UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC., EVENTBRITE INC., and STARWOOD HOTELS & RESORTS WORLDWIDE, INC.,

Petitioner
v.

AMERANTH, INC.,

Patent Owner

CASE CBM Unassigned

Patent No. 8,146,077

PETITION FOR COVERED BUSINESS METHOD REVIEW OF U.S. PATENT NO. 8,146,077

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TABLE OF CONTENTS

Page

TABLE OF EXHIBITS

EXHIBIT	DESCRIPTION
1001	U.S. Patent No. 6,384,850 to McNally, et al.
1002	Turnbull Expert Declaration
1003	U.S. Patent No. 6,871,325 to McNally, et al.
1004	U.S. Patent No. 8,146,077 to McNally, et al.
1005	U.S. Patent No. 6,982,733 to McNally, et al.
1006	U.S. Patent Application Number 09/400,413 (the "'413 application") (850 app)
1007	U.S. Patent Application Number 10/015,729 (the "'729 application") (325 app)
1008	U.S. Patent Application Number 11/112,990 (the "'990 application") (077 Application)
1009	U.S. Patent Application Number 10/016,517 (the "'517 application") (733 application)
1010	U.S. Patent No. 6,384,850 to McNally, et al. File History
1011	U.S. Patent No. 6,871,325 to McNally, et al. File History
1012	U.S. Patent No. 8,146,077 to McNally, et al. File History Excerpts
1013	CBM2014-00015 – CBM petition for U.S. Patent No. 6,384,850
1014	CBM2014-00016 – CBM petition for U.S. Patent No. 6,871,325
1015	CBM2014-00014 – CBM petition for U.S. Patent No. 8,146,077
1016	CBM2014-00013 – CBM petition for U.S. Patent No. 6,982,733

1017	CBM2014-00015 – Paper 20 – ’850 Institution Grant
1018	CBM2014-00016 – Paper 19 – ’325 Institution Grant
1019	CBM2014-00014 – Paper 19 – ’077 Institution Denial
1020	CBM2014-00013 – Paper 23 – ’733 Institution Grant
1021	Inkpen, Gary, *Information Technology for Travel and Tourism* (2d ed. 1998)
1022	Timothy Bickmore, *Digestor: Device Independent Access to the World Wide Web*, Computer Networks and ISDN Systems 29, 1075-1082 (1997)
1023	Nokia 9000i Communicator Owner’s Manual (1997)
1024	U.S. Pat. No. 5,948,040 to DeLorme et al.
1025	U.S. Pat. No. 6,058,373 to Blinn et al.
1026	McFadden et al., MODERN DATABASE MANAGEMENT (5th ed. May, 1999), Chapter 11
1027	Micros 8700 HMS Version 2.10 User’s Manual
1028	Aronson, Larry, *HTML Manual of Style* (1994)
1029	Jesitus, “Wireless Technology Keeps Customers In Order,” Hospitality Technology (January 1977)
1030	*Ameranth Inc. v. Apple Inc.*, Case No. 3-12-cv-02350 (S.D. Cal., filed Sept. 26, 2012) (ECF No. 7) and *Ameranth Inc. v. Starwood Hotels & Resorts Worldwide, Inc.*, Case No. 12-cv-1629 (S.D. Cal. Filed June 29, 2012) (ECF No. 1)
1031	Complaints filed by Ameranth related to *Ameranth Inc. v. Apple*

	Inc.
1032	Ameranth, Inc. v. Menusoft Sys. Corp., et al., No. 2:07-CV-271, 2010 WL 4952758, at 1-2 (E.D. Tex. Sept. 20, 2010)
1033	2:10-CV-294-JRG-RSP (E.D. Tex.) Claim Construction
1034	Definitions from *Microsoft Computer Dictionary* (4th ed. 1999)
1035	Transcript of Oral Arguments in CBM2014-00013 (Paper No. 34)
1036	American Heritage Dictionary (3d ed. 1992) (for the definition of "other" and "cascade")
1037	http://catalogue.pearsoned.co.uk/educator/product/Information-Technology-for-Travel-and-Tourism/9780582310025.page
1038	U.S. Patent No. 5,897,622 to Blinn et al.
1039	U.S. Patent No. 5,991,739 to Cupps et al.
1040	U.S. Patent No. 6,107,944 to Behr
1041	U.S. Patent No. 5,912,743 to Kinebuchi et al.
1042	U.S. Patent No. 5,724,069 to Chen et al.
1043	U.S. Patent No. 6,920,431 to Showghi et al.
1044	U.S. Patent No. 6,301,564 to Halverson et al.
1045	Complaint for priority in the IPDEV suit – 14-cv-1303
1046	U.S. Patent No. 5,937, 041 to Cardillo
1047	Micros Systems Inc. "POS Configuration User's Guide: 3700 POS"

1048	U.S. PG Pub 2002/0059405 to Angwin
1049	WIPO Patent Publication No. WO 97/27556 to Flake et al.
1050	U.S. Patent No. 5,023,438 to Wakatsuki et al.
1051	U.S. Patent No. 6,300,947 to Kanevsky et al.
1052	*Ameranth, Inc. v. Menusoft Systems Corp.*, Ameranth Opp. to non-party Seamless North America, LLC's motion for leave to file *amicus curiae* brief, E.D. Tex. Dkt. No. 2:07-cv-00271 at ECF No. 336.
1053	Micros Hand-Held Touchscreen Pre-Release Information (Sept. 8, 1992)
1054	Thesaurus.com Synonyms for "Ticket"
1055	U.S. Patent No. 8,738,449 to Cupps, et al.
1056	U.S. Patent No. 5,974,238 to Chase Jr.
1057	*Ameranth v. Menusoft Systems Corp.*, 07-cv-271-RSP, Dkt. 281 (E.D. Tex. 2010)– Opening post-trial JMOL
1058	*Ameranth v. Menusoft Systems Corp.*, 07-cv-271-RSP, Dkt. 281 (E.D. Tex. 2010) Opposition JMOL Brief
1059	*Ameranth v. Menusoft Systems Corp.*, 07-cv-271-RSP, Dkt. 281 (E.D. Tex. 2010) Order Denying JMOL
1060	Ameranth Infringement Contentions
1061	U.S. Patent No. 8,738,449 File History
1062	Sep. 13, 2010 Trial Testimony. *Ameranth v. MenuSoft*, 07-cv-271-RSP

1063	Sep. 14, 2010 Trial Testimony. *Ameranth v. MenuSoft*, 07-cv-271-RSP
1064	Sep. 15, 2010 Trial Testimony. *Ameranth v. MenuSoft*, 07-cv-271-RSP
1065	Bruce Brown, "First Looks: Windows CE 2.0 Cornucopia," PC Magazine (June 30, 1998)
1066	Graf, "Modern Dictionary of Electronics" (7th ed. 1999).
1067	Matthews & Poulsen, "FrontPage 98: The Complete Reference" (January 1998)

I. INTRODUCTION

It is hereby requested that the United States Patent and Trademark Office proceed with a covered business method ("CBM") review of claims 1-18 of U.S. Patent No. 8,146,077 (Ex. 1004,"the '077 patent"). The '077 patent has been asserted against Apple Inc. ("Apple"), Eventbrite Inc. ("Eventbrite") and Starwood Hotels & Resorts Worldwide, Inc. ("Starwood") (collectively, the "Petitioner") and others in at least 34 different pending lawsuits. Exs. 1030, 1031.

The '077 patent, which claims priority to an application filed in 1999 after the Internet had become widely known and used, describes a real time synchronous communications system for configuring and transmitting "hospitality" menus (e.g., restaurant menus) to client devices such as PCs and wireless handheld devices (e.g., smartphones and personal digital assistants) over the Internet. *See* Ex. 1019, CBM2014-00014, Paper 19 at 10-11. The general ideas claimed in the '077 patent are that the menus displayed at the client and wireless handheld devices are synchronized to a master menu, and the menus are configured to be displayed as cascaded sets of linked graphical user interface screens so as to be suitable for display on the small screens of such wireless handheld devices.

As explained below, these general ideas and each of the particular techniques recited in the claims of the '077 patent had been developed and were well known long before the application for the '077 patent was filed. In particular,

synchronization of databases of any kind, include menu databases, had long been known in the art, as had the use of client PCs and wireless handheld computing devices for displaying menus that were synchronized to a master menu. The re-formatting of web documents, including re-formatting into cascaded sets of linked graphical user interface screens, for the small screen sizes of wireless handheld devices such as smart phones and PDAs was also well-known. *See generally* Exs. 1022, 1025, 1027-28. All of the claims of the '077 patent are therefore unpatentable over the prior art identified below.

II. COMPLIANCE WITH FORMAL REQUIREMENTS

A. Mandatory Notices Under 37 C.F.R. §§ 42.8(b)(1)-(4)

1. Real Parties-In-Interest

The real parties-in-interest are Apple, Eventbrite, and Starwood.

2. Related Matters

Petitioner, along with other parties, previously filed a petition for CBM review of the '077 patent in CBM2014-00014 under 35 U.S.C. §§ 101 and 112. *See* Ex. 1019. The Board denied that petition. Ex. 1019 at 41.

Ameranth, Inc. ("PO") has asserted the '077 patent in the following 37 patent infringement lawsuits, including the suit filed against Petitioner. To the best of Petitioner's knowledge, the following is a list of the defendants and the civil action numbers for the pending matters (Ameranth, Inc. is the lone plaintiff in each case): *Apple Inc.*, Case No. 3-12-cv-02350 (S.D. Cal., 9/26/12); *Starbucks Corp.*,

Case No. 3-13-cv-01072 (S.D. Cal., filed 5/6/13); *TicketBiscuit, LLC,* Case No. 3-13-cv-00352 (S.D. Cal., filed 213/13); *Ticketfly, Inc.,* Case No. 3-13-cv-00353(S.D. Cal., filed 2/13/13); *Eventbrite, Inc.,* Case No. 3-13-cv-00350(S.D. Cal., filed 2/13/13); *Hilton Resorts Corp. et al.,* Case No. 3-12-cv-01636 (S.D. Cal., filed 7/2/12); *Kayak Software Corp.,* Case No. 3-12-cv-01640 (S.D. Cal., filed 6/29/12); *Usablenet, Inc*., Case No. 3-12-cv-01650 (S.D. Cal., filed 6/29/12); *Starwood Hotels & Resorts Worldwide, Inc.,* Case No. 3-12-cv-01629 (S.D. Cal., filed 6/29/12); *Hotels.com, LP,* Case No. 3-12-cv-01634 (S.D. Cal., filed 6/29/12); *Orbitz, LLC,* Case No. 3-12-cv-01644(S.D. Cal., filed 6/29/12); *EMN8, Inc.,* Case No. 3-12-cv-01659 (S.D. Cal., filed 6/29/12); *Best Western International, Inc.,* Case No. 3-12-cv-01630 (S.D. Cal., filed 6/29/12); *NAAMA Networks, Inc. et al.,* Case No. 3-12-cv-01643 (S.D. Cal., filed 6/29/12); *Hotel Tonight, Inc.,* Case No. 3-12-cv-01633 (S.D. Cal., filed 6/29/12); *Travelocity.com, LP,* Case No. 3-12-cv-01649 (S.D. Cal., filed 6/29/12); *Expedia, Inc.,* Case No. 3-12-cv-01654 (S.D. Cal., filed 6/29/12); *Hyatt Hotels Corporation et al.,* Case No. 3-12-cv-01627 (S.D. Cal., filed 6/29/12); *Hotwire, Inc.,* Case No. 3-12-cv-01653 (S.D. Cal., filed 6/29/12); *Wanderspot LLC,* Case No. 3-12-cv-01652 (S.D. Cal., filed 6/29/12); *Micros Systems, Inc.,* Case No. 3-12-cv-01655 (S.D. Cal., filed 6/29/12); *Marriott International, Inc. et al.,* Case No. 3-12-cv-01631 (S.D. Cal., filed 6/29/12); *Mobo Systems, Inc.,* Case No. 3-12-cv-01642 (S.D. Cal., filed 6/29/12); *ATX Innovation,*

Inc., Case No. 3-12-cv-01656 (S.D. Cal., filed 6/29/12); *Fandango, Inc.*, Case No. 3-12-cv-01651 (S.D. Cal., filed 6/29/12); *StubHub, Inc.*, Case No. 3-12-cv-01646(S.D. Cal., filed 6/29/12); *TicketMaster, LLC et al.*, Case No. 3-12-cv-01648 (S.D. Cal., filed 6/29/12); *Agilysys, Inc.*, Case No. 3-12-cv-00858 (S.D. Cal., filed 4/6/12); *TicketMob, LLC,* Case No. 3-12-cv-00738 (S.D. Cal., filed 3/27/12); *Papa John's USA, Inc.,* Case No. 3-12-cv-00729 (S.D. Cal., filed 3/27/12); *O-Web Technologies Ltd.,* Case No. 3-12-cv-00732 (S.D. Cal., filed 3/27/12); *Domino's Pizza, LLC et al,* Case No. 3-12-cv-00733 (S.D. Cal., filed 3/27/12); *Seamless North America, LLC,* Case No. 3-12-cv-00737 (S.D. Cal., filed 3/27/12); *GrubHub, Inc.,* Case No. 3-12-cv-00739 (S.D. Cal., filed 3/27/12); *Pizza Hut, Inc. et al.,* Case No. 3-12-cv-00742 (S.D. Cal., filed 3/27/12); *Papa John's USA, Inc.* 12-cv-0729 (S.D. Cal. Filed March 27, 2012); and *OpenTable, Inc.,* Case No. 3-12-cv-00731) (S.D. Cal., filed 3/27/12).

