

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AGILYSYS, INC., ET AL.
Petitioners

v.

AMERANTH, INC.
Patent Owner

Case CBM2014-00014
Patent No. 8,146,077

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

Submitted Electronically via the Patent Review Processing System

PATENT OWNER'S PRELIMINARY RESPONSE

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PATENT OWNER'S LIST OF EXHIBITS

Exhibit No.	Description
2001	Memorandum of Points and Authorities in Support of Plaintiff Ameranth, Inc.'s Motion to Disqualify Counsel (Fulbright Jaworski)
2002	Memorandum of Points and Authorities in Support of Plaintiff Ameranth, Inc.'s Motion to Disqualify Counsel (Akin Gump)
2003	"Domino's Pizza First in Industry to Offer Mobile Ordering" (September 27, 2007)
2004	http://www.dailymotion.com/video/xr7y4b_tim-cook-calls-patent-wars-pain-in-the-ass_tech
2005	157 Cong. Rec. S1053 (Mar. 1, 2011)
2006	157 Cong. Rec. S5441 (Sept. 8, 2011)
2007	"Software Patent Reform Just Died in the House," Washington Post, Nov. 20, 2013
2008	Nov. 18, 2013 Letter from Victoria A. Espinel, President and CEO of the Business Software Alliance
2009	http://www.bsa.org/advocacy/intellectual-property-and-innovation
2010	http://www.bsa.org/~media/Files/Policy/Patents/JointCBMLetter091913
2011	"Ameranth Signs Major New Patent License with PAR Technology Corporation for its Patented 21 st Century Communications Web/Wireless Synchronization Inventions" (Jan. 28, 2013)

2012	“Ameranth Signs Major New Patent License with Snapfinger, Inc. for its Patented 21 st Century Communications Web/Wireless Synchronization Inventions” (Jan. 24, 2012)
2013	Secondary Factors Evidence and Nexus Charts Submitted in App. Ser. No. 11/112,990 (U.S. Pat. No. 8,146,077)
2014	April 21, 2010 Claim Construction Order (Judge Everingham)
2015	September 9, 2010 Claim Construction Order (Judge Everingham)
2016	September 13, 2010 Claim Construction Order (Judge Everingham)
2017	August 10, 2012 Claim Construction Order (Judge Payne)
2018	July 5, 2013 Order re: Motions to Dismiss (Judge Sammartino)
2019	157 Cong. Rec. S1379 (Mar. 8, 2011) (Statement of Senator Kyl)
2020	157 Cong. Rec. S5431 (Sept. 8, 2011) (Statement of Senator Kyl)
2021	“Ameranth Wireless Awarded Computerworld Honors 21 st Century Achievement Laureate Medal” (April 16, 2001)
2022	Letter from Computerworld Honors Program (July 5, 2001)
2023	“Wireless Finds a Welcome in Hospitality,” Business Week (Feb. 9, 2004)
2024	Steve Glen (VP of Marriott) Letter to K. McNally (Feb. 3, 2000)

2025	Computerworld Honors Archive
2026	Ameranth Receives Moby Award For Wireless Mobile Computer Application (Sept. 13, 2000)
2027	“Food.com and Ameranth Technology Announce Partnership to Develop Link From Food.com site With Ameranth's 21st Century Restaurant System” (July 15, 1999)
2028	Internal Food.com Memo between its Executive Team (Sept. 13, 1999)
2029	Examiner Interview Summary in App. Ser. No. 11/112,990, October 14, 2011
2030	Web Characterization Terminology & Definitions at §2.3, May 24, 1999, http://www.w3.org/1999/05/WCA-terms
2031	<i>SFA v. 1-800-Flowers.com</i> , Case No. 6:09-cv-340-LED (E.D. Tex. April 11, 2013)
2032	https://developer.apple.com/library/ios/documentation/IDEs/Conceptual/iOS_Simulator_Guide/iOS_Simulator_Guide.pdf
2033	<i>Kilopass Tech v. Sidense Corp.</i> , No. 2013-1193 (Fed. Cir. Dec. 26, 2013)
2034	Notice of Allowance and Examiner’s Amendment, App. Ser. No. 11/112,990 (Feb. 2, 2012)

I. STATEMENT OF PRECISE RELIEF REQUESTED

In accordance with 37 C.F.R. § 42.207(a), Patent Owner, Ameranth, Inc., submits this Preliminary Response to the Petition for Covered Business Method (“CBM”) review (“Petition,” “Pet.” or “Am. (‘Amended’) Petition”). For the reasons set forth below, the Patent Trial and Appeal Board (“PTAB” or “Board”) should deny the Petition for review of claims 1-18 of U.S. Patent No. 8,146,077 (“the ‘077 patent”) because (1) the ‘077 patent is not a CBM patent, because it is unrelated to the practice, management or administration of a financial product or service and/or is directed to a technological invention, (2) the claims of the ‘077 patent are not invalid under 35 U.S.C. §112 and (3) the claims of the ‘077 patent are not patent ineligible under 35 U.S.C. §101.

The Petition itself obfuscates the truth, hides critical facts, and is rife with inconsistencies, errors, omissions, deceptions and mischaracterizations. When the facts were counter to their invalidity allegations, Petitioners simply ignored or withheld them—not only from the PTAB but from their own expert as well. In fact, they excluded the entirety of the ‘077 patent and its exceptionally comprehensive prosecution history and vast amount of secondary factors evidence altogether from their “expert” (who provided a declaration on the other three patents in this family but was shockingly mum on the ‘077 patent)—Petitioners simply withheld all of this information from the supposed “expert” so that he could render the opinions they wanted without having to deal with annoying “facts” in the ‘077 file. With no facts supporting any of their contentions, Petitioners were not fazed—they simply invented new ones of their own. When the dependent claims contradicted their positions, they tried to

sweep them under the rug. When the evidentiary record refuted their positions, they simply withheld it. Specifically, Petitioners withheld from the PTAB all the judicial rulings and multiple Markman constructions from three different federal judges, rulings which previously rejected Petitioners' core invalidity allegations and which rulings rejected and refute Petitioners' claim construction proposals.¹

Critically, by submitting no expert declaration/testimony with respect to the '077 patent, Petitioners thus provided no definition of a POSA, which is required for a proper §112 validity review of this patent, a fact which is fatal to Petitioners' §112 arguments, given that consideration of the perspective of a POSA is necessary to analyze the written description requirement. The '077 examiner and the '077 supervisory examiner painstakingly reviewed and familiarized themselves with the details and critical inventive aspects of this patent over a period of years and then carefully crafted an examiner's amendment, which they objectively and conclusively determined was fully supported by the patent specification and drawings, and allowed the 18 claims

¹ Petitioners also conveniently ignore the fact that their lead counsel, Mr. Zembek, was also counsel for defendants on almost all of the prior adverse judicial rulings and that Mr. Zembek's firm recently hired Judge Everingham's law clerk (Jim Warriner), who assisted in writing those Markman rulings and subsequently worked on this CBM matter and the *Ameranth v. Pizza Hut et al.* case under Mr. Zembek's direction. Mr. Warriner's improper involvement in this matter and the Southern District of California case is the subject of one of two disqualification motions pending in the district court (Exhs. 2001, 2002). Petitioners are charged with knowledge of all these prior rulings and thus were required to disclose them to the PTAB per counsel's duty of candor requirement.

of the '077 patent. Now, Petitioners, with no facts, no expert report/analysis, no definition of the skills of a POSA and no correct claim constructions, make a “hand waving” argument that they know better and the USPTO was wrong.

Worse yet, while the Petitioners now self-servingly allege that Ameranth's '077 patent claims are invalid and patent ineligible, they do so while also simultaneously seeking patents for themselves directed to the same subject matter as the '077 patent. Apple and the other Petitioners withheld the fact that Apple is even now concurrently asserting to the USPTO that its own copycat hospitality market patent application titled “Systems and Methods for Processing Orders and Making Reservations Using an Electronic Device” (US 2013/0332208), published December 12, 2013, is non-obvious and represents a patentable invention. This should independently constitute an estoppel against their contradictory arguments in the Petition. This kind of hypocritical “hide the ball” litigation tactic as to all contradictory evidence has no place in the AIA petition process. *See* 37 C.F.R. §42.12. The Board should deny the Petition for these ethical reasons as well as the following substantive factual and legal reasons, as fully explained herein.

First, Petitioners mischaracterize the claimed invention as a financial product or service by superficial attorney arguments devoid of any focus on the actual claims of the '077 patent.

Second, Petitioners assert that the '077 patent is not directed to a technological invention, while ignoring the vast amount of contradictory evidence well known to them, and ignoring the '077 prosecution history, which actually compels the opposite conclusion that the actual claimed software

system invention was technological and novel and non-obvious over the prior art (because the Examiner concluded that it was, contrary to Petitioner's unsupported and **false** characterization of what the USPTO supposedly "recognized") and was directed to a technical solution to a technical problem. Thus, Petitioners' argument necessarily fails to meet the heightened "more likely than not" standard for institution of CBM review because it provides no credible basis for anticipation or obviousness of any claim.

Third, Petitioner's arguments under §101 are based on a gross mischaracterization of the actual claimed subject matter; the claims are clearly directed to patentable subject matter under all controlling precedent.

Fourth, Petitioners' arguments regarding §112 ignore the history of the examiner's amendments to the claims and the examiners' understanding thereof, and Petitioners' "hybrid claim" arguments have been previously rejected by multiple federal judges. In fact, Petitioners' **admissions** in their own Petition, discussed below, provide some of the best evidence against their frivolous §112 allegations.

Fifth, Petitioners ignored the uniqueness of numerous dependent claims by incorrectly asserting that the patentability of those dependent claims rises and falls with the independent claims. That is factually and legally incorrect.

Sixth, the Petitioners' failed to provide **any** actual **evidence** supporting their claim constructions, failed to define the level of skill of a POSA, and their newly contrived core claim construction positions (alleging, *e.g.*, that the critical inventive "synchronization" claim elements are "method steps") were rejected by all three federal judges and are simply wrong. Thus, because the

overall validity analysis of the claims must be based on a *correct* claim construction, all of the Petitioners' invalidity/ineligibility arguments (which are all based on their *incorrect* claim constructions) also fail.²

Accordingly, for each of these reasons, which are described in greater detail below, the Petition should be denied in its entirety.

II. BACKGROUND

Patent Owner Ameranth, a small but innovative software company founded in 1996, is the type of company for which the protections of the U.S. patent system were intended. Its entrepreneur founders saw needs and invented a visionary means to meet them, not "abstractly," but with real, proven, award-winning products based on the patented computer software system technology encompassed, *inter alia*, by the '077 patent. Ameranth, in fact, invented, produced and deployed *five* such products which were directed to meeting specific technical needs of business and commerce, and which were the opposite of an "abstract idea."³ Ameranth was properly awarded the '850 patent and three other later-issued patents (including the '077) which protect those inventions, and deployed its award-winning software products into the market, across thousands of restaurants, hotels, casinos, clubs and stadiums and, as confirmed

² "[H]ow a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). Claim scope is determined by analyzing each limitation in light of the claim as a whole before determining compliance with statutory requirements for patentability. MPEP 2106.01(III)(A). Claims must be construed before engaging in a validity analysis. *Phillips*, 415 F.3d at 1327.

³ As discussed below, those products include Ameranth's (1) 21st Century Restaurant, (2) Improv Comedy Club web/mobile ticketing, (3) Hostalert Reservations/Waitlist, (4) eHost-web/mobile hotel concierge and (5) Magellan restaurant reservations.

by Harvard Business School, Ameranth's technology innovations effectively set the wireless ordering standard⁴ until the Petitioners' (all much larger companies) copying and willful infringements largely displaced them (adopting Ameranth's innovations as their own) and took the market that Ameranth created for themselves.

Ameranth was thus compelled by Petitioners' improper conduct to enforce its patents against infringers. This includes, *e.g.*, Petitioner Domino's, which claimed in 2007 that it had invented aspects of Ameranth's technology, and characterized it as its own "breakthrough technology."⁵ The importance of Ameranth's right to protect its inventions from copying and infringement was emphasized by Petitioner Apple's CEO, Tim Cook: "*The worst thing in the world that can happen to you if you are an engineer and you have given your life to something - is for someone to rip it off and put their name on it.*" (http://www.dailymotion.com/video/xr7y4b_tim-cook-calls-patent-wars-pain-in-the-ass_tech) (Exh. 2004)). Yet, Apple is trying to do **just that**, right now, to Ameranth, with its own copycat hospitality market patent application.

It is a daunting challenge for a very small company to defend its inventions and its rights against so many powerful corporations, but Ameranth is determined to do

⁴ Harvard Bus. Sch. Press (2005) ("Ameranth's main product, 21st Century Restaurant is ***poised to become the industry standard*** for mobile wireless ordering and payment processing in restaurants.") (emphasis added) (Exh. 2013, at Exh. A thereto, p. 11 (Nexus Charts)).

⁵ "With the addition of yet another order-taking channel, Domino's is thrilled to lead the market with this breakthrough technology." *See* Exh. 2003. Domino's made this claim despite now disparaging Ameranth's inventions as an unpatentable "abstract idea." Further contradicting its position, Domino's had sought two patents for itself (App. Serial Nos. 09/491,265 and 10/182,091) for technology similar to Ameranth's inventions. Yet only Ameranth obtained patents on this technology.

so. The current Petition is yet another in a long series of delay and harassment tactics employed by large company defendants against Ameranth, first in the district court lawsuits and now before the Board. Petitioners' objective is merely to allow them to continue to infringe Ameranth's patents without consequence and adversely affect Ameranth's licensing program.⁶ Moreover, Petitioners' contrived arguments have been rejected previously by three different district court judges. And it is clear that Petitioners are using the CBM process merely as a litigation delay tactic in view of the fact that not all defendants have joined the Petition or the Petitions against Ameranth's other three patents (in a thinly-disguised attempt to avoid estoppel in the district court after this effort fails). Petitioners' dubious tactics abuse the goals of the CBM program, which was designed to provide an alternative and expedited forum for adjudication of the validity of a particular narrow type of patents and not merely a second venue for **already failed** arguments that did not survive the litigation process and which are intended only to impose further delay and expense.

III. PETITIONERS LACK STANDING BECAUSE THE '077 PATENT IS NOT A COVERED BUSINESS METHOD PATENT UNDER THE AIA

In violation of 37 C.F.R. §42.304(a), Petitioners have failed to demonstrate that the '077 patent is a covered business method patent as defined by 37 C.F.R. §42.304 and, as such, lacks standing to petition for CBM patent review.

A. The '077 Patent Does Not Claim A Financial Product or Service

A "covered business method patent" is a patent that "claims a method or corresponding apparatus for performing data processing or other operations used in

⁶ The *Ameranth v. Pizza Hut et al.* case against Petitioners in the Southern District of California is currently stayed pending conclusion of this and the three other CBM proceedings.

the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions." AIA §18(d)(1); *see also* §18(a)(1)(B), 37 C.F.R. §§42.301(a), 42.302. For purposes of determining whether a patent is eligible for a covered business method patent review, the focus is on the claims. *See* CBM Final Rules, 77 Fed. Reg. 48734, 48736 (Aug. 14, 2012) ("CBM Rules") (Pet. Exh. 1026) (In accordance with 37 C.F.R. § 42.6(d), Patent Owner refers to Exhibits and documents already of record).

