherent infirmities of the Micros system, recognizing that massive changes would be required to magically transform it into a web-based system:

While the Micros 8700 HMS system was implemented using proprietary communications and data formats, it would have been obvious to a POSITA to implement that system using well-known Internet technologies such as hypertext transport protocol (HTTP) for communications (including transmission of menus, selections from menus, and updates relating to the same) among the system components, and hypertext markup language (HTML) and web browsers for authoring and displaying menus and other data at the user workstations and the HHTs.

Pet. at 25. However, this is not how Section 103 works. Petitioner cannot just review the claims it is seeking to invalidate, identify the **missing elements** and the massive deficiencies in its base reference and then simply declare all of those “**missing**

**elements**” to simply be obvious to “add” without even citing to anything disclosing such missing elements which would have been properly combinable with the base reference. Worse, the Petition did not even attempt to explain how this could even be done. The attempt to create missing functionality out of thin air thus completely fails.

Petitioner also does not even seem to appreciate that the Micros screens disclosure it relies on are **not** “HTML/Author’d” web documents suitable for Digester’s “HTML only web page” conversions. Petitioner stated:

The Micros 8700 UM discloses that the graphical user interface of the user workstation is configured as cascaded sets of linked graphical **user interface screens** that are configured to facilitate user operations, such as cashier or manager functions, or taking orders.

Pet. at 29 (emphasis added). Petitioner then attempted to combine Micros’s user interface screens with Digester’s “web page” reauthoring disclosure. *E.g.*, Pet. at 30. However, the “graphical user interface screens” of Micros 8700 are **not** HTML web pages/documents. Without question, however, Digester was entirely reliant on HTML documents for its conversions:

The proxy accepts a request for **an HTML document**, retrieves **the document** from the specified HTTP server, **parses the HTML** and constructs **an Abstract Syntax Tree (AST)**

Exh. 1022 at 7 (emphasis added). Consequently, the very concept of somehow combining the generic Micros 8700 user screens with the Digester “small web page” conversion approach innately fails, because Micros did not and could not even “author” any HTML web documents to produce the “large web pages” in the first place which were needed by Digester to be converted to “small web pages.” Petitioner’s argument thus fails before it can even get off the ground.

At the time of the invention, the Micros 8700 system was incapable of

interfacing with the internet, or with HTTP protocols, and was incapable of generating or interacting with web pages or any wireless handhelds other than its proprietary two pound HHT (infamously known as “the brick”). The HHT user interface was limited, it was non-real time, and operated only via Micros’s proprietary, non-real time communication protocol. Further, there was never any web browser for the Micros HHT, a prerequisite to the viability of any web browser/page-based approach.

The record clearly shows that Micros did not have what Petitioner via hindsight argues it had. Micros in fact sought to obtain Ameranth’s menu generation and synchronization technology for itself. Just three weeks prior to the September 21, 1999 filing of the ‘850 patent specification, on August 31, 1999, Ameranth’s lead inventor Mr. McNally, after being requested by Micros, sent Ed Rothenberg (Micros’s Software Director at the time) an overview of Ameranth’s invention, soon to be embodied in its specification and claims. This included references to Ameranth’s “Menu Wizard” and “Communication Wizard”—which were key to the automated menu generation and synchronization functionality of the ‘077 claims. The letter to Micros also emphasized numerous key terms of the ‘077 claims, *e.g.*, “by utilizing parameters of the master menu file structure” which is reflective of the **use of the “existing POS databases”**<sup>27</sup> (which the Digester “small web page” conversion approach failed to use or disclose), thus demonstrating nexus between the claims and

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<sup>27</sup> App. Ser. No. 11/112,990, 1.131 Dec. at Exh. 19 thereto (Exh. 1012 at 418) (“Attached is an example of the developer GUI for our ‘**Menu Wizard**’ ... we make available to POS partners, we assist them with **importing their existing databases into this tool**..... the “menu Wizard” ... will **create both** the Windows CE and HTML code **from the same database** ... ‘the ‘communications wizard’ ... will **update the wireless and web status automatically**”) (emphasis added).

the product (and at the very time of the invention between two POSA, Mr. McNally and Mr. Rothenberg). This provides a unique window into just what happened at the time of the invention, including between Ameranth's lead inventor, his inventive ideas, and the world's largest Hospitality IT Company, Micros. Immediately after this communication to Mr. Rothenberg, a face to face meeting at Micros HQ occurred on September 2, 1999, when Mr. McNally demonstrated and briefed the invention to Mr. Rothenberg/Micros. Subsequent to this demonstration and presentation, Micros (again through Mr. Rothenberg) sought "exclusivity" and to "leverage our IP" as expressed to Ameranth on a call on May 9, 2000.<sup>28</sup> Ameranth's sole product at the time was the 21st Century Restaurant™, and Ameranth contemporaneously advertised the product, marked as "patent pending." A license term sheet was drafted by Micros and presented to Ameranth on June 1, 2000, again emphasizing Micros's insistence on "**exclusivity**:"

MICROS- AMERANTH INTELLECTUAL PROPERTY  
 LICENSE, DEVELOPMENT & MARKETING TERM SHEET  
 ... Ameranth shall license to MICROs certain software (**the "Ameranth Intellectual Property"**)... As Ameranth's **exclusive reseller** of Ameranth's Intellectual Property in the hospitality industry, Micros shall have the **right to resell** Ameranth Intellectual Property **to other hospitality-system vendors** and to **end-user customers**."

App. Ser. No. 11/112,990, 1.132 Dec. at Exh. 41 thereto (Exh. 1012 at 553, 668) (emphasis added). Then, just three weeks later, Ameranth responded to the Micros term sheet (Exh. 1012 at 553-54, 672 (1.132 Dec. at Exh. 42 thereto)), but due to Micros demanding **exclusivity**, Ameranth wanted guaranteed minimums. The parties ultimately did not reach agreement on those minimums and Ameranth rejected Micros's demand for an exclusive license in the absence of the guaranteed minimums.

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<sup>28</sup> App. Ser. No. 11/112,990, 1.132 Dec. at Exh. 40 thereto (Exh. 1012 at 553, 666).



But there can be no dispute that, at the very time of the invention, Micros placed great value on Ameranth's technology covered by the '077 patent/claims and sought the exclusive rights to it, not only for itself but to also be a reseller to other POS companies and to Micros's own end customers. This accordingly constitutes clear evidence of a nexus to the claimed patent pending invention, as indicated by the terminology in the Ameranth/Micros communications discussed above. Moreover, it also demonstrates non-obviousness, because the world's largest hospitality IT company would not have sought or needed Ameranth's technology (especially "exclusively"), nor would the other hospitality IT companies which Micros sought to "resell" the Ameranth technology/products to (which other companies Ameranth did license directly), if the Ameranth technology had been obvious. As is also clear in the record, Microsoft invested into Ameranth, just before Micros sought "exclusivity."

#### **D. Overview Of The Blinn Reference**

As previously stated, Blinn, a non-hospitality patent that post-dates the priority date of the '077 patent, was filed by and assigned to Microsoft (which owned Petitioner Expedia during the relevant time frame). Blinn was really nothing more than plain vanilla internet type web shopping, of which there were many as the "dot com" craze was starting to build. Like Digestor, it was not a hospitality based reference, and Petitioner's contentions that **two non-hospitality references** could be combined to yield the claimed **hospitality based** invention/claims fails entirely. Apparently, what attracted Petitioner and its expert to this particular reference was the fact that it contained discussion of what it "wanted" to interface to and/or work with, including wireless handhelds. That is true, but it does nothing more. It is devoid of any recognition of the unique problems involved in configuring for wireless handhelds or achieving or maintaining any kind of synchronization in the hospitality environment.

Blinn did not even recognize nor understand the underlying problem that needed to be solved and which Ameranth's inventors did recognize and did solve, and Blinn certainly did not "solve" a problem which it did not even recognize existed, and in a market it was not even in. Petitioner cannot dispute that reality—otherwise Petitioner would not have needed to try to combine Blinn with Digestor for its nebulous "small web page" conversion approach, flawed as it is.

Blinn also lacks the file structure, first GUI, master menu and menu categories, items and modifiers specifically recited in '077 independent claims 1 and 9—thus Petitioner did not even attempt to allege that a Blinn/Digestor combination met any of '077 claims 1-12. The contentions regarding claims 13-18 likewise fail. Without either Blinn or Digestor having the capability to produce actual "handheld databases/apps" renders the very concept of their combination meeting the claimed "programmed handheld configuration" limitation of '077 claim 13 non-viable at the time of the invention. Petitioner's contention that Microsoft/Expedia, with many POSA at their disposal and **owning** the Blinn patent/technology at the time of the invention, would still partner with, praise and invest in Ameranth's invention, is without merit.

PO understands that two very deficient references might theoretically be combinable and still lead to obviousness. However, that is not the case with the Micros/Digestor and Blinn/Digestor combinations. To make the proposed combinations, each reference would have to have its fundamental principle of operation changed and much more alchemy would be required beyond Petitioner's reliance on Digestor's "bag of tricks"—which would have to come from some other unidentified reference or references to even come close to the '077 claims. Petitioner's proposed combinations in fact create yet more problems and gaping holes when

compared to each reference standing alone, most of which Petitioner and its expert either did not recognize, did not appreciate or simply chose to ignore. Petitioner also failed in its attempts to fix the problems with its references which it did recognize.

Further, Petitioner and its expert appear to think that Digestor can be combined with Micros or Blinn via some kind of a “plug and play” approach, akin to “connecting” an iPhone to its battery charger. That simply is not true as explained in detail herein, and Petitioner’s failure to explain in any detail any actual “**modifications**” (which *KSR* requires) to be made to any of the references is fatal to Petitioner’s contentions. Simply declaring that a POSITA would know to do everything which the references do not teach is not an adequate §103 analysis.

#### **IV. 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 **301 page** Turnbull 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, and the Board 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 §103 based arguments, in and outside of the claim charts and occurring in dozens of instances. *E.g.*, Pet. at 26, 27, 30, 43, 45 (bottom of pages), 34, 35, 38, 39, 44, 46 (middle of pages) and 27, 33, 41, 42, 43 (top of pages) (this is just for the first §103 challenge of the first 12 claims; it is continued throughout the Petition). This is an improper attempt to circumvent the 80-page limit. Further, Petitioner improperly included many conclusory attorney

arguments within the single spaced claim charts, further opining on the material which was improperly incorporated by reference.

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[,]” and “is a pointless imposition on the court’s time. A brief must make all arguments accessible to the judges, rather than ask them to play archeologist with the record.”). In the Petition before us, incorporation by reference of numerous arguments from Dr. Roy’s 250-page Declaration into the Petition serves to circumvent the page limits imposed on petitions.**<sup>29</sup>

Without reference to the Turnbull Declaration or other improperly incorporated exhibits, the Petition lacks adequate basis for its challenges because it depends on improperly incorporated material for those challenges. The "obviousness argument" portion of the Petition, pages 25 to 80, is chock-full of conclusory "It would have been obvious," "a POSITA would be motivated" or "a POSITA would understand" assertions with no support or explanation other than in the Turnbull Declaration, and mostly not even there. The effect of such conclusory reliance on the Turnbull Declaration is, again, that Petitioner has improperly availed itself of "a self-help increase in the length of the brief," which should be rejected.

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<sup>29</sup> *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 Turnbull Declaration is, as in *Cisco* and *Tempur Sealy*, a very large "self-help increase in the length of the brief." The Turnbull Declaration is even larger than the declarations in *Cisco* and *Tempur Sealy*.

## V. CLAIM CONSTRUCTION

The Petitioner and the Board must construe all claims, including all dependent claims (glossed over by Petitioner), before performing any analysis of validity.<sup>30</sup> Further, since the `077 patent is a continuation of the `850 and `325 patents, (also challenged in CBM proceedings), claims across the entire family of patents must be construed consistently between each other. The proposals herein yield that consistency. While Petitioner perfunctorily proposed a few `077 constructions, it failed to consider those constructions in the context of the patent family overall. Petitioner then largely ignored the few proposals it did make and made no attempt to actually apply them to the claims. Critically, Petitioner did not consider the claims as a whole<sup>31</sup> nor consider even a fraction of the pertinent elements of any claim. Petitioner simply provided an incomplete claim chart including random material from extrinsic references and impermissible attorney argument, and conclusorily deemed every element obvious, devoid of any substantive explanation or supporting evidence.

### A. The Independent Claims 1 and 9 Preambles Are Limiting

Petitioner stated: “The preambles do not recite any structural components and **does not serve as the antecedent basis for any terms** recited in the body of the Challenged Claims.” (Pet. at 17) (emphasis added). This is wrong, and by not considering the preambles as limitations, all of the Petition arguments and other constructions innately fail because the Petition did not consider the claims as a whole.

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<sup>30</sup> During review before the PTAB, claims of an unexpired patent are provided their broadest reasonable interpretation in light of the specification. 37 C.F.R. § 42.300(b).

<sup>31</sup> See, e.g., *Hockerson-Halberstadt, Inc. v. Converse Inc.*, 183 F.3d 1369, 1374 (Fed. Cir. 1999) (“Proper claim construction . . . demands interpretation of the entire claim in context, not a single element in isolation.”).

Petitioner failed to treat the preambles as limiting even though they provide antecedent basis supporting claim terms recited in the claim body, and were amended during prosecution to distinguish prior art, both of which mandate that they are limiting.

Only in the preambles of independent claims 1 and 9 does “hospitality” appear, and this term was added based on the Examiner's recommendation to distinguish prior art. (Exh. 1012 at 225, 235-36). Further, the “hospitality applications” terms in dependent claims 2-5 and 10-12 are provided antecedent basis from the recitation of “hospitality” in the preambles. The preamble thus must be a limitation. *Pacing Tech. v. Garmin*, No. 14-1396 at 5 (Fed. Cir. Feb. 18, 2015) (“Because the preamble terms ‘user’ and ‘repetitive motion pacing system’ provide antecedent basis for and are necessary to understand positive limitations in the body of claims in the ’843 patent, we hold that the preamble to claim 25 is limiting.”).