3. Lead and Back-up Counsel

Lead Counsel for Petitioner is James M. Heintz, DLA Piper LLP (US), Reg. No. 41,828, who can be reached by email at jim.heintz@dlapiper.com, by phone at 703-773-4148, by fax at 703-773-5200, and by mail and hand delivery at DLA Piper LLP (US) 11911 Freedom Drive, Suite 300, Reston, VA 20190. Backup counsel for Petitioner are Robert C. Williams; who can be reached by email at: robert.williams@dlapiper.com; by mail and hand delivery: DLA Piper LLP (US)

401 B Street, Suite 1700, San Diego, California, 92101-4297; by phone at 619-699-2820, and by fax at 619-699-2701; and Ryan W. Cobb, Reg. No. 65,498; who can be reached by email: ryan.cobb@dlapiper.com; by mail and hand delivery: DLA Piper LLP (US) 2000 University Avenue, East Palo Alto, California, 94303-2214; by phone at 650-833-2235, and by fax at 650-833-2001.

Petitioner hereby requests authorization to file a motion for Robert C. Williams to appear *pro hac vice*, as Mr. Williams is an experienced litigating attorney, is counsel for Petitioner in the above litigation, and as such has an established familiarity with the subject matter at issue in this proceeding.

4. Power of Attorney and Service Information

Powers of attorney are being filed with the designation of counsel in accordance with 37 C.F.R. § 42.10(b). Service information for lead and back-up counsel is provided in the designation of lead and back-up counsel above. Service of any documents via hand delivery may be made at the postal mailing addresses designated above. Petitioner hereby consents to electronic service.

B. Proof of Service on the Patent Owner

As reflected in the attached Certificate of Service, a copy of this Petition in its entirety is being served to the PO's attorney of record at the address listed in the USPTO's records by overnight courier pursuant to 37 C.F.R. § 42.6.

C. Fee

The undersigned authorizes the Director to charge the fee specified by 37 C.F.R. § 42.15(b) and any additional fees that might be due in connection with this Petition to Deposit Account No. 50-1442.

III. GROUNDS FOR STANDING

In accordance with 37 C.F.R. § 42.304(a), the Petitioner certifies that the '077 patent is available for CBM review because, as explained further below, the '077 patent constitutes a covered business method patent as defined by Section 18 of the America Invents Act (*see* AIA § 18(a)(1)(A)), and further certifies that the Petitioner is not barred or estopped from requesting a CBM review challenging the patent claims on the grounds identified in this Petition. Petitioner is eligible to file the petition because Ameranth has sued Petitioner for alleged infringement of the '077 patent. *See* Ex. 1030. Additionally, Petitioner is not estopped from pursuing this petition under 37 C.F.R. § 42.73(d)(1) because the Board has not instituted a trial or issued a final written decision on any claim of the '077 patent.

A. The '077 Patent Is a Covered Business Method Patent

A "covered business method patent" is a patent that "claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration or management of a financial product or service, except that the terms does not include patents for technological inventions." AIA § 18(d)(1). This definition was drafted to encompass patents "claiming activities

that are financial in nature, incidental to a financial activity or complementary to a financial activity." Final Rule, 77 Fed. Reg. 48,734, 48735 (Aug. 14, 2012). A single claim directed toward a covered business method makes every claim of the patent eligible for CBM review, even if a Petition does not seek review of that claim. *See CRS Advanced Technologies, Inc. v Frontline Technologies, Inc.*, CBM2012-0005, paper 17 at 6-9 (granting CBM review of claims 3, 6, 7, 16, 24 and 33 while relying in part on relying on recitation of "retail bank" in claim 1 to fulfill the requirement that the patent be directed to a financial activity).

At least claim 7 of the '077 patent qualifies as a covered business method as has previously been determined by the Board in CBM2014-00014. *See* Ex. 1019 at 10-15. Claim 7 recites "the information management and real time synchronous communications system in accordance with claim 1, further enabled to facilitate and complete payment processing." Ex. 1004 at 17:19-21. Claim 7 is therefore at least "incidental to financial activity" and/or "complementary to financial activity" and thus satisfies the first requirement of AIA § 18(d)(1). Ex. 1019 at 11.

Claim 7 also does not qualify as an exception to a covered business method because it is not directed toward a technological invention. To qualify as a technological invention, the subject matter as a whole must recite a technological feature that (1) is novel and unobvious over the prior art (the "first prong"), and (2) solves a technical problem using a technical solution (the "second prong"). *Id*. at

11. Both prongs must be met for the exception to apply. *Id*. As discussed in the Board's Decision in CBM2014-00014, at least the first prong is not satisfied because the subject matter of the '077 patent claims are not novel and unobvious but rather "are the predicted and expected result of known programming steps." *Id*. at 14. Additionally, the Office Patent Trial Practice Guide states that "reciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious" does not typically render a patent a technological invention. Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,763-64 (Aug. 14, 2012). The '077 patent includes numerous statements indicating that the technology utilized therein was known in the art:

> The preferred embodiment of the present invention uses typical hardware elements in the form of a computer workstation, operating system and application software elements which configure the hardware elements for operation in accordance with the present invention. Ex. 1004 at 6:55-58.
>
> The preferred embodiment also encompasses a typical file server platform including hardware such as a CPU, e.g., a Pentium® microprocessor, RAM, ROM, hard drive, modem, and optional removable storage devices, e.g., floppy or CD ROM drive." *Id*. at 7:1-2.
>
> The software applications for performing the functions falling within the described invention can be written in any commonly used computer language. The discrete programming steps are commonly known and

thus programming details are not necessary to a full description of the invention. *Id*. at 12:57-61.

Accordingly, the claims of the ’077 patent do not satisfy the technological invention exception and are eligible for covered business method review.

IV. STATEMENT OF PRECISE RELIEF REQUESTED

In accordance with 37 C.F.R. § 42.22, the Petitioner respectfully requests that claims 1-18 of the ’077 patent be canceled for the reasons set forth below.

V. IDENTIFICATION OF PATENTABILITY CHALLENGES

In accordance with 35 U.S.C. § 321 and 37 C.F.R. § 42.304(b), CBM review of claims 1-18 of the ’077 patent is requested in view of the following grounds:

A. Claims 1-18 are unpatentable under 35 U.S.C. § 112 (pre-AIA) due to lack of an antecedent basis for the “the same connected system” limitations.

B. Claims 1-18 are unpatentable under 35 U.S.C. § 103 (pre-AIA) as obvious over the Micros 8700 HMS Version 2.10 User’s Manual (Ex. 1027, “Micros 8700 UM”) including the Micros 8700 HMS Version 2.10 Appendix published in June 1997 (collectively, the “Micros 8700 Pub”) in view of Bill N. Schilit, *Digestor: Device-Independent Access to the World Wide Web*, Computer Networks and ISDN Systems (1997) (Ex. 1022, “Digestor”).

C. Claims 13-18 are unpatentable under 35 U.S.C. § 103 (pre-AIA) as obvious over U.S. Pat. No. 6,058,373 to Blinn et al. (Ex. 1025, “Blinn”) in view of Digestor.

VI. LEVEL OF ORDINARY SKILL IN THE ART

A person of ordinary skill in the art at the time of the alleged invention of the ’077 patent (a “POSITA”) patent had a Bachelor’s degree in either electrical engineering or computer science and two years of experience in the fields of developing software for wireless networks and devices, developing Internet-based systems or applications, or an equivalent experience in software development of up to 5 years. Ex. 1002 ¶¶ 71-72.

VII. SUMMARY OF THE ’077 PATENT

A. Patent Specification and Claims

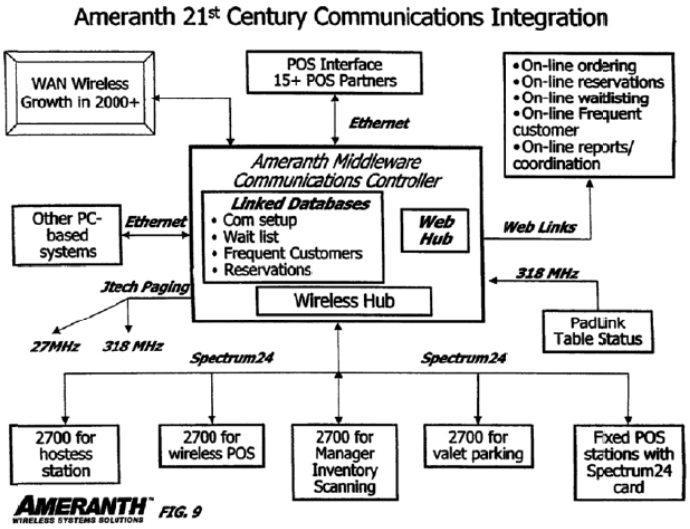
The ’077 patent, entitled “Information Management and Synchronous Communications System With Menu Generation, and Handwriting and Voice Modification of Orders,” was filed on April 22, 2005 and issued on March 27, 2012. Ex. 1004 at 1. The ’077 patent claims priority to, and is a continuation of, application No. 10/016,517, filed on Nov. 1, 2001, now U.S. Pat. No. 6,982,733, which is a continuation-in-part of application No. 09/400,413, filed on Sep. 21, 1999 (Ex. 1006), now U.S. Pat. No. 6,384,850. Exs. 1005 (’733 patent) and 1001 (’850 patent). The ’077 patent was assigned upon issuance to, and upon information and belief is still owned by, Patent Owner Ameranth, Inc.

As the Board previously found, a “principal object” of the ’077 patent “‘is to provide an improved information management and synchronous communications system and method which facilitates . . . generation of computerized menus for

restaurants and other applications that utilize equipment with non-PC-standard graphical formats, display sizes and/or applications.'" Ex. 1019 at 3 (quoting Ex. 1004, '077 patent at 2:61-67). According to the '077 patent, handheld wireless computing devices such as PDAs had not previously been "quickly assimilated into the restaurant and hospitality industries" due to their small display sizes. Ex. 1004 at 2:12-17; Ex. 1019 at 2-3. The '077 patent addresses this problem by reformatting menus to display on wireless handheld computing devices as "cascaded sets of linked graphical user interface screens." Ex. 1004 at 16:3-4.

In addition to reformatting menus for the small screen sizes of wireless handheld devices, the '077 patent is also directed toward keeping the menus displayed on such wireless handheld computing devices and on other user devices synchronized with a master menu stored in a master database. The '077 patent describes its preferred embodiment as a "synchronous communications control module . . . [that] provides a single point of entry for all hospitality applications to communicate with one another wirelessly or over the Web." Ex. 1004 at 12:39-42. "The single point of entry works to keep all wireless handheld devices and linked Web sites in synch with the backoffice server (central database)." Ex. 1004 at 12:47-49. This allows for "a reservation made online [to be] automatically communicated to the backoffice server which then synchronizes with all the wireless handheld devices wirelessly." Ex. 1004 at 12:51-54.