1. ***Legislative History Of AIA And Intent Of CBM Review***

Neither the AIA nor the CBM Rules provide an explicit definition for "practice, administration, or management of a financial product or service." However, the CBM Rules indicate that the legislative history and intent of the AIA definitions and the CBM review program would be instructive in determining the contours of the "financial product or services" language. *See* CBM Rules, 77 Fed. Reg. 48735 (Aug. 14, 2012) (Pet. Exh. 1026).

Petitioners have cited a statement from Senator Schumer (also quoted in the CBM Rules) to the effect that the CBM program was drafted to encompass patents "claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity." *Id.* at 48735, quoting 157 Cong. Rec. S5432 (Sept. 8, 2011) (Pet. Exh. 1026). Patent Owner notes that the quoted statement was in response to a statement by Congressman Shuster that incorrectly characterized the CBM program as limited only to companies in the financial services sector. As such, it must also be noted that Senator Schumer clarified that "[i]n response to concerns that earlier versions of the amendment were too broad," the CBM patent review would be "narrowly targeted." *See* 157

Cong. Rec. S1053 (Mar. 1, 2011) (Exh. 2005).

2. *The '077 Claims Are Not Directed To Financial Services*

In support of their erroneous assertion that the claimed subject matter of the '850 patent is directed to activities that are financial in nature, Petitioners cherry picked references from the specification dealing with particular applications of the invention for, *inter alia*, restaurant ordering (Am. Petition 29, 31-32). Apparently, Petitioners believe that any use of a technological invention in commerce compels the conclusion that the invention is directed to a financial product or service. However, that belief is not supported by the statute, legislative history, rules or the invention as claimed. The claimed inventions are not directed to “ordering,” “reservations,” “ticketing,” “customer frequency,” “payment processing” or “wait-list management” *per se*, they are directed to specialized computer software system functionality which may be used in those contexts as detailed below. But use of the inventions in a business to make money does not transform the claimed inventions into “financial services.” Petitioners self-servingly defined “financial product or service” to include the application environments in which the claimed inventions may be used, then tautologically declared that the '077 claims are therefore directed to a financial product or service (Am. Petition 27-30). Petitioners’ argument requires a leap which the AIA does not allow the Board to make.

Also, by claiming subject matter specifically directed to hospitality industries such as lodging, food service, reservations and ticketing, the '077 patent claims "technologies common in business environments across sectors" with "no particular relation to the financial services sector" and is thus squarely within the category of patent excluded from CBM review. *See* 157 Cong. Rec. S5441 (Sept. 8, 2011) (Exh.

2006). Notably, none of Ameranth's 26 licensees is a financial services company, and no defendant accused of infringing the '077 patent is a financial services company.

One possible end result of use of the claimed systems of the '077 patent may include the sale of, *e.g.*, a meal, hotel room or ticket (the realization of which is outside the scope of the claimed invention), but the claimed subject matter is not thereby automatically a "financial product or service." Such a strained construction is grossly over-inclusive and contrary to the plain meaning of the statute, and would also subsume every software/data processing patent under the purview of the CBM review program. But Congress has recently chosen not to extend CBM review beyond the financial realm to include, *e.g.*, all software patents. For example, H.R. 3309 originally included an expansion of the CBM program to cover all patents. That provision was removed to obtain passage. (*See* "Software Patent Reform Just Died in the House," Washington Post, Nov. 20, 2013 (Exh. 2007)). In fact, at least one of the Petitioners (Apple) lobbied vigorously (and successfully) to strike the CBM program expansion provision from H.R. 3309. (*See* Nov. 18, 2013 Letter from Victoria A. Espinel, President and CEO of the Business Software Alliance ("BSA"), in which Petitioner Apple is a controlling member) (General Counsel of Apple, Bruce Sewell, is also Vice Chairman of the BSA) (Exh. 2008)). Thus, in the Petition, Apple argues for an overreaching reading of the AIA as regards Ameranth's patents, but when it comes to Apple's own patents, Apple is fighting tooth and nail to prevent the AIA from being expanded to cover review of software/data processing patents. In fact, one of Apple-controlled BSA's stated reasons for even existing is to "[e]nsure that patents are available to inventions in the software field just as they are available to inventions in any other industry." (*See* <http://www.bsa.org/advocacy/intellectual-property-and->

innovation (Exh. 2009)).

Apple’s lobbying efforts against CBM expansion are diametrically opposed to what it told the Board in its Petition:

[W]e are writing to express our opposition to recent legislative proposals expanding the America Invents Act’s “covered business method patent” program. These proposals could harm U.S. innovators – a driving force of economic growth and job creation in this country – by unnecessarily undermining the rights of patent holders. . . data processing is integral to everything from cutting-edge cancer therapies to safety systems that allow cars to respond to road conditions in real time to prevent crashes. Subjecting data processing patents to the CBM program would thus create uncertainty and risk that discourage investment in any number of fields where we should be trying to spur continued innovation.

See <http://www.bsa.org/~media/Files/Policy/Patents/JointCBMLetter091913> (Exh. 2010). Apple has thus publicly admitted in its lobbying efforts, via its participation in and control over the BSA, that the CBM program does not encompass software/data processing patents. All the while, Apple has been pursuing CBM review of the ‘077 patent, a patent which is clearly not directed to the “very narrow class of financial-services-related patents” which Apple admitted defines the scope of CBM review applicability. Apple and its privies (the other co-Petitioners) should thus be estopped from making the diametrically opposite argument here.

B. The ‘077 Patent Is Directed To A Technological Invention Which Is Novel And Unobvious Over The Prior Art And Is Directed To A Technical Solution To A Technical Problem

1. The Technological Nature Of The ‘077 Patent

The ‘077 patent describes and claims various forms of an information management and synchronous communications system primarily contemplated for use in the hospitality industry. The inventions described in the patent are software

systems that have been licensed by 26 independent companies.⁷ These claimed inventions necessarily synchronize the operations of computers, databases, Web servers, and wireless handheld computing devices (such as “smartphones”), etc., to perform specific hospitality related functions. The decisions of these 26 different companies to license Ameranth's patents are compelling evidence that Ameranth's inventions are novel and non-obvious, and these licensees’ **independent** statements about Ameranth's patents are compelling as to the true novelty of the patents.⁸

The Petitioners, however, which include some of the world’s largest hospitality enterprises, have blatantly copied and practice the patented inventions across a wide range of, *inter alia*, online and mobile ordering, ticketing and reservation functions. Amazingly, while **now** asserting that Ameranth “invented nothing,” Petitioner Micros

⁷ Ameranth's 26 licensees include some of the largest hospitality companies in the world, the majority of which sought licenses entirely independently of litigation.

⁸ ““Reaching an agreement with Ameranth for the use of its **novel patents** was important to Par, since we provide many of the restaurant and hotel industry’s top brands and renowned properties with our industry leading hospitality products, solutions and services,” stated Paul Domorski, Chairman & CEO of Par Technology Corporation”; “Reaching an agreement with Ameranth for the use of its patents was very important to Snapfinger, as we provide most of the restaurant industry’s top brands with web, mobile, and call center remote ordering technology,” stated Jim Garrett, CEO of Snapfinger, Inc. “We wanted to ensure that our restaurant partners were in compliance with **Ameranth’s visionary patents** in order to avoid exposing them to potential uncapped liabilities.”

(Jan. 2013 and Jan. 2012 Press Releases approved by Par and Snapfinger (emphasis added) (Exhs. 2011, 2012); *see also In re Roufett*, 149 F.1350, 1355 (Fed. Cir. 1998) (“licenses show[] industry respect for the invention”).

(the world's largest hospitality technology company) tried to buy Ameranth in 1999-2000 to obtain exclusive rights to Ameranth's intellectual property⁹ and, as discussed below, Petitioner Marriott praised Ameranth's technology as innovative and Petitioner Agilysys licensed Ameranth's technology from 1999 until 2012. If the '077 patent inventions did not uniquely "solve a technical problem" essential to their mobile/web operations, Petitioners would not be using the inventions, or they would develop "work around" solutions. Yet, they all continue to infringe.

To further appreciate the novel technical aspects of the inventions of the '077 patent and the others in this Ameranth patent family, it is critical to understand the technical problems which the inventors first recognized in September 1998 and for which they uniquely invented the solution. While the invention applies to different hospitality applications, the patented inventions were originally conceived in the context of restaurant ordering using wireless handheld devices. A number of problems existed with the use of such technology. For example, because of the smaller screen sizes of wireless handheld devices, electronic menus formatted for standard personal computer screens would not fit well or display in readable fashion on such devices. Moreover, restaurant menu selections are really comprised of cascading tiers of options which must be correctly represented on whatever device or series of screens they are presented on. (*See, e.g.*, U.S. Pat. No. 6,384,850 (the "'850 patent") col. 1:41-2:5, 2:32-47, 3:45-57, 6:26-8:59 (the "'077 patent includes all of the disclosure of the first-to-issue '850 patent and additional material)).

Computerized electronic menus link these hierarchal tiers of options/modifiers in a manner that allows selection of a complete orderable item. Thus, if a

⁹ *See* Exh. 2013 at 4-5 & Exh. A thereto, pp.2-3.

customer wishes to order a Turkey Club sandwich with Swiss cheese and potato salad, the menu navigation process might progress, *e.g.*, from Screen 1¹⁰ (Breakfast, Lunch or Dinner) to Screen 16 (Sandwiches, Soups, or Salads) to Screen 58 (Ham and Cheese, Turkey Club, Hot Pastrami, *etc.*), to Screen 112 (Swiss, American, Cheddar, Havarti) to Screen 197 (coleslaw, potato salad, fries, fruit), and so on, until an order is completed. However, one of the problems which arises when a computerized menu created for use on a standard PC is to be used on a wireless handheld device with a smaller display screen on which less information can appear in a single view is that linkages and sequencing of the cascaded menu options, modifiers, sub-modifiers, *etc.*, must change. *See* '077 patent, col. 2:19-67, '850 col. 2:32-47 and Figures 1, 7, and accompanying text.

This re-sequencing challenge exists whenever an electronic menu is configured for use on a smaller wireless handheld device. When only a single type of handheld device is used (for instance, if all wait staff use the same type of device), the re-linking will be the same for all such devices. But the problem is more complex when the menu is not simply used by wait staff with uniform devices, but also is accessible by individual consumers who have many different kinds of computing devices and smartphones with different and non-standard display screen sizes and characteristics. In order to work in such a varied environment, the menu generation system must be

¹⁰ The numbers are merely illustrative. The salient point is that a large number of “screens” are required to make up an entire “menu,” which must be linked in a logical and functional manner to enable ordering of the desired menu courses, items, side dishes and/or condiments. And all of that information must be presented on display devices of different screen size and using multiple types of, *inter alia*, operating systems/platforms and communications protocols.

capable of adapting to the different screen sizes/display characteristics of the different devices and formatting, linking and sequencing the different cascading screens and menu tiers to work properly on all such devices, as shown throughout the '077 patent.

As also described throughout the '077 patent, other problems understood by the inventors included the challenges involved in getting the menus out to remote computing devices on which orders would be placed and maintaining system synchronization so that the same substantive hospitality information (*e.g.*, menu items) would appear on any of the connected devices regardless of whether screen size, formatting, or sequencing levels, etc., were different device to device. Further, the inventors knew that a viable system had to address the reality that menus change. The inventors did not believe that electronic menu systems which required manual programming or inputting of menu information into individual handheld devices were practical or commercially viable, and certainly not for consumer mobile devices. The inventors realized that the same substantive information had to be reflected on each of the computing devices displaying the menu, regardless of format, without an inordinate amount of data manipulation or programming with every change.

The patented invention uniquely solved these challenges with a technological software system solution in which a central/master database maintains “database equilibrium” and contains a “single truth” of hospitality data—for example, an up-to-date restaurant menu with current items and pricing—and through the software modules described in the patents (menu configuration software, a communication control module, communication protocols and application programming interfaces, etc.) causes that same *substantive* menu data to be correctly formatted, sequenced, displayed and updated across a variety of connected devices—including but not

limited to different types of wireless handheld computing devices, such as smart phones. See '077 patent, *passim*.

At the time of the inventions of the '077 patent, the above-described computer software functionality, and the specifically recited arrangement of computer and software components, were unknown to a person of skill in the art, and the claimed inventions were not achievable using existing components either with or without the knowledge of a person of skill in the art. As explained herein, because Ameranth's patents describe a "technological invention," they do not meet the definition of a covered business method patent and are thus not subject to CBM review.

2. *Many Others Have Found Ameranth's Claimed Inventions To Be Novel and Innovative*

Significant commercial success and industry recognition followed for the technology developed by Ameranth embodying the inventions described in the patents, testifying to the novel and innovative nature of Ameranth's patented technology. This is evidenced in the comprehensive Secondary Factors Declarations provided to the USPTO in the prosecution of the '077 patent, a follow-on patent in the '850 patent family, including detailed explanations of nexus to the claimed subject matter, as discussed below.

Ameranth invented and deployed five software products for the hospitality industry which practiced claims of the patents—21st Century Restaurant, Improv Comedy Club Ticketing, Hostalert, Magellan (with Zagat), and eHost. *See, e.g.*, Pet. Exh. 1048 at 5-6. Red Lobster, Seasons 52, and Medieval Times restaurants and Zagat adopted Ameranth's technology for its operations. Ameranth's patented technology was also deployed at numerous sports and entertainment venues, including, *e.g.*, American Airlines Center, Madison Square Garden, Staples Center,

Lambeau Field, and Improv and Funny Bones comedy clubs throughout the country.¹¹ Holiday Inn likewise deployed Ameranth's technology in thousands of hotels nationwide.¹²

Many others have acknowledged the unique inventive aspects of Ameranth's patents. For example, Judge Everingham of the Eastern District of Texas concluded that "The menus are interactive and serve two important functions: displaying an up-to-date menu and entering an order. *The invention solves a number of problems with the prior art.*" Exh. 2014, p. 2 (emphasis added). In the litigation involving the present Petitioners in the Southern District of California, Judge Sammartino provided the following synopsis: "The '850 Patent covers an information management and synchronous communications system and method for generating computerized menus

¹¹ Before deciding to stop paying its license fees in 2012, Petitioner Agilysys (which acquired Infogenesis in 2006) licensed Ameranth's patents for more than a decade, which covered their product deployments at, e.g., Madison Square Garden, Staples Center, Lambeau Field and American Airlines Center. See Exh. 2013 at Exh. A thereto, p. 11 (Nexus Charts) ("The solution was recently installed at American Airlines Center . . . to provide in-seat service to patrons." "We are also bringing wireless solutions to customers like Park City (Utah) and MGM/Mirage' added Scot Martiny, Vice President, Sales and Marketing for Infogenesis." "The level of interest is very high among the cruise, casino, resort, stadium and restaurant segments").