**B. The Independent Claim 13 Preamble is Limiting**

Claim 13 recites “said system” multiple times in the body of the claim. This is a clear reference to the information management and real time synchronous communications “system” recited in the preamble of claim 13, and thus the preamble provides antecedent basis for the “system” recitation in the body of the claim.<sup>32</sup> Further, each of the “said system” terms is also preceded by “connected in.” Thus the association of the “**system**” from the preamble with the “**said system**” terms in the claim body clearly proves Petitioner’s Section 112 argument based on alleged “lack of an antecedent basis” for “in the same connected system” entirely wrong.

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<sup>32</sup> *Rackspace, Inc. v. Rotatable Tech. LLC*, IPR2013-00248, Paper No. 10 at 8-9 (Oct. 1, 2013) (“The term ‘computer display window’ is cited **only in the preamble** of these claims, but it **is given patentable weight** as it provides **an antecedent basis** for “the window” recited in the body of each of these claims.) (emphasis added).

### C. PO's Proposed Constructions

The claims of the '077 patent are complex and require construction of numerous terms prior to proper analysis under §103. PO proposes the following constructions.

**“Real time”** (Claims 1-18): *“pertaining to a system or mode of operation in which computation is performed during the actual time that an external process occurs, in order that the computation results can be used to control, monitor, or respond in a timely manner to the external process.”* IEEE Std. Dict. (6th ed. 1996) (as cited in IPR2013-00222, Paper 12 at 13, Aug. 12, 2013).

**“Hospitality Applications or [Information] or [Menus]”** (claims 1-18): *“Applications, or [information] or [menus] used to perform services or tasks in the hospitality industry.”* See, e.g., Ex. 1004, 5:17-18 (“hospitality applications, e.g., reservations, frequent customer ticketing, wait lists, etc.”); 12:33-34 (referring to “computerized hospitality applications”); CBM2014-00014 non-Inst. Dec. at 16, 17. PO agrees with the Board’s prior construction wherein the “hospitality industry” refers to restaurants, hotels, casinos and venues or parties providing event ticketing which involve any of the Board’s correctly-enumerated functions (reservations, frequent customer functions, ticketing, wait lists, etc.) or other functions which are clearly within the scope of the specification and claims, e.g., food or drink ordering. The patent emphasizes that speed is important in the hospitality market, e.g., “the **time criticality** of ordering, reservation and wait-list management and other similar applications” (Exh. 1004 at 1:65-67 (emphasis added)). This scope of “hospitality” is consistent with prosecution statements as well and was relied on to distinguish prior art cited by the Examiner as discussed above in the context of the preamble language.<sup>33</sup>

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<sup>33</sup> Interview, Reply and Amend., App. Ser. No. 11/112,990 (Exh. 1012 at 225, 235-36); Amendment (Exh. 1012 at 515) (“Wakatsuki is not directed to a ‘**hospitality**’

**“Programmed Handheld Menu Configuration”** (Claims 1-12): *“a programmed set of instructions and data enabling real time synchronous system communications which are [for claim 1] derived from at least category, item and modifier parameters in the master menu file structure [for claim 9: derived from at least category and item parameters in the master menu file structure and modifiers from the modifier menu] and which are configured to provide the customized display layout distinctive to and integral with the wireless handheld computing device(s) including the set of linked graphical user interface screens appropriate for cascading the GUI screens directly on the usable display area/size of the handheld device display screen.”* See CBM2014-00014 non-Inst. Dec. at 18-20.

Petitioner impermissibly read out the single most important terms and the preferred embodiment, *i.e.*, **“programmed handheld [menu]<sup>34</sup> configuration,”** from the independent claims. In fact, Petitioner appears to not even understand that this term and its equivalent in claim 13 and the remainder of the claim elements are clearly directed to computerized user menus for **display**, not just pure menu **data** simply regarding, *e.g.*, “what’s to eat.” As discussed fully below, this error is repeated again and again, when Petitioner relies on the Micros proprietary means of sending a simple message with “item out” data as allegedly meeting the requirement for this term while

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application as presently claimed in all amended claims. This is especially relevant considering that the claim limitation ‘**hospitality**’ was accepted by the Applicants after suggestion by the Examiner in a previous Interview.”) (emphasis added).

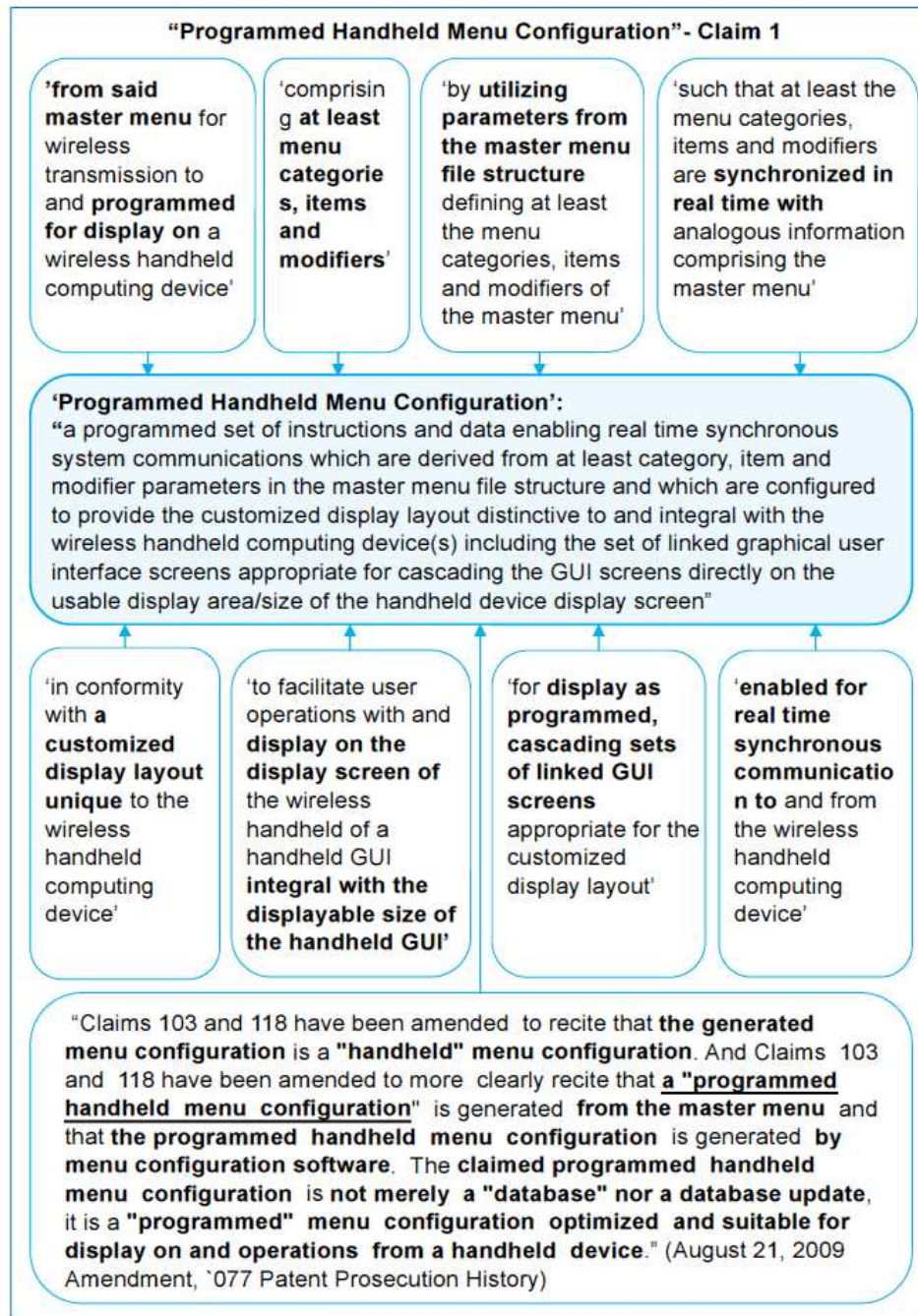
<sup>34</sup> The term excluded “menu” as to claim 13, but clearly has the same meaning as in claims 1 and 9, as is clear from claim 13 as a whole, including recitation of a master database including a “master database file structure” from which the handheld configuration is built, as well as the recitation of “for display as cascaded sets of linked graphical user interface screens,” which is clearly a multi-level menu configuration.



ignoring, e.g., the further limiting “category” and “modifier” terms in the claims (which are not in the Micros “**item** out” messages) which, when read as a whole with the other claim elements, clearly define a multi-level menu configuration.

This limitation is not used just once, it is recited **11 times** in independent claims 1 and 9 and once in their counterpart, claim 13. The necessity of a proper construction is thus self-evident, and the proper construction is compelled by the other terms and elements within the claims and it must be construed in order to properly consider the claims as a whole—as PO did above. *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms”).

This is not an instance in which a patent owner seeks to “read in” limitations from the specification—these limitations are indisputably *in the claims*. The following chart illustrates the proper BRI constructions mandated by the limitations of the claims themselves when considered as a whole, which Petitioner and its expert did not do. The proposed construction is consistent with the detailed explanations of the claimed “menu configuration software” throughout the ’077 specification including, e.g., Figures 1-5 and 7 and as explained in the prosecution history. This construction is also consistent with and is fully supported by the Board’s prior ’077 constructions including, e.g., construing “unique to the wireless handheld computing device” to mean “distinctly characteristic of the wireless handheld computing device;” “the cascading sets of menus” ... are “cascading sets of screen displays” and, finally, “[w]e give the claim term “graphical user interface screens” the meaning of “a plurality of screen displays that provide an interface for user operations, such as *menu selections*.” CBM2014-00014, non-Inst. Dec. at 16-20 (emphasis added).



Without any construction of this term or the other menu terms, and Petitioner's error in asserting that this term could be met only by raw data akin to a list of "what's to eat," none of the Petition's obviousness arguments have merit in view of the fact that the Petition does not even address, consider or explain the actual meaning of this critical term/element of the claim and thus clearly Petitioner and its expert do not explain how their asserted prior art meets this limitation.

**“Programmed Handheld Configuration”** (Claims 13-18): *“a programmed set of instructions and data enabling real time synchronous system communications which are derived from the master database file structure and which are configured to provide the customized display layout distinctive to and integral with the wireless handheld computing device(s) including the set of linked graphical user interface screens appropriate for cascading the GUI screens directly on the usable display area/size of the handheld device display screen.”* See CBM2014-00014 non-Inst. Dec. at 18-20 & discussed below.

**“Synchronized/synchronous”** (Claims 1-18): *“made or configured to make consistent.”* 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 recognize that the “timing” aspect of the claims is separately governed by the “real time” term. PO thus submits that the BRI for these terms is simply “made or configured to make consistent” pursuant to the specification definition and usage in the other claims of the patent family. See Exh. 1004 2:35-38, 5:31-33, 12:49-51 (“in synch with the backoffice server (central database) so that the different components are in equilibrium and an overall consistency is achieved”).

**“Master database”**(Claims 13-18): *“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.”* See Microsoft Comp. Dict. (4th ed.1999) (Exh. 1034 at 123); Exh. 1004 at 2:34-37 (“backoffice server (central database)”; *id.* at 5:5-6 (“synchronization between a central database and multiple handheld devices”).

**“Web page”** (Claims 13-18): *“a document, with associated files for graphics, scripts, and other resources, accessible over the internet and viewable in a Web browser.”* CBM2014-00015, Inst. Dec., Paper 20 at 8. The proper construction of “web page” was decided by the Board in related CBM2014-00014 et seq., and despite the Petitioner’s expert’s position to the contrary in the prior CBM Petitions, the Board confirmed the inclusion of “viewable **in a web browser**” as part of the proper construction—which alone dooms all of Petitioner’s Micros/Digestor combinations, because the Micros HHT had no web browser and Petitioner made no attempt to fill this gaping hole in the combination.

**“Master menu”** (Claims 1-12): *“a menu file structure from which another menu configuration is generated comprising at least categories, items and modifiers [categories and items in claim 9] and capable of being displayed as cascaded sets of linked graphical user interface screens.”*

**“Wireless handheld computing device”** (Claims 1-18): *“a wireless computing device that is sized to be held in one’s hand.”* See Judge Everingham Markman Order (Exh. 1032 at 24, and discussed below)

**“Automatic/Automatically”** (Claims 1-18): *“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>)).

**“Linked databases”** (Claims 2, 10, 14): *“two or more different databases programmed with linked file structures.”*

**“Are Integrated between and with one another”** (Claims 11, 16): *“two or*

*more different databases that are programmed with bi-directional, linked file structures to provide a functional unit.*” Microsoft Comp. Dict. (4th ed. 1999) (Integration: “In computing, the combining of different activities, programs, or hardware components into a functional unit.”) (Exh. 2015).

## **VI. THE PETITION DID NOT ESTABLISH THAT ANY CLAIM IS MORE LIKELY THAN NOT INVALID**

### **A. Petitioner Has Not Shown That Any Claim Of The '077 Patent Is More Likely Than Not Indefinite Under 35 U.S.C. §112**

After failing on all §112 arguments in the first Petition (CBM2014-00014), Petitioner now alleges that **the same** “the same connected system” limitation which was in the claims when the first Petition was filed on October 15, 2013 is now indefinite. But Petitioner failed to mention that the terminology was required by Examiner Brophy and Supervisory Patent Examiner (“SPE”) Bullock in an Examiner’s amendment, signed by the Supervisory Examiner. (Exh. 1012 at 1036, 1040, 1046, 1049, 1052-54). The notion that a **SPE** would, or could, insert a term in a claim which would render it invalid is absurd. As POSA having knowledge of the application disclosure and the claims, the Examiners knew what the terminology meant and thus the term is *ipso facto* definite. Further, the construction of the preambles as limiting, which Petitioner fatally ignored, fully resolves any arguable issue in any event by defining the “system,” and in claims 13-18, for example, “what” is “**connected**” in “said system” is defined exhaustively in reference to the preamble recitation and is crystal clear in, *e.g.*, claim 13 (a) through (d).<sup>35</sup>

“[A] patent is invalid for indefiniteness if its claims, read in light of the

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<sup>35</sup> Moreover, “an antecedent basis can be present by implication.” *Energizer Holdings, Inc. v. USITC*, 435 F.3d 1366, 1371 (Fed. Cir. 2006). The claim structure does more than imply, it requires reading the preamble term as providing antecedent basis.