Figure 9 from the ’077 patent (reproduced below) is “an exemplary system diagram that illustrates how ‘[a] single point of entry works to keep all wireless handheld devices and linked web sites in synch with the backoffice server applications so that the different components are in equilibrium at any given time and an overall consistency is achieved.’” Ex. 1019 at 5-6, quoting Ex. 1004 at 5:29-33.



B. Overview of the Prosecution History

The Challenged claims were issued only after an extensive prosecution involving numerous interviews with the Examiner, numerous claim amendments, and five separate rejections rejecting the pending claims. The application for the ’077 patent was filed on April 22, 2005 along with a preliminary amendment intended to overcome rejections from previous examination of the priority application. Ex. 1012 (4/22/05 amendment) at 88-94. A second preliminary

amendment cancelled all claims and added twenty-six new claims. *Id*. (9/25/07 Amendment) at 151-59.

The Examiner next issued a non-final rejection of all claims due to certain prior art, including U.S. Patent No. 6,973,437 to Olewicz (Ex. 1049, "Olewicz") and U.S. Pat. Pub. 20020059405 to Angwin (Ex. 1048, "Angwin"). Ex. 1012 (12/15/08 Rejection) at 304-17. Applicants responded by submitting a 37 CFR 1.131 declaration in an attempt to antedate the Angwin and Olewicz references. *Id*. (1/23/09 Remarks) at 330-32. The examiner found that the declaration failed to antedate the Angwin and Olewicz references because it did not establish an actual reduction to practice or reasonable diligence during the critical period. *Id*. (6/26/09 Non-Final Rejection) at 427. The examiner also presented new obviousness rejections in view of the Micros 8700 UM reference and other prior references. *Id*. at 429-47. The applicants responded with two additional inventor declarations under 37 CFR 1.131 as well as an inventor declaration under 37 CFR 1.132 addressing purported secondary considerations. Ex. 1012 (8/21/09 Remarks) at 493-97; 536-39 and (McNally Declaration) at 541-724. The examiner then issued a final rejection of all claims as being obvious over the Micros 8700 UM, U.S. Patent No. 6,300,947 to Kanevsky et al. (Ex. 1051), and U.S. Patent No. 5,974,238 to Chase Jr. (Ex. 1056). Ex. 1012 (1/20/10 Final Rejection) at 769-805.

The applicants filed a notice of appeal and, following an interview with the

examiner, a Request for Continued Examination. *Id*. (2/25/10 Notice of Appeal) at 823; (5/24/10 Request for Continued Examination) at 831. In the Request, the applicants presented additional claim amendments and attempted to distinguish them from the prior art. *Id*. (5/24/10 Remarks) at 847-55. In response to an interview with the Examiner on Dec. 7, 2010, the applicants filed a supplemental response and amendment. *Id*. (12/16/10 Remarks and Amendments) at 923-43.

No further action took place until an applicant-instigated interview on October 14, 2011 to discuss possible allowable subject matter for the application. *Id*. (Feb. 2, 2012 Interview Summary) at 1030-31. Following this interview, the examiner allowed the application on February 2, 2012, stating that the prior art alone did not teach the following limitations:

> wherein the system is further enabled to automatically format the programmed handheld menu 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, and
>
> wherein a cascaded set of linked graphical user interface screens for a wireless handheld computing device in the system includes a different number of user interface screens from at least one other wireless handheld computing device in the system. *Id*. (Notice of Allowance) at 1052.

VIII. CLAIM CONSTRUCTION

In accordance with 37 C.F.R. § 42.304(b)(3), Petitioner provides the following statement regarding construction of the ’077 patent claims.

A. Legal Standard

Claims in a CBM review of an unexpired patent are to be given their “broadest reasonable interpretation in light of the specification.” 37 C.F.R. § 42.300(b). This standard is often referred to as “BRI”.

B. Construction of the Terms Used In the Challenged Claims

Because the claim construction standard in this proceeding differs from that used in U.S. district court litigation, Petitioner expressly reserves the right to assert different claim construction positions under the standard applicable in district court for any term of the ’077 patent in any district court litigation. Claim construction is further discussed in Ex. 1002 ¶¶ 69-90.

The Board has previously construed certain claim terms in its decision at Paper 19 of CBM2014-00014, and Petitioner hereby requests the Board adopt the same constructions here. As the Board is aware, four district court claim construction opinions have been issued for patents of the same family: three in Case No. 2:07-cv-00271-TJW-CE (E.D. Tex.), involving, the ’850 patent, U.S. Patent No. 6,871,325 (Ex. 1003, the “’325 patent”), and the ’733 patent, and one in Case No. 2:10-CV-294-JRG-RSP (E.D. Tex.), involving the ’850 and ’325 patents.

Ex. 1019 at 15-16. However, as the Board has previously found, these claim construction opinions are not necessary to resolve this Petition. *Id*. at 16.

1. "hospitality application information" (claim 13)

The Board previously construed this claim term as "information used to perform services or tasks in the hospitality industry." Ex. 1004 at 5:17-18; Ex. 1019 at 16-17; Ex. 1002 ¶ 84.

2. "synchronized" (claims 1, 9 and 13)

The Board previously construed this claim term as "made to happen, exist, or arise at the same time." Ex. 1019 at 17-18. PO asserted during oral argument in CBM2014-00013 that downloading a menu from one device to another device constitutes synchronization, Ex. 1035 at 31-32, and should be held to that construction. "Synchronous" in these claims should be similarly construed. Ex. 1002 ¶ 85.

3. "cascaded sets"

This term should be construed to mean "sets whose members are arranged in succession." This construction comports with the plain meaning of "cascade" as "a succession of stages, processes, operations or units." Ex. 1036 at 3; Ex. 1002 ¶ 86-87.

4. "graphical user interface screens" (Claims 1, 9, and 13)

The Board previously construed this claim term as "a plurality of screen displays that provide an interface for user operations, such as menu selections."

Ex. 1019 at 18-19; Ex. 1002 ¶ 88.

5. "unique to the wireless handheld computing device" (Claims 1, 9, and 13)

The Board previously construed this claim term as "distinctly characteristic of the wireless handheld computing device." Ex. 1019 at 20; Ex. 1002 ¶ 89.

6. "web page" (Claim 13)

In the related proceeding CBM2014-00015, the Board construed the term "web page" in the '850 patent as "a document, with associated files for graphics, scripts, and other resources, accessible over the internet and viewable in a web browser." Ex. 1017 at 8; Ex. 1002 ¶ 73.

7. "database" (claims 2, 3, 10, 12-15)

This term should be construed to mean "a file composed of records, each containing fields, together with a set of operations for searching, sorting, recombining and other functions." Ex. 1034 at 8; Ex. 1002 ¶¶ 79-80.

8. "real time" (claims 1, 9 and 13)

In the context of the '077 patent, and under the BRI standard applicable here, this term should be construed to mean "a data-processing technique in which information is utilized as events occur and the information is generated, as opposed to batch processing at a time unrelated to the time the information was generated." *See* Ex. 1066 at 627; *see also Paragon Solns, LLC v. Timex Corp.*, 566 F.3d 1075, 1094 (Fed. Cir. 2009); Ex. 1034 at 11; Ex. 1002 ¶ 90. The meaning of "real time"

is context-dependent. Ex. 1002 ¶ 90. The construction above is consistent with the distinction drawn in the '077 patent between "real time communication over the internet" and "support for batch processing that can be done periodically throughout the day." Ex. 1004 at 2:27-31. Ex. 1002 ¶ 90.

9. The Preambles are Not Limiting.

The preambles do not recite any structural components and does not serve as the antecedent basis for any terms recited in the body of the Challenged Claims. Instead, the preambles merely set forth the purpose ("information management and synchronous communication") and intended use ("for generating and transmitting menus") of the claimed invention. *See* CBM2013-00014, Paper 33, at 14-15 (PTAB Aug. 22, 2014). Accordingly, the preambles are not limiting under the BRI.

IX. STATE OF THE ART PRIOR TO THE '077 PATENT

The state of the art prior to the '077 patent is discussed generally in Ex. 1002 ¶¶ 91-106. The techniques claimed in the '077 patent were all well known in the computer and hospitality industries well before the earliest effective filing date of the '077 patent in September 1999. *See generally id*. For example, several different schemes for ensuring that a consistent set of data is available at client devices (both wireless hand-held and PCs) were well known to a POSITA. One possibility was the use of a centralized database that was queried by client devices to obtain data when it was needed, such as in response to user queries. Ex. 1026 at

430; Ex. 1002 ¶ 563. Alternatively, the concept of storing separate full or partial copies of a central database client sites (sometimes referred to as database replication) was also well known in the art. Ex. 1026 at 430-31; Ex. 1002 ¶ 563. Known techniques for updating such replicated databases included snapshot replication, near real-time replication, and pull replication. Ex. 1026 at 424. Similarly, real time communication of data from a database (*e.g.*, for airline or hotel reservations) was also well known in the art. *Id.* Accordingly, claim limitations such as "real time synchronous communication" and "real time synchronous transmission of the programmed handheld menu configuration" (which is nothing more than a database) were nothing new in the art at the time of the '077 patent. *See generally*, Ex. 1002 ¶¶ 91-106; 558-566.

The use of wireless handheld devices was also known in the computer and hospitality industries well before the '077 application was filed. For example, a wireless handheld device from Micros Systems known as the HHT (hand held terminal) had been in use in the Walt Disney World Village for taking beverage orders in the pool area and communicating those orders to the hotel's point of sale system, the Micros 8700 hospitality management system, at least as early as January, 1997. Ex. 1029 at 26. The use of such wireless handheld devices for taking and communicating orders from customers was known to shorten the time necessary for the servers to bring orders to customers. *Id*. at 26.

The technique of re-configuring or re-formatting information to be displayed on a small screen such as that found on a smartphone or PDA (both of which are wireless handheld devices) was also known in the art long before the ’077 patent was filed. Digestor discloses reauthoring a single web page configured for display on a large screen into a set of linked webpages, each with a portion of the information from the single large screen web page for display on such wireless handheld devices. *See* Ex. 1022 at 1078 (single web page with title, headings and content replaced by multiple web pages including outline page with title and headings in the form of hypertext links to additional pages with corresponding content). Also, the Micros 8700 UM discloses sets of linked screens displayed on a screen of a wireless hand held terminal one after the other. *See* Ex. 1027 at 3-7 to 3-9 (discussing use of next screen and previous screen keys to access linked user defined HHT screens). The claim limitations directed toward “cascaded sets of linked graphical user interface screens” for display on a wireless handheld device were therefore also known well before the filing of the ’077 patent.

Accordingly, all of the components and techniques of claims 1-18 of the ’077 patent are in the prior art, and it would have been obvious to combine them in the manner recited in those claims as discussed below. *See* Ex. 1002 ¶¶ 29-43, 558-66, and 749-52.

X. THERE IS A REASONABLE LIKELIHOOD THAT PETITIONER WILL PREVAIL ON AT LEAST ONE CLAIM OF THE '077 PATENT

As required under 35 U.S.C. § 324(a), there is a reasonable likelihood that Petitioner will prevail in establishing that at least one of claims 1-18 of the '077 patent is invalid under 35 U.S.C. §§ 102 and 103 as explained below.

XI. DETAILED EXPLANATION OF THE CHALLENGES

A detailed explanation of the pertinence and manner of applying the prior art references to claims 1-18 of the '077 patent is provided below in accordance with 37 C.F.R. §§ 42.304(b)(4) and 42.304(b)(5).

A. Challenge to Claims 1-18 As Indefinite Due to Lack of Antecedent Basis For "the same connected system" Limitations

Each independent claim (claims 1, 9, and 13) of the '077 patent recites the limitation "the same connected system." Ex. 1004 at 16:55-56, 18:41, and 20:3-4. These claims do not recite a "connected system" prior to the "the same connected system" limitation, and there are multiple possible ways to interpret this limitation. For example, it is not clear whether this limitation requires that the claimed system itself include two wireless handheld computing devices each with a different display size, or whether the claimed system must be connected to a second system that has two wireless handheld computing devices with different display sizes. Other interpretations are possible. Accordingly, claims 1, 9, and 13 are indefinite.

Notably, the Patent Office has already determined that the Challenged Claims are indefinite. In an interference, the applicants of U.S. Patent No.