¹² Ameranth's technology and products have also won several major industry technology awards (one nominated personally by Bill Gates), and Ameranth has been recognized as a leader in wireless technology innovation in both national publications (including The Wall Street Journal, New York Times, USA Today, and Time Magazine) and in prominent hospitality industry publications.

for use on specialized displays. *The invention allows for the more efficient use of handheld wireless devices in the restaurant and hospitality fields by creating an integrated solution that formats data for smaller displays and allows for synchronization of data.*” *Ameranth v. Pizza Hut et al.*, Dkt. No. 27 at p. 3 (Exh. 2018) (emphasis added). Petitioners ignored the aspects of the ‘077 claims which distinguish over the prior art—they simply pointed to certain components of the claimed system in isolation (*e.g.*, “computer” and “internet”) and alleged that the entire claimed system is thus presumptively not patentable based on their superficial and incorrect characterization. That is most certainly not allowed by the AIA CBM provision, as stated repeatedly by the AIA’s sponsors during debate on the Bill:

[B]usiness methods do not include “technological inventions.” . . . the definition applies only to abstract business concepts and their implementation, whether in computers or otherwise, but does not apply to inventions relating to computer operations for other uses or the application of the natural sciences or engineering.

Statement of Senator Kyl, 157 Cong. Rec. S1379 (Mar. 8, 2011) (Exh. 2019).

[A]n actual software invention is a technological invention, and is not subject to review under section 18.

Statement of Senator Kyl, 157 Cong. Rec. S5431 (Sept. 8, 2011) (Exh. 2020);

see also Statement of Senator Schumer, 157 Cong. Rec. S1364 (Pet. Exh. 1043);

Matal at 633-35 (Pet. Exh. 1029).

Petitioners have not made *any* credible allegation of how the ‘077 claims are not directed to technological innovations over the prior art. Specifically, with respect to the claims which recite the synchronous generation and transmission of “menus” from a central server to a handheld computing device or Web page (claims 1-12), Petitioners cite no prior art references or combination of references which teach or

suggest this functionality in the context of the claimed subject matter as a whole. The Petition is equally deficient as regards the claims which recite a system for synchronizing applications and data between the various recited components/devices (claims 13-18). Moreover, Petitioners entirely ignored the vast amount of secondary evidence in the '077 patent file history that confirms the non-obviousness of the inventions, including even their own prior licensing of it.

The Board is required to examine the basis for institution of a CBM review put forth by a Petitioner and is not required, nor allowed, to make conclusions which are not supported by something in the record evidence and argument presented in the Petition, nor is the PTAB allowed to ignore evidence to the contrary which was withheld by Petitioners.

In contrast to the Petition's failure to point to anything credible indicating that the '077 claims are not technological inventions which are anticipated or obvious in view of the prior art, Patent Owner has detailed copious evidence of the technological, innovative, nature of Ameranth's claimed inventions.¹³ For example, Microsoft's founder Bill Gates, in personally nominating Ameranth for one of its many technology awards based on its patented technology, stated that: "Ameranth is one of the leading pioneers of the information technology age for the betterment of mankind." Exh. 2013 at Exh. A, p. 10; *see also* Exhs. 2021, 2022, 2025. A Business Week article about Ameranth's hospitality technology, and its co-founder and lead

¹³ While Ameranth's '850, '325 and '733 patents were issued prior to Ameranth's submission of its extensive secondary factors evidence (in support of the later-issued '077 patent), that evidence is equally supportive of the non-obviousness of the claims of the earlier-issued patents. *See* attached '077 Secondary Factors Declaration and Nexus Summary attached as Exh. A thereto (Exh. 2013).

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. 2023; Exh. 2013 at Exh. A, p. 11. Steve Glen, vice-president of Marriott (yet another petitioning defendant—at odds with its own later-contrived allegations), 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. 2024 (emphasis added)); Exh. 2013 at Exh. A, p. 10. Also, Computerworld notified Ameranth that:

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. 2022 (emphasis added); Exh. 2013 at Exh. A, p. 12; *see also* Exhs. 2021, 2025.

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. 2026 (emphasis added); Exh. 2013 Exh. A, p. 10.

Although Petitioners baselessly assert that Ameranth's innovations as embodied in the '077 patent do not describe a technological invention, the facts and these independent sources concluded otherwise. When these facts, the actual claim language, and the Markman rulings withheld by the Petitioners are considered in their entirety, a conclusion is compelled that the '077 patent claims technological inventions which are not taught or suggested by the prior art, are not directed to

“business methods,” and thus are excluded from CBM review.

3. *The Petition Grossly Misstates The Actual Claims*

Petitioners’ core thesis on “technological invention” is that the ‘077 patent invention was directed at solving “a business problem of how to become more user friendly through computerizing non-computerized processes.” (Am. Petition at 36). Petitioner’s characterization is clearly wrong in light of the actual claim language, which is directed, *inter alia*, to a system for transformation of a “master” **computerized** menu into a second, “programmed handheld” **computerized** menu (claims 1-12)¹⁴ or a system for synchronization of hospitality applications and data across different computerized elements of the system via, *inter alia*, specialized communications control software, master database, and file structure (claims 13-18). The misleadingly cropped passage from the ‘077 patent specification quoted by Petitioners (“solving the problem of converting paper-based menus or Windows PC-based menu screens to small PDA-sized displays and Web pages”) was merely a statement that restaurant menus had historically been paper based. Clearly, the claims are directed to computerizing **second** menus for non PC standard sized displays once menus were first computerized. This computerization of second menus presented

¹⁴ Clearly these claims are directed to converting the data representing the **master** menu (which represents real, physical objects) into a **second** and different form of that data (the epitome of a transformation), and this computerized task could not possibly be performed by a human, *i.e.*, synchronously linking with all of the parameters in the central database and calculating exactly how to make the resulting menu appear optimally on multiple handheld devices. *See* April 21, 2010 Markman Order at 8 (Exh. 2014) (holding that ‘850 claims 1-11 are directed to “a computerized system having multiple devices in which **a change to data** made on a central server is updated on client devices and vice versa.”) (emphasis added).

unique problems with regard to how such menus could be presented on various “non standard PC sized” screen types and sizes, as well as on Web pages. See ‘077 patent Abstract (“user-friendly and efficient generation of **computerized menus and reservations** . . . for restaurants and other applications that utilize equipment **with nonstandard** graphical formats, display sizes and/or applications”) (emphasis added); col. 1:18-24 (“This invention relates to an information management and synchronous communications system and method **for generation of computerized menus for restaurants** and other applications with specialized display and synchronous communications requirements related to, for example, the use of equipment or software **with non-PC-standard** graphical formats, display sizes and/or applications.”) (emphasis added). These unique problems were the primary technical problems the claimed invention was directed to, as discussed above. No claim of the ‘077 patent is directed to “scanning” a paper menu and converting it into a digital form as Petitioner’s proffered interpretation misleadingly implies. Thus Petitioner’s mischaracterization of the patent claims is overtly wrong as are its core claim constructions, as addressed below.

Further, the eligibility of a patent for CBM review is determined by what the patent actually claims. CBM Rules, 77 Fed. Reg. 157 at 48736 (Pet. Exh. 1026). The '077 independent claims recite two forms of information management and synchronous communications system as discussed above. Further, numerous dependent claims include additional and independently unique inventive elements all of which were entirely ignored by Petitioners. The claimed inventions are systems which operate pursuant to particular software-programmed functionality. The inventions include uniquely inventive software

elements and are not generic amalgams of “off the shelf” parts. As it has done in prior CBM cases, the Board should reject Petitioners’ mischaracterization of the claimed subject matter.¹⁵

4. *The Petition Fails To Provide Any Credible Basis For Its Contention That The Claims Do Not Define A Technological Feature That Is Novel And Unobvious Over The Prior Art*

Critically, Petitioner’s **only** argument that the ‘077 patent claims do not “as a whole recite[] a technological feature that is *novel and unobvious over the prior art*” (37 C.F.R. §42.301(b)) is the unsupported statement “[t]o the extent the claimed subject matter arguably includes technical features, the USPTO recognized that these were neither novel nor unobvious.” (Am. Petition at 36). The Petition makes no further statement whatsoever as to what the USPTO supposedly “recognized.” However, the record evidence shows that the inventions were recognized as novel and innovative at the time of filing of the parent application in 1999, a fact which is unrefuted by Petitioner’s vacuous attorney argument. For example, the **world leader in online ordering** for restaurants in 1999, Food.com (formerly Cybermeals), and owner of the Cupps patent (which Ameranth’s three earlier-issued patents were allowed over), independently partnered with Ameranth and sought exclusive rights to Ameranth's software tools/inventions. (*See* Exhs. 2027, 2028; *see also* Exh. 2013 at 2-4 and Exh. A thereto, pp. 2, 3, 16).

¹⁵ *See, e.g.*, CBM2013-00027, Inst. Dec. at 37 (“Petitioner contends that the invention [] centers on the abstract idea of “determining a price using external data sources.” We do not view [the] independent claims . . . as reciting merely determining a price using external data sources. The[] claims recite a specific combination of computer components that interact in such a way to match or compare buy and sell orders for a plurality of securities based upon conditions set forth within each order.”).

Thus, unlike the recent Institution ruling as to the technological invention aspect in CBM2013-00027 (at page 10), in which it was stated that “Patent Owner does not assert that, **at the time of the invention** in the ’419 patent, electronic trading platforms, nor computer networks, were unknown, unachievable, or incapable of being combined in the manner claimed” (emphasis added), Ameranth has provided indisputable evidence of the non-obviousness of its inventions at “**the time of the invention**” which was also explained contemporaneously in the patent itself:

[T]he unavailability of any simple technique for creating restaurant menus and the like for use in a limited display area wireless handheld device or that is compatible with ordering over the internet has prevented widespread adoption of computerization in the hospitality industry. Without a viable solution for this problem, organizations have not made the efforts or investments to establish automated interfaces to handheld and Web site menus and ordering options.

‘850 patent col. 2:39-47.¹⁶ And the only evidence cited by Petitioners as allegedly showing knowledge in the prior art shows no such thing as explained above.

¹⁶ *See also, e.g.*, Secondary Factors Evidence presented in Exh. 2013:

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.

Without this new solution, the “barriers to entry” would have remained enormous and prohibitive to allow wireless devices to move from the “niche area” of the market to the mainstream.

(March 2008 Memorandum of John Harker of Symbol Technology) (Exh. 2013 at Exh. A, p. 3).

Thus, Petitioners' argument regarding the purported absence of a technological feature is irreparably flawed. Petitioners therefore have put forth ***no*** credible reason whatsoever on which the PTAB could base a determination that the actual issued claims of the '077 patent are not novel and obvious over the prior art, and the record evidence compels the opposite conclusion. A CBM proceeding cannot be instituted where the alleged absence of a technological feature is actually **refuted** by the record evidence as it is here. Moreover, a party taking a position adverse to the patentability of a claim bears the burden of proving a factual underpinning for invalidity, and the Board may not remedy such party's deficiency by inserting new facts or rationales. *See Rambus Inc. v. Rea*, 731 F.3d 1248, 1255 (Fed Cir. 2013).

5. *The Petition Also Failed To Consider The Claims As A Whole As Required By The AIA And The PTAB Rules*

The Petition fails for yet another critical reason. 37 C.F.R. §42.301(b) states that the technological invention determination requires a case-by-case consideration of "whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution." However, Petitioners have mistakenly pointed to individual elements and features of the claims of the '077 patent, declaring them to be "conventional hardware" or "conventional software" components. *See* Am. Petition at p. 36-37. The correct analysis is whether the claimed subject matter ***as a whole*** recites a novel and non-obvious technical feature. *See* 37 C.F.R. § 42.301(b). Moreover, Petitioners conspicuously failed to mention the wireless handheld computing device limitation present in all of the claims of the '077 patent. They ignored this limitation because a principal technological feature of every claim of the '077 patent is the functionality of specialized software to synchronize handheld

computing device displays; for example synchronization of computerized menus (claimed in explicit detail) between a central/master menu/database and a wireless handheld computing device (claims 1-12). As the Board has held in other cases, an unsupported allegation of “conventional” components fails where the claims are “limited to machine operation” and the Petition fails to explain how the claim elements “represent routine, conventional, general-purpose computer activity.” *See* CBM2013-00017, Denial of Request for Rehearing, Paper No. 17 at p. 3-4.

A straightforward reading of the specification and prosecution history of the '077 patent clearly shows the presence of numerous technical features which were not known in the prior art, and thus the claims as a whole (all of which include one or more of these features) were clearly not known in the prior art. *See, e. g.*, Examiner’s Reasons for Allowance, Feb.2, 2012 (Exh. 2034). For example, as discussed above, core inventive concepts described in the ‘077 patent and reflected in the claims include software functionality for automatically transforming, reconfiguring, and correctly relinking the cascading tier structures of hospitality menu information for display and operation on different types and sizes of computerized devices (desktop PCs, laptops, smartphones, etc.), and synchronizing such hospitality data, and changes thereto, across the computerized system without the necessity of individualized updates/revisions to each device. Whether certain aspects of the entire claimed system might have been known in the prior art is irrelevant. The combination of all of the claimed features (including the novel features discussed above), considered as a whole, comprises a technological feature that was novel and unobvious over the prior art at the time of the invention.

Petitioners incorrectly allege that the inventions recited in the claims of the

'077 patent could be performed using only a pen and paper (*See* Am. Petition at 11, 66) and that the inventions are directed to the “business problem of how to become more user friendly through computerizing non-computerized processes.” Am. Petition at 36. Petitioners’ characterization is incorrect. As previously noted, practicing the synchronous invention with pen and paper is not even possible due to the very nature of the claimed invention, which is not the simple computerization of printed menus as Petitioners simplistically and incorrectly allege. As detailed above, the Petition fails to even minimally address *the actual claims* of the ‘077 patent.

As previously mentioned, in yet another example of the Petitioners’ two-faced approach to trying to tear down the patent rights of others while simultaneously trying to obtain the very same rights for themselves, Petitioner Apple argues that the ‘077 claims are directed to “conventional” subject matter while also filing its own patent application on the same subject matter covered by the ‘077 patent. In Pat. Pub. No. US 2013/0332208 (published Dec. 12, 2013), Apple seeks a patent on “*Systems and Methods for Processing Orders and Reservations Using an Electronic Device.*” This application includes subject matter which Apple seeks to claim for itself and which is encompassed by the ‘077 patent including, *e.g.*, transmitting a “menu” to, and receiving an “order” from, a “portable electronic device.” Apple’s ongoing attempt to patent this technology is an admission that the ‘077 claims, for which the priority application was filed thirteen years before Apple’s application, were **not** “conventional.” Apple did not disclose this patent application to Ameranth, the Board or to the District Court for the Southern District of California. The Board should appreciate Apple’s hypocritical conduct for what it is—a duplicitous attempt to game the patent system

to eliminate the legitimate rights of others and lay claim to those rights for itself. The Board should view all of Apple's and the other Petitioners arguments through that lens.

6. *The '077 Patent Claims Technological Inventions Directed To Technical Solutions To Technical Problems*

Petitioners argue that Ameranth's invention "simply computerizes the well-known concept of generating menus and facilitating orders from the menus, a concept that has been performed by humans 'verbally' or by 'pen and paper' for years before the patent application was filed." Am. Petition at 11. Based on that erroneous characterization of what the patent claims actually cover, Petitioners contend that the patents merely claim a non-patentable "abstract idea." *Id.* As discussed above, however, Ameranth's '077 patent is not directed to merely rendering electronic versions of traditional paper menus and permitting ordering from those menus.