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 Inst., Inc.*, 134 S. Ct. 2120, 2124 (2014). “The standard adopted by the Supreme Court ‘mandates clarity, while recognizing that absolute precision is unattainable.’” *Biosig Inst., Inc. v. Nautilus, Inc.*, No.12-1289 at 7 (Fed. Cir. Apr. 27, 2015) (quoting *Festo Corp. v. Shoketsu Co.*, 535 U.S. 722, 731 (2002)). The Petition does not meet this burden for the reasons given above. It cannot be disputed that the terminology clearly conveyed the scope of the invention to SPE Bullock with reasonable certainty—after all, he drafted it.<sup>36</sup>

Further, this challenge should not even be allowed, because Petitioner has previously filed §112 indefiniteness challenges in the prior Petition and should not be allowed a “do over” under the PTAB’s redundant grounds basis for denying institution of a repetitive petition. Although making other indefiniteness arguments, Petitioner made no allegation of indefiniteness as to this claim terminology in the prior Petition. Petitioner had knowledge of the claims and the specification when the prior Petition was filed, and thus could have made the argument then. Still further, Petitioner and its expert proposed prior art invalidity challenges against these same claims, thus proving that the terminology is not “indefinite” to them—otherwise they would not have been able to make those arguments, as deficient as they are.

Still further, Petitioner itself proposed a construction for the challenged

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<sup>36</sup> Petitioner’s red herring allegation that an “interference” existed or occurred relative to the ‘077 claims is simply untrue. In actuality, based on misleading arguments from QuikOrder, a non-Petitioning defendant, and its incorrect reading of the claims and the specification, the examiner in that prosecution reached incorrect conclusions. Nothing in that case has any bearing on this proceeding and there was no interference.

terminology in the context of a slightly larger element in the original Petition against the '077 patent. Thus the meaning of the terms was clear and discernable to Petitioner in October 2013. Moreover, the Board had no difficulty whatsoever in understanding what the term means in disposing of Petitioner's "method step" allegation.<sup>37</sup>

**B. Petitioner Has Not Shown That Any Claim Of The '077 Patent Is More Likely Than Not Invalid As Obvious In View of the Combination of Micros 8700 and Digestor**

**1. The Digestor "Transformation" Approach Was Contrary To The Claimed Functionality And Admits Such**

As stated above, the Petition's attempt to use Digestor to remedy the stark infirmities of Micros 8700 or Blinn fails. The Digestor authors admitted that it only worked for one user at a time and that it took on average 20 seconds to perform the requisite calculations. Thus it could never be real time or used in an overall system. The properly construed claims, including the proper construction of "real time," precludes applicability of Micros and Digestor as references. As the Examiner concluded during prosecution, the Micros system was **not** real time, nor could Digestor be real time because it took a full **twenty** seconds to do a single, one page computation to accomplish its "web conversion" and it could only do "one at a time" conversions. Thus in systems requiring "two handhelds" at a minimum, that would mean **forty** seconds to accomplish the conversions, by doing them in sequence.<sup>38</sup>

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<sup>37</sup> CBM 2014-00014, Paper No. 19 at 21-22 ("We agree with Patent Owner that the disputed phrase of claim 13 is a functional requirement and is not a method step. ... As such, claim 13 is directed to a system comprising communications control software that is capable of performing the recited functions.").

<sup>38</sup> However, a Micros-based combination cannot meet the "two **different** handheld" limitations of the claims in any event because the Micros system was limited to operation with only one type/size of handheld device (HHT). Petitioner tried to hand

***a. Digestor does not disclose the precisely recited output display requirements of all claims***

Digestor admits that the results were at best only targeted to being “good enough” and not “aesthetically pleasing” and that they relied on “scrolling” of shrunk-down web pages. Moreover, a POSA would have known that scrolling would not have been acceptable in a hospitality/restaurant POS system to display and access menus. The authors even say that to use their approach required a “bag of tricks.” Such a “bag of tricks,” whatever they were (which were not detailed in the document), could not be part of a “synchronized” system as recited in the claims, which claimed system requires precisely recited functions, derived from the database structure, not ad-hoc “trickery.” Digestor further admitted that it “worked poorly” for documents “with a lot of whitespace” (which clearly restaurant menus have). Then, critically, the authors admitted that “[t]he area that Digestor could use the most improvement in is its set of transformation techniques.” This was precisely what the claimed invention was about.

***b. Digestor does not teach or suggest real time synchronization of a programmed handheld [menu] configuration with/from a master menu/database***

As one of its many infirmities, Digestor did not directly connect with a central/master database/menu--a critical aspect of the claimed invention, as explicitly recited in the ‘077 claims. For example, the recited “programmed handheld menu configuration” of claims 1 and 9 is built from data parameters from the master menu in the central database and the recited “hospitality application information”

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wave around this disqualifying aspect of Micros, by alleging that because Digestor “referred to” multiple handheld types, that this overcomes the undeniable infirmity of Micros. But the Petition did not explain how any different handhelds could be integrated with the proprietary Micros HHT’s and it did not identify a teaching or suggestion in any other reference to fill this gaping void in the purported combinations.



of claim 13 is synchronized between the master database, wireless handheld computing device, web server and web page. The claims do not recite nor require generation or synchronization of anything with an already-existing web page. The recited data parameters contained within the recited master menu/database were not contained within “second menu” web pages at the time of the invention. Thus there could be no teaching or suggestion to a POSA to use the source web pages which were converted by Digestor to handheld form. In contrast, the claimed invention reached back to the original database parameters from which to generate a programmed handheld menu configuration as recited in claims 1 and 9 or a programmed handheld configuration configured for display as cascaded sets of linked graphical user interface screens as in claim 13 (*i.e.*, a menu configuration). The claimed invention is not simply reducing a web page display to a smaller size.

Digestor (and the Kanevsky reference which was distinguished during prosecution)<sup>39</sup> did not recognize the importance of configuring/rendering all generated device menus, including handheld and standard screen menu displays, from the parameters and linkages in the “central/master” database, without which

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<sup>39</sup> Kanevsky was similar to Digestor in its “web conversion” approach. Patent Owner distinguished over Kanevsky during prosecution of the ‘077 patent and the ‘077 claims were allowed over Kanevsky and such “web conversion” based approaches. *See* Ser. No. 11/112,990, Amendment May 24, 2010 (Exh. 1012 at 854) (“Kanevsky, which taught only ‘web pages’ to ‘web pages’ conversion and applied numerous unique conversion approaches, which had nothing to do with leveraging the master database information and which in fact, yielded web page display outputs with incomplete data displays/information that make the Kanevsky approach inappropriate and entirely unworkable for the precision of the hospitality field of operations.”). Note that Kanevsky published more than two years after the priority date of the ‘077 patent, and is thus not prior art under the AIA.

it is impossible to have a real time synchronous system. The Kanevsky/Digestor approach relied on reading/reviewing a previously-generated HTML document and then using various approximations and ad-hoc mechanisms, in Digestor's words a "bag of tricks," to merely estimate and produce a modified version of the document, none of which "tricks" would have yielded a consistent output, and as such would have been innately "out of synch" with the "master" database/menu, which of course in a real time system is always changing. The Digestor/Kanevsky approach did not realize nor appreciate the critical importance of the "central/master" database and the concept of having "one truth" as regards the data and applications in the system, as discussed above with regard to objective evidence of non-obviousness. The Digestor reference also does not teach or suggest building "converted" web pages from data in a master/central database and thus Digestor does not teach or suggest a synchronized system as required by the claims.<sup>40</sup> Digestor's imprecise, "semantic," transformations cannot yield a precise or even predictable output and thus a hospitality application which attempted to use the Digestor approach would not be able to, for example, keep a food order straight.

Digestor further cannot meet the handheld limitation because, *inter alia*, it operated by converting a standard, large, web page to a smaller web page. Reading the claims to have such a requirement would exclude a preferred embodiment disclosed by the patent and encompassed by the claims. The preferred embodiment (which must be

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<sup>40</sup> A review of the entirety of the Digestor reference confirms it only provided mobile "access" to server-based WWW documents and flowed in one direction, *i.e.*, "**outward**," and was entirely incapable of converting data coming back to it, *i.e.*, "**inward**," back into its original form for synchronous communication to the central computer/master menu/master database as required by the '077 claims.

within the scope of the claims), as is shown in the specification relative to its use of Windows CE on the handheld includes the storage of a menu database on the handheld device. It cannot be reasonably disputed that Digestor's web page conversion approaches did not encompass databases stored on the handheld device. Clearly, Digestor only supplies a converted web page when requested by a user, and does not store a database on the handheld device.

Still further, independent claims 1 and 9 clearly require that the display of the master menu is within a "window" of the operating system on the central computer unit. The "menu" recited in claims 1 and 9 is a configuration of linkages for a GUI that is designed in a window of the operating system of the central processing unit, and not merely data or parameters alone. Both claims require that the "programmed handheld menu configuration" is built from data in the back office master menu. "Configured for display to facilitate user operations in at least one window" thus cannot be a reference to a "web page" as argued by Petitioner. Web pages themselves are not shown "in a window" of an operating system. Petitioner's argument conflates the master menu functionality with what Petitioner perceives is the programmed handheld menu configuration functionality. Again, Petitioner's argument about "web pages" on a handheld is wrong, and is additionally wrong as applied to the "window" limitation.

Yet further, the recitation of "integral with the wireless handheld computing device" appears in claims 1 and 9 and reads in context: "display of the programmed handheld menu configuration on the display screen of a handheld graphical user interface integral with the wireless handheld computing device." A handheld graphical user interface integral with the wireless handheld computing device is an application resident on the handheld device. It cannot be merely a mobile web page. Petitioner's

arguments in reliance on web conversion references such as Digestor is thus still further inapposite.

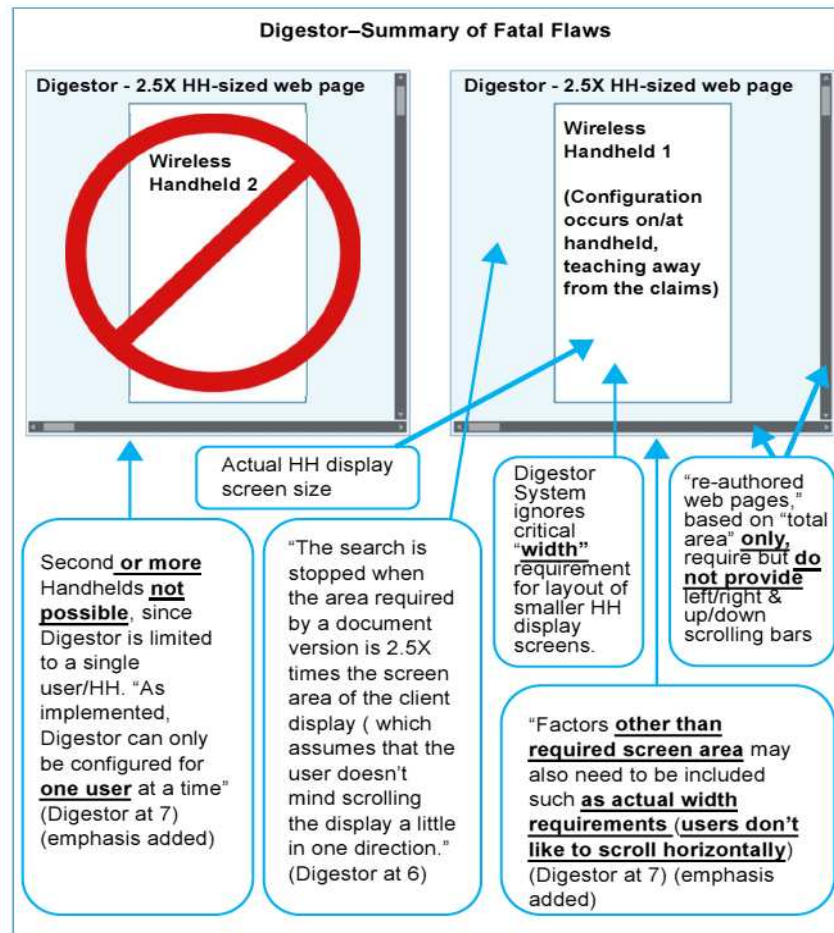
*c. Digestor does not disclose any of the explicitly recited handheld device display requirements of all claims*

Digestor did not produce “customized” display layouts as recited in claims 1, 9 and 13 to display precisely on the “sized to be held in one’s hand” handheld device as properly construed. At 2.5 times the size of the handheld displays, clearly the Digestor displays were not sized to be held in one’s hand. Consequently, the technical approach which Digestor relied on, *i.e.*, computing the total area of the display (as opposed to height/width, as the ‘077 patent allows for, *see, e.g.*, Figure 5) and stopping the calculation when the total area of the data to be displayed equaled 2.5 times the calculated total area of the computer display, always yielded an output requiring scrolling and which was not customized to that display. In contrast, Ameranth’s inventors recognized the criticality of considering **display width**,<sup>41</sup> to achieve the recited “unique to” the handheld functionality, which Digestor’s calculations could not provide. Moreover, independent of the user acceptability/practicality of menus that could only be accessed by up/down and left/right scrolling, such an approach simply does not meet the actual limitations of the ‘077 patent/claims.<sup>42</sup> See the following figure for a summary of the flaws of Digestor as applied to the present claims, the substance of which is discussed separately herein.