8,738,449 (Ex. 1055, the "'449 Patent") copied the claims from the '077 patent. The examiner rejected the copied claims for lack of antecedent basis for the "the same connected system" limitation. *See* Ex. 1062, 6/6/13 Non-Final rejection. The applicants amended "in the same connected system" to read "connected to the system." Ex. 1062 at 12/4/13 Amendment. Because this deficiency has not been corrected in the '077 patent, all Challenged Claims are indefinite.

B. Challenge to All Claims Based on the Micros 8700 Pub and Digestor

1. Summary of Micros 8700 Pub

The Micros 8700 Pub qualifies as prior art to the '077 patent under 35 U.S.C. § 102(b) because it was published in June 1997, which is more than one year prior to the earliest possible effective filing date of the application of the '077 patent on September 21, 1999. In the *Ameranth v. Menusoft* litigation, Ameranth alleged that the Micros 8700 Pub was not prior art because it was only available along with the sale of the related Micros product. *See* Ex. 1057 at 7. However, the Federal Circuit has held that prior art "need only be accessible to the interested public." *Cooper Cameron Corp. v. Kvaerner Oilfield Products*, 291 F.3d 1317, 1324 (Fed. Cir. 2002). The Micros 8700 Pub was accessible to the interested public for at least the following reasons.

First, Ameranth did not dispute that any member of the interested public could obtain a manual by purchasing the system. Second, the Micros 8700 Pub

lacks any confidentiality designations or any other indicia restricting distribution. *See generally* Exs. 1027-28. Third, there is sworn deposition testimony that there were no restrictions on distribution of the Micros 8700 Pub. *See* Exs. 1062 at 23:25-24:15, 25:11-26:11, and 28:2-11; 1063 at 7:5-8:3, 8:10-11:1; and 1064 at 33:24-25, 45:18-46:4, 49:14-50:5, and 63:24-64:20. Fourth, the Micros 8700 Pub itself describes how the user can order additional copies through placing an order with a specific order number provided in the manual. *See* Ex. 1027 at xvi-xix. It should also be noted that the District Court denied Ameranth's motion alleging that the Micros Pub did not qualify as prior art. *See* Exhibit 1059. Therefore, the Micros 8700 Pub is prior art under 35 U.S.C. § 102(b).

The Micros 8700 Pub describes a menu-based, database-driven, point-of-sale restaurant management system sold and distributed by Micros Systems, Inc., called the Micros 8700 Hospitality Management System ("Micros 8700 HMS"). The Micros 8700 Pub describes the system as an "integrated Point-Of-Sale (POS) system comprising modular hardware and flexible, user-configured software." Ex. 1027 at 1-2. Along with the POS operations, the Micros 8700 HMS provides printing, sales and cost reporting, and interfaces to third-party peripheral equipment and software including property management systems, among other functionalities. *Id*.; Ex. 1002 ¶ 561.

The Micros 8700 HMS included the 8700 HMS base station in communication with user workstations and wireless handheld computing devices, called hand-held touchscreens ("HHTs"), all of which include graphical user interfaces for displaying, manipulating, and storing menus. *Id*. at 1-3 to 1-4, 1-18, 3-2, 5-2, 5-22, D-33 to D-35. The Micros 8700 HMS permits the display and generation of multiple menus. For example, Micros 8700 HMS discloses the capability to display menu items such as appetizers for a food menu among other selections. *Id*. at 1-18 and 3-3 to 3-10. The Micros 8700 HMS further allows the user to perform almost all of the POS operations that can be performed on a user workstation. *Id*. at 1-17. In addition to displaying information across these devices, Micros 8700 HMS synchronizes and updates information across these devices through, *e.g.*, updating the menu data on these devices. *Id.* at 5-13. The Micros 8700 HMS further discloses display of menus on the graphical user interface of devices of different display sizes and requirements, such as user workstations and handheld terminals. Ex. 1027 at 1-5 to 1-16, 5-13; Ex. 1002 ¶ 562.

2. Summary of Digestor

Digestor, which was not considered by the Patent Office during the original prosecution of the '077 patent, also qualifies as prior art under 35 U.S.C. § 102(b) because Digestor was published in 1997, which is more than one year prior to the

earliest possible effective filing date of the ’077 patent on September 21, 1999. Digestor describes “a software system which automatically re-authors arbitrary documents from the world-wide web to display on small screen devices such as PDAs and cellular phones, providing device independent access to the web.” Ex. 1022 at Abstract. An example of a reauthored web document that has been divided to display as a cascaded set of linked graphical user interface screens on a small screen device is shown in the figure below (Ex. 1022 at 1078):

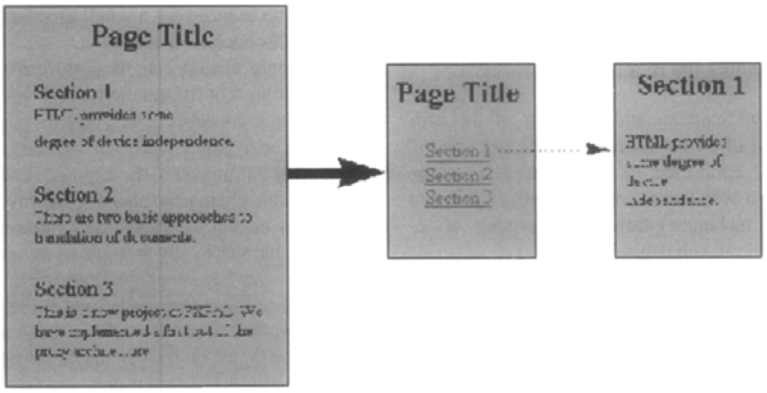


Fig. 3.

Digestor discloses four approaches for formatting documents for display on small screens, including: (1) device-specific authoring, (2) multiple-device authoring, (3) client-side navigation, and (4) automatic re-authoring. *Id.* at 1076. Automatic re-authoring can be performed at either the server that serves the documents, the client, or an intermediate device. *Id.*; Ex. 1002 ¶ 564.

3. Challenge Based on the Micros 8700 Pub and Digestor.

While the Micros 8700 HMS system was implemented using proprietary communications and data formats, it would have been obvious to a POSITA to

implement that system using well-known Internet technologies such as hyptertext transport protocol (HTTP) for communications (including transmission of menus, selections from menus, and updates relating to the same) among the system components, and hypertext markup language (HTML) and web browsers for authoring and displaying menus and other data at the user workstations and the HHTs. Ex. 1002 ¶ 565. It would further have been obvious to a POSITA to utilize a web server as disclosed in Digestor for communications among the various system components. *Id*. at ¶ 566. A POSITA would have been motivated to do so in order to take advantage of existing hardware and software to minimize development costs. *Id*. Because both Micros 8700 UM and Digestor discuss display of data on multiple devices with different display configurations, it would have been obvious to a POSITA to combine Digestor's customized display layout teachings to the user workstation and HHT devices supported by the Micros 8700 HMS so that menus would be displayed appropriately on the differently-sized display screens of all devices in the system. *Id*. It should be noted that nothing in the claims of the '077 patent preclude both the "web page" and the "wireless handheld device" from being implemented as wireless handheld devices with browsers. *Id*. This combination renders each of the claims of the '077 patent obvious as shown in the following charts. *Id*.

Claim 1	**Micros 8700 Pub and Digestor**
An information	The Micros 8700 UM discloses an information management and

management and real time synchronous communications system for configuring and transmitting hospitality menus comprising:	real time synchronous communications system for processing orders, configuring, and transmitting menus for a hospitality management system (HMS) that allows restaurants to take and complete orders, and keep track of inventory of menu items remaining for purchase in real-time. Ex. 1027 at 1-2, 5-13. "The 8700 is an integrated Point-Of-Sale (POS) system comprising modular hardware and flexible, user-configured software . . . An 8700 System includes personal computer(s), User Workstations, printers, peripheral devices, and software. The 8700's modular design allows great flexibility in configuring a system that is both cost effective and functional." Ex. 1027 at 1-2. "The item quantity, name, and price posts to the check detail. Depending on the availability of the item and the programming of the system, one of the prompts shown below will display." Ex. 1027 at 5-13. "The Special Count may be set for those Menu Items that are programmed for limited availability (Menu Item Class Type Definition #16 - Check Menu Item Availability Before Allowing Sale - is set ON.) The Special Count is reduced each time a Menu Item is ordered. When the count reaches zero, the Menu Item automatically shifts to "Not Available"." Ex. 1027 at 11-28. Digestor discloses the use of Internet technology for displaying information on both large and small screen devices. Ex. 1022 at 1075. *See also* Ex. 1002 ¶¶ 567-71.

A POSITA would have understood that the Micros 8700 required a synchronous, real-time communications system to maintain an updated "Special Count" of menu items available for display on other display devices in the system. Ex. 1002 ¶ 571. A POSITA would further have understood that systems using Internet technology constituted real time synchronous communications systems as those terms are used in the '077 patent. *Id*. at ¶¶ 90, 571.

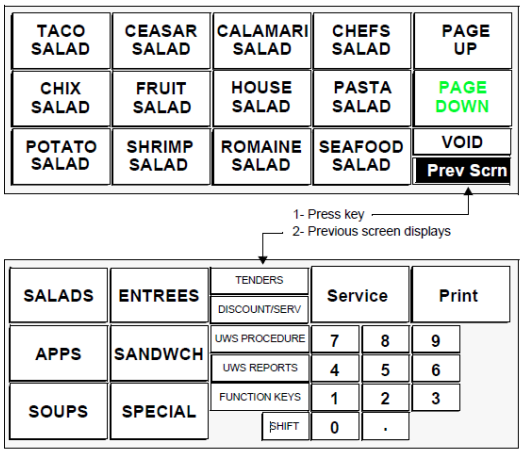
Claim 1	**Micros 8700 Pub and Digestor**

a. a central processing unit	The Micros 8700 UM discloses a central processing unit in the PC Workstation. Ex. 1027 at 1-12. "The PC Workstation (PCWS) is a personal computer that functions both as a PC and a User Workstation," including a "[s]ystem board supporting a variety of true 32-bit processors, including 486SX 25Mhz, 486DX/2 66Mhz, and 486DX/4 100Mhz." Ex. 1027 at 1-12. *See* also Ex 1002 ¶¶ 572-74. *See also*, Ex. 1012 (Jan. 20, 2010 Final Rejection) at 771.
b. a data storage device connected to said central processing unit,	The Micros 8700 UM discloses various data storage devices connected to the central processing unit. "Memory configurations ranging from 1 Mbyte to 64 Mbytes, with an optional cache available as 128 Kbytes or 256 Kbytes" as features of the PC Workstation which also includes the central processing unit. Ex. 1027 at 1-12. "Disk drive options, including an internal hard drive and an external floppy disk drive." Ex. 1027 at 1-12. "The SQL module provides an industry standard set of commands that allow you to define, display, and update 8700 database information in tables (similar to a typical spreadsheet). These commands also allow you to import database information into many accounting packages as well as Standard database applications like dBase IV. The Unix cron command allows SQL commands to be executed at specified dates and times. Thus, updates to the **8700 database** can be performed unattended." Ex. 1027 at 1-3 (emphasis added). *See also*, Ex. 1012 (Jan. 20, 2010 Final Rejection) at 771. *See also* Ex. 1002 ¶¶ 575-80.