Core inventive concepts described in the '077 patent and reflected in the claims include software functionality for automatically transforming, reconfiguring, and correctly relinking the cascading tier structures of hospitality menu information for display and operation on different types and sizes of computerized devices and software-enabled interfaces (desktop PCs, laptops, Web browsers, smartphones, etc.), and efficiently and quickly synchronizing such hospitality data, and changes thereto, across the computerized system without necessity of individualized updates/ revisions to each device. These functions not only are performed by software components operating and interacting with a computerized system (central/master database, computer operating system, Web server, Web pages, wireless handheld computing devices, etc.), but could not be performed without such technological components, and thus the claimed invention is not merely a computer replacement for functions

performed previously either verbally or using pen and paper. The invention was not simply creating computerized menus, it was solving the problem of how to display and synchronize computerized menus on non-standard devices/interfaces. *See e.g.*, ‘077 patent col. 3:39-41 (“[G]enerate and maintain computerized menus for, e.g., restaurants and other related applications that utilize non-PC-standard graphical formats, display sizes or applications.”). Thus, Ameranth’s patented invention “solves a technical problem using a technical solution,”¹⁷ which was not described or suggested by the prior art as was recognized by the Examiners during prosecution. Consequently, the patents in suit are exempt from CBM review.

IV. CLAIM CONSTRUCTION

During a review before the Board, the claims of an unexpired patent must be provided their broadest reasonable interpretation in light of the specification. 37 C.F.R. § 42.300(b); 77 Fed. Reg. 157 at 48697-48698 (Aug. 14, 2012) (Pet. Exh. 1027). The broadest reasonable construction means that "the words of the claim must be given their 'plain meaning' unless such meaning is inconsistent with the specification." MPEP § 2111.01(I); *see* 77 Fed. Reg. 157 at 48699 (Pet. Exh. 1027). In the absence of a specific definition in the specification, a claim term is presumed to take on its ordinary and customary meaning that the term would have to a person of ordinary skill in the art. *Id.* Significantly:

¹⁷ The legislative history makes clear that software systems may qualify as technological inventions: “[T]echnological inventions are excluded from the scope of the program . . . technological inventions include inventions in the natural sciences, engineering, and computer operations—and [] inventions in computer operations obviously include software inventions.” S. 5431 Leg. History, Statement of Sen. Kyl, Cong. Rec.-Senate, September 8, 2011 (Exh. 2020).

Though understanding the claim language may be aided by explanations contained in the written description, it is important not to import into a claim limitations that are not part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.

MPEP §2111.01(II) (*quoting Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004)).

In their Amended Petition, which Petitioners filed because their original Petition was deemed insufficient due to Petitioners' failure to provide **any** claim constructions whatsoever, Petitioners again failed to provide any meaningful claim constructions. Worse still, Petitioners provided no evidence whatsoever for any of their claim construction proposals and improperly referenced "Exhibit 1042,"¹⁸ which is not even part of their Petition. Petitioners expressly excluded Exhibit 1042 from the Petition by stating in their list of Exhibits "Denotes exhibits not cited in and not filed with this petition" as regards Exhibit 1042, and Petitioners did not file Exhibit 1042 with the Petition. Petitioners proposed constructions thus innately fail as to all invalidity theories depending from them. *See* 37 C.F.R. § 41.67(c)(1)(ix) ("Reference to unentered evidence is not permitted in the brief."). Further, the few constructions they have reluctantly provided are incorrect, and Petitioners withheld and ignored multiple prior district court constructions and holdings which directly refute what Petitioners now argue to the Board. This is particularly incredulous considering that

¹⁸ Exhibit 1042 was the Larson Declaration relied on in the three other Petitions, but was expressly not relied on in the present Petition, and which did not consider the '077 patent or prosecution history (because Petitioners shielded their "expert" from the "taint" of having knowledge of said materials as discussed herein). Petitioners attempt to backdoor the Larson Declaration in the present Petition should be rejected under the Rules. 37 CFR §42.304(b)(5).

four (4) separate claim construction orders have been issued in 2010 and 2012 by different courts construing claims of the parent ‘850 patent, and an additional court in 2013 has rejected Petitioners’ “mixed claim” arguments regarding certain claims. These courts specifically rejected the very constructions and arguments which Petitioners re-allege yet again. Yet Petitioners neither provided nor disclosed to the PTAB any of these highly relevant previous judicial constructions and interpretations of the relevant claim terms.¹⁹

In contrast, Patent Owner adopts and accepts all of the previous judicial constructions (Exhs. 2014-2017), and urges the Board to adopt them for this proceeding as well because they were thoughtfully considered based on the intrinsic evidence only²⁰ and are entirely consistent with the “broadest reasonable interpretation” standard applicable in this proceeding. Each of the prior district court constructions was determined by consideration of the claim language and the

¹⁹ The Federal Circuit has expressed disapproval for such “gamesmanship:”

Kilopass was making claim construction arguments to the United States Patent and Trademark Office Board of Patent Appeals and Interferences (the “Board”) that were directly contrary to those being made to the court in order to distinguish over a key piece of prior art during a concurrent inter partes reexamination. The district court admonished Kilopass for engaging in “gamesmanship.”

Kilopass v. Sidense Corp., No. 2013-1193 at 9 (Fed. Cir. Dec. 26, 2013) (Exh. 2033).

²⁰ The only exception was that the judges relied on the definition of “Web page” provided by the well-respected World Wide Web Consortium in 1999 to refute the Defendants’ attempts to mischaracterize the “Web page” definition based on the very same reference (Microsoft Computer Dictionary) which Petitioners cited to, but expressly disavowed reliance on and did not provide to the Board, rely on again in the instant Petition.

specification description where deemed necessary to understand the meaning of a term used in the claims, which Patent Owner submits is precisely the standard the Board must apply here.²¹ "The protocol of giving claims their broadest reasonable interpretation during examination does not include giving claims a legally incorrect interpretation. This protocol is solely an examination expedient not a rule of claim construction." *In re Skvorecz*, 580 F.3d 1262 (Fed. Cir. 2009). Moreover, USPTO personnel must first determine the scope of a claim by thoroughly analyzing the language of the claim before determining if the claim complies with each statutory requirement for patentability. MPEP 2106(II)(C).

As an initial matter, Patent Owner proposes the following definition of the level of skill of a person of ordinary skill in the art: "a person of ordinary skill in the art to which the patents pertain would have a Bachelor's degree in either electrical engineering or computer science and two years of experience developing software for wireless networks and devices and two years of experience in Web servers, Web pages and HTML/XML." Petitioners' proposed constructions do not rely on **any** defined level of skill in the art and are thus inherently flawed. The Board must construe the entirety of the challenged claims, including all dependent claims (which Petitioners fatally glossed over), before performing any analysis of validity.

²¹ Note that the PTAB adopts district court claim constructions where they "are consistent with the ordinary and customary meaning of the terms as understood by one of ordinary skill in the art." *Apple v. SightSound*, CBM2013-00019, Paper No. 17, Non-Institution Decision at 7. Notably, Petitioner Apple was also the Petitioner in the aforementioned CBM Petition, and in that proceeding Apple disclosed district court claim constructions. Thus, when favorable to it, Apple discloses district court claim constructions to the PTAB; when unfavorable, Apple pretends they don't exist.

Critically, Petitioners have failed to consider the claims as a whole and failed to provide proposed constructions for even a small fraction of the pertinent elements of any claim. Petitioners' conclusory arguments thus must be rejected. *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).

Petitioners' shockingly sparse claim construction proposals (supported by no POSA definition and nothing other than attorney argument) begin with “Web page,” which Petitioners assert means “a document on the World Wide Web.” Petitioners' proposal is astounding in view of the fact that Judge Everingham in the Eastern District of Texas construed “Web page” to mean “a document, with associated files for graphics, scripts, and other resources, accessible over the internet and viewable in a web browser” and Judge Payne in the Eastern District of Texas, in a separate case, construed “Web page” precisely the same way. (Exhs. 2014, 2017). Both Judges Everingham and Payne rejected the Petitioners' construction and relied on the definition of Web page provided by the World Wide Web Consortium in 1999, which is as authoritative on Web definitions as is possible. (Web Characterization Terminology & Definitions at §2.3, May 24, 1999, <http://www.w3.org/1999/05/WCA-terms> (Exh. 2030)).

Petitioners' “Web page” proposal is doubly vexing considering that Mr. Zembek, lead counsel for Petitioners, was the same attorney who lost the very same argument before Judge Everingham. Patent Owner does not assert that Mr. Zembek is estopped from now proposing a construction at odds with the prior judicial

constructions, but Patent Owner does submit that not providing the Board with the prior constructions is wrong and deceptive, to put it mildly. The prosecution history of the '077 patent (unmentioned by Petitioners) includes extensive references to the *Menusoft* case and to the prior Judge Everingham Markman rulings, which eviscerate Petitioners' presently-proposed constructions and invalidity/ineligibility arguments.

Likewise, Petitioners' proposal for "Web server" is a sterile and overly-simplistic definition divorced from the actual use of a Web server in the '077 patent description and claims. The intrinsic evidence clearly indicates that Petitioners' proposal for "Web server" is too narrowly focused on HTML and fails to consider the broad "Web resource" provision capability which a person of ordinary skill in the art would understand a Web server to provide. When considered in view of the specification and the World Wide Web Consortium definition of "Web server" in 1999, *i.e.*, "a server that provides access to Web resources and which supplies Web resource manifestations to the requestor" (Exh. 2030 (1999 W3C Web Terminology)), it is clear that "Web server" as used in the claims of the '077 patent should be construed to mean "a server that stores and serves at least one Web page or other Web resource or Web resource manifestation to a requestor."

After clearly having sought construction of the synchronization elements of the '850 claims for the **functional terms** that they truly are (in the *Menusoft* case) and which Judge Everingham confirmed them to be, Mr. Zembek, on behalf of Petitioners, now contradictorily asserts that the synchronization aspects of the '077 claims are actually "**method steps.**" This flip-flop is not an issue involving the "broadest reasonable construction" rubric but rather is an attempt to mislead and confuse the Board. Petitioners now assert that "the hospitality application information

is synchronized between any connected users” is a method step having a plain and ordinary meaning, yet Petitioners do not say **what** that meaning is to the minds of Petitioners or through the lens of a proper POSA. Petitioners really are not concerned with providing a construction for “synchronized,” of course, they are instead merely trying to argue that the use of “synchronized” makes the claim hybrid. This assertion is striking considering that Judge Payne had absolutely no difficulty in construing “synchronized” to simply mean “made to be the same” in 2012 and he further observed that “both the specification and the ordinary meaning [] suggest that the meaning of synchronization is to ensure that data on the devices is made to be the same.” (Exh. 2017). This is also entirely consistent with Judge Everingham's 2010 Markman constructions. Moreover in 2013, yet a **third** judge, Judge Sammartino in the Southern District of California, specifically rejected Petitioners’/Defendants’ “mixed claim” argument with respect to the “synchronized” element of ‘850 claims 12-16 (similar to ‘077 claims 13-18) by holding:

[T]he Court is unpersuaded that the term “synchronized” requires any user action, but merely describes the ability of the system to synchronize applications and data between the various devices. . . . Accordingly, because the claims do not impermissibly create hybrid method and apparatus claims, Defendants’ motion is DENIED on this basis.

(Exh. 2018). Thus all other adjudicative bodies have summarily rejected Petitioners’ “method step” constructions and/or “mixed” claims arguments. The fact that Petitioners would make the same argument before the Board and not tell the Board about the prior holdings is flabbergasting and disrespectful of the PTAB. The Board should closely examine this and every other argument in the Petition.

Likewise, the recitation of “menu categories, menu items, and modifiers

comprising the programmed handheld menu configuration are synchronized in real time with analogous information” is not a method step, it is merely a description of the ability of the system to perform said synchronization, just as “synchronized” was construed by Judge Sammartino to provide a functionality of the system, not a method step. Patent Owner does agree that this claim element should have its plain and ordinary meaning, which is the words of the claim itself. The claim element in which this terminology appears specifically recites “**menu configuration software**” for performing the recited functionality. “Menu configuration software” functionality is not a method step. Petitioners’ bare attorney argument is facially ridiculous and appears to assume the Board will not even read the claim language.

Petitioners’ proposed “central processing unit” construction fails to take account of the actual usage of this terminology in the specification. Specifically, Judge Everingham recognized in his claim construction of the parent '850 patent that claims 1-11 of the '850 patent are directed to a “a computerized system having multiple devices in which a change to data made *on a central server* is updated on client devices and vice versa.” (emphasis added) (Exh. 2014 at 8). This construction reflects the centralized nature of the control over the recited menu generation and transmission functionality via the central processing unit, as recited in claims 1-12 of the '077 patent, and also as regards other claims which include a recitation of “master database” ('077 patent claims 13-18). The recited central processing unit is not a generic CPU, it is a particular processing unit which, in combination with specialized application software and other components, provides synchronized menus across different devices in the system. This claim element thus cannot be construed as a broadly generic CPU; to do so would conflict with usage in the specification and the

structure of claim 1 as a whole, and would thus impermissibly deviate from the broadest *reasonable* interpretation standard which the Board must apply.

Petitioners' proposed "operating system" construction fails to comport with the specification usage of the terminology used in the claims. For example, the '077 specification describes and incorporates "GUI operating systems" which enable "a particular application program [to] present[] information to a user through a window of a GUI" ('077 patent, col. 6:30-31). The specification further states: "The window environment is generally part of the operating system software that includes a collection of utility programs for controlling the operation of the computer system. The computer system, in turn, interacts with application programs to provide higher level functionality, including a direct interface with the user." (*Id.* at col. 7:20-30). Patent Owner thus submits that the broadest reasonable interpretation supported by the specification is "software that controls the operation of a computer system including the system's interactions with application software programs, including the provision of a user interface."

Patent Owner agrees with Petitioners proposal for "POS" as "point of sale," as clearly shown throughout the specification, and as would be understood by a POSA.

Based on the foregoing, adopting Petitioner's proffered construction of the terms for which Petitioners actually proposed constructions would ignore the patent description in favor of generic constructions which do not address the specification and claim usage of the subject terminology. As regards the terms for which Petitioners provided no proposed constructions, as well as other terms of the claims which must be construed in order to make coherent determinations based on the claims as a whole (as the Board is required to do), Patent Owner urges the Board to

adopt the proposals provided by Patent Owner as they are consistent with the specification and plain meaning of the subject terminology and are consistent with the existing constructions from multiple, independent, federal judges. Specifically, Patent Owner urges the Board to adopt the constructions provided above, and to adopt the constructions given to other claim terms (which were the same as or similar to the ‘077 terms²²) ordered by the four prior judicial claim constructions (Exhs. 2014-2017) and Judge Sammartino’s rejection of Petitioners’ “mixed” claims argument (Exh. 2018) involving the same claim term (“synchronized”), and which Petitioners have not challenged.²³

V. THE PETITION DID NOT ESTABLISH THAT ANY CLAIM IS MORE LIKELY THAN NOT INVALID

A. Petitioners Have Not Established That The Claims Of The '077 Patent Are Invalid On The Asserted Ground Based on 35 U.S.C. §112

1. *The Claims Satisfy The Written Description Requirement*

As already noted, Petitioners failed to provide any expert testimony to support their attack on the '077 patent. The reason why Petitioners offer no expert testimony is surely because they wanted to shield from their expert the prosecution history of

²² ‘077 claims 1-12 are "menu generation/configuration claims", as are, *inter alia*, ‘850 claims 1-11. ‘077 claims 13-18 are "synchronization claims" as are, *inter alia*, ‘850 claims 12-16. The claim terms construed by Judges Everingham and Payne are the same as or similar to the relevant terms in the '077 claims, and Judge Sammartino interpreted terms of the ‘077 claims.