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<sup>41</sup> Exh. 1004 at 10:28-29 (“formatting Columns by specifying **the column widths** and justification”) (emphasis added).

<sup>42</sup> Likewise, the HHT admitted that “[o]rders occupying more screen space than is available can be scrolled up/down for viewing.” (Exh. 1053 at 8). This was not generating menus customized for a handheld display screen.



Critical aspects of the claims of the '077 patent include at least ten different claim terms which distinguish over the Digestor approach, several of which simply mandate that the "programmed handheld [menu] configuration" is designed to conform with the precise display characteristics of a target handheld device and to display on that device (not to display a large non-customized image which exceeds both the rows/columns and available pixels of the target display and could not be shown without scrolling both up/down and left/right).<sup>43</sup> And considering this claim element as

<sup>43</sup> The claimed synchronized system configured menus for the handheld display and thus eliminated the need for scrolling on the handheld, which is consistent with representations PO made during prosecution. (Exh. 1012 at 506 ("the scrolling function of the HHT reference would be inoperable to provide the handheld menu configuration of cascading screens")). *In re ICON Health & Fitness, Inc.*, 496 F.3d

a whole and the overall claims as a whole, no POSA would ever pursue an approach like Digestor which does not meet any of the handheld device display limitations. Also, “compatible with the displayable size of the handheld GUI/computing device display screen” means that the menus show “**on** the display,” not **outside of** it. And of course, “customized display layout” means what it says, *i.e.*, “customized” **to** the display, not outside of the displayable screen area/size of the handheld device. Still further, in CBM2014-00014, the Board construed “unique to the wireless handheld device” as “distinctly characteristic of the wireless handheld computing device.” This in and of itself rules out any applicability of the Digestor reference to the ‘077 claims. Digestor did not customize a standard web page to the distinct characteristics of any handheld device.<sup>44</sup>

## 2. The combination of Micros and Digestor would have been unworkable

Micros HHT<sup>45</sup> had no web browser, nor the memory or capability to store or use

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1374, 1382 (Fed. Cir. 2007) (“[A] reference teaches away from a combination when using it in that combination would produce an inoperative result”). Moreover, the Micros HHT did not even have left/right scrolling and thus could not have properly displayed a complete “transformed” web page as generated by Digestor even if it had a “web browser,” which it did not. The Micros HHT was a specialized piece of hardware which no POSA would have sought to even try to combine with Digestor.

<sup>44</sup> The Petition and the Turnbull Declaration repeatedly cite to Digestor’s assertions of the “goals” it had in mind, but did not point to anything in Digestor to explain how Digestor would achieve such goals. The Digestor authors clearly set the goal of having their “transformations” “be appropriately displayed on the device” but then they relied on the UC Berkeley based technology approach, which Digestor admits was not focused on producing the “**most appropriate**” display outputs.

<sup>45</sup> The Petition did not provide evidence of public availability of the Micros HHT “Pre-Release” document (Exh. 1053) nor does the document itself manifest sufficient indicia of such. Note in particular that material on the cover page has been redacted.

a browser, nor of course could it communicate over the web. Nor was there any capability in the Micros system to communicate over HTTP web-based communications, and combining Digestor with Micros could not magically transform Micros into a web-based system, something it simply was not. Thus, Micros would be useless as combined with Digestor, because the combination simply would not work. Further, there was only one size/type of HHT<sup>46</sup> and Digestor was viable at most for displaying web pages on smart phones, but has no teaching or suggestion of building a “second” menu from a master database/menu. Digestor generated its modified web pages only from existing web pages, not from a source database as claimed. Thus the combination could not have met the limitations of any of the claims. Moreover, ‘077 claims 1 and 9 do not even require generation of web page menus which would even need to be converted. Still further, the Petition relies on Micros 8700’s “item out” functionality to meet the real time limitation of the claims. However, during prosecution the Examiner specifically concluded and stated that Micros was NOT a “real time” system. With regard to the proposed combination of Micros and Digestor, Petitioner attempts to read out the term “between” in ‘077 claim 13 element “d” and the first wherein clause. Clearly, a function of the recited communications control software is to “link and synchronize hospitality application information simultaneously

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If this was a confidentiality designation, the document was unavailable to the public. The Petition is mum. Likewise, the Petition did not provide anything supportive of authenticity or public availability of Exhibit 1047, or to even explain what it is purported to be. Thus neither can provide the basis for an obvious determination.

<sup>46</sup> A POSA would not have known how to provide a web browser compatible with the HHT. During the time frame of the invention, 1998-99, mobile web browsers were device specific and the Micros HHT was proprietary, as admitted by Petitioner.

between the master database, wireless handheld computing device, web server and web page.” The Petition does not point to any web server or web page in the Micros 8700 or HHT, but rather attempts to rely on Digestor for its sparse disclosure of the internet. However, the combination fails because, inter alia, “enabl[ing] access to the Micros 8700 ... by wireless handheld devices” is not what is claimed. “Access to” is not “linking and synchronizing.” Having failed to even appreciate that such linking and synchronization functionality is required, the Petition thus fails to identify any suggestion or teaching of said functionality in any of the alleged prior art references put forth in the Petition.

### **3. The Proposed Micros/ Digestor Combination Against Claims 1-18 is Fatally Flawed**

Petitioner ignored that Examiner Brophy and Supervisory Examiner Bullock allowed the claims of the '077 patent over the Micros 8700 and Kanevsky combination. Here, Petitioner is simply replacing Kanevsky with Digestor. However, Digestor is based on Kanevsky's same failed approach of converting “large” web pages to “small” web pages via heuristic type “guestimates” (not linked to the master database/menu), which was specifically distinguished by PO during prosecution. Petitioner did not even attempt to explain why Examiners Brophy and Bullock were wrong in rejecting the same argument now made in the Petition, nor could they, because the new combination is no different, and the Examiners were **not** wrong.

It is undisputed that the Micros 8700 system operation was “implemented using proprietary communications and data formats” (Pet. at 25) and that it operated only with its own, customized and unique, point of sale hardware devices, including a singular, stand-alone wireless handheld device (the Micros HHT). It also cannot be disputed that this Micros HHT had no web browser, that the Micros 8700 system had



no web server, nor did it operate with HTTP communications nor did it or its database generate or have the capacity to generate, store or receive any HTML web pages nor was it a real time system. Yet, as if to wave a magic wand, Petitioner simply asserted that it would have been “obvious” to entirely change the Micros 8700 “principles of operation,” replace the proprietary Micros communications protocols with HTTP, ordain the capability to “generate/transmit/receive/store” web pages, add a web server and ordain an API and the SQL queries between that web server, the API and the Micros 8700 database and conjure a custom web browser for the Micros HHT out of thin air. (Pet. at 25-26). Petitioner then cites to the Digestor paper, which details a simple, lab based, concept limited to a single user at a time and which relied on converting “**large web pages**” into “**small web pages**,” without ever addressing or acknowledging that the Micros 8700 never generated or had the functionality to have generated the “**large web pages**” (before or after being combined with Digestor) which Digestor required. Then, based only on conclusory declarations of obviousness, Petitioner alleges that the ’077 inventor’s customized menu generation for wireless handheld devices could simply be woven in—yet ignored the requirement for generating the handheld configurations synchronously from the master database. Then, on top of those creations which Petitioner conjured to fill the many holes in the combination, Petitioner just conclusorily stated that all of these conjured elements could have been magically “synchronized” together, and in real time.<sup>47</sup> Pet. at 26-27.

Petitioner’s hindsight-based reconstruction “using the claims as a frame” while “changing the principles of operation” of both references must be rejected for this

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<sup>47</sup> Note that all of this functionality was ignored by Petitioner even in its attempt to recreate PO’s inventions piecemeal, as further detailed below. Thus, simply, the proposed “combination” simply never could have worked.

reason alone, even apart from the gaping holes, fatal flaws, violations of law and rules, and the fact that the references teach away from the invention. Throughout the Petition, including the claim charts, Petitioner seeks to retain and cite to some of the “principles of operation” of the Micros 8700 and its associated HHT (when such aspects are asserted to be supportive of the Petition arguments), while ignoring or simply changing those same principles, limitations and/or functionality (when not supportive).

Petitioner waffles back and forth in the claim charts from pointing to various Micros 8700 or HHT cites/features, and then instantly and magically shifts/transforms to alleged “web page/browser” embodiments, all with no explanation, and no admitted modifications of or to either reference. For example, while alleging that the “proprietary communications and data formats” of the Micros 8700 system could simply be transformed and “implemented” as HTTP communications, Petitioner relies on the supposedly “replaced” Micros proprietary protocols to allegedly meet the “real time” limitations. (Pet. at 53 (“A POSITA would have understood that the **Micros 8700 Operating software** acted as a **real-time interface** between the components of the system (such as user workstations and HHT’s) **and the applicable communications protocols**”) (emphasis added)). But neither Petitioner nor its expert even attempted to explain how any actual “modifications” to either of the asserted references would be made. Petitioner's universal talisman was that, when in doubt, to simply conclusorily declare everything to have been “obvious to a POSITA” or allege that “a POSITA would have understood” (*see e.g.*, Pet. at 53) that the missing functionality or the necessary modifications would just “be there” without any explanation as to why. This is not the standard for obviousness. Petitioner's

conclusory arguments thus must be rejected.<sup>48</sup> Further, the vastly different “principles of operation” of these two references are not even combinable as the Petition proposed, since they not only teach away from the invention and from the claims, but also from each other.

Petitioner entirely ignored that merely adding a conversion of a “large” to a “small” web page software function (the Digester concept) did not disclose or suggest all of the missing functionality or its integration with the Micros 8700 system and its database, and that the Micros HHT would need a “web browser”—without which the proposed combination is nothing more than an incomplete and unworkable concept based on drastically different “principles of operation,” in addition to being non-real time and not a synchronous “system” at all, as discussed throughout this response.

Thus, due to the above-identified pervasive infirmities, the proposed combination fails. Further identification of many additional errors and fatal flaws with regard to the references themselves and/or their combinations with each other, as applied to the actual limitations of the claims, follows.

On page 31 of the Petition, the only support provided for the claims 1 and 9 recitation “at least the menu categories, menu items and modifiers comprising the programmed handheld menu configuration are synchronized in real time with analogous information comprising the master menu” is “Micros discloses synchronizing the menu information in real time as evidenced by the ability to track the number of menu items remaining.” Then the Petition cites to the “Post Limited

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<sup>48</sup> See *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) (“Attorney’s arguments in a brief cannot take the place of evidence.”); *In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984) (lawyer arguments and conclusory statements which are unsupported by factual evidence are entitled to little probative value).

Availability Menu Item” functionality which HHT purportedly had. However, the Micros 8700 transmitted only a simple **message** to the HHT merely “decrementing” the **item** count for a particular menu **item**. The 8700 did not transmit an entire “programmed handheld menu configuration” including categories, items and modifiers, thus it could not have synchronized such between the master menu and a handheld device nor in real time, since Micros is not a real time system.

The Micros 8700 document is a purported user’s manual for the 8700 HMS. There is no description in the Micros documents of a client/server system in which a change to a master menu on a central server is updated on a client device via a programmed handheld menu configuration. In fact, there are no handheld client devices (per the ‘077 claims) in the 8700 system because there is no server providing the recited programmed handheld [menu] configurations to any handheld device.

Petitioner ignored the express description in the “HHT Pre-Release” document (Exhibit 1053). The HHT document shows that the HHT was *stand-alone* from the perspective of the displayable menus. There was no disclosure or suggestion of synchronously nor automatically generating and transmitting a “programmed handheld menu configuration” from a master menu or a master database to the Micros HHT device. The HHT was the antithesis of the ‘077 claims.

The HHT Pre-release document details the functionality of the HHT device and the **non-synchronous, separate,** requirements for its menu programming and operation. The Micros 8700 system and the HHT device, to the extent they even existed as described in the documents, could not have provided the capabilities of the claimed synchronous centralized menu generation invention. The HHT had a stand-alone menu/GUI system, which was not updated continuously, *i.e.*, via real time

synchronization/transmission, from a central server/master menu to a handheld device as recited in claims 1 and 9 or from a master database per claim 13. The HHT had only limited capability to communicate with a back office computer and the communication that is discussed in these documents was not synchronous communication of “a programmed handheld menu configuration” from the back office central computing unit master menu as required by claims 1 and 9 or a “programmed handheld configuration” per claim 13. In fact, the HHT document clearly shows that the HHT required menu programming or configuration separate from the back office POS menu. The only connection between the HHT and the back office was in transmitting orders from the HHT and receiving very limited “item availability” updates from the back office—and the updates were not transmission of a “programmed handheld [menu] configuration.” In fact, teaching away from the claims (including the “**automatic**” recitation of the ‘077 claims), the “menu” displayed on the HHT was **manually** configured on the HHT itself (the HHT manual clearly states that “transaction touchscreens” “must” be set by a “programmer/installer” (Exh. 1053 at 5)), and it was not synchronously generated from the back office computer and transmitted to the HHT.<sup>49</sup> Any handheld system requiring the involvement (any involvement) of a “programmer/installer” for its basic operations could never work with consumer remote ordering (which is clearly within the scope of the claims).

The HHT document explicitly states that the display configuration was manually

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<sup>49</sup> As the Board has previously observed “the system is *enabled to synchronize, in real time*, information between a programmed handheld menu configuration and a master menu file structure stored on a central processing unit” and “claims 1 and 9 (like claim 13) require that the system be enabled *to format automatically* the programmed handheld menu configuration” (CBM2014-00014, non-Inst. Dec., Paper 19 at 39).

programmed specifically by the HHT “programmer/installer:”

User-generated screens are completely defined by a user (programmer/installer). They are programmed in a similar fashion to a traditionally keyboard. Each key location, legend and font size is custom chosen and a function code assigned

The user must also choose a touchscreen that will display while the system is awaiting a sign in. After signing in, the system can be set to select one of several transaction touchscreens. The programmer/installer must set a default initial transaction screen ...