A POSITA would understand that a data storage device could be a volatile memory such as a RAM chip, or a non-volatile memory such as a hard disk drive. Ex. 1002 ¶ 580.

c. an operating system including a	The Micros 8700 UM discloses user workstations, such as personal computer work stations, running the Unix operating system with a graphical user interface. "An 8700 System includes personal computer(s), User

first graphical user interface,	Workstations, printers, peripheral devices, and software. The 8700's modular design allows great flexibility in configuring a system that is both cost effective and functional. Further, the 8700 provides multitasking and multi-user capability through the Unix operating system." Ex. 1027 at 1-2 "User Workstations (UWS) are used to record all sales and time keeping activity in the system...." Ex. 1027 at 1-4 "The Screen Display displays transaction information during POS Operations...This illustration shows the screen display format for UWS/1 and U WS/2." Ex. 1027 at 1-7 *See also* Ex. 1027 Appendix D (detailing graphic user interface procedures for adding and manipulating records); Ex. 1012 (Jan. 20, 2010 Final Rejection) at 772. *See also* Ex. 1002 ¶¶ 581-85.
d. a master menu including at least menu categories, menu items and modifiers,	The Micros 8700 UM discloses a master menu including menu categories such as appetizers, menu items such as a list of appetizers, and modifiers such as condiments. "A lookup key lists a set of items on the operator display and allows the operator to choose one. It optimizes keyboard space by linking multiple menu items or functions to a single key. For example, one set of menu items might be linked to an appetizer lookup. When an operator presses the appetizer lookup, a numbered list of appetizers appear on the display . . ." Ex. 1027 at 1-18; *see also id.* at 3-8. "Many menu items are programmed to require or allow condiments. The term "condiment" includes anything that may modify a menu item-accompaniments, toppings, dressing, preparation instructions, etc. You will be prompted for required condiments, but not for condiments that are allowed (not required)." Ex. 1027 at 5-22; *see also id.* at 3-12. *See also*, "Condiments requiring other condiments" at Ex. 1027 at 5-2; Ex. 1012 (Jan. 20, 2010 Final Rejection) at 772. *See also* Ex. 1002 ¶¶ 586-89.
wherein said master menu is capable of being stored on said data storage	The Micros 8700 UM discloses that the master menu is stored on the user workstation. The "[User Workstation] Procedures are used to perform tasks that modify (change or update) the system's database. For example, using UWS Procedures, a manager may edit, add, or

device pursuant to a master menu file structure and	delete records from the employee or menu item files. Although many of these procedures can be performed at the PC through System Configurator, there are advantages to using UWS Procedures . . .” Ex. 1027 at 11-2. *See also*, Ex. 1027 Appendix D, D-33 to D-36; Ex. 1012 (Jan. 20, 2010 Final Rejection) at 773. *See also* Ex. 1002 ¶¶ 590-93.
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	The Micros 8700 UM discloses that the graphical user interface of the user workstation is configured as cascaded sets of linked graphical user interface screens that are configured to facilitate user operations, such as cashier or manager functions, or taking orders. “When you sign in at a UWS/3, a “Default” Transaction Touchscreen will display based on how the system is programmed. The particular screen that displays is unique to each installation. Typically, each job function (for example, server, cashier, manager) has its own default transaction touchscreen that gives access to specific operations.” Ex. 1027 at 3-2. The user workstation displays cascaded sets of linked graphical user interface screens such as cascaded ‘Main Food and Beverage’ and ‘Salads’ screens shown below: Mary pressed [Salads] by mistake on her main food and beverage touchscreen. Luckily, there is a [Previous Screen] key programmed on the SLU screen that is generated by [Salads]. When Mary presses [Previous Screen], the Main Food and Beverage Touchscreen is displayed again. This scenario is illustrated below.  Ex. 1027 at 3-8. *See also* Ex. 1012 (Jan. 20, 2010 Final Rejection) at 773. *See also* Ex. 1002 ¶¶ 594-96.
e. menu configuration software	The Micros 8700 UM discloses that menus on the HHT can be used to perform many of the same operations as performed on the user workstations (Ex. 1002 ¶ 597):

enabled to generate a programmed handheld menu configuration from said master menu for wireless transmission to and programmed for display on a wireless handheld computing device,	"The HHT is a portable User Workstation. Like the UWS/3, it contains an 8700 Revenue Center database. Using the HHT, an operator can post orders, close guest checks, and perform almost every other operation that is available on a UWS." *See* Ex. 1027 at Micros 1-15; *see also* Ex. 1002 ¶ 598. "The HHT transmits posting and transaction information to the Base Station (BST), and the BST transmits guest check information and database modifications to the HHT." See Ex. 1027 at Micros 1-15. Digestor discloses reauthoring software that modifies a master document sized for display on a large screen by dividing it into a set of smaller linked documents sized for display on a smaller screen of a wireless handheld terminal. Ex. 1022 at 1078 and Fig. 3; *see also* Ex. 1002 ¶ 598. *See also* Ex. 1002 ¶¶ 597-99.

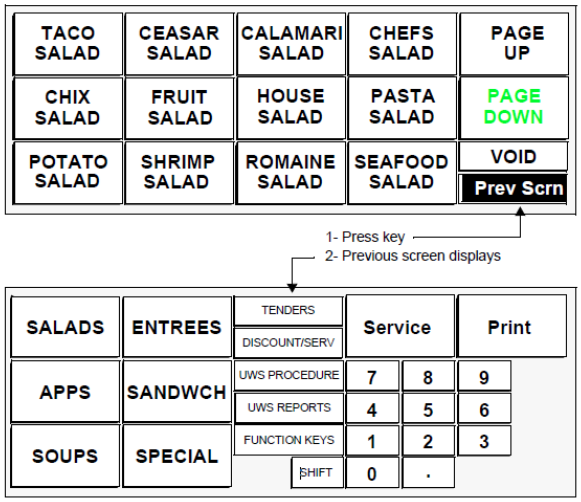
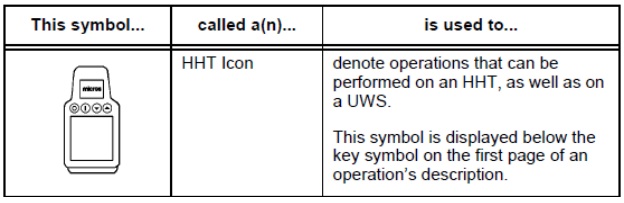
It would have been obvious to a POSITA to utilize reauthoring software as disclosed in Digestor to modify the size of the menu pages displayed on the workstation by dividing them into smaller pages for display on the smaller screen of the hand held terminal. Ex. 1002 ¶ 599.

said programmed handheld menu configuration comprising at least menu categories, menu items and modifiers and	The Micros UM discloses that the HHT can "can post orders, close guest checks, and perform almost every other operation that is available on a" workstation. Ex. 1027 at Micros 1-15. One of these operations is the display of menu categories, menu items and modifiers. *See* Ex. 1027 at Micros 3-7 to 3-10, 3-16 (depicting HHT icon); id. at xiv (indicating that the HHT icon indicates "operations [] can be performed on an HHT, as well as a UWS." Ex. 1027 at Micros xiv. *See also* element 1(d) above; Ex. 1012 (Jan. 20, 2010 Final Rejection) at 773-74. *See also* Ex. 1002 ¶¶ 600-03.
wherein the menu configuration software is	The Micros 8700 UM discloses software enabled to generate menus as discussed in the previous claim elements. *See e.g.*, *supra* at element 1.e. and previous element. The Micros

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,	software provides the operations to be performed on both the HHT as well as the workstation, which includes using the menu categories, items and modifiers from the master menu file described in previous claim elements above. *See supra* and Ex. 1027 at Micros xiv and Micros 3-7 to 3-10. Micros discloses synchronizing the menu information in real time as evidenced by the ability to track the number of menu items remaining: **Post Limited Availability Menu Item**  **Procedure** 1. Begin or pick up a guest check. 2. If ordering more than one of this menu item, press the quantity. 3. Press the menu item key, for example: [Daily Spcl #1]. The item quantity, name, and price posts to the check detail. Depending on the availability of the item and the programming of the system, one of the prompts shown below will display. **Prompts** **Prompt** / **What it Means** / **Action Required** `ONLY 1 name REMAINING`, where name is the menu item — When the count decrements to 2 and another of the menu item is ordered, the system warns of the impending outage with the prompt. — Press [Clear] to continue. Notify other operators. `ONLY # ITEMS REMAINING`, where # is the quantity on hand. — An order was placed for more of an item than is on hand. — Press [Clear] to continue. Order equal to or less than the number remaining. `NO MORE name REMAINING` — No more of this item is available. — Press [Clear] to continue. The status can be changed through UWS Procedure #14. Ex. 1027 at 5-13; *see also id*. at 5-14, 5-27, and 11-28. *See also* Ex. 1012 (Jan. 20, 2010 Final Rejection) at 774-75; Ex. 1002 ¶¶ 604-07. Digestor discloses reauthoring software that modifies a master document sized for display on a large screen by dividing it into a set of smaller linked documents sized for display on a smaller screen of a wireless handheld terminal. Ex. 1022 at 1078 and Fig. 3; *see also* Ex. 1002 ¶ 606.
wherein the menu configuration software is further enabled to generate the programmed handheld menu configuration in conformity with a customized display	The Micros 8700 UM discloses software enabled to generate a menu with a layout unique to the HHT: "The HHT's LCD touchscreen displays 12 lines of 20 to 30 characters. (It varies because a proportional font is used.) The touchscreen overlay features 8 columns by 5 rows, for a total of up to 40 touchscreen keys. Two character sizes are available for key legends." Ex. 1027 at 1-15. The HHT and User Workstations "require[] different steps

layout unique to the wireless handheld computing device to facilitate user operations with and display of the programmed handheld menu configuration on the display screen of a handheld graphical user interface integral with the wireless handheld computing device, wherein said customized display layout is compatible with the displayable size of the handheld graphical user interface	and different keys than those described [in the User Manual]." Ex. 1027 at 2-19. *See also id.* at 11-25 to 11-26 (referring to HHT SLU Group field for HHT only and SLU Group field for non-HHT touchscreens). Digestor discloses customizing the display of content for graphic user interfaces of handheld devices with varying screen sizes: "Digestor is a software system which automatically re-authors arbitrary documents from the world-wide web to display appropriately on small screen devices such as PDAs and cellular phones, providing device independent access to the web. Digestor is implemented as an HTTP proxy which dynamically re-authors requested web pages using a heuristic planning algorithm and a set of structural page transformations to achieve the best looking document for a given display size." Ex. 1022 at 1075; Ex. 1002 ¶ 612. "Automatic re-authoring is thus the ideal approach to providing broad access to the web from a wide range of devices, if it can be made to produce legible, navigable and aesthetically pleasing re-authored documents without loss of information." Ex. 1022 at 1077; Ex. 1002 ¶ 613. *See also* Ex. 1002 ¶¶ 608-14.

A POSITA would have understood that the different steps and keys required on the HHT and the User Workstation exemplified unique displays and layouts specific to the HHT and the various User Workstations, especially in light of the different specification options of the displays. Ex. 1002 ¶ 614. Additionally, a POSITA would have found it obvious to combine Micros with Digestor to support other wireless handheld devices with varying screen sizes to create customized display layouts compatible with such handheld devices. Ex. 1002 ¶ 614.

Claim 1	Micros 8700 Pub and Digestor
wherein the programmed handheld menu configuration is configured by the menu configuration software for display as programmed cascaded sets of linked graphical user interface screens appropriate for the customized display layout of the wireless handheld computing device,	The Micros 8700 UM discloses displaying menu content as cascaded sets of linked graphical user interface screens as evidenced by the ability to go "previous" or "next" screens: **Previous Screen**  **Procedure** Press [Previous Screen]. The last, user-defined touchscreen is displayed. *Note* If several screens have been displayed and you wish to go back two or more screens, press [Previous Screen] as many times as necessary until the desired screen displays. However, note that [Previous Screen] disregards (or skips) SLU screens. **Prompts** None. Ex. 1027 at 3-7. Mary pressed [Salads] by mistake on her main food and beverage touchscreen. Luckily, there is a [Previous Screen] key programmed on the SLU screen that is generated by [Salads]. When Mary presses [Previous Screen], the Main Food and Beverage Touchscreen is displayed again. This scenario is illustrated below.  Ex. 1027 at 3-8; *see also id.* at 3-9. By including the icon described at Ex. 1027 at xiv, the Micros discloses the ability to display the programmed cascaded sets of linked graphical user interface screens on the handheld device:  *See also* Ex. 1002 ¶¶ 615-17.

As discussed above, Digestor discloses dividing pages sized for display on a large screen into sets of smaller pages for display on a smaller screen. Ex. 1022 at 1078-1079. To the extent it is not inherent, it would have been obvious to a POSITA to link the smaller pages in the sets to each other and to include navigation links including "next" and "previous" links so that the smaller documents would form cascaded sets of linked graphical user interface screens. Ex. 1028 (HTML Manual of Style) at 55 and Fig. 3.5; Ex. 1002 ¶ 617.