²³ Note that only claims reciting “menu” subject matter were asserted and construed in the *Menusoft* case (e.g., ‘850 claims 1-11), only claims involving cross-system synchronization of “hospitality applications” were involved in the *Par* case (e.g., ‘850 claims 12-16), whereas the *Pizza Hut* case deals with all types of claims in all of Ameranth’s asserted patents. Both *Menusoft* and *Par* are now licensees.

the '077 patent, including the fact that the patent was granted over more than 200 references. Nor do Petitioners offer any definition of a person skilled in the art on which to base their §112 allegations. That is a fatal blow to Petitioners' arguments, because the standard with respect to the written description requirement is “does the description clearly allow **persons of ordinary skill in the art** to recognize that he or she invented what is claimed.” *In re Gosteli*, 872 F.2d 1008, 1012 (Fed. Cir. 1989), quoted in MPEP 2163.02 (emphasis added). Section 112 itself states, “[t]he specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable **any person skilled in the art to which it pertains, or with which it is most nearly connected**, to make and use the same” (emphasis added).

The Petition's failure to provide any definition of a person skilled in the relevant art, and failure to support such a definition with expert testimony or other evidence, reduces Petitioners' Section 112 arguments to rubbish. Their petition offers nothing but bare attorney argument, which cannot take the place of the necessary objective evidence. *See, e.g., In re De Blauwe*, 736 F. 2d 699, 705 (Fed. Cir. 1984); *In re Walters*, 168 F.2d 79, 80 (CCPA 1948).

Furthermore, all of the '077 claim elements attacked by Petitioners were ones that were added by the USPTO examiners in an examiner's amendment concurrent with the Notice of Allowance. *See* Exh. 2034. Examiners Bullock and Brophy proposed these claim elements, having extensive familiarity with the patent specification (which was reviewed multiple times, over the course of several office actions and over many years), and the examiners even noted support for those elements in their own summary of an interview with the applicant's lead inventor, Mr.

McNally, and counsel, that took place a few months prior to the examiner's amendment and Notice of Allowance. This interview report clearly confirmed that the examiners and the Patent Owner clearly understood the claims, the specification and the written description backing those claims up:

In the interview the applicant described the **function** of the **menu generation system** creating **cascaded** graphical user interface **screens** which are **adaptable to different sized** handheld devices

Exh. 2029 (emphasis added). As the Federal Circuit has held, "[A]n invention is construed not only in the light of the claims, but also with reference to the file wrapper or prosecution history in the Patent Office ... Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent." *Philips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed.Cir. 2005) (internal quotations and citations omitted).

The examiners' conclusion that these elements are supported in the specification was, obviously, a prerequisite to the examiners' proposing their amendment in the first place. As explained in MPEP 2163(II)A)(2) (emphasis added):

[Whether the specification complies with the written description requirement calls for the examiner to compare the scope of the claim with the scope of the description to determine whether applicant has demonstrated possession of the claimed invention. . . conducted from the standpoint of one of skill in the art at the time the application was filed (see, e.g., *Wang Labs. v. Toshiba Corp.*, 993 F.2d 858, 865, 26 USPQ2d 1767, 1774 (Fed. Cir. 1993)) and should **include a determination of the field of the invention and the level of skill and knowledge in the art**. Generally, there is an inverse correlation between the level of skill and knowledge in the art and the specificity of disclosure necessary to satisfy the written description requirement. **Information which is well known in the art need not be described in detail in the specification.** See,

e.g., *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1379-80, 231 USPQ 81, 90 (Fed. Cir. 1986).

This analysis (which, again, was a prerequisite to the examiners proposing the examiners' amendment) further shows a fatal and irreparable flaw in the Petition: A determination of "the level of skill and knowledge in the art" is required, and Petitioners offer none in their Petition; Petitioners also offer no expert testimony or declaration as to the level of skill and knowledge in the art, no evidence in support of their claim constructions and, in fact, no objective evidence of any kind. Without such a determination, Petitioners have provided no basis on which to find a failure to comply with the written description requirement.

Additionally, the PTAB has already rejected a CBM Petition on the ground that it is "merely attorney argument that is based primarily on the misguided premise that the terms in the claims must be found in the specification verbatim." See *CRS Advanced Techs, Inc. v. Frontline Techs, Inc.*, CBM 2012-00005 at Paper 17 (PTAB Jan. 23, 2013), pp. 14-15. That is exactly the same flaw found here in Petitioners' erroneous Section 112 attack on the '077 patent claims—it is mere attorney argument, based on the incorrect premise that the terms in the claims must be found word-for-word, verbatim, in the specification. Petitioners' "verbatim" theory is erroneous because it is contrary to the law on Section 112, including extensive Federal Circuit precedent. As explained in MPEP 2163.02, the first paragraph of Section 112 does not require that an applicant describe claim limitations exactly: "The subject matter of the claim need not be described literally (*i.e.*, using the same terms or *in haec verba*) in order for the disclosure to satisfy the written description requirement." MPEP 2163.02.

Petitioners' assertion that the '077 patent does not satisfy the written description requirement is particularly troubling in view of Petitioners' failure to disclose prior judicial rulings directly contradicting their arguments. This omission is not a result of differing claim construction standards between the USPTO and the district courts. Rather, while purporting to adopt the "broadest reasonable interpretation," in fact, Petitioners implicitly insert their own previously rejected claim judicial constructions (in the *Menusoft*, *Par* and *Pizza Hut* lawsuits). For example, Petitioners' indefiniteness/written description argument is based on their proposed constructions which, as discussed above, have no support other than raw attorney argument. Petitioners withheld the fact that Judges Everingham and Payne of the Eastern District of Texas *rejected* their proposed constructions, found the claims sufficiently understandable, and adopted a construction of "synchronized" that, as discussed above, wholly undermines Petitioners' proposed construction. These withheld judicial claim constructions completely undermine the core invalidity arguments made in the Petition. The withholdings were not due to a lack of awareness; lead counsel for defendants in the *Menusoft* case in which Petitioners' constructions were previously rejected are the same Fulbright & Jaworski attorneys serving as lead counsel for Petitioners in this matter. Petitioners are thus well aware of the courts' constructions of terms relevant to the claims of this patent, but Petitioners intentionally chose to not disclose same to the PTAB.²⁴

²⁴ "A claim is indefinite only when it is not amenable to construction or insolubly ambiguous." *Teva Pharms USA, Inc. v. Sandoz, Inc.*, 723 F.3d 1363, 1368 (Fed. Cir. 2013). "If the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which **reasonable persons will disagree**, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds." *Exxon Research & Eng'g Co. v. United States*, 265 F.3d

a) **"Cascaded Sets Of Linked Graphical User Interface Screens" Is Fully Supported By The Specification**

Right from the start, Petitioners seek to mislead the Board as to the §112 allegations regarding this limitation. They allege on page 43 of the Petition that “Each Challenged Claim of the ‘077 Patent recites “wherein . . . 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 graphical user interface screens.” However, claims 13-18 do not contain this limitation, so this ground of rejection cannot possibly apply to those claims.

As regards the actual claims in which the limitation appears, Petitioners wrongly argue that there is no support in the specification,²⁵ but they are entirely mistaken. The specification discloses and discusses, in part, at col. 6:43-53:

File options can have additional subordinate or child options associated

1371, 1375 (Fed. Cir. 2001) (emphasis added). It cannot be argued that Judges Everingham and Payne would not be “reasonable persons who disagree,” even if the Board were to construe the claims differently. Thus, on the record evidence, withheld by Petitioners, there can be no indefiniteness of claims which have been judicially construed (multiple times).

²⁵ Petitioners misstate the relevant language in the claims. The correct relevant language is as follows: Element d of independent claim 1 includes the language, "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 graphical user interface screens". Element d of independent claim 9 includes, "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 graphical user interface screens", and independent claim 13 contains the element, "wherein the communications control software is further enabled to automatically format a programmed handheld configuration for display as cascaded sets of linked graphical user interface screens appropriate for a customized display layout of at least two different wireless handheld computing device display sizes in the same connected system".

with them. If a file option having subordinate options is selected, the child options are displayed in context in a child menu or submenu proximate to the selected parent option. One or more of the child options provided in the child menu may have further subordinate options. Thus, such a menu system comprises **cascading sets of menus** which are displayable in context to show the **parent/child relationships** between options of the context menu. A menu system of this type is incorporated into the preferred embodiment of the invention.

Petitioners mistakenly argue that the entire menu system, in the preferred embodiment, is displayed on a single graphical user interface screen. Again, they are wrong. Each menu of the system, as disclosed in the specification, may be displayed and navigation between a master menu and submenus is accomplished through linked GUI screens, for example in different Web pages, as would be easily understood by persons of skill in the art. (*See, e.g.*, '077 col. 13:13-15:46 (discussion of master menus, modified menus, and menus generated to comply with particular criteria)).

Additionally, the construction of the term "menus" by Judge Everingham in the Eastern District of Texas, in the parent '850 patent, is acknowledgement of the correct nature of menus displayed via linked screens: "The court construes the term 'menus' as 'computer data representing collections of **linked levels of choices or options** intended for display in a graphical user interface.'" (Exh. 2014) (emphasis added). This is fully consistent with the '077 patent's disclosure of the preferred embodiment of a "menu system" including multiple linked levels displayed via linked cascading screens. Additionally, Figures 6-8 show display screens and Figure 7 shows menus displayed in a "PDA or Web page format," or otherwise described as "page type" format ('077 col. 11:34-41) which any true POSA would know are also, *e.g.*, different linked screens (in one particular embodiment of the invention).

Further, the '077 patent describes that a handheld device may "instantly download the menu configuration" ('077 col. 3:30-31 and 9:66-10:13) which, as a person of skill in the art would understand, requires that the menu configuration be configured for the handheld device that is receiving the "download."

Also, the "tree structure" of the displayed menus described in the specification (col. 10:61-64) is an alternate way of explaining "linked cascading screens," providing further written description support for these terms and the claims containing these terms. Still further, automatically creating the display/screen linkages and the cascading aspect of the invention is clearly described. Col. 9:54-56 ("If any **changes** are made to the modifiers, those **changes** will be **automatically reflected** throughout **the menu tree**") (emphasis added).

Still further, the specification clearly uses "**screen**" terminology as another exemplary term for the graphical user interface displays/menus (that a POSA would understand). *See, e.g.*, Figure 8 (an example of an ordering "literal **screen**" (emphasis added) and the menu/screen in Figure 6 is referred to as a "screen." "When the program loads, the **screen** shown in FIG. 6 appears." '077 col. 10:51-52 (emphasis added).

Further demonstrating that a POSA at the time of the invention would understand the teachings of the '077 patent, including functionality for creating "operator screens," is a contemporaneous August 1999 email exchange between Ameranth's lead inventor, Mr. McNally, and Ed Rothenberg (then Director of IT for Petitioner Micros). This email exchange, which occurred just one month before the filing of the original parent application which issued as the '850 patent, confirms how two persons of skill in the art at the time understood the claimed technology:

Attached is an example of the developer GUI for our "Menu Wizard" [reflected as "menu configuration software" in the claims/specification] (an easy to use explorer type interface) which enables the rapid creation of *operator screens* for the Windows CE Ultrapad

See Exh. 2013 at Exh. A, p. 3 (Nexus Overview) (emphasis added). Clearly, Examiners Bullock and Brophy understood this, just as any true POSA would, and actually did, as shown.

b) The "Customized Display Layout" Elements Are Fully Supported By The Specification

Petitioners again distort portions of the specification and ignore other important material in the specification. The specification expansively describes the use of "customized layout, views, and fonts" (col. 10:20-11:14) and the display of menus on a variety of devices, including PDAs (*i.e.*, wireless handheld "personal digital assistants") and Web pages, and discusses conforming the display to each of a wide variety of screen sizes (*see, e.g.*, col. 15:26-37, 2:61-67, 11:33-44). The specification notes that, in a preferred embodiment, "[t]he POS device also can be customized with respect to 'look and feel' for the particular version." (col. 11:46-47). Designing for the "look and feel" is designing for the "display layout" and the "particular version" is that version unique to the target device. The specification further describes, at col. 9:66-10:13, previewing menu screen displays for handheld devices on the desktop computer, in a preferred embodiment, to verify that the menu configuration is customized for the particular handheld device before downloading. *See also* col. 11:20-25 and Figure 5 (screen display showing an example of this customization). In fact, Figure 5 is the exemplary figure reflecting the customization for the particular display sizes and any POSA would realize this from its title, "**Customize,**" and which

is described in detail by the specification text. *E.g.* col. 10:20-41.

Additionally, it would be well-known to one of ordinary skill in the art that Figure 5, combined with the disclosed inventive simulator/preview functionality and other inventive features, teach programming to conform a screen display to the screen size unique to a particular device or Web page. Petitioners ignored these extensive disclosures and teachings, did not consider the entire specification, did not consider the level of skill in the art, and thus failed as to all of their §112 allegations under Federal Circuit precedent:

When determining whether a specification contains adequate written description, one must make an “objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art.” Because the specification is viewed from the perspective of one of skill, in some circumstances, a patentee may rely on information that is “well-known in the art” for purposes of meeting the written description requirement.

Boston Scientific Corp. v. Johnson & Johnson, 647 F.3d 1353, 1366 (Fed. Cir. 2011) (citations omitted). If a skilled artisan would have understood the inventor to be in possession of the claimed invention at the time of filing, even if every nuance of the claims is not explicitly described in the specification, the written description requirement is satisfied. *See, e.g., Vas-Cath v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991); *Martin v. Johnson*, 454 F.2d 746, 751 (CCPA 1972) (stating “the description need not be in *ipsis verbis* [*i.e.*, “in the same words”] to be sufficient”).

Further, Petitioners themselves made an admission which eviscerates their argument on “customized display layout.” At page 47 of the Petition, they stated:

Indeed, the **patent’s description of converting a menu** to a “**small PDA-sized display**” suggests **creating a display layout for a single wireless handheld computing device display size** (*i.e.*, a “**small PDA-**

sized display”) (emphasis added)

Clearly, Examiners Bullock and Brophy understood this claim term/element, just as any true POSA would, and which in fact Petitioners did as well.

c) The "At Least Two Different Wireless Handheld Computing Device Display Sizes" And "Different Number Of User Interface Screens" Limitations Are Supported By The Specification

As highlighted immediately above in the preceding section, within their own argument, Petitioners **admit** that the specification teaches handheld display customization for at least a single handheld. Thus, admittedly by Petitioners, the “customization” is described. Moreover, considering the claims as a whole and reviewing the four corners of the specification and drawings, including the preview function, shows that the customize function and the other extensive explanations within the ‘077 disclosure clearly compel the conclusion that the uniquely inventive “two or more” limitations are described within the ‘077 disclosure and would be understood as such by a true POSA.