*Id.* (emphasis added). The HHT document thus admits that the screen definitions and linkages are “programmed” manually via application software directly on the HHT device by the programmer/installer, not previous to transmission to the device as occurs by operation of the presently claimed menu configuration software (“for wireless transmission to”).<sup>50</sup>

Further, Claims 1 and 9 recite “the menu configuration software is enabled to generate said programmed handheld menu configuration by utilizing parameters from the master menu file structure” and “wherein said master menu is capable of being stored on said data storage device pursuant to a master menu file structure and said master menu is capable of being configured for display to facilitate user operations in at least one window of said first graphical user interface as cascaded sets of linked

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<sup>50</sup> The HHT pre-release document makes clear that the touchscreen files that yield the actual HHT menu display “reside in the HHT itself.” (*See* Exh. 1053 at 4)). The touchscreens are generated when a key is depressed on the HHT and this functionality is programmed separately from the programming for display of the back office menu on standard screens. (*See* Exh. 1053 at 5). There is no direct conversion between the Micros 8700 back office menu to the actual HHT manually-programmed display configuration.

graphical user interface screens.”<sup>51</sup> This claimed synchronous menu configuration software functionality can only be accomplished from a central server in the back office because that is where the claimed GUI (and associated operating system) used to assign parameters to items in the menu is located. The HHT document does not even remotely suggest this functionality existing at a central server in the context of generation of a menu configuration for transmission to a handheld device. Rather, the HHT document discusses assembly of a screen display configuration on the HHT device itself, and is thus inconsistent with and teaches away from the actual claimed invention, as discussed above. This is evidenced, *inter alia*, by the HHT document’s discussion of assembly of menu screens in the context of “condiments,” which are examples of modifiers:

System-generated screens are displayed when a SLU key is depressed or a **condiment** entry is required. When one of these situations occurs, ***the software scans through the menu item file and assembles all those items that have been programmed to belong to this SLU or condiment group.***

The system has a Touchscreen Style file which details how each system generated screen should display. This includes key and font sizes.

(Exh. 1053 at 5). This passage from the HHT document clearly shows that “condiment” groups are assembled for display on the HHT. There can thus be no possible combination involving the Micros HHT or any other reference that does not recognize the need for “generat[ing] said programmed handheld menu configuration by utilizing parameters from the master menu file structure” to occur at the central server in the context of generation of a handheld menu configuration.<sup>52</sup> Any such

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<sup>51</sup> Claim 13 includes analogous limitations with respect to a “programmed handheld configuration” which, as discussed above, recites a menu configuration in concert with the other claim limitations as a whole.

<sup>52</sup> As the Board previously observed, “the system is *enabled to synchronize, in real*

combination would be unworkable, would render the combination unsuitable for the intended purpose of a device such as the HHT and/or would change the principles of operation of one or more of the combined references.

Still further, when items are assembled for display by the application software code on the HHT (via Touchscreen Style file) as described in the HHT pre-release document, there is no mention in that document of determining whether a group of items is displayed on a single screen or is broken up into multiple screens for display to eliminate “scrolling” because of the limited display area/size of the HHT as compared to a standard PC size display. In fact, the HHT document admits the opposite, stating that “[o]rders occupying more screen space than is available can be scrolled up/down for viewing.” (Exh. 1053 at 8). The “customized” display layout provided by the '077 claims is thus not disclosed or suggested by the HHT.

The cascaded/hierarchical nature of menus as defined in the '077 specification and claims requires that all links be correct no matter what the target display requires. Micros did not even envision the possibility of directly generating a handheld menu configuration from a back office menu configuration and converting all of the links required to maintain the correct relationships in a client/server system, *i.e.*, a synchronous system wherein changes to menu data/configuration made on the central server are reflected on the client handheld device. In the invention as presently claimed, manual “programming” of a handheld device is not required. That is very different from the separate programming required for the HHT display configuration. In fact, it is the opposite and, as previously stated, Micros’ repeated use of the term

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*time*, information between a programmed handheld menu configuration and a master menu file structure stored on a central processing unit.” CBM2014-00014, non-Inst. Dec., Paper 19 at 39. This functionality is not disclosed by these references.



“must” in regards to the requirement for manual programming by a programmer/installer on the handheld precludes any approach of combining any other prior art with it to remove the separate programming requirement.

Moreover, the requirement that the HHT “buffer changes until the HHT terminal is available to accept the changes” teaches away from a real time synchronous client/server system wherein changes made on the server are updated on the handheld device immediately after they occur, not at some later point in time after being “buffered,” *i.e.*, stored for a period of time. In fact, combination of the 8700 and HHT reference descriptions with any other reference allegedly teaching synchronous communication would yield an unworkable system because of the non-real time, non-synchronous, non-client/server teachings of the Micros references.

In addition, no combination of any kind with the Micros references can overcome the requirement of the Micros HHT document that “programming” of the menu display screens be done on the Micros HHT by a “programmer/installer.” See Exh. 1053 at 5. *KSR* requires, *inter alia*, the identification of an “apparent reason” to combine references. There cannot be a reason to combine references which would yield an unworkable result.<sup>53</sup> Moreover, Petitioner failed to explain the differences between the prior art and the claimed invention. Even without PO’s thorough exposition of the infirmities of Micros, the Petition’s failure to identify the differences

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<sup>53</sup> *KSR Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007) (Relevant inquiry is “whether there was an apparent reason to combine the known elements **in the fashion claimed** by the patent at issue.”) (emphasis added); *see also* MPEP 2143.01 (“[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious”).

requires rejection of the request to institute trial.<sup>54</sup>

Still further, the recitation in claim 1 of “enabled to generate said programmed handheld menu configuration by utilizing parameters from the master menu file structure, defining at least menu categories, items and modifiers,” and a similar recitation in claim 9, requires that the programmed handheld menu configuration is built from the master menu. The Petition and the Turnbull Declaration argue only that menu categories, items and modifiers are found on both the HHT and 8700 workstation (*e.g.*, Pet. at 31), without making any contention that the categories, items and modifiers on the HHT come from the workstation in real time or otherwise. Petitioner’s combinations relying on Micros are thus rendered fatally defective for failing to address this claim element.<sup>55</sup>

Additionally, claim 9’s recitation of “real time synchronous transmission of at least the menu categories, menu items and modifiers” is not in claim 1, yet the Petition relied only on Turnbull’s arguments respecting claim 1 to meet the claim 9 element.

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<sup>54</sup> *Travelocity v. Cronos Tech.*, CBM2014-00082, Paper No. 12, Oct. 16, 2014, p. 5 (“because Petitioner failed to identify the *differences* between each of the applied references and the subject matter recited in the challenged claims, Petitioner failed to demonstrate why a person of ordinary skill in the relevant art would *combine* the references in the manner proposed to achieve the recited subject matter”); *Apple v. Smartflash LLC*, CBM2015-00033, Paper 11 at 15-18 (PTAB May 28, 2015) (“Petitioner has not identified sufficiently the differences between the claimed invention and each reference, or how the teachings of the references are to be combined, if at all.”).

<sup>55</sup> As it has done in prior cases, PO submits that the Board should entirely reject Petitioner’s mischaracterization of the claimed subject matter. *See, e.g.*, CBM2013-00027, Inst. Dec. at 37 (rejecting proposed Section 101 ground where Petitioner mischaracterized the claims).

(Exh. 1002 at ¶694 (“The analysis for this claim element is the same as set forth above in the corresponding element of claim 1 **because the claim language is identical.**”) (emphasis added)). Turnbull’s statement is simply untrue. The ground for invalidity of claim 9 is thus fatally defective for failure to address a claim limitation, irrespective of anything else. Moreover, the claim 1 argument (Pet. at 35-36) dealt only with the purported “**item** availability” function of Micros, and thus entirely failed to address **category** and **modifiers** levels of the programmed handheld menu nor did it address “menus” for display as properly construed. Thus, no argument was made on this element for claim 9, and likewise the argument respecting claim 1 fails because it mischaracterizes the programmed handheld menu configuration. The cited disclosure of the Micros document simply does not involve “menus” for display nor categories or modifiers being transmitted to the HHT, and Petitioner has not put forth any argument why the cited material would suggest them in the context of only an “item” availability function which does not even disclose display functionality with regard to an “item.”

Also, the properly construed “programmed handheld menu configuration” of claims 1 and 9 as set forth above or the “programmed handheld configuration for display as cascaded sets of linked graphical user interface screens” of claim 13 could not have been met by a shrunk-down web page in 1998-99 because a single Digestor web page did not contain the complete set of GUI screens for an entire menu. Digestor merely “analyzed” and “re-authored” one web page at a time, not an entire “programmed menu configuration.” In contrast, the entire menu or “database” as claimed is created and then synchronized with the target device as evidenced, *inter alia*, by the unambiguous claim language itself.<sup>56</sup> For the same reason, the Micros

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<sup>56</sup> Dependent claim 8 further demonstrates that the menu/database is created in its

8700 in combination with the Micros HHT does not teach or suggest what is claimed, since the “item availability” information sent to the HHT had nothing to do with the displayability or user interface of the HHT—as detailed above, the user interface and programming was manually done on the HHT itself, separate from the standard menu on the Micros backoffice computer.

Petitioner’s expert Turnbull merely presented conclusory argument that it “would have been obvious” to “modify” the Micros 8700 menu displayed on the restaurant workstation GUI to “divid[e] it into multiple pages” for display on a handheld device. Turnbull Dec. ¶621 (Exh. 1002). However, Petitioner failed to appreciate that there were no “pages” in the Micros system to be divided, and certainly not “web pages,” because no such capability existed in the Micros system as discussed above. Petitioner cites to no capability to somehow transform the Micros Unix based system into a web based system. The menus on the 8700 workstation were simply not the same menus as displayed on the HHT device as detailed above. Further, the Digester “re-authoring” solution is a thin client, browser-based, solution that is incompatible with the “thick” hardware-based HHT, which had programming and data on the device itself which provided the displays and hardware based forward/back buttons to navigate the displays. The Petition makes no attempt to explain how the two disparate approaches could be combined. They in fact could not be combined without changing the principles of operation of both and including some other magical capability or additional art if it had existed (which it did not). If it had existed, Micros, the world’s largest hospitality IT company, would have surely found and used it, rather

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entirety, not piecemeal, by reciting “simulator” functionality to allow appropriate configuration for presentation on target devices.

than seeking an exclusive license to Ameranth's inventions and technology.

Moreover, after challenging the sufficiency of the written description of the limitations directed to "customizing" display layouts "unique to the wireless handheld computing device" for "two different" handheld sizes (in CBM-2014-00014), which the Board rejected, Petitioner now asserts that Micros teaches these limitations. For example, through carefully-crafted wording, Petitioner conclusorily states that a POSA would have "understood" that the capability exists in Micros. (Pet. at 39). But the mere fact that the Micros 8700 system used three different "PC standard" type workstations says nothing about any "customization" for **handheld** displays. Further, there would not have been any need for "handheld customization" functionality "unique to varying display sizes" due to the fact that the Micros 8700 was a closed, proprietary, system that only worked with a single handheld type/size (the HHT). As demonstrated above, the display/user interface for the HHT was produced via programmer/user manual action on the HHT itself. In contrast, the invention of the '077 patent was directed to the problem of creating "**non-PC standard**" sized displays, *i.e.*, "**non-UWS 1, 2, 3** sized/type displays." There was no such functionality in Micros 8700. The mere fact that UWS 1, 2, 3 and the HHT were parts of the Micros system is not a disclosure of any **actual** "display size" **customization** for handhelds.

Additionally, all independent claims of the '077 patent require a "cascaded set of linked graphical user interface screens" for at least "two different" handhelds having "a different number of user interface screens." There was only one size HHT,<sup>57</sup> and Digestor could only work with one user/handheld at a time. Thus there is no disclosure

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<sup>57</sup> Petitioner conclusorily alleged that the Micros system could produce layouts for devices of various sizes. (Pet. at 37-38). But the cited material applied to standard sized computer screens, not to "wireless handhelds" as properly construed.

in either reference, or the combination, of the “plural” handhelds limitation nor a disclosure of the “different number of screens” for each handheld limitation.

Further, the properly construed “automatically format” limitation of all independent '077 claims is not met by Digestor. Digestor did not perform its transformations until “**a user** has configured the system,” including the user specifying “the size of their default browser font (this is needed in order to estimate the screen area requirements of text blocks).” (Exh. 1022 at 1080) (emphasis added). While indulgently using the word “automatically,” Digestor did not actually disclose a complete transformation and configuration procedure which was “done or produced as if by machine.” Moreover, this infirmity of Digestor cannot be remedied by Micros, because the Micros HHT also did not format the programmed handheld menu configuration/hospitality application information from a back office master menu/database as discussed above, nor automatically.

### **C. The Combination Of Blinn And Digestor Fails**

The combination of Blinn and Digestor against claims 13-18 fails for many of the same reasons Micros/Digestor fails as detailed above. Further, the replacement of Micros with Blinn does not rectify the infirmities of the Micros/Digestor combination.

#### **1. The Blinn Reference Is Not Prior Art**

Petitioner relies on U.S. Patent No. 6,058,373, issued on May 2, 2000, which Petitioner refers to as “Blinn.” Petitioner wrongly claims that “Blinn” is entitled to an earlier date as a 102(b) reference, the date of April 27, 1999, on the ground that “Blinn” is “incorporated by reference” in an earlier patent, U.S. Patent No. 5,897,622. But Petitioner is wrong and its “incorporation” argument is technically defective.