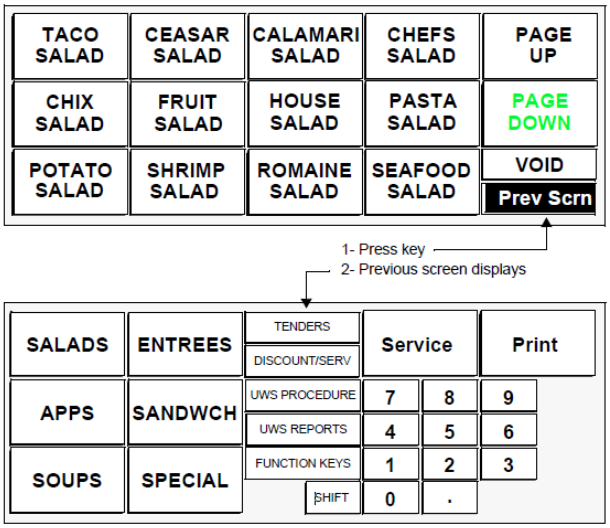
wherein said programmed cascaded sets of linked graphical user interface screens for display of the handheld menu configuration are configured differently from the cascaded sets of linked graphical user interface screens for display of the master menu on said first graphical user interface, and	The MICROS 8700 UM discloses different displays for the user workstation and the wireless handheld device such that the menu configuration between the two differs: "The HHT's LCD touchscreen displays 12 lines of 20 to 30 characters. (It varies because a proportional font is used.) The touchscreen overlay features 8 columns by 5 rows, for a total of up to 40 touchscreen keys. Two character sizes are available for key legends." Ex. 1027 at 1-15. "The Screen Display displays transaction information during POS Operations. The same screen format is used by the UWS/1 and UWS/2. The UWS/3 has a slightly different format which provides the same information." Ex. 1027 at 1-7. *See also id.* at 1-4 through 1-6, 1-8 through 1-11. The HHT and User Workstations "require[] different steps and different keys than those described [in the User Manual]." Ex. 1027 at 2-19. *See also* Ex. 1002 ¶¶ 618-21.

It would have been obvious to a POSITA that the master menu displayed on the user workstation could be comprised of multiple pages forming a cascaded set of linked graphical user interface screens, and that each such page could itself be modified by further dividing it into multiple pages forming a cascaded set of linked

graphical user interface documents for display on a smaller sized screen of a wireless handheld device. Ex. 1002 ¶ 621.

wherein the system is enabled for real time synchronous communications to and from the wireless handheld computing device utilizing the programmed handheld menu configuration including the capability of real time synchronous transmission of the programmed handheld menu configuration to the wireless handheld computing device and real time synchronous transmissions of selections made from the handheld menu configuration on the wireless handheld computing device, and	The Micros 8700 UM discloses real time synchronization of menu data to and from the wireless handheld device, including e.g. the availability of special menu items: **Post Limited Availability Menu Item**   **Procedure** 1. Begin or pick up a guest check. 2. If ordering more than one of this menu item, press the quantity. 3. Press the menu item key, for example: [Daily Spcl #1]. The item quantity, name, and price posts to the check detail. Depending on the availability of the item and the programming of the system, one of the prompts shown below will display. **Prompts** Ex. 1027 5-13. *See also* Ex. 1027 5-13 “The limited availability menu item feature allows you to define menu items to have a limited quantity available: After a programmed number of sales are posted, the system indicates that the menu item is unavailable when that menu item is entered. Example At the beginning of his shift, the manager entered the number of daily special s available during lunch, near the end of the lunch shift, Mary entered an order for five daily specials. She received the system prompt: "ONLY 4 DAILY SPECIAL REMAINING,'. She returned to her table and informed the group that one would have to order something else which one of the customers was happy to do. She then placed the order for four daily specials,

Prompt	What it Means	Action Required
ONLY 1 *name* REMAINING, where name is the menu item	When the count decrements to 2 and another of the menu item is ordered, the system warns of the impending outage with the prompt.	Press [Clear] to continue. Notify other operators.
ONLY # ITEMS REMAINING, where # is the quantity on hand.	An order was placed for more of an item than is on hand.	Press [Clear] to continue. Order equal to or less than the number remaining.
NO MORE *name* REMAINING	No more of this item is available.	Press [Clear] to continue. The status can be changed through UWS Procedure #14.

	Immediately after service totalling her check, her order, George, tried to enter an order for the daily special and received this message: "NO MORE DAILY SPECIAL REMAINING." *See also* Ex. 1002 ¶¶ 622-23. Digestor discloses that "[a]s soon as a state is created containing a document version that is 'good enough', the search is halted and that document is returned to the client for rendering." Ex. 1022 at 1079; Ex. 1002 ¶ 623
wherein the system is further enabled to automatically format the programmed handheld menu 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, and	As discussed above, the Micros 8700 UM discloses displaying cascaded sets of linked graphical user interface screens appropriate for the customized display layout of an HHT: **Previous Screen**  **Procedure** Press [Previous Screen]. The last, user-defined touchscreen is displayed. ***Note*** If several screens have been displayed and you wish to go back two or more screens, press [Previous Screen] as many times as necessary until the desired screen displays. However, note that [Previous Screen] disregards (or skips) SLU screens. **Prompts** None. Ex. 1027 at 3-7. Mary pressed [Salads] by mistake on her main food and beverage touchscreen. Luckily, there is a [Previous Screen] key programmed on the SLU screen that is generated by [Salads]. When Mary presses [Previous Screen], the Main Food and Beverage Touchscreen is displayed again. This scenario is illustrated below.  Ex. 1027 at 3-8.

	Digestor teaches generating customized display layouts with cascaded sets of linked user interface screens for wireless handheld devices that have varying screen sizes: "Digestor is a software system which automatically re-authors arbitrary documents from the world-wide web to display appropriately on small screen devices such as PDAs and cellular phones, providing device independent access to the web. Digestor is implemented as an HTTP proxy which dynamically re-authors requested web pages using a heuristic planning algorithm and a set of structural page transformations to achieve the best looking document for a given display size." Ex. 1022 at 1075; *see also id.* at 1077 ("The contents of each section is elided from the document and the section header is converted into a hypertext link which, when selected, loads the elided content."). *See also* Ex. 1002 ¶¶ 624-27.

A POSITA would have understood that the Micros 8700 Pub disclosed generating customized display layouts for devices of various screen sizes, such as User Workstations and HHTs. Ex. 1002 ¶ 627. It would have been obvious to a POSITA to generate customized display layouts for other types of handheld devices, as disclosed for example in Digestor, to enable the Micros 8700 HMS system to work with the various types of portable handheld devices available in the market. *See*, *e.g.* Ex. 1022 at 1075 (describing various devices) and Ex. 1002 ¶ 627.

Claim 1	**Micros 8700 Pub and Digestor**
wherein a cascaded set of linked graphical user interface screens for a	The Micros 8700 UM discloses different user interface layouts with different numbers of user interface screens for various types of devices, including user workstations and HHT devices: "The HHT's LCD touchscreen displays 12 lines of 20 to 30 characters. (It varies because a proportional font is used.) The

wireless handheld computing device in the system includes a different number of user interface screens from at least one other wireless handheld computing device in the system.	touchscreen overlay features 8 columns by 5 rows, for a total of up to 40 touchscreen keys. Two character sizes are available for key legends." Ex. 1027 at 1-15. "The Screen Display displays transaction information during POS Operations. The same screen format is used by the UWS/1 and UWS/2. The UWS/3 has a slightly different format which provides the same information." Ex. 1027 at 1-7. The HHT and User Workstations "require[] different steps and different keys than those described [in the User Manual]." Ex. 1027 at 2-19. Digestor discloses customizing the display of information for devices, including the number of user interface screens, based on the screen size of the device: "Digestor is a software system which automatically re-authors arbitrary documents from the world-wide web to display appropriately on small screen devices such as PDAs and cellular phones, providing device independent access to the web. Digestor is implemented as an HTTP proxy which dynamically re-authors requested web pages using a heuristic planning algorithm and a set of structural page transformations to achieve the best looking document for a given display size." Ex. 1022 at 1075. *See also* Ex. 1002 ¶¶ 628-34.

A POSITA would have understood that the Micros 8700 UM disclosed generating customized display layouts for devices of various screen sizes, such as User Workstations and HHTs. Ex. 1002 ¶ 634. It would have been obvious to a POSITA to generate customized display layouts with different numbers of user interface screens for other types of handheld devices with different display sizes, as disclosed in Digestor, to enable the Micros 8700 HMS system to work with such other handheld devices. *See, e.g.*, Ex. 1022 at 1075 (describing various PDAs, including the Sony MagicLink, Apple Newton, Nokia 9000 Communicator); Ex.

1002 ¶ 634.

Claim 2	**Micros 8700 Pub and Digestor**
2. The information management and synchronous communications system in accordance with claim 1,	See claim 1 preamble above. *See also* Ex 1002 ¶ 635.
wherein the system is further enabled by a communications systemic relationship providing a common, linked system comprising:	The Micros 8700 UM discloses an HMS system with common linked components enabled to communicate with each other: "The 8700 is an integrated Point-Of-Sale (POS) system comprising modular hardware and flexible, user-configured software. In addition to POS operations, the 8700 System also provides: • Printing and Video Display Requisition • Sales and Cost Reporting • Labor Scheduling and Time Keeping • Interfaces to third-party peripheral equipment and software, including Property Management Systems. An 8700 System includes personal computer(s), User Workstations, printers, peripheral devices, and software. The 8700's modular design allows great flexibility in configuring a system that is both cost effective and functional." Ex. 1027 at 1-2. *See also* Ex. 1002 ¶¶ 636-37.
a) A Wireless Hub Application;	The Micros 8700 UM discloses a base station transmitting information to the HHTs: "The HHT communicates by radio frequency with a Base Station, which is cabled to an LCC or RCC in one of the PCs in an 8700 System. The HHT transmits posting and transaction information to the Base Station (BST), and the BST transmits guest check information and database modifications to the HHT." Ex. 1027 at 1-15. *See also* Ex. 1002 ¶¶ 638-39.
b) A Web Hub Application;	The Micros 8700 UM discloses a base station connected to a PC which includes networking capabilities: The Micros PC workstation "functions both as a PC and a User Workstation" and includes networking functionalities such as "Ethernet 10BaseT and 10Base2 interfaces. Using the MICROS LAN card allows the expansion slot to also be used for other functions, such as serial interfaces, modems, SCSI interface, or

	multimedia." Ex. 1027 at 1-12. Digestor discloses that "automatic reauthoring . . . can be performed either on the client, on the **server**, or on an intermediary HTTP proxy server . . . ." Ex. 1022 at 1076 (emphasis added). *See also* Ex. 1002 ¶¶ 640-43.

The PC Workstation sits in the center of the Micros System allowing the user workstations, HHTs, and base stations to remain in synchronous communication. Ex. 1027 at 1-2. To the extent that the PC workstation was not already capable of connecting to the Web (or internet), a POSITA would have found it obvious to connect the PC workstation to the internet and to configure it to act as a web hub (i.e., a web server) as disclosed in Digestor for the Micros System. Ex. 1002 ¶ 643; *see also* Ex. 1027 at 1-2. A POSITA would have been motivated to do so to provide the capability of accepting orders and purchases via the internet. Ex. 1002 ¶ 643.

Claim 2	**Micros 8700 Pub and Digestor**
c) Linked Databases between two or more different Hospitality Applications; and	The Micros 8700 UM discloses linked databases between multiple hospitality software applications including at least two of restaurant point of sale systems (*see* Ex. 1027 at 1-3), or reservations, or waitlists (*e.g.* order waiting line (*see* Ex. 1027 at B-30)), or frequent customer or ticketing programs (*see* Ex. 1027 at 4-1 to 4-60). "The System Configurator module is an integral part of the 8700 System, providing: the means to create and edit the database files that define the parameters of the system—to program the restaurant's operation into the system." Ex. 1027 at 1-2. *See also*, Ex. 1012 (Jan. 20, 2010 Final Rejection) at 784-85. *See also* Ex. 1002 ¶¶ 644-45.
d) A Communications Setup Application.	Micros discloses prompts and messages used for communications between various components of the

	system: "UWS prompts and messages are features of the 8700 System that make it easy to learn and to use, by providing the operator with instructions or information. The most common may be divided into four types… Additional prompts … may include the following: … • Communications Messages may display, to describe communication conditions that exist between the UWS and other devices in the 8700 System." Ex. 1027 at Appendix at A-2. *See also* Ex. 1002 ¶¶ 646-48.

A POSITA would have understood that each UWS included a Communications Setup Application to initiate communication between the UWS and other components of the system. Ex. 1002 ¶ 648.