Petitioners are further wrong because the specification discloses configuration for "**multiple** handheld devices." *E.g.*, col. 12:28-31 ("fast synchronization between a central database and **multiple** handheld devices, synchronization and communication between a Web server and **multiple** handheld devices") (emphasis added). Also, as noted above, the specification discloses and describes the use of "customized layout, views, and fonts" (col. 10:20-11:14) and the display of menus on a variety of devices, including PDAs (*i.e.*, wireless handheld "personal desk assistants") and Web pages, and discusses conforming the display to each of a wide variety of screen sizes (*see, e.g.*, col. 15:26-37, 2:61-67 , 11:33-44). The specification notes that, in a preferred

embodiment, "[t]he POS device also can be customized with respect to 'look and feel' for the particular version" (col. 11:46-47). The specification further describes, at col. 9:66-10:13, previewing menu screen displays for handheld devices on the desktop customized for the particular handheld device before downloading. *See also* col. 11:20-25 and Figure 5 (screen display showing an example of this customization). Once again, Petitioners entirely ignored the inventive preview function as to any consideration of the written description. The entire purpose of the "preview" function was to enable the various sized displays to be previewed on a larger desktop display to verify their "look and feel." That the invention was intended for and teaches multiple device sizes/types is clearly confirmed by its reference to "**splitter view**," which enables multiple "views," *i.e.*, sizes, to be shown on a larger desktop display, at the same time: "Splitter views allow the user to see **different** views at the same time. **Each** view is displayed on **its own section** of the screen" (col. 11:10-13) (emphasis added). Any POSA would understand that "different" views, means "more than one" and the reference to "each" view on "its own section" also confirms that the invention teaches two or more views/sizes. Petitioners' baseless argument to the contrary is wrong and frivolous in light of their own admission.

Of course, the inventive preview function is specifically claimed in the '077 patent (claim 8), which is itself innately inventive, and which Apple copied almost a decade later into its IOS simulator (Exh. 2032). Petitioners ignored dependent claim 8 the same as they ignored the other dependent claims as to their patentable distinctiveness, yet they relied on the subject matter of those dependent claims, in their introductory section, when they felt that particular claim limitations helped their goals of alleging that the '077 patent is directed to a financial product or service. This

is yet another example of Petitioners' duplicitous behavior.

Further, it is well established that difference in scope vis-à-vis a preferred embodiment is not enough to show lack of written description. "That a claim may be broader than the specific embodiment disclosed in a specification is in itself of no moment." *In re Rasmussen*, 650 F.2d 1212, 1215 (CCPA 1981), citing *In re Smythe*, 480 F.2d 1376, 1384 (CCPA 1973). The extensive discussion of preferred embodiments set forth in the '077 specification, accordingly, fully satisfies the written description requirement as to these challenged terms.

Clearly, Examiners Bullock and Brophy understood this claim term/element, just as any true POSA would, as evidenced by the discussion of the prosecution history above.

2. The Claims Do Not Mix Apparatus And Method Elements

Petitioners have made this "hybrid claim" argument before, in the District Court (Southern District of California), and it has been summarily rejected by that Court. None of the asserted claims of the '077 patent recite both a system and a method step. The claim elements which Petitioners challenge clearly are proper functional limitations.

Proof of indefiniteness requires demonstrating that the claim "is insolubly ambiguous, and no narrowing construction can properly be adopted." *Microprocessor Enhancement Corp. v. Texas Instruments Inc.*, 520 F.3d 1367, 1374 (Fed. Cir. 2008) (district court erred in finding indefiniteness). Petitioners cannot meet this burden, or even a lessened burden, because the '077 claims do not require any user actions as was the situation in all of Petitioners' cited cases.

Petitioners allege that the recitation of "synchronized in real time with

analogous information” in claims 1 and 9 and “synchronized between any connected users” in claim 13 are method steps (Am. Petition at 57). Petitioners are mistaken. What is recited in the asserted claims is the function or capability of the software-enabled system, it is not a step and it is not a user’s input. Petitioners’ deletion of “menu configuration software” from the limitation of claims 1 and 9 and deletion of “communications control software” from the limitation of claim 13 are sad attempts by Petitioners to mislead the PTAB. The actual claim language reads:

wherein the menu configuration software is enabled to generate said programmed handheld menu configuration by utilizing parameters from the master menu file structure defining at least the menu categories, menu items and modifiers of the master menu such that 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

‘077 claim 1 (emphasis added).

wherein the communications control software is enabled to utilize parameters from the master database file structure to synchronize the hospitality application information in real time between the master database, at least one wireless handheld computing device, at least one web server and at least one web page such that substantially the same information comprising the hospitality application information is capable of being displayed on the wireless handheld computing device, at least one web page and other display screens of the synchronized system, such that the hospitality application information is synchronized between any connected users

‘077 claim 13 (emphasis added). There is no recitation of a user’s action—as was the case in *IPXL* and *In re Katz* on which Petitioners rely. Moreover, the claimed functionality is explicitly provided by the menu configuration or communications control software. The examiners certainly understood that these are functional

limitations. *See* Exh. 2029 (“In the interview the applicant described the **function** of the **menu generation system** creating cascaded graphical user interface screens which are adaptable to different sized handheld devices.”) (emphasis added).

Further, similar language in claim 1 of the ‘850 patent was construed by Judge Everingham in the Eastern District of Texas as requiring only the “capability” of performing the recited function. *See* Exh. 2015 at 2 (“Limitation g of the asserted independent claims requires ‘software for generating ... and transmitting,’ not actual transmission.”). What is recited in the claims, accordingly, is the function or capability of the system; again, it is not a step and it is not a user’s input. The public (*e.g.*, Ameranth’s 26 licensees) clearly understands that infringement occurs when a system including the recited functionality/capability is made, used, sold or offered for sale. Such claim language is clearly not indefinite under *IPXL*, as discussed below.

Curiously, Petitioners have chosen to waste the Board’s time in forcing it to consider their concocted “hybrid claim” allegations even though two different district courts have rejected those arguments. Judge Payne in the Eastern District of Texas had absolutely no difficulty in construing “synchronized” as a function of the claimed system meaning “made to be the same” and Judge Payne further observed that “both the specification and the ordinary meaning [] suggest that the meaning of synchronization is to ensure that data on the devices is made to be the same.” Exh. 2017 at 17. Judge Payne did not read the claims as requiring any “act” of synchronizing.²⁶ Moreover, as detailed above, Judge Sammartino in the Southern

²⁶ Still further, Judge Payne concluded that the “single point of entry” in ‘850 dependent claim 13 “describes functionality of the communications control module.” (Exh. 2017 at 18). The communications control module recited in independent claim 12 is part of the system structure which provides the recited synchronization

District of California specifically rejected Petitioners’/Defendants’ “mixed claim” argument with respect to the “synchronized” element of the ‘077 claims. (Exh. 2018 at 17) (“[T]he Court is unpersuaded that the term ‘synchronized’ requires any user action, but merely describes the ability of the system to synchronize applications and data between the various devices”).

Petitioners’ citations to the *Katz* and *IPXL* cases are mischaracterizations of those cases. *IPXL* dealt with a claim which recited “the **user uses**” and *Katz* dealt with a claim which recited “said individual **callers** digitally **enter** data.” In both, a user’s action was recited, which is clearly not the case here. *Rembrandt Data Techs., LP v. AOL, LLC*, 641 F.3d 1331 (Fed. Cir. 2011), is similarly inapposite. *Rembrandt* involved a claim which recited a “step of transmitting” as stated by Petitioners. However, “synchronized” as recited in the asserted claims is not “transmitting.” It is a recitation of functional capability of the application software, whereas “transmitting” as used in the *Rembrandt* claims is not a statement of capability, it is the recitation of an action.²⁷ Clearly, “synchronized” is a recitation of a capability of the system, not a user action, as was abundantly clear to Judge Sammartino.

IPXL and *Katz* did not hold that claims are indefinite as “hybrid” where the pertinent claim language involves recitation of capabilities of the system via functional language, as has been pointed out by numerous district courts:

[T]he claims in [*IPXL* and *Katz*] suffered from a true ambiguity as to whether the claims require a product or performing a method. In particular,

functionality. This is one example of why claims must be construed as a whole and why dependent claims cannot be swept under the rug as Petitioners attempted.

²⁷ When recited as a step as in *Rembrandt*, “transmitting” violates *IPXL*. However, “transmitting” when recited as functionality of software is not violative of *IPXL*.

those cases involved apparatus claims incorporating steps where a user acts *upon the system*. Here, the claims involve capabilities *of the system*, as limitations on the "event manager" and "subsystem" structural elements. The functional language merely describes the functional capability of the claimed structures. . . . [T]he language present in the claims is functional despite the lack of "configured to" or similar wording . . . "detect[ing]," "infer[ring]," and "initiat[ing]" serve to recite the system's capabilities.

SFA v. 1-800-Flowers.com, Case No. 6:09-cv-340-LED (E.D. Tex. April 11, 2013) (Exh. 2031 at page 32-33) (emphasis in original).

[T]he Federal Circuit . . . concluded that . . . **where the claims require capability, not actual use, or describe functional limitations, such claims are not invalid based on the IPXL rule**. Claim 18 claims an apparatus that has the capability **of** performing certain steps if activated by the user. Whether the user actually performs the functions is "of no import" . . . the *IPXL* rule does not apply. Similarly, claim 27 describes: "A portable electronic device, comprising ... computer readable memory comprising instructions that, when executed by the one or more processors, perform operations comprising: receiving a plurality of user inputs ... and displaying a current character string as input by the user, ... [and] in response to the further user input, replacing the current character string...." [T]he patentable subject matter is the apparatus, which has the *capability* of performing certain steps when certain user inputs are received.

Apple, Inc. v. Samsung Elec. Co., 877 F.Supp.2d 838, 895-96 (N.D. Cal. 2012) (emphasis added, citations omitted).

[C]laims containing both a physical description of an apparatus and a description of the apparatus' function, e.g., "communicates," "populates," "configured to," and "upon activation," were not impermissible apparatus-method claims. . . these "claims simply use active language to describe the capability of the apparatuses; they do not claim the activity itself."²⁸

²⁸ *Ricoh Co., Ltd. v. Katun Corp.*, 486 F. Supp. 2d 395, 402-03 (D.N.J. 2007) (citations omitted); *accord WesternGeco L.L.C. v. ION Corp.*, 876 F.Supp. 2d 857, 874 (S.D. Tex. 2012) ("a functional limitation [is] an attempt to define something by

In *Biosig Inst. v. Nautilus, Inc.*, 715 F.3d 891, 904 (Fed. Cir. 2013), the Federal Circuit rejected a mixed claims argument, holding that *IPXL* was inapplicable, because the challenged claims were apparatus claims with functional limitations. *Id.* Likewise, the ‘077 claims are clearly system claims with functional limitations. As was also the situation in *Apple* and *Ricoh*, and numerous other cases cited therein and in the footnote below, the subject claims in the present case clearly contain a physical description of the claimed system as well as a description of the functionality of the system. For example, claim 13 of the ‘077 patent recites a master database, Web server, Web page, wireless handheld computing device, application program interface and communications control software. Claim 13 also recites functionality of the system incorporating these components via the “synchronized” limitation as well as the “wherein” recitations. The ‘077 patent specification clearly states that the communications control software does not require any user action:

A communications control program . . . continuously monitors the wireless network access point and all other devices connected to the network such as pagers, remote devices, internet Web links and POS software. Any message received is decoded by the software, and then routed to the appropriate device. **No user action** is needed during operation of the software . . .

‘077 patent col. 10:42-49 (emphasis added).

Petitioners fail to acknowledge the readily obvious software functionality/capability of the explicitly-recited system components, including the communications

what it does rather than by what it is”); *Kara Tech. Inc. v. Stamps.com Inc.*, 2008 WL 8089236 * 21 (C.D. Cal. April 3, 2008) (“[T]he claim includes a limit to the function of the invention . . . active language to describe the capability of the apparatus.”).

control module/software and menu configuration software, and thus fail to make out any credible argument under *IPXL*. The shallowness of Petitioners' argument is exemplified by their assertion that the Federal Circuit in the *Katz* case "summarily rejected a 'functional limitation' argument." (Am. Petition at 58). This argument is nothing less than another blatant attempt to mislead the Board. In *Katz*, the Federal Circuit indeed rejected the patentee's argument that the faulty claim language was a functional limitation—but that was only because the language in *Katz* was not a functional limitation, unlike the language of the '077 claims. The *Katz* decision did not hold that functional limitations are method steps as Petitioners assert they are. In fact, Petitioners quoted the salient language from *IPXL* and *Katz* which shows that the challenged language in those cases was indeed directed to user actions, not functional limitations. Am. Petition at 58-59.

It is also noteworthy that all four of Ameranth's patents in the '850/'077 patent family have been exhaustively reviewed over more than a decade by a cadre of different and varied USPTO patent examiners, including numerous supervisory patent examiners, resulting in 4 separately issued patents containing a total of 65 claims. Three of these patents have also been reviewed by two different courts in the Eastern District of Texas in the context of claim construction, and never has any issued claim been found to be indefinite in any way, including any alleged "hybrid claim" basis for indefiniteness. Further, Judge Sammartino in the Southern District of California has considered and rejected the "hybrid claim" arguments as regards the four patents in the '850 patent family. Petitioners' "hybrid" arguments are frivolous.

3. Petitioners' "Single Species" Argument Falls Flat

Petitioners' newly contrived "single species" argument is actually a deceptive

repackaging of a claim construction position previously *rejected* in the Eastern District of Texas. In the *Ameranth v. Menusoft* case, Menusoft’s counsel (lead counsel for Petitioners here), argued for a construction that would have limited “synchronization” to a single embodiment, namely, when an entire database is stored locally on a wireless handheld device with exchanges between that database and a central database. The Eastern District of Texas *rejected* that position in the *Menusoft* case, finding “it is not necessary that the clients have local databases.” Exh. 2014 at 7-8. In the *Ameranth v. Par* case, a second Eastern District of Texas judge *rejected* a similar argument, construing synchronization to straightforwardly mean “made to be the same” as disclosed in the specification. Exh. 2017 at 17.

In their Petition, however, Petitioners present **the same twice-rejected** claim construction, now deceptively repackaged in the guise of an argument that their failed construction (synchronization between a local database on a handheld and master database) is the only “species” of synchronization supposedly disclosed in the patents, and that any other application of synchronization therefore fails the written description requirement. But Petitioners do not disclose to the PTAB that two district courts have already interpreted the patents and concluded that intrinsic support exists therein for a much broader interpretation of synchronization. Petitioners acknowledge that the PTAB uses the “broadest reasonable interpretation” standard; thus, the district courts’ broad interpretation of synchronization should be applied in the CBM process, entirely eviscerating Petitioners’ argument. Moreover, there is nothing in any of the claims requiring synchronization with a handheld device “database.” As recognized by all previous judicial claim constructions, either (1) functionality is provided to transmit menu **data** to a handheld device or Web page (*e.g.*, ‘850 claims

1-11) or (2) functionality is provided to synchronize hospitality data and applications across different components including a handheld device (*e.g.*, '850 claims 12-16), but there is no local "database" required anywhere in the '077 claims nor does the specification require a local database. In fact, the Petitioners self-servingly contrived term "**local database**" is not even used in the specification.