The 1999 patent, USP 5,897,622, includes the following passage, at col. 10:63 to col. 11:1, upon which Petitioner's “incorporation” argument solely rests: “A detailed

explanation of the invocation and processing of purchasing actions is provided in a commonly owned and concurrently filed **application** having the title "System and Method for Processing Electronic Order Forms", **Ser. No. 08/732,205 hereby incorporated by reference.**" (emphasis added).

The rule on unpublished applications incorporated into an issued patent being available to the public, and thus theoretically available as 102(b) references, is found in MPEP 103 and in 37 CFR 1.14(a)(vi), using identical language (emphasis added):

*Unpublished pending applications (including provisional applications) that are incorporated by reference or otherwise identified. A copy of **the application as originally filed of an unpublished pending application may be provided to any person, upon written request and payment of the appropriate fee (§ 1.19(b)), if the application is incorporated by reference or otherwise identified in a U.S. patent,** a statutory invention registration, a U.S. patent application publication, or an international patent application publication that was published in accordance with PCT Article 21(2).*

The *Bruckelmyer* case cited by Petitioner is to the same effect—it holds that an unpublished patent **application** that was available in the Canadian Patent Office is "publicly accessible" and thus a "printed publication" under 35 U.S.C. §102(b).<sup>58</sup>

Petitioner is therefore wrong in claiming that "Blinn was 'publicly available' when the '622 patent issued..." What is incorporated, and the only thing that could even theoretically be used as a reference dated April 27, 1999, is the "**application**" from which "Blinn" issued, and not the "Blinn" patent itself. *But Petitioner does not cite to the application and does not assert the application itself as a 102(b) reference.*

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<sup>58</sup> Petitioner asserts that the application in *Bruckelmyer* was "referenced in a published patent," but the only patent that referenced the application at issue was the patent that subsequently issued out of that application.

Petitioner's use of Blinn therefore fails, and must be disregarded, because Petitioner cites to and relies only on the issued patent, which is not incorporated by reference in the earlier '622 patent. The Blinn '323 patent does not qualify as an April 27, 1999 "printed publication" under 35 U.S.C. 102(b), because the patent itself was not "publicly available" prior to its issuance in May 2000, and the patent itself was not "incorporated by reference" in an earlier issued patent. Thus Blinn post-dates the September 1999 priority date of the '077 patent.

**2. The Petition Cited To No Actual Disclosure Of Real Time Synchronous Functionality In Blinn**

The Petition simply alleges that Blinn is a real time system, without citing any evidentiary support for the argument. The Petition cites generic material from Blinn dealing with browsers and servers but merely in the context of a virtual web store. (Pet. at 74-75). This does not disclose, *inter alia*, the recited "real time synchronous transmission of the configured hospitality application information" from a master database to a wireless handheld device, web server and web page.

**3. Blinn Does Not Disclose Hospitality Application Functionality As Required By Claim 13**

Further, neither Blinn nor Digestor involve "hospitality applications," and thus neither teach or suggest "hospitality application information" as claimed, and thus clearly the combination cannot do so. The Petition merely argues that a POSA would have known that the combination "could have" somehow included hospitality information based on Petitioner's mere conjecture that the "patent speaking to the availability to modify based on a 'merchant's unique sales transactions'" would have included hospitality applications. (Pet. at 65). This is woefully insufficient. Blinn does not disclose nor suggest application of the claimed invention to the unique



requirements of the hospitality industry as discussed above and as this terminology has been construed by the PTAB in CBM2014-00014, nor did the Petition explain why a POSA would do so based on Blinn. Simple hindsight-based, unsupported, substitution from a disparate field fails under *KSR*, as discussed above.

Because Blinn does not disclose “hospitality applications,” it cannot disclose a wireless handheld computing device “configured to display said hospitality application information” as recited in element “b” of claim 13. Petitioner’s citations speak only to “a purported communications medium” and do not point to any disclosure in Blinn of displaying any hospitality application information. (*See* Pet. at 66.) Likewise, the requirement of claim 13 element “d” regarding configuration of a web page to display hospitality application information is not met by Blinn, nor does the Petition point to any purported disclosure of same, merely alleging conclusorily that a POSA would just “know” that a web page “could have been configured” to do so, without explaining how a POSA would know. (Pet. at 67). This is insufficient.

#### **4. Blinn Does Not Disclose Customizing Web Page Outputs Unique To Handheld Displays**

The Petition alleges at pages 71-72 that Blinn describes customizing web page outputs unique to the handheld device displays. But Petitioner points to no disclosure of this functionality in Blinn other than a reference to a figure and text that do not disclose what Petitioner says it does. As demonstrated above, Digestor fails to teach or suggest this claim requirement, thus the combination of Blinn and Digestor likewise fails. The recitations of “pursuant to a master database file structure” (claim 13 element “a”) and “utilize parameters from the master database file structure” (claim 13 element “e”) clearly differentiate the properly construed claims from “web page conversions” as disclosed by Digestor and other similar types of approaches, as

discussed in detail above with respect to claims 1 and 9. Web page conversion approaches do not operate by linking directly to the master database file structure to produce a handheld device display as explicitly recited by claim 13.

Even under Petitioner's proposed construction for "database," Digestor does not use a database file structure, much less a master database file structure (*i.e.*, a database associated with a central server computing unit), which is "composed of records, each containing fields, together with a set of operations for searching, sorting, recombining and other functions." The web page source documents which are transformed by Digestor are not "databases." This is evidenced by the fact that Petitioner proposed separate constructions for "web page" and "database," because a POSA would have known they were not the same thing.

Digestor states "although the focus of this work is on minimizing page retrieval time, not on producing the **most appropriate** page layout for the display device." Exh. 1022 at 2 (emphasis added). This is a clear admission within Digestor itself of teaching away from the invention of claim 13 with its many limitations directed to configuration of the **most appropriate** layout for particular devices, as discussed above in the context of claims 1 and 9, in addition to admitting that Digestor simply does not meet the claim term respecting same.

**5. Blinn Does Not Disclose Automatically Formatting A Programmed Handheld Configuration As "Cascaded Sets of Linked GUI Screens" For "Two Different" Handheld Device Display Sizes Including "A Different Number Of UI Screens"**

The Petition cites only to Blinn's disclosure of dynamic generation of HTML documents. (Pet. at 72-73). There is no mention in the cited material of a "programmed handheld configuration for display as cascaded sets of linked graphical user interface screens," *i.e.*, a hospitality "menu" for a handheld display screen. There is no

specificity at all in Blinn as to configuring anything for a handheld device display screen, let alone for “two different handheld display sizes.” Generation of a generic HTML document is not device-specific, Blinn does not disclose the claimed cascaded sets of linked graphical user interface screens, does not disclose such cascaded sets of screen for two different handheld display sizes and Blinn does not disclose hospitality menus. Blinn is thus entirely unrelated to these aspects of ‘077 claim 13.

Additionally, claim 13 requires a “cascaded set of linked graphical user interface screens” for at least “two different” handhelds having “a different number of user interface screens.” Petitioner cites only to disclosure in Blinn of a “dynamic page generator” which is not responsive to these **handheld-specific** limitations and as detailed above, Digestor could only work with one user/handheld at a time.<sup>59</sup> Thus there is no disclosure in either reference, or the combination, of the “plural” handhelds limitation or the “different number of UI screens” for each handheld limitation.

#### **6. Blinn Was Issued To Microsoft, An Early Investor In PO**

Tellingly, the Blinn patent was assigned to a company, Microsoft, which did not develop the inventions of the ‘077 patent on its own, and instead invested in PO Ameranth’s technology encompassed by the ‘077 claims, as discussed above. Had Microsoft already had possession of the inventive technology of the ‘077 patent, there would have been no reason for Bill Gates to recommend Ameranth for an award a few years later by stating “Ameranth is one of the leading pioneers of the information technology age for the betterment of mankind” (Exh. 1012 at 543, 953), nor any reason for Microsoft to invest in Ameranth based on that technology. This is highly indicative

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<sup>59</sup> As is clear from the discussion of Digestor above, even if Digestor could produce linked screens as claimed, which it did not, it would be producing the same number of linked screens no matter the target device on which the screens are displayed.

of both the absence of any disclosure in Blinn of the claimed invention, and also compelling objective evidence of non-obviousness.

**D. Failure Of Both Combinations To “Automatically Format”**

Each of independent claims 1, 9 and 13 include the element “**to automatically format** a programmed handheld menu configuration for display.” In contrast, both the Micros HHT and Digester required **manual/user actions** from/at/on the handheld to “configure” the displayed information—the opposite of, teaching away from and failing to meet this essential inventive aspect of all ’077 claims. Since Blinn depends on Digester for this, the second combination also fails to meet this key limitation.

**E. Petitioner’s Arguments Regarding Numerous Dependent Claims Fail**

**Claims 3, 12, 15:** Petitioner did not consider these claims as a whole and ignored the proscription against two separate claim limitations being met by the same prior art element. Petitioner’s two base references (POS systems) did not “import the POS database”<sup>60</sup> into themselves, *i.e.*, when asserted against the system of claim 1—because they were both just basic POS systems and thus each already had a POS database. *Ex parte Brud*, BPAI Appeal 2009-011707 at 3, 4 (Exh. 2013) (“Consistent 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 [] reference as being responsive to two different elements.”). Micros/Blinn did not import their database “from/to” themselves.

Further, these claims require “automatic importation” of the POS system

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<sup>60</sup> See Microsoft Comp. Dict. (4th ed. 1999) (Exh. 2015) (Import: “To bring information **from one system** or program **into another**”) (emphasis added). A basic POS system cannot at the same time be the “system” of claim 1 and also another system from which a POS database is imported into the “system” of claim 1.

database. The Petition does not refer to any reference which actually discloses such “automatic” functionality as properly construed. The Petition essentially alleges, without explicitly saying so, that automatic importation would have been inherent, *e.g.*, that Micros “discloses the ability to ‘import[] and export[] data into and out of the 8700 database,’” and Blinn’s disclosure of “the generation of purchase orders to saving the purchase order in a specified database” somehow meets the “automatic” importation requirement. (Pet. at 42, 78). But those are incorrect and meaningless conclusions. Disclosure of a system set up to actually perform the functionality automatically was required, but was not identified by Petitioner. Petitioner reads out the “automatic” term of these claims, which is clear error. *Texas Instr. Inc. v. USITC*, 988 F.2d 1165, 1171 (Fed. Cir. 1993) (A claim interpretation cannot “render the disputed claim language mere surplusage.”). A disclosure of “automatic” functionality requires an actual disclosure in the reference structures reflecting it—a mere “possibility” of what “might be,” without evidence, does not confirm there to be **automatic** functionality as the BPAI has interpreted the requirement.<sup>61</sup>

**Claims 4, 5:** These claims do not simply “**add**” reservations or ticketing system functionality **for integration with** the base Micros POS reference as Petitioner mistakenly asserts, rather they require all aspects of the claim elements in independent claim 1 to **be** reservations or ticketing system databases/menus/functions.<sup>62</sup> The

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<sup>61</sup> *Ex parte Herbeck*, Appeal 2009-008033 at 3 (Exh. 2014) (“Merely because Venkatesh has ‘computers as both client and server systems... that communicate with each other’ does not provide support for **automatically performing** various steps as part of a computer-implemented method as claimed.”) (emphasis added). Moreover, “prior art structures must possess the capability of performing the recited function.” *See Intel Corp. v. USITC*, 946 F.2d 821, 832 (Fed. Cir. 1991).

<sup>62</sup> When PO wanted one hospitality application to be “integrated” with another/second

Micros POS did not have “reservations” or “ticketing” system functionality, and thus all of the Petition’s cites to Micros as regards claim 1 cannot appropriately be applied against claims 4/5. Without Micros as a base reference against claim 1, the Petition fails as to claims 4/5. Consequently, ignoring this reality and relying on the Micros “food/drink” reference cites and POS functionality fails entirely, because “food/drink” functions are not reservations or ticketing system functions.

The allegation of disclosure of a “ticketing application” in the Micros reference is actually a disclosure of a restaurant paper “ticket”, *i.e.*, a “thing” (a “receipt”) which is not a software application, most certainly not one fully synchronized with all of the elements of claim 1, and thus Petitioner's contrived argument completely misses the mark. (Exh. 1012 at 697-98 (“ticketing” in the patents is clearly event/show ticketing systems, such as Ameranth’s award-winning Improv Ticketing system, not a paper food order receipt); Exh. 1012 at 681 (“proceed directly to the theater entrance for ticket verification and seating assignments”); Exh. 1012 at 1008, 1010). As to reservations, the Petition cites to nothing at all in Micros, merely alleging that a POSA “would have found it obvious”—simply because some restaurants take reservations. This is absurd. The Micros documents contain no reservations functionality. The Petition provides no basis for obviousness of this subject matter.<sup>63</sup> Moreover, Figures 1 and 7 of the ‘077 patent, which Petitioner’s expert missed or ignored, illustrate that

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hospitality application, it claimed it, as in claims 11 and 16.

<sup>63</sup> The Petition refers to a purported “reservation application” in Exhibit 1029 but points to nothing in that Exhibit evidencing such, nor anything else for that matters. This appears to be yet another attempt to incorporate by reference without identifying alleged references as part of the asserted combination. To the extent Petitioner is relying on the Micros 8700 for reservations functionality, it simply did not have any.

“ordering” as recited in the claims is ordering of “food/drink,” as is also indicated in col. 3, line 58. Food and drink are not “reservations” or “ticketing,” and thus Petitioner’s allegations that the Micros system met the “reservations” and “ticketing” system dependent claims of the ’077 patent fails for this further reason. The same reference disclosure cannot satisfy two different claim limitations. (Exh. 2013 at 3-4).