Claim 3	**Micros 8700 Pub and Digestor**
3. The information management and real time synchronous communications system in accordance with claim 1,	See claim 1 preamble above. *See also* 1002 ¶ 649.
wherein the information from the POS database is automatically imported into the system.	The MICROS 8700 UM discloses the ability to "import[] and export[] data into and out of the 8700 database." Micros 8700 UM at xix. Micros 8700 UM further discloses: "The SQL module provides an industry standard set of commands that allow you to define, display, and update 8700 database information in tables (similar to a typical spreadsheet). These commands also allow you to import database information into many accounting packages as well as standard database applications like dBase IV. The Unix cron command allows SQL commands to be executed at specified dates and times. Thus, updates to the 8700 database can be performed unattended." Micros 8700 UM at 1-3. *See also* Ex. 1002 ¶¶ 650-52.

A POSITA would have understood that the database importing functionality of the Micros system as well as the ability of the updates to "be performed unattended" would mean that the POS database would be automatically imported into the system. Ex. 1002 ¶ 652.

Claim 4	**Micros 8700 Pubs and Digestor**
4. The information management and real time synchronous communications system in accordance with claim 1, wherein the said Hospitality Applications include at least reservations applications.	See claim 1 preamble above. *See also*, Ex. 1012 (Jan. 20, 2010 Final Rejection) at 784-85 and 802-03 citing Ex. 1027 at B-30. *See also* Ex. 1002 ¶¶ 653-55.

A POSITA would have found it obvious to include reservation applications such as the reservation application of Ex. 1029 in the Micros system because reservations are commonly used in restaurant services around the world. Ex. 1002 ¶ 655.

Claim 5	**Micros 8700 Pub and Digestor**
5. The information management and real time synchronous communications system in accordance with claim 1, wherein the said Hospitality Applications include at least a Ticketing applications.	See claim 1 preamble above. *See also*, Ex. 1012 (Jan. 20, 2010 Final Rejection) at 784-85 and 802-03 citing Ex. 1027 at Chapter 4 and 1-2. *See also* Ex. 1002 ¶¶ 656-58.

A POSITA would have found it obvious that the Micros system includes ticketing applications because the guest checks are similar to tickets and checks at restaurants have been referred to synonymously with tickets. *See* Ex. 1054; *see also* Ex. 1002 ¶ 658.

Claim 6		Micros 8700 Pub and Digestor
6. The information management and real time synchronous communications system in accordance with claim 1		See claim 1 preamble above. *See also* Ex. 1002 ¶¶ 659.
in which the wireless handheld computing device is a smart phone.	Digestor discloses display of content on smartphones, such as the Nokia 9000 Communicator: "General Magic's Presto!Links for Sony's MagicLink, AllPen's NetHopper for the Newton and Sharp's MI-l0 (shown to the right), all provide WWW browsers for PDA class devices, while the Nokia 9000 Communicator and Samsung's Duett provide web access capabilities from cellular phones." Ex. 1022 at 1075. *See also* Ex. 1002 ¶¶ 660-62.	

A POSITA would have found it obvious to use a smart phone such as those disclosed by Digestor in place of the Micros HHT. Ex. 1002 ¶ 662. A reason for doing so is the cost reduction associated with using off-the-shelf smart phones rather than developing a custom hand held terminal such as the Micros HHT. *Id*.

Claim 7	Micros 8700 Pub and Digestor
7. The information management and real time synchronous communications system in accordance with claim 1, further enabled to facilitate and complete payment processing directly from the wireless handheld computing device including: a) Billing; b) Status and c) Payment Information.	The Micros 8700 UM discloses a handheld device capable of payment processing including billing, status, and payment information. For example, the Micros 8700 UM discloses an HHT that can "tender checks" (*i.e.* process payment) via cash, credit card or room charge. *See* Ex. 1027 at Chapter 9; Ex. 1012 (Jan. 20, 2010 Final Rejection) at p 788-89. *See also* Ex. 1002 ¶¶ 663-66.

Claim 8		Micros 8700 Pub and Digestor
8. The information management and real time synchronous communications system in accordance with claim 1,		See claim 1 preamble above. *See also* Ex. 1002 ¶ 667.
wherein one or more of the layout, views or	The Micros 8700 UM discloses a HHT wherein the layout, views, and fonts are created in conformity with the display screen parameters of the device.	

fonts of the programmed handheld menu configuration are created in conformity with the display screen parameters of the wireless handheld computing device and	"The HHT's LCD touchscreen displays 12 lines of 20 to 30 characters. (It varies because a proportional font is used.) The touchscreen overlay features 8 columns by 5 rows, for a total of up to 40 touchscreen keys. Two character sizes are available for key legends." Ex. 1027 at 1-15. "Digestor is a software system which automatically re-authors arbitrary documents from the world-wide web to display appropriately on small screen devices such as PDAs and cellular phones." Ex. 1022 at 1075. *See also* Ex. 1002 ¶¶ 668-70.
wherein the system is enabled to generate a view of the programmed handheld menu configuration for user preview from the central computing unit and which facilitates a further user manual modification prior to the transmissions of the programmed handheld menu configuration to the wireless handheld computing device.	See claim 1 "wherein clause" at 32-33 above. The Micros 8700 UM discloses that changes can be made to the system database using either UWS (user workstation) Procedures or the System Configurator. Ex. 1027 at 11-2. These database changes include changes to menu items. *Id.* at 11-2, 11-22 – 11-30. *See also* Ex. 1002 ¶¶ 671-72.

It would have been obvious to a POSITA to display a preview of a display of both a user workstation and a hand held terminal to a user before the changes were distributed throughout the system as it was a common practice for HTML editors to allow a preview of a modified web page prior to placement of the modified web page on a server for further dissemination at the time of the '077 patent. Ex. 1002 ¶ 672; Ex. 1067 at 17-20.

Claim 9	**Micros 8700 Pub and Digestor**
9. An information management and real time synchronous communications system for configuring and transmitting hospitality menus comprising:	See Claim 1 preamble. *See also* Ex. 1002

	¶¶ 567-71.
a. a central processing unit,	See Claim 1.a. *See also* Ex. 1002 ¶¶ 572-74.
b. a data storage device connected to said central processing unit,	See Claim 1.b. *See also* Ex. 1002 ¶¶ 575-80.
c. an operating system including a first graphical user interface,	See Claim 1.c. *See also* Ex. 1002 ¶¶ 581-85.

said operating system configured to interoperate with the central processing unit, the data storage device and application software;	The Micros 8700 UM discloses a personal computer User Workstation running the Unix operating system. "The 8700 System includes personal computer(s), User Workstations, printers, peripheral devices, and software. The 8700's modular design allows great flexibility in configuring a system that is both cost effective and functional. Further, the 8700 provides multitasking and multi-user capability through the Unix operating system." Ex. 1027 at 1-2. *See also* Ex. 1002 ¶¶ 677-79.

A POSITA would understand that the Unix operating system interoperates with the central processing unit and data storage device on the device, as well as application software running on the device. Ex. 1002 ¶ 679.

Claim 9	**Micros 8700 Pub and Digestor**
d. a master menu including menu categories, and menu items	1.d. *See also* Ex. 1002 ¶¶ 586-89.
wherein said master menu is capable of being stored on said data storage device pursuant to a master menu file structure and	See Claim 1.d. "wherein clause" at p 29-30 above; *See also* Ex. 1002 ¶¶ 590-93.
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	See Claim 1.d. "wherein clause" at 30 above; *See also* Ex. 1002 ¶¶ 594-96.

e. a	Micros 8700 UM discloses a menu including menu categories, menu

modifier menu capable of being stored on said data storage device, and	items, and modifiers such as condiments. "Post Condiments Many menu items are programmed to require or allow condiments. The term "condiment" includes anything that may modify a menu item-accompaniments, toppings, dressing, preparation instructions, etc. You will be prompted for required condiments, but not for condiments that are allowed (not required)." Ex. 1027 at 5-22. *See also* claim 9.d regarding data storage device; Ex. 1002 ¶¶ 683-84 and "Condiments requiring other condiments" at Ex. 1027 at 5-2.

menu configuration software enabled to automatically generate a programmed handheld menu configuration from said master menu for display on a wireless handheld computing device,	See Claim 1.e. *See also* Ex. 1002 ¶¶ 597-99.
said programmed handheld menu configuration comprising at least menu categories, menu items and modifiers and	See Claim 1 above at 31. *See also* Ex. 1002 ¶¶ 600-03.
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 categories and items of the master menu and modifiers from the modifier menu 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 and modifier menus	See Claim 1 above at 31-32. *See also* Ex. 1002 ¶¶ 586-59; 608-14; and 687-89.
wherein the menu configuration software is further enabled to generate the programmed handheld menu configuration in conformity with a customized display layout unique to the wireless handheld computing device to facilitate user operations with and display of the programmed handheld menu configuration on the display screen of a handheld graphical user interface integral with the wireless handheld computing device,	See Claim 1 above at 32-33. *See also* Ex. 1002 ¶¶ 604-14.
wherein said customized display layout is compatible with the displayable size of the handheld graphical user interface,	See Claim 1 above at 33. *See also* Ex. 1002 ¶¶ 608-14.
wherein the programmed handheld menu configuration is configured by the menu configuration software for display as	See Claim 1 above at 34.

cascaded sets of linked graphical user interface screens appropriate for the customized display layout of the wireless handheld computing device,	*See also* Ex. 1002 ¶¶ 615-17.
wherein said cascaded sets of linked graphical user interface screens for display of the programmed handheld menu configuration are configured differently from the cascaded sets of related graphical user interface screens for display of the master menu on said first graphical user interface, and	See Claim 1 above at 35. *See also* Ex. 1002 ¶¶ 618-21.
wherein the system is enabled for real time synchronous communications to and from the wireless handheld computing device utilizing the programmed handheld menu configuration including the capability of real time synchronous transmission of at least the menu categories, menu items and modifiers comprising the programmed handheld menu configuration to the wireless handheld computing device and real time synchronous transmissions of selections made from the handheld menu configuration on the wireless handheld computing device, and	See Claim 1 above at 36-37. *See also* Ex. 1002 ¶¶ 622-23.
wherein the system is further enabled to automatically format the programmed handheld menu 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, and	See Claim 1 at 37-38. *See also* Ex. 1002 ¶¶ 624-27.
wherein a cascaded set of linked graphical user interface screens for a wireless handheld computing device in the system includes a different number of user interface screens from at least one other wireless handheld computing device in the system.	See Claim 1 above at 38-39. *See also* Ex. 1002 ¶¶ 628-34.

Claim 10	**Micros 8700 Pub and Digestor**
The information management and real time synchronous communications system in accordance with claim 9, further including a communications systemic relationship comprising:	See Claims 2 and 9 preamble. *See also* Ex. 1002 ¶ 697.
a) A Wireless Hub Application;	See Claim 2.a. *See also* Ex. 1002 ¶¶ 638-39.
b) A Web Hub Application;	See Claim 2.b. *See also* Ex. 1002 ¶¶ 640-43.
c) Linked Databases Between two or more different	See Claim 2.c. *See also*

Hospitality Applications; and	Ex. 1002 ¶¶ 644-45.
d) A Communications Setup Application.	See Claim 2.d. *See also* Ex. 1002 ¶¶ 646-48.
Claim 11	**Micros 8700 Pub and Digestor**
11. The information management and real time synchronous communications system in accordance with claim 9,	See claim 9 preamble. *See also* Ex. 1002 ¶ 702.
wherein at least two different hospitality software applications are integrated between and with one another.	Micros 8700 UM discloses an "integrated Point-Of-Sale (POS) system comprising modular hardware and flexible, user-configured software." Ex. 1027 at 1-2. The system includes at least two hospitality applications for such operations as "Labor Scheduling and Time Keeping" (Ex. 1027 at 1-2), order processing (Ex. 1027 at ch. 4) and payment processing (Ex. 1027 at ch. 9). *See also* Ex. 1002 ¶ 703.
Claim 12	**Micros 8700 Pub and Digestor**
12. The information management and real time synchronous communications system in accordance with claim 9, wherein the system enables automatic importation of the POS database information into the system.	See claim 3. *See also* Ex. 1002 ¶¶ 704.
Claim 13	**Micros 8700 Pub and Digestor**
13. An information management and real time synchronous communications system for use with wireless handheld computing devices and the internet comprising:	The Micros 8700 UM discloses an information management and real time synchronous communications system for use with wireless handheld computing devices and networked PC workstations. Ex. 1027 at 1-2 to 1-4, 1-12. The Micros PC workstation "functions both as a PC and a User Workstation" and includes networking functionalities such as "Ethernet 10BaseT and 10Base2 interfaces." Ex. 1027 at 1-12. Digestor discloses wireless handheld devices with capabilities to connect to the internet. Ex. 1022 at 1076. *See also* Ex. 1002 ¶¶ 705-08.