Still further, the Petition ignored **all** dependent claims, incorrectly alleging that only the independent claims should be considered in a CBM petition. This is a fatal error because several of the dependent claims specifically expand on the independent claims and address and contradict the Petitioners' "single species" allegations, in addition to all the other arguments presented herein in defense of the patentability of the independent claims. For example, claims 3, 12, 15 recite, *e.g.*, "the system enables automatic importation of the POS database information into the system," claim 8 recites "the system is enabled to generate a view of the programmed handheld menu configuration for user preview from the central computing unit," (*i.e.*, the "preview functionality" copied by Apple) and claims 2,10 and 14 provide "a communications systemic relationship comprising a) a Wireless Hub Application, b) a Web Hub Application, c) Linked Databases between two or more different hospitality applications, and d) a Communications Setup Application." Each of these dependent claims further explain, in differing ways fully supported by the specifications as any POSA would understand, the details of various additionally unique implementations of the claimed synchronization involving, *e.g.*, "information," "a view" and "communications," none of which involve synchronization of full "local databases" as required by Petitioners' "single species" theory. The system gets the relevant information out to the handheld

device so that the current version is available to the user, which does not require a local database on the handheld device as anyone who has ever used a smart phone understands. All of Petitioners' associated invalidity contentions fail at least against these dependent claims because they were not addressed at all. Petitioners' contentions against these dependent claims are thus unsupported, and contradicted by the record evidence. There is thus no basis for CBM review of these claims.

Still further, the described and claimed synchronization of, *e.g.*, claim 13, among a master database, wireless handheld devices, a Web server, and Web page, is fully consistent with Judge Payne's construction of "synchronization" as "made to be the same," and thus fully satisfied the written description requirement. The transmission of a menu to a Web page or handheld device is described at col. 13:13-32 and at 10:14-11:44, in addition to the sections cited above, and also satisfies the written description requirement, as confirmed by Judge Everingham in the *Menusoft* case: "The Court finds support for this definition in the intrinsic record, where the patentee used the term "[is] reflected instantaneously on ... a web page" to describe the transmission of information to a web page. '850 Patent, 4:21-23." (Exh. 2016) (emphasis added). Petitioners' flawed argument is based on an improper construction for "Web page" and an absurd contention regarding synchronization of information between a central database and a wireless handheld device. The proper construction of Web page is that provided by the World Wide Web Consortium in 1999 as discussed above and adopted by both Judges Everingham and Payne, while rejecting the Petitioners' proposed construction. Nor does providing synchronized information between a central database and a handheld device require a database on the handheld device, and no such requirement is stated in the specification, nor would a POSA

have thought there was any such requirement.

Moreover, Petitioners' unsupported arguments are legally insufficient to support a Section 112 argument based on inadequate written description:

In arguing that a species does not constitute[] a description of the genus of which it is part, there must be some analysis that either: (1) considers factors such as the knowledge of one skilled in the art and the level of predictability in the field, or (2) demonstrates that the specification reflects that the invention is, in fact, no broader than what is disclosed in the specification.

Alstom Power Inc. v. Hazelmere Res. Ltd., Reexam. No. 95/001,368, at 14-15 (Dec, 17, 2013) (citing *Bilstad v. Wakalopulos*, 386 F.3d 1116, 1124 (Fed. Cir. 2004) and *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1159 (Fed. Cir. 1998)). Petitioners provided no credible analysis under either prong of the Federal Circuit's requirement for making out a case of inadequate written description based on a "species" argument. Petitioners provided only unsupported attorney argument, which falls far short of what is required to make out a plausible case of inadequate written description. As was pointed out by the PTAB Board in *Alstom*, "lack of written description must be demonstrated by more than pointing out the difference in scope." *Id.* at 14. In the present case, there is no difference in scope--the claim scope is fully described in the specification as detailed above. But even without such full description, Petitioners' unsupported allegations are fatally deficient for the aforesaid reasons.

The '077 description thus "clearly 'allow[s] persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed.'" *Ariad Pharms., Inc. v. Eli Lilly & Co*, 598 F.3d 1336, 1351 (Fed. Cir. 2010).

B. Petitioners Have Not Established That The Claims Of The '077 Patent Are Ineligible Or Invalid On The Asserted Ground Based on 35 U.S.C. §101

The test for patent eligibility under 35 U.S.C. §101 is not amenable to bright-line categorical rules. *See Bilski v. Kappos*, 130 S. Ct. 3218, 3229-30 (2010). Further, the Federal Circuit has recognized that it has been especially difficult to apply §101 properly in the context of computer-implemented inventions. *CLS Bank Intl v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1277 (Fed. Cir. 2013) (*en banc*). Because Petitioners' claim constructions (based on their incorrect "method steps" construction) are themselves innately wrong, the entire premise of their §101 allegations also fail. "[W]hether the ... patent is invalid for failure to claim statutory subject matter under §101[] is a matter of both *claim construction* and statutory construction." *State St. Bank & Trust Co. v. Signature Fin. Group*, 149 F.3d 1368, 1370 (Fed. Cir. 1998). Patent Owner submits that the Board will conclude, after properly construing and considering the actual claimed subject matter as a whole and considering the totality of the specification/drawings, that the Petition did not address the actual claimed subject matter of the '077 patent and that said subject matter is clearly patent eligible.

Section 101 lists new and useful processes, machines, manufactures, and compositions of matter as broad categories of patent-eligible subject matter. "In choosing such expansive terms ... modified by the comprehensive 'any,' Congress plainly contemplated that the patent laws would be given wide scope." *Bilski*, 130 S. Ct. at 3225 (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980)). Courts have fashioned three limited exceptions to the aforementioned §101 categories, prohibiting patents directed to: laws of nature, physical phenomena and abstract ideas. *See Mayo Coll. Svcs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012).

An abstract idea by itself is not patentable, but patent protection is available for a practical application of an abstract idea. *Id.* at 1293-94; *Bilski*, 130 S. Ct. at 3230. To be patent-eligible, a claim cannot simply state the abstract idea and add the words "apply it." *See Mayo*, 132 S. Ct. at 1294. If the claim incorporates meaningful limitations, it is directed to more than just an abstract idea. *See Id.* at 1297.

1. The Petition Grossly Mischaracterized The Actual Claimed Subject Matter

Petitioners allege that the invention recited in the claims of the '077 patent is directed to the purely abstract idea of computerizing menus. They further argue that the claimed system is simply a replacement for a pen and paper. Petitioners' §101 argument is based on their incorrect allegation that "menus are generated faster than with the non-computerized process" (Am. Petition at 66) is what the '077 invention as recited in claims 1-12 is about. However, there is nothing in these claims about being "fast" and Petitioners ignore the numerous specific software and functional combinatory limitations in these claims. Petitioners are trying to convince the PTAB that nothing other than adding mere computerization is involved. They are completely wrong as shown herein.

Petitioners also allege that claims 13-18 are directed to nothing more than placing an order or reservation (Am. Petition at 69). However, there is no recitation of "order" in any of the '077 claims. Moreover, even if the claimed system were used in an environment where orders are entered, that would not make the claims merely directed to the abstract idea of entering "orders." Patent Owner is confident that the Board is not a receptive audience for Petitioners' misleading, simplistic and incorrect characterizations.

Petitioners' arguments can be quickly dismissed on even the most cursory

examination of the actual claim language. As it has done in prior cases, Patent Owner submits that the Board should entirely reject Petitioners' mischaracterization of the claimed subject matter.²⁹

The claims of the '077 patent recite an information management and synchronous communications system for synchronization of computerized menus between a central/master menu/database and wireless handheld computing device via specific menu configuration software (claims 1-12) and synchronization of hospitality application information between a master database, wireless handheld computing device, Web server and Web page via specific communications control software functionality (claims 13-18). As noted above, the claimed menu generation and transmission/synchronization functionality was not known at the time of the invention, as recognized by the Examiner's Reasons for Allowance of the '850 patent, and Petitioners have not even attempted to present any credible evidence that it was. Moreover, the subject matter of claims 13-18 (*inter alia*, the use of a master database in conjunction with specialized communications control software functionality for synchronizing menus/hospitality applications across a system including disparate types and sizes of devices) was not known in the prior art at the time of the invention as shown, *inter alia*, by the secondary factors evidence submitted in the '077 patent prosecution history, discussed above, and Petitioners have not even attempted to present any evidence that it was. The particular claimed features of the '077 patent thus comprise meaningful limitations and are much more than mere abstract ideas.³⁰

²⁹ See, e.g., CBM2013-00027, Inst. Dec. at 37 (discussed above) (rejecting proposed Section 101 ground where Petitioner mischaracterized the claims).

³⁰ For instance, claims 13-18 recite "hospitality application information" multiple times; Judge Payne construed "hospitality applications" (as a plural) to mean

The functions performed using these features and components are not insignificant pre- or post-solution activity; they are, in combination, the inventive solution itself. Moreover, Ameranth's, and Petitioners', products embodying the inventions claimed in the '077 patent have enjoyed significant commercial success and industry recognition, validating the novel and innovative nature of Ameranth's patented technology. "[I]nventions with specific applications or improvements to technologies in the marketplace are not likely to be so abstract that they override the statutory language and framework of the Patent Act." *Research Corp. Tech., Inc. v. Microsoft Corp.*, 627 F.3d 859, 869 (Fed. Cir. 2010).

Petitioners further argue that the specific components recited in the claims of the '077 patent add nothing because each was known individually in the prior art. That is simply untrue. Moreover, the argument is antithetical to the law:

In determining the eligibility of [a] claimed process for patent protection under § 101, ... claims must be considered as a whole. It is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis.

Diamond v. Diehr, 450 U.S. 175, 188 (1981); *see also Bilski*, 130 S. Ct. at 3230.

While it may be true that certain components of the present invention were known at the time of the filing of the parent application, that is true for almost all inventions—it is those components in combination (with the specific new and inventive software and synchronization functionality which provides the claimed interaction of these components) which must be analyzed.

“software adapted to perform or assist with two or more hospitality-related tasks” (Exh. 2017 at 8), so the '077 patent claims are clearly reciting ***very specific application functionality***, not simply a field of use limitation.

Petitioners' analysis, however, does not account sufficiently for any of the claims as a whole (*i.e.*, the particular combination of components and how the claims require that they be used in the claimed specialty software-enabled system). Petitioners rest their §101 argument on the claimed system's use of allegedly "typical" computer elements and the alleged failure "to disclose any algorithms for the synchronous communications of menus." (Am. Petition at 11). However, as previously noted, the claims of the '077 patent recite a system comprising a specific combination of components and features that interact in a specific way as dictated by the recited software functionality to, *inter alia*, generate and transmit menus on and to various components of the claimed system, and which functionality is described throughout the specification. Moreover, there is no requirement that claimed software functionality must be disclosed in a particular algorithm, and Petitioners cited no authority for such proposition.³¹ Also, Petitioners' allegations that the claims do not disclose "how" the computer is programmed or how specified functions are performed is a red herring. "The purpose of claims is not to

³¹ Petitioners confuse means-plus-function claiming with functional claiming. However, "[c]omputer-implemented inventions are often disclosed and claimed in terms of their functionality. This is because writing computer programming code for software to perform specific functions is normally within the skill of the art once those functions have been adequately disclosed." (MPEP 2161.01(I) (*citing Fonar Corp. v. General Elec. Co.*, 107 F.3d 1543, 1549 (Fed. Cir. 1997))). In any event, even if the '850 claims included means-plus-function elements, which they do not, there is no requirement to disclosure line by line code. *See Medical Inst. & Diag. Corp. v. Elekta AB*, 344 F.3d 1205, 1214 (Fed. Cir. 2003) ("there would be no need for a disclosure of the specific program code if software were linked to the . . . function and one skilled in the art would know the kind of program to use.").

explain the technology or how it works, but to state the legal boundaries of the patent grant.” *S3 Inc. v. nVIDIA Corp.*, 259 F.3d 1364 (Fed. Cir. 2001). “How” claimed functions are performed would, at most, be relevant to an enablement argument, which Petitioners did not make.

As recently concluded by the PTAB in CBM2013-00027, a recited “controller computer” which included a “means for matching” constitutes a special purpose computer that performs the recited function of ‘matching’ the conditional buy and sell orders using the ‘external multiple data sources.’” (*Id.*, Inst. Dec. at 38). Similarly, the recited synchronous system functionality of the ‘077 claims involves synchronizing multiple components. This functionality is that of a special purpose computer conceived by the inventors; it was not available in anything that existed at the time of the invention.³² The recited systems of the ‘077 patent are thus directed to a new and nonobvious combination of patentable-eligible software functionality and components that comprise a patentable improvement over the prior art and thereby impose meaningful limitations.

2. *The ‘077 Patent Claims Fall Squarely Within The Federal Circuit’s And Supreme Court’s Bounds Of Patent Eligible Subject Matter*

The Federal Circuit's recent decision in *Ultramerical v. Hulu* provides an independent reason that the Petition must be denied. In *Ultramerical*, the Federal Circuit affirmed the validity of a claim that is much closer to a business method claim than any issued claim of the ‘077 patent. *See, e.g.*, U.S.

³² For example, the “central processing unit” of claims 1-12 (discussed above) and “master database” of claims 13-18 are not generic databases, they are specially purposed for providing the claimed synchronization functionality, and thus do not preempt all uses of databases in computerizing menus.

Pat. No. 7,346,545, Claim 1 (directed to “a method for distribution of products over the Internet,” and which was a representative claim considered in *Ultramercial*). The Federal Circuit held that it "does not need the record of a formal claim construction to see that many of these steps require intricate and complex computer programming." *Ultramercial, LLC v. Hulu, LLC*, 722 F.3d 1335, 1350 (Fed. Cir. 2013). The Federal Circuit stated further "even without formal claim construction, ***it is clear that several steps plainly require that the method be performed through computers, on the internet, and in a cyber-market environment.*** One clear example is the third step, 'providing said media products for sale on an Internet website.' " *Id.* (emphasis added). Further, “programming creates a new machine, because a general purpose computer in effect becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software.” *Id.* at 1353 (citing *In re Alappat*).