**Claims 6, 18:** Petitioner simply alleges that the “custom” (Pet. at 44) Micros HHTs upon which its challenge to claim 1 is based, can simply be “replaced” with “web based” smart phones based on “cost” (but with no cost facts/analysis), but did not explain with any specificity how this would occur technically, within the proprietary communications system of the Micros 8700 system which had no web capability. Petitioner is not permitted to use specific cites to the Micros HHT as to claim 1, but then just “plug in” an entirely different device incompatible with the base Micros 8700 system, while still relying on the same HHT functionality aligned against claim 1 limitations, and with no modifications explained. Reliance on anything other than the HHT as meeting the smart phone requirement of these claims means that the claim 1 elements for which the HHT was applied are improperly read out of the claims.

**Claim 8:** Still further, the recitation of “preview” functionality in claim 8 is not even close to being met by the cited references. Petitioner provides no actual citations to any evidence of the recited functionality in any alleged prior art reference. The Petition’s improper attempted reliance on the “FrontPage” document (Exh. 1067) fails, *inter alia*, because it is not listed as part of any proffered combination. Proposed combinations must be made explicit.<sup>64</sup> Further, the Petition’s reference to an “HTML

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<sup>64</sup> *In re Hoch*, 428 F.2d 1341, 1342 n.3 (CCPA 1970) (“Where a reference is relied on to support a rejection, whether or not in a ‘minor capacity,’ there would appear to be no excuse for not positively including the reference in the statement of the rejection.”).

editor” is vague and inapplicable anyway, because “web pages” were excluded from claims 1-12. Moreover, nothing in the FrontPage document shows anything regarding laying out the configuration for a “programmed handheld menu configuration,” and/or “display screen parameters” of handheld devices or “generating a view” or “for user preview from the CPU.” Further, ‘077 claim 8 was written to further distinguish from the Micros 8700/HHT, through the use of “from the central computing unit” and “**prior to the transmission**” since, as discussed above, the Micros HHT display programming was done on the HHT device itself **after** the transmission, by a programmer. The Petition’s arguments as to Micros/Digestor meeting claim 8 fail because the Petition says conclusorily that it “would have been obvious” to do what the claim recites based on a mere allegation that it was a common practice for HTML editors to allow for previewing web pages. This type of reliance on mere allegations of a “common practice” without specific explanation and basis violates strict case law requiring actual evidence. The Petition makes no attempt to explain what it is, nor how it supposedly meets claim 8, especially as for handheld layouts. Further, the Petition improperly attempted to “incorporate by reference” excerpts from the Turnbull Declaration. Further, the Petition does not explain how the so called “HTML editor” is used by or at the “central computing unit” and or with its master menu as recited/required. Also, the requirement of “user manual modification prior to the transmissions of the programmed handheld menu configuration to the wireless handheld computing device” renders ineffective all web-based references including Digestor which rely on “transformation” of an already-existing document. Also, Digestor didn’t integrate with FrontPage, in any way.



**Claims 2, 10, 14:** Petitioner’s argument regarding the recited “communications systemic relationship” of claims 2, 10 and 14 has no merit. As discussed above, Micros 8700 had no web capability, and could not be combined with a web approach such as Digestor. Moreover, a “communications systemic relationship” requires a “**relationship**” between the claimed elements. Petitioner’s disparate, unconnected cites to Micros and Digestor as to individual components is insufficient to show a relationship between the purported (but non-existent) wireless and web hub applications of Micros and Digestor, the “linked databases between two or more different hospitality applications or the “communications setup application.”

As to the “linked databases between” the two different hospitality applications terms, this term and these claims require **specific programmed functionality within the databases** to “link” the databases. Such linkage functionality must be disclosed in the prior art, not just “assumed” to be possible. Clearly the BRI, as discussed above, requires the two different databases to be **directly linked between** each other.

Similarly, Blinn (as applied to claim 14) did not involve hospitality applications, the material cited in the Petition made no mention of two different linked hospitality databases and the material cited from Blinn as to “electronic merchandising system” (Pet. at 76), fails to show the claimed communications systemic relationship nor the purported, but actually not disclosed, wireless and web hubs of Blinn. Petitioner also provided nothing but attorney argument as to the “communications setup **application**” limitation, once again merely conclusorily alleging it would have been obvious.<sup>65</sup>

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<sup>65</sup> This application is not “prompts and messages” as to what “exists” (Pet. at 41-42). Rather, “set up” occurs prior to communications. (See Microsoft Comp. Dict. (4th ed. 1999) (Exh. 2015) (Setup: “The procedures involved in preparing a software program or application to operate within a computer”). As to Blinn, Petitioner cites to alleged

Also, Petitioner points to a wireless RF hardware communications “base station” in Micros, supposedly bolstered with an imagined but non-existent “link” to Digestor, as an alleged “wireless hub **application**.” (Pet. at 40-41). However, neither Micros nor Digestor disclose any software **application** functionality for providing such wireless hub functionality or web hub functionality. Moreover, Digestor was limited to only “one at a time” connections and thus cannot be a “hub” in any sense.

Likewise, Petitioner merely alleges that web hub functionality is present in Blinn by virtue of disclosure of an IIS server (Pet. at 77) yet Petitioner already relied on Blinn’s IIS server to meet element 13(c) (“web server”), and it cannot meet both elements at the same time without reading out “web hub application” in claim 14.

**Claims 11, 16:** In the limitation “**are** integrated,” the “**are**” requires that such functionality in the prior art structure must have existed, *i.e.*, that the two different **hospitality** systems **ARE** “integrated,” *i.e.*, a functional unit, not that Petitioner believes with no actual evidence that it might be “possible” to do so. Petitioner failed to show this in either claim or with either combination. The Micros 8700 was a **single** hospitality POS system. Petitioner’s citing to minor “sub functions” within the 8700 POS system is not “**integrated**” nor “**between**” nor with “**another**” hospitality system. The claim requires “**different**” hospitality applications, not sub-modules of the **same** application. And even if “different,” labor scheduling and time keeping are not “hospitality.” Petitioner seeks to “read out” the word “different”—just as Petitioner does as to “integrated between.” But because neither the Blinn nor the Digestor reference discloses or suggests a hospitality application, it is also impossible for this combination

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“communications software” and improperly tries to incorporate the Turnbull Declaration (Pet. at 77-78). “Communications” is not “communications setup.” The Petition thus fails on this element as to both proposed combinations.

to have been “integrated between and with” two different hospitality applications. Petitioner merely alleged that a web page “could” have been configured to display hospitality application information. The claim requires “are integrated,” which cannot be met by speculation. Moreover, to meet this limitation, Petitioner was required to cite to a specific disclosure of two different hospitality applications fully integrated with each other, bi-directionally. Petitioner did not do so.

Institution as regards any of the dependent claims would be improper because their additional functionality was either entirely ignored by the Petition or treated in a merely conclusory way and thus a challenge to those claims has been waived.<sup>66</sup>

#### **F. Objective Evidence Of Non-Obviousness**

The present Petition, filed seventeen years after the conception of the inventions of the ‘077 patent, now alleging obviousness in 1998, does not merely ask the board to **ignore** history (which Petitioner and its expert clearly did), it fully 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 (August 1998), publicly demonstrated the inventions embodied in its 21<sup>st</sup> Century Restaurant™ system (November 1998) and then introduced products embodying the claims of Ameranth’s patents into the hospitality market (November 1998 through May 1999). Unprecedented and nearly instantaneous industry-wide recognition followed for the breakthrough products and technology embodying the inventions described in the patents, attesting to the novel and innovative nature of

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<sup>66</sup> See IPR2014-00771, Paper 12 at 6 (citing 37 C.F.R. §42.104 (b)(4) (“the *petition* must set forth . . . [h]ow the construed claim is unpatentable under the statutory ground identified. The petition must specify *where* each element of the claim is found *in the prior art* patents or printed publications relied upon.”)).

Ameranth's patented technology. This is evidenced in the comprehensive Secondary Factors Declarations provided to the Patent Office in the prosecution of the '077 patent (Exh. 1012 at 541-724, 860-906, 923-1017, 1025-26), including detailed explanations of nexus to/with the claimed subject matter (Exh. 1012 at 923-1017) and as elaborated below.<sup>67</sup> PO submits that objective factors including praise/awards, commercial success, copying, failure of others and licensing confirm the non-obviousness of all '077 claims as is detailed herein.<sup>68</sup>

Ameranth's 1998-99 product introductions/demonstrations actually involved many of the Defendants in the pending district court litigation (also Petitioner companies) as well as owners of the alleged prior art references asserted in the slew of "second round" CBM Petitions recently filed against the Ameranth family of patents, which include, Agilysys,<sup>69</sup> Microsoft/Expedia, Starwood,<sup>70</sup> Oracle/Micros, IBM,<sup>71</sup> and Marriott. Thus, this is an *extraordinary* situation where the contemporaneous objective

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<sup>67</sup> In an Interview Summary, the Examiners noted: "The Applicant explained how the secondary factors show non-obviousness." (Exh. 1012 at 1030).

<sup>68</sup> The extensive prosecution history of the '077 patent family includes overwhelmingly compelling confirmation of the non-obviousness of the '077 claims, including the established nexus of the objective evidence with the claims, as is detailed in multiple Section 1.131 and 1.132 declarations, and which convinced the examiner and supervisory examiner which allowed the '077 patent.

<sup>69</sup> While now claiming Ameranth's inventions were obvious, Agilysys licensed Ameranth's 21<sup>st</sup> Century Restaurant System™ technology and later-issued patents, first in 1999 (Exh. 1012 at 948) and continuing for **13 years** through 2012—at which time they abruptly stopped paying license fees and then blatantly copied.

<sup>70</sup> Starwood adopted Ameranth's technology and partnered with Ameranth in 2000 (Exh. 1012 at 552, 650). "Starwood is very excited to be able to offer Ameranth's software to our hotels in North America" (Exh. 1012 at 689).

<sup>71</sup> IBM was a launch partner with Ameranth as to the 21st Century Restaurant™ System, in May 1999, at the Chicago NRA Show. (Exh. 1012 at 363, 392).

evidence does not merely retrospectively **imply** non-obviousness. Rather, indisputable facts and events which actually occurred at the time of the invention (directly involving the very petitioner and/or company references being asserted against Ameranth) which **prove** that Ameranth's inventions were **not** deemed to be obvious at the time of the invention, including involvement of a large number of the present Petitioners (in this and other recently-filed Petitions) and the very companies which Petitioner now alleges would have "combined" their products in lieu of using/licensing Ameranth's technology.

However, these companies did **not do** in 1998/1999 what Petitioners now allege via hindsight would have been "obvious" for them **to do**. This is the "history" of what actually happened in 1998-99, which directly and indisputably refutes Petitioner's 2015 assertions—yet Petitioner now effectively asks the Board to "ignore" this evidence as evidenced by the fact that Petitioner itself ignored it. These very companies partnered/worked with Ameranth (IBM/Marriott/Starwood), or sought to license Ameranth's inventions exclusively for themselves (Oracle/Micros), or licensed it (Agilysys), or they invested directly in Ameranth (Microsoft/Expedia) to secure the use of Ameranth's intellectual property for themselves. That the world's largest hospitality IT company, Micros, sought to exclusively license Ameranth's technology at the very time of the invention based on the menu generation and synchronization technical information and demonstration ***provided to it personally by Ameranth's lead inventor, Mr. McNally***, including the critical features/elements recited in the '077 claims, 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

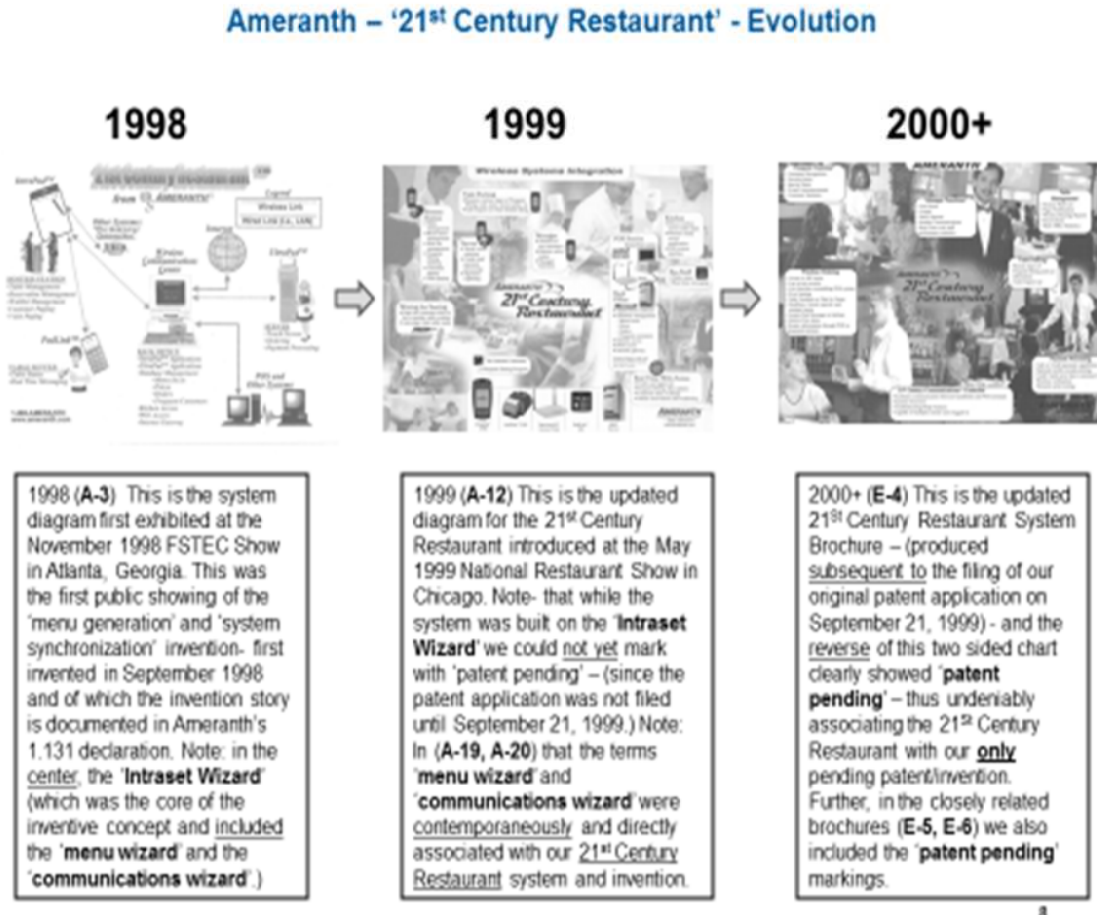
Expedia) the world's largest software company, Micros the world's largest POS/PMS company and Marriott/Starwood two of the world's largest hotel companies). These facts, actions and statements by the industry giants thus compellingly confirm the non-obviousness of the inventions.<sup>72</sup> Further, Ameranth was a tiny company and had no "market power" to influence these companies to adopt its innovations and partner with it—rather, all that Ameranth had was the innovations/technology itself. Thus, conclusively, the third party actions in 1998/1999 were all based on the merits of the technology. Additionally, it was not only these renowned companies that believed Ameranth's technology was a breakthrough. Rather, it was literally the entire hospitality marketplace and across the entire spectrum of independent experts, press/writers and decision-makers. Beyond Micros, Marriott, Microsoft/Expedia, Starwood and IBM, Symbol (then the world's largest LAN and mobile device supplier), Food.com (then the world's largest online food ordering company), JTECH (then the world's largest hospitality paging company) and six other of the largest hospitality POS companies all partnered with, licensed, and/or invested in Ameranth—whose sole product at the time was the soon to be "patent pending" 21<sup>st</sup> Century Restaurant™ system.