The exact same is true for claims 1-18 of Ameranth's '077 patent, if not more so—even more clearly than the valid *Ultramercial* method claim, system claims 1-18 of the '077 patent recite computers and applications of computer technology via specialized computer software.³³ Each claim of the patent is directed to components arranged in a network, implemented in computing devices, and requiring intricate and complex computer programming that enables the interconnected hardware/software elements to all work together as

³³ The *Ultramercial* claim, which was held patentable, actually involves a financial transaction including receipt of payment. Thus, the *Ultramercial* claim may be more accurately characterized as being directed to “financial” subject matter as opposed to the claims of the ‘077 patent, which recite no such financial subject matter.

defined by the claims. For example, the '077 claims recite a wireless handheld computing device (and Web page in the case of claims 13-18) which interacts with the rest of the system via specialized software functionality. The software limitations/requirements of the claims apply to the specifically recited wireless handheld device and Web page limitations as well as to the back office/central database/first menu software limitations/requirements.³⁴

Further, the Board's decision in *SightSound*, applying *Ulramercial*, is dispositive. There, the petitioner argued that the claims recited the abstract idea of selling digital music. However, the Board, *sua sponte*, rejected the asserted 101 ground (*SightSound*, CBM2013-00019, Paper No. 17, at 16-21) because the claim "recites a specific combination of computer components, at specific locations, that interact in a specific way to accomplish the steps of the method." *Id.* at 18. The Board concluded that "[t]he 'first memory,' 'second memory,' 'transmitter,' 'receiver,' and 'telecommunications line' components, and the specific functions performed using those components, represent meaningful limitations on the scope of the claim that take it beyond the abstract concept of selling music." *Id.* at 18-19. Likewise, the '077 claims require a specific combination of components to interact in a specific way to accomplish the synchronization of, *e.g.*, menus.

³⁴ Petitioners completely ignore that every claim of the '077 patent recites a "wireless handheld computing device," which was construed by Judge Everingham as "a wireless computing device that is sized to be held in one's hand." (Exh. 2014). Thus, even if the claims were directed broadly to "computerizing menus," which they are not, they would still not preempt uses of such broadly-construed claims on non-handheld computing devices, and thus would not preempt all computerized menus.

As was the case for the steps of the *Ultramercial* and *SightSound* claims, the limitations of the '077 system claims do not merely claim an abstract idea; nor are they directed to an unpatentable law of nature or mathematical formula. *Diehr*, 450 U.S. at 187. The claims of the '077 patent clearly satisfy both of the recognized independent bases for patent eligibility, *i.e.*, via the particularized software which all claims require, they are tied to particular machine(s) and they transform an article. Still further, while satisfaction of either prong of the machine or transformation test (the present claimed invention satisfies both) confers patent eligibility under Section 101, the machine or transformation prong is not the only means by which a Court can conclude that claims are directed to patent eligible subject matter. *Bilski v. Kappos*, 130 S. Ct. 3218, 3227 (2010). Specifically, an “abstract idea” inquiry is required separate and apart from the machine or transformation test analysis. Under such inquiry, the claimed invention of the '077 patent cannot be performed by pen and paper or in a human’s head as discussed above.

Also consistent with finding these claims patent eligible is *SiRF Tech., Inc. v. ITC*, 601 F.3d 1319, 1332-1333 (Fed. Cir. 2010), in which the Federal Circuit held that claims involving GPS technology recited patentable subject matter because, "there is no evidence here that the calculations here can be performed entirely in the human mind. Here, as described, the use of a GPS receiver is essential to the operation of the claimed methods." As the Federal Circuit further stated in *SiRF*: “It is clear that the methods at issue could not be performed without the use of a GPS receiver; indeed without a GPS receiver it would be impossible to generate pseudoranges or to determine the position of the *GPS receiver* whose

position is the precise goal of the claims." *Id.* at 1332. The '077 claims, similarly, are not directed to mere calculations that can be performed entirely in the human mind. As discussed throughout this Response, the '077 claims are directed to specialized functionality involving interaction between components (precisely analogous to the functionality provided by the GPS receiver in *SiRF*) which cannot be performed without specially programmed computer(s) and have absolutely nothing to do with anything that could possibly be performed by pen and paper or in the human mind (for example, application software functionality for generating a second menu from a first menu and transmitting the second menu to a wireless handheld computing device or Web page—a pen and paper or the human mind cannot generate a computerized menu and transmit it to a wireless handheld device or Web page). What's more, the Petition made no assertion or argument that the actual claimed subject matter of the '077 patent could be performed in the human mind.

It should be further noted that the '077 patent's dependent claims contain additional elements that are also particularly tied to a machine or machines and/or transform an article, further emphasizing their patentability.³⁵ *See, e.g.*, claims 3, 12, 15 ("information from the POS database is **automatically** imported into the system") (claim 3) (emphasis added). Petitioners' flawed characterization of the '077 patent as directed to merely "speeding up" tasks done by humans failed to consider dependent claims 3, 12 and 15 which each include an "**automatic**" limitation. The ordinary and customary definition of the term "automatic" (as noted by the BPAI in Appeal 2010-000055, at p. 5),

³⁵ *Ultramercial*, 722 F.3d at 1340 ("the question of eligible subject matter must be determined on a claim-by-claim basis").

is set forth in Merriam Webster's Collegiate Dictionary: "done or produced as if by machine." Clearly, a human's manual actions are not done "as if by machine." Indisputably, the "automatic" functional aspects of claims 3, 12 and 15 are integral to the invention as recited in those claims, *e.g.*, the specification states: "For example, a reservation made online can be automatically communicated to the backoffice server and then synchronized with all the wireless handheld devices wirelessly." '077 patent, col. 5:34-37. Claims 2, 10 and 14 contain "communications systemic relationship" elements, claim 8 (the "preview" functionality) recites "the system is enabled to generate a view of the programmed handheld menu configuration for user preview from the central computing unit" and claim 17 recites "the hospitality application information also includes the completion of payment processing." Further, dependent claims 6 and 18 include specific "*smart phone*" limitations (which any POSA would understand have their own unique characteristics) and dependent claim 7 requires specific functionality for performing functions "directly from the wireless handheld computing device," thus indisputably not preempting all forms of computerized menus.

Petitioners were required to analyze **each claim** individually and consider all elements of each claim as a whole in conducting their analysis. Instituting a CBM review of the dependent claims would be improper because their unique inventive and patent eligible functionality was entirely **ignored** by the Petition and thus a challenge to those claims has been waived.

But the Federal Circuit's analysis in *Ultramercial* did not end with the terms of the claim. The Federal Circuit also looked at the figures in the

specification: "[i]n addition, Figure 1, alone, demonstrates that the claim is not to some disembodied abstract idea but is instead a specific application of a method implemented by several computer systems, operating in tandem, over a communications network." *Ultramercial*, 722 F.3d at 1350.

As in *Ultramercial*, the '077 patent specification also includes Figures, as well as textual description, which show that claims 1-18 are not drawn to a disembodied abstract idea, but are instead tied to a particular computer implementation. For example, Figure 1 shows a menu presented via a user interface which is analogous to the "master menu" of '077 claim 1 and Figure 7 shows a menu presented via a user interface, including applicability to both a wireless handheld computing device format and a Web page format, which is analogous to the "**programmed handheld menu**" of '077 claim 1. Figures 2-5 further demonstrate the extensive use of computer interfaces to provide inputs which the claimed menu generation and transmission software use to configure menus for display on computing device screens, *i.e.*, the **transformation** of a menu into a different form suitable for display on the particular target display device, *e.g.*, a wireless handheld computing device. The specification provides much more description of the menu generation, transmission and display functionality as recited, *inter alia*, in '077 claim 1, as discussed above, *e.g.*:

With reference to FIG. 1, the preferred embodiment includes an intuitive GUI 1 from which to build a menu on a desktop or other computer. A hierarchical tree structure 2 is used to show the different relationships between the menu categories 3 (*e.g.*, soups, salads, appetizers, entrees, deserts, etc.), menu items 4 (*e.g.*, green salad, chicken caesar salad, etc.), menu modifiers 5 (*e.g.*, dressing, meat temperature, condiments, etc.) and menu sub-modifiers 6

(e.g., Italian, French, ranch, bleu cheese, etc.).

'077 patent, col.7:35-43.

FIG. 7 is a schematic representation of a point of sale interface **15** for use in displaying a page-type menu **16** created using the inventive menu generation approach. As can be seen from FIG. 7, the page menu is displayed in a catalogue-like point-and-click format whereas the master menu, FIG. 1, is displayed as a hierarchical tree structure. Thus, a person with little expertise can "page through" to complete a transaction with the POS interface and avoid having to review the entire menu of FIG. 1 to place an order. *A PDA or Web page format could appear like FIG. 7*

'077 patent, col. 11:33-44(emphasis added).

The '077 patent claims are directed to a computer software system which is limited to discrete components and specific functionality which does not preempt any basic principle, and thus are not subject to CBM review:

Pre-emption is only a subject matter eligibility problem when a claim preempts all practical use of an idea. . . . Claim 4 further limits performing a real time Web transaction to completing the funds transfer by object routing. Claim 4 would not cover methods that do not use object routing to complete the transfer of funds in a software program that can be accessed by an internet user, i.e., a Web application

SAP, Inc. v. Pi-Net Intl. Inc., CBM2013-00013, Paper No. 15, Inst. Dec. at 21.

Viewing the subject matter of the '077 patent as a whole, the invention involves an extensive use of computers, networks, and computer interfaces, just as the patent in *Ultramercial* did (and even more so for the '077 patent because the '077 patent actually recites computer, network and display/interface functionality provided via specialized software (e.g., menus)). Petitioners' "abstract idea" argument (Am. Petition at 63-72) is

legally incorrect because it improperly boils the claims down to the supposedly abstract idea of "computerizing menus" while ignoring all of the computer implemented limitations described above:

[A]ny claim can be stripped down, simplified, generalized, or paraphrased to remove all of its concrete limitations, until at its core, something that could be characterized as an abstract idea is revealed. A court cannot go hunting for abstractions by ignoring the concrete, palpable, tangible limitations of the invention the patentee actually claims.

Ulramercial, 722 F.3d at 1344.

Likewise, Petitioners' patentable subject matter challenge under §101 wholly ignores the inventive content and technological nature of the '077 patent. The patent describes software system inventions, embodying numerous unique and essential claim limitations, that have been widely deployed by Ameranth and that have won acclaim and technology awards. Just as controlling authority has long established that independent confirmations of non-obviousness via secondary factors provide some of the best evidence against obviousness, the independent actions of the numerous panels of judges awarding Ameranth its many technology awards for the five different products embodying the claims, as well as 26 patent licensees, confirm that Ameranth's invention is not a mere "abstract idea."

Further, Petitioners' argument that the inventions do not "transform a particular article into a different state or thing" is absurd. As described above, the very essence of many of the claims is transformation of "master menus" into "programmed handheld menus" suitable for display and navigation on handheld devices or Web pages, *i.e.*, for a different use. "Transformation and reduction of an article 'to a

different state or thing’ is the clue to patentability of a process claim that does not include particular machines.” *Bilski v. Kappos*, 130 S. Ct. 3218, 3227 (2010) (*quoting Gottschalk v. Benson*, 409 U.S. 63, 70 (1972)).³⁶ “Transformation of electronic data [such as the claimed menus] has been found when the nature of the data has been changed such that it has a different function or is suitable for a different use.” MPEP 2106(II)(B)(1)(b) (*citing In re Bilski*, 545 F.3d 943, 962-63 (Fed. Cir. 2009) (*aff’d sub nom Bilski v. Kappos*, 130 S. Ct. 3218 (2010))); *see also* MPEP §2106(II)(B)(1)(b) (emphasis added):

An article can also be electronic data that represents a physical object . . . identified by indicating what the data represents, the particular type or nature of the data, and/or how or from where the data was obtained.

Clearly, menus are physical objects and the application software claimed by the ‘077 patent transforms data representations of those physical objects to different forms. Still further, the constituents of menus, *i.e.*, categories, items etc., are physical objects. Thus, data representations of physical objects are transformed by the claimed functionality on multiple levels. The ‘077 patent claims are thus patent eligible under

³⁶ “X-ray attenuation data produced in a two dimensional field by a computed tomography scanner” . . . clearly represented physical and tangible objects, namely the structure of bones, organs, and other body tissues. Thus, ***the transformation of that raw data into a particular visual depiction of a physical object on a display was sufficient to render that more narrowly-claimed process patent-eligible. We further note for clarity that the electronic transformation of the data itself into a visual depiction in Abele was sufficient; the claim was not required to involve any transformation of the underlying physical object that the data represented.***

In re Bilski, 545 F.3d 943, 962-63 (Fed. Cir. 2008) (*en banc*) (citation omitted, emphasis added), *aff’d Bilski v. Kappos*, 130 S. Ct. 3218 (2010).

the very standard which Examiners in the USPTO must apply.

The claims of the '077 patent do not preempt all uses of menus on computers, as the Petition erroneously asserts. In fact, these claims are incredibly extensive, each containing more than **60** claim elements/terms, each requiring cooperation and synchronization with others, thus the very allegation that these claims preempt all scope of computerized menus or anything else is simply preposterous. Rather, the scope of the claims is limited to, *e.g.*, a very particular information management and synchronous communications system for generating and synchronizing computerized menus representative of physical menus (and their physical constituents, *e.g.*, food to be ordered) as detailed above and recited explicitly in claims 1-12, and the particular information management and synchronous communications system for synchronizing software and application data representing computerized forms of physical objects between a central database, one or more wireless handheld computing devices, a Web server, and a Web page that is described above and set forth in claims 13-18. The Petitioners' §101 challenges should be rejected by the Board for the reasons stated above.

Claims 1-18 are not merely abstract ideas. No one can credibly argue that claims 1-18 preempt every possible way (or even a substantial number of ways) of "computerizing menus," as Petitioners have mischaracterized them. As such, Petitioners have not shown that it is "more likely than not" that any of claims 1-18 are unpatentable under 35 U.S.C. §101, and thus the Petition for covered business method review must be denied on those grounds.

**3. *35 U.S.C. §101 Is Not A Condition For Patentability
And Thus Cannot Form A Ground For CBM Review***

Petitioner's challenge under Section 101 ignores recent Federal Circuit

case law concluding that §101 is not a condition for patentability. *CLS Bank*, 717 F.3d at 1276; *Ultramercial*, 722 F.3d at 1341. Although the Board has previously addressed the question of whether it has the authority to institute a CBM proceeding on the basis of §101 (*see SAP Am., Inc. v. Versata Dev. Grp., Inc.*, Case CBM2012-00001, Paper No. 36, at 32-36 (PTAB Jan. 9, 2013), it did so prior to the Federal Circuit's recent decisions in *CLS Bank* and *Ultramercial*.

The express statutory language defining available grounds for CBM review states that such grounds must be invalidity based on "a condition for patentability," but does not include Section 101 as a condition for patentability. 35 U.S.C. § 282(b)(2). All ten Federal Circuit judges in *CLS Bank v. Alice (en banc)* agreed that §101 is not a condition for patentability, distinguishing that section from §§102 and 103. The Federal Circuit agreed, contrary to the Board's decision in *SAP v. Versata*, that §101 is a threshold determination for patent eligibility, and is not a condition for patentability. *Accord Ultramercial*, 722 F.3d at 1341; *see also* Preliminary Response, CBM2013-00049, Paper No. 16 at 55-61. In view of the clarification provided by the Federal Circuit and in light of the clear statutory language, Patent Owner respectfully asks that the Board re-evaluate its previous decision on this issue.

VI. CONCLUSION

For at least the reasons set forth above, the Board should not initiate a CBM review in this case. The '077 patent is not directed to a "financial product or service" and is also a "technological invention" exempt from CBM review. Moreover, Petitioner has failed to establish that any of Claims 1-18 are more likely than not invalid under 35 U.S.C. §§101 or 112.

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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 January 14, 2014 by causing said documents to be delivered via electronic mail, per agreement of the parties, to counsel for Petitioners at the following addresses:

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