The system/claimed functionality is shown in the evolution of the contemporaneous 1998-2000 21st Century Restaurant System™ Brochures (Exh. 1012 at 962)) below, and include "patent pending" markings—shortly after the filing of the original '850 application, which included specific "screen shots" of the then operational 21<sup>st</sup> Century Restaurant™ system (Exh. 1010 at 55-61). These Brochures

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<sup>72</sup> *CBS v. Sylvania, Inc.*, 415 F.2d 719, 728 (1st Cir. 1969) ("the leader in color television development chose to license"), *cert. denied*, 396 U.S. 1061 (1970).

included the disclosure of key inventive/claimed features, e.g., “dynamic menu generation” (e.g., Exh. 1012 at 991) thus further confirming the nexus between the 21<sup>st</sup> Century Restaurant™ product and the ‘077 claims.<sup>73</sup>



Further detailing the nexus between the claims and Ameranth’s products, as provided to the examiner during prosecution, was a “Correction to Supplemental Response:”

This important reference (including “**instantly creates the displays and GUI on the handheld’s smaller screens – with no custom programming required**” further confirms the nexus through the direct association between the claimed features of the present invention and the

<sup>73</sup> There is a “presumption of a nexus” when a product is “coextensive” with a patent claim. *Teva Pharm., Inc. v. Sandoz, Inc.*, 723 F.3d 1363, 1372 (Fed. Cir. 2013). “Objective evidence of nonobviousness need only be ‘reasonably commensurate with the scope of the claim.’” *Rambus Inc. v. Rea*, 731 F.3d 1248, 1257 (Fed. Cir. 2013).

21<sup>st</sup> Century Restaurant products, and the same claimed feature of the 21<sup>st</sup> Century Restaurant included on the reverse of Exhibit E-5 (the 2000/2001 Product Brochure), which also states this claimed feature and its operational benefit (“***Dynamic Menu generation – no handheld programming required***”), (i.e. the “menu wizard”) and includes several actual GUI ‘screen shots’ of the dynamically generated handheld menus.

App. Ser. No. 11/112,990, Feb. 3, 2011 (Exh. 1012 at 1025-26) (emphasis added); *see also* Exh. 1012 at 991. These “dynamically generated handheld menus” are of course the “programmed handheld [menu] configurations” of all ‘077 claims, clearly confirming the nexus.<sup>74</sup>

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 21<sup>st</sup> 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. 1012 at 706)) (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 committee consisting of numerous

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<sup>74</sup> Such objective evidence linked to contemporaneous product brochures/advertising is important in confirming non obviousness. *See Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579 (Fed. Cir. 1997) (“The prominence of the **patented technology** in Baxter’s **advertising** creates an inference that **links** the Gambro invention to this success.”) (emphasis added).



recognized experts in their fields at the time of the invention) selected Ameranth's 21st Century Restaurant™ 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 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 age for the betterment of mankind” (Exh. 1012 at 543, 953), is a 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 hospitality 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. 1012 at 890, 965 (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. 1012 at 647, 964 (emphasis added).<sup>75</sup> Also, Ameranth was notified that:

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<sup>75</sup> See *Allen Archery, Inc. v. Browning Mfg. Co.*, 819 F.2d 1087, 1092 (Fed. Cir. 1987) (praise in the industry for a patented invention, and specifically praise from a competitor tends to indicate that the invention was not obvious).

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. 1012 at 695 (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. 1012 at 661 (emphasis added) (the actual “best and finest implementation” clearly would not have won this award if was an “obvious idea”); Exh. 1012 at 964.

Just one week before the original application from which the ‘077 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 ‘077 claims—thus further confirming the nexus:

I have met with Keith McNally [Ameranth Founder and lead inventor of the ‘077 patent] to agree on the deal points on a Licensing Agreement. Here are the products and services we would want.

1. Menu Wizard – this is a tool which digitally constructs and updates restaurant menus. [The] benefits to us with this tool would be the following:
  - a) Create and update menus faster with significant labor savings
  - b) Lower cost of maintenance (restaurant customers will be able to update and change specials themselves)
  - c) Exclusive rights to this tool (barrier to entry)
2. 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 among its entire Executive Team (Exh. 2001; *see also* Exh. 1012 at 957, 962, 970 (item “A-20”)).

In yet another confirmation of non-obviousness, and from an independent and compellingly knowledgeable source, the Harvard Business School Press (2005) stated that “Ameranth’s main product, 21st Century Restaurant is *poised to become the industry standard* for mobile wireless ordering and payment processing in restaurants.” (Exh. 1012 at 965, 1017 (emphasis added)). Ameranth’s technology has indeed become the industry standard, through infringers such as the Petitioner companies affirmative choice 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.

Still further 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. 1012 at 697), “the 21st Century Communications<sup>TM</sup> middleware, [] routes data, regardless of programming language, across a variety of platforms” (*id.* at 698), the Ameranth product provided “a wireless **interface to the databased information**,” (*id.* at 699), 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 ’077 “**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.

At the time of the conception of the invention in August 1998, others including defendants and Petitioners whose documents are now being used to challenge the '077 patents and the companies had not even recognized the underlying synchronization problem needing to be solved (first identifying the problem itself can confirm non-obviousness), *i.e.*, the challenge of synchronization across multiple and different-sized handheld computing devices while maintaining synchronization with the master database, and most certainly had not recognized the solution via synchronized "second menus" or as in the '077 claims "programmed handheld menu configurations."

John Harker, an executive of Symbol Technologies stated:

They [Ameranth] had just developed an innovative new solution-that they called their 21St Century Restaurant '**software wizard**'- which had the capability to interface existing 'point of sale' (POS) systems (**with their intensive graphical user interfaces and complex databases**) to **the mobile wireless devices** that we were preparing to introduce to the market in 1999.

Exh. 1012 at 957 (item "C-56") (emphasis added); Exh. 1012 at 711-712.

Still further, beyond the contemporaneous confirmations, the non-obviousness of the claimed inventions has been confirmed over and over again, recently, through the licensing of the '077 patent family, across a wide spectrum of the world's largest to smallest companies (36 in total) and including praise from the CEO's of the licensees,<sup>76</sup> and with the majority of these licenses occurring entirely outside of

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<sup>76</sup> 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,'

litigation. 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.<sup>77</sup>

Additionally, while now alleging that Ameranth's inventions were obvious in 1998, the infringing defendants have copied and continue to publicly claim key inventive elements of Ameranth's claims (if not Ameranth's claims in their entirety), as "breakthroughs" of *their own*—essentially alleging that they were the true inventors of these alleged "non-inventions."<sup>78</sup> Exemplary of defendants' attempts to copy and claim Ameranth's inventions for themselves is Apple's copying of Ameranth's simulator (as its iOS Simulator (Exh. 2002 at 6)) as claimed in '077 claim 8 and Apple's assertion that it invented the "digital hub" (wireless **hub** and web **hub** integration), which is specifically claimed as part of the "communications systemic relationship" recited in '077 claims 2, 10 and 14.<sup>79</sup>

Further examples of copying include Petitioner (CBM2014-00014) Hyatt Hotel's CTO claiming that it invented the "communications systemic relationship" aspects of '077 claims 2, 10 and 14, **integration** of two different hospitality

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stated Paul Domorski, Chairman & CEO of Par Technology Corporation") (emphasis added).

<sup>77</sup> See *In re Roufett*, 149 F.1350, 1355 (Fed. Cir. 1998) ("licenses showing industry respect for the invention" is objective evidence of nonobviousness).

<sup>78</sup> *Heidelberger v. Hantscho Prods.*, 21 F.3d 1068, 1072 (Fed. Cir. 1994) ("litigation argument that an innovation is really quite ordinary carries diminished weight when offered by those who had **tried and failed to solve the same problem**, and then **promptly adopted the solution** that they are **now denigrating**") (emphasis added).

<sup>79</sup> Powerpoint Presentation produced in *Apple v. Samsung* litigation (Exh. 2004).

applications of `077 claims 11,16 and of the “single point of entry” of `850 claim 13.<sup>80</sup>

His own statements below, from just a few months ago, confirm this copying and nexus, and further compel a determination of non-obviousness:

There’s a metaphor that I like to use to describe what this technology platform is: I compare it to **mise en place**, which is a French phrase that translates to “**everything in its place**.” In a technology platform, the ingredients are our data from different sources, for example reservations systems, loyalty systems, the CRM platform, and so on..... using what we call an **API façade**, we are presenting what appears to be a **single API**

Quotes from Matt O’Keefe, Hyatt CTO, April 8, 2015 (Exh. 2005) (emphasis added).

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”)<sup>81</sup> (emphasis added). This too confirms non-obviousness and nexus. *Power-One, Inc. v. Artesyn Tech., Inc.*, 599 F.3d 1343 (Fed. Cir. 2010) (“Artesyn's position that Power-One's invention was obvious is **inconsistent** with its position that its own infringing product was **an advancement** in the industry.”) (emphasis added). Then, in 2014, Dominos copied Ameranth’s `733 patented voice conversion technology, in the form of the “Dom” voice ordering product, using Apple’s Siri technology.<sup>82</sup>

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

Anyone who’s ever wondered what restaurant chains might do to take

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<sup>80</sup> Hyatt Hotels CTO Interview, April 2015 (Exh. 2005).

<sup>81</sup> Exh. 2006 ("With the addition of yet another order-taking channel, Domino's is thrilled to lead the market with this **breakthrough** technology.") (emphasis added).

<sup>82</sup> “Domino's app let's you voice-order pizza” (Exh. 2007).

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) (video/audio in possession of PO). Confirming the “failure of others”—in receiving its award for the technology copied from Ameranth, Pizza Hut admitted that it had tried but failed in the late 90s:

[I]n the late 90s, we really made a run at this ***and it wasn't successful***.

Statement of Delaney Bellingers—Pizza Hut, FS/TEC 2009 Awards transcript at 12:29 (Exh. 2018) (emphasis added).

Starbucks claimed the entirety of Ameranth’s inventions/claims as its own “holy grail” in 2014,<sup>83</sup> just before filing Petitions of its own (CBM2015-00091, -00099) asserting **the opposite**—*i.e.*, that everything Starbucks now refers to as a “holy grail” for itself was obvious/known back in 1998. Further, just as Hyatt (with its “API Façade”) and Apple (with its “digital hub”) did, Starbucks clearly has also copied and claimed for itself the inventive features of Ameranth’s “communications systemic relationship” of ’077 claims 2, 3, 10, 14, 15 and ’850 claim 13, with their “holy grail” as further admitted, e.g., *on* April 27, 2015 (Exh. 2009) (“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.**”) (emphasis added).

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<sup>83</sup> “Starbucks to roll out innovations in mobile platform,” March 13, 2014 (Exh. 2008) (“Starbucks is poised to unveil innovations within its mobile platform that will include ordering ahead and new payment features that the company has called a potential “holy grail” for throughput. ... Management referred to mobile ordering as the potential “holy grail” of throughput”).

Further demonstrating nexus and copying and again from the very companies involved in filing petitions against the '077 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 21<sup>st</sup> Century Restaurant™ product/technology, and launched its copycat "IG Roam" mobile ordering product which embodied the claimed inventions<sup>84</sup> and halted license payments to Ameranth after paying those fees for 13 years.

The copying, praise/awards, failure of others, commercial success and licensing confirmed above to have a nexus with key inventive aspects of the '077 claims compel a conclusion of non-obviousness at the time of the invention (especially because the Petitioner and its expert entirely ignored all of the objective evidence—which is in the record and clearly was known to Petitioner).

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

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<sup>84</sup> Exh. 2010 ("Agilysys ... today announced the general availability of the ***InfoGenesis™ Roam mobile software solution***, a food and beverage ordering assistant for the company's award-winning InfoGenesis™ POS system.") (emphasis added).



**VII. 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 1-18 of the '077 patent are more likely than not invalid under 35 U.S.C. §§103 or 112.

June 8, 2015

Respectfully Submitted,

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**CERTIFICATE OF SERVICE**

I certify that, in accordance with 37 C.F.R. §42.6, a true and correct copy of the foregoing Patent Owner's Preliminary Response was served on June 8, 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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