A POSITA would have found it obvious to combine the Micros system with the internet-capable devices disclosed in Digestor because it would have provided more inclusive networking capabilities, including internet connections, to the Micros system. Ex. 1002 ¶ 708.

Claim 13	**Micros 8700 Pub and Digestor**
a) a master database connected in said system and configured to store hospitality application information pursuant to a master database file structure;	The Micros 8700 UM discloses a database configured to store information relating to the restaurant pursuant to a master database file structure. "The SQL module provides an industry standard set of commands that allow you to define, display, and update 8700 database information in tables (similar to a typical spreadsheet). These commands also allow you to import database information into many accounting packages as well as Standard database applications like dBase IV. The Unix cron command allows SQL commands to be executed at specified dates and times. Thus, updates to the 8700 database can be performed unattended." Ex. 1027 at 1-3. *See also* "Master Item Menu File" at Ex. 1027 at D-33 to D-35; Ex. 1012 (Jan. 20, 2010 Final Rejection) at 791. *See also* Ex. 1002 ¶¶ 709-11.
b) at least one wireless handheld computing device connected in said system and configured to display said hospitality application information;	The Micros 8700 UM discloses a wireless handheld touchscreen ("HHT") device capable of displaying hospitality information, such as restaurant menus. "The HHT is a portable User Workstation. Like the UWS/3, it contains an 8700 Revenue Center database. Using the HHT, an operator can post orders, close guest checks, and perform almost every other operation that is available on a UWS" *See* Ex. 1027 at Micros 1-15. *See also* Ex. 1002 ¶¶ 712-14. *See also*, Ex. 1012 (Jan. 20, 2010 Final Rejection) at 792.
c) at least one web server connected in said	Digestor discloses a web server. "automatic reauthoring . . . can be performed either on the client, on the **server**, or on an intermediary HTTP proxy **server** . . . ." Ex. 1022 at 1076

Claim 13	Micros 8700 Pub and Digestor
system;	(emphasis added). *See also* Ex. 1002 ¶¶ 715-16.

A POSITA would have found it obvious to combine the Micros 8700 system with Digestor to enable access to the Micros 8700 system over the internet. Ex. 1002 ¶ 716.

Claim 13	Micros 8700 Pub and Digestor
d) at least one web page connected in said system and configured to display said hospitality application information; and	Digestor discloses web pages, which may be configured to display hospitality information. "Digestor is a software system which automatically re-authors arbitrary documents from the world-wide web to display appropriately on small screen devices such as PDAs and cellular phones, providing device-independent access to the web." Ex. 1022 at 1075. *See also* Ex. 1002 ¶¶ 717-19.

A POSITA would have found it obvious to combine the Micros 8700 system with Internet technology as disclosed in Digestor to enable access to the Micros 8700 system over the internet. Ex. 1002 ¶ 719.

Claim 13	Micros 8700 Pub and Digestor
e) real time communications control software enabled to link and synchronize hospitality application information simultaneously between the master database, wireless handheld computing device, web server and web page, wherein the communications	The Micros 8700 UM discloses software for synchronizing restaurant menu information between the master database, user workstations and wireless handheld devices, such that substantially the same information is capable of being displayed on each device. "The 8700 is an integrated Point-Of-Sale (POS) system comprising modular hardware and flexible, user-configured software . . . An 8700 System includes personal computer(s), User Workstations, printers, peripheral devices, and software." Ex. 1027 at 1-2. "The HHT is a portable User Workstation. Like the UWS/3, it contains an 8700 Revenue Center database.

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,	Using the HHT, an operator can post orders, close guest checks, and perform almost every other operation that is available on a UWS. Ex. 1027 at 1-15. "The Special Count may be set for those Menu Items that are programmed for limited availability (Menu Item Class Type Definition #16 - Check Menu Item Availability Before Allowing Sale - is set ON.) The Special Count is reduced each time a Menu Item is ordered. When the count reaches zero, the Menu Item automatically shifts to "Not Available"." Ex. 1027 at 11-28. "The limited availability menu item feature allows you to define menu items to have a limited quantity available: After a programmed number of sales are posted, the system indicates that the menu item is unavailable when that menu item is entered. Example: at the beginning of his shift, the manager entered the number of daily special s available during lunch, near the end of the lunch shift, Mary entered an order for five daily specials. She received the system prompt: "ONLY 4 DAILY SPECIAL REMAINING." Immediately after service totaling her check, her order, George, tried to enter an order for the daily special and received this message: "NO MORE DAILY SPECIAL REMAINING."" Ex. 1027 at 5-13. *See also* Ex. 1002 ¶¶ 720-26. *See also*, Ex. 1012 (Jan. 20, 2010 Final Rejection) at 792. Digestor discloses "a software system that automatically re-authors arbitrary documents form the world-wide web to display appropriately on small screen devices." Ex. 1022 at 1075; Ex. 1002 ¶ 725.

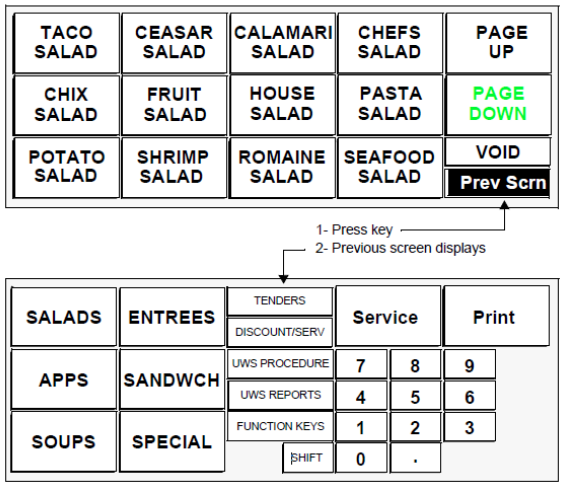
A POSITA would have found it obvious to implement the Micros 8700 system using Internet technology, and combine it with Digestor's re-authoring

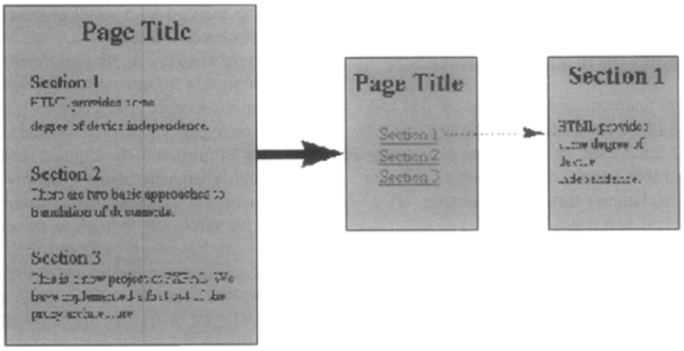
technology to enable access to the Micros 8700 HMS over the Internet by wireless handheld devices and other client devices. Ex. 1002 ¶ 726.

Claim 13	**Micros 8700 Pub and Digestor**
wherein the communications control software is enabled to act as a real time interface between the elements of the system and any applicable communications protocol,	The Micros 8700 UM discloses software enabled to act as a real time interface between the components of the system and the communications protocols used by those components. "The 8700 is an integrated Point-Of-Sale (POS) system comprising modular hardware and flexible, user-configured software. In addition to POS operations, the 8700 System also provides . . . An 8700 System includes personal computer(s), User Workstations, printers, peripheral devices, and software." Ex. 1027 Micros at 1-2 "The Special Count may be set for those Menu Items that are programmed for limited availability (Menu Item Class Type Definition #16 - Check Menu Item Availability Before Allowing Sale - is set ON.) The Special Count is reduced each time a Menu Item is ordered. When the count reaches zero, the Menu Item automatically shifts to "Not Available"." Ex. 1027 at 11-28 "The limited availability menu item feature allows you to define menu items to have a limited quantity available: After a programmed number of sales are posted, the system indicates that the menu item is unavailable when that menu item is entered. Example: at the beginning of his shift, the manager entered the number of daily special s available during lunch, near the end of the lunch shift, Mary entered an order for five daily specials. She received the system prompt: "ONLY 4 DAILY SPECIAL REMAINING." Immediately after service totalling her check, her order, George, tried to enter an order for the daily special and received this message: "NO MORE DAILY SPECIAL REMAINING."" Ex. 1027 at 5-13. *See also* Ex. 1002 ¶¶ 727-31.

A POSITA would have understood that the Micros 8700 operating software acted as a real-time interface between the components of the system (such as user workstations and HHTs) and the applicable communications protocols used by these devices, because the system is described as an integrated system capable of

providing synchronized data (including, e.g. the count of available items) to the various devices in the system. Ex. 1002 ¶ 731. A POSITA would have found it obvious to replicate this functionality when implementing the Micros 8700 HMS using Internet technology. *Id.*

Claim 13	**Micros 8700 Pub and Digestor**
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, and wherein a cascaded set of linked graphical user interface screens for a wireless handheld computing device in the system includes a different number of user interface screens from at least one other wireless handheld computing device in the system, and	The Micros 8700 UM discloses displaying cascaded sets of linked graphical user interface screens appropriate for the customized display layout of an HHT: **Previous Screen** Prev. Screen **Procedure** Press [Previous Screen]. The last, user-defined touchscreen is displayed. *Note* If several screens have been displayed and you wish to go back two or more screens, press [Previous Screen] as many times as necessary until the desired screen displays. However, note that [Previous Screen] disregards (or skips) SLU screens. **Prompts** None. Ex. 1027 at 3-7. Mary pressed [Salads] by mistake on her main food and beverage touchscreen. Luckily, there is a [Previous Screen] key programmed on the SLU screen that is generated by [Salads]. When Mary presses [Previous Screen], the Main Food and Beverage Touchscreen is displayed again. This scenario is illustrated below.  Ex. 1027 at 3-8. Digestor teaches generating customized display layouts with cascaded sets of linked user interface

	screens for wireless handheld devices that have varying screen sizes: "Digestor is a software system which automatically re-authors arbitrary documents from the world-wide web to display appropriately on small screen devices such as PDAs and cellular phones, providing device independent access to the web. Digestor is implemented as an HTTP proxy which dynamically re-authors requested web pages using a heuristic planning algorithm and a set of structural page transformations to achieve the best looking document for a given display size." Ex. 1022 at 1075. "The overall process of deciding which combination of techniques to apply to a given page for a given client display seems at first to require some form of human artistic ability. However, an automatic re-authoring algorithm has been developed which captures many of the heuristics used in the manual re-authoring exercise, and which does a fairly good job of producing good looking pages for a given display. The basic approach is that of a heuristic planner which searches a document transformation space in a best-first manner." Ex. 1022 at 1079.  Fig. 3. Ex. 1022 at Fig. 3; *see also id.* at 1077 ("The contents of each section is elided from the document and the section header is converted into a hypertext link which, when selected, loads the elided content."). *See also* Ex. 1002 ¶¶ 732-37.

A POSITA would have understood that the Micros 8700 UM disclosed generating customized display layouts for devices of various screen sizes, such as User Workstations and HHTs. Ex. 1002 ¶ 737. It would have been obvious to a POSITA to generate customized display layouts for other types of wireless handheld computing devices, as disclosed for example in Digestor, to enable the Micros 8700 HMS system to work with the various types of wireless handheld devices available in the market. *See, e.g.* Ex. 1022 at 1075 (describing various devices); Ex. 1002 ¶ 737. It would further have been obvious to a POSITA that the different sizes of display screens on such devices would result in customized layouts having different numbers of screens. *Id*.

Claim 13	**Micros 8700 Pub and Digestor**
wherein the system is enabled for real time synchronous transmission of the configured hospitality application information to the wireless handheld computing device, the web server and the web page and real time synchronous transmissions of inputs responding to the configured hospitality application information from the wireless handheld computing device, or the web server or the web page.	*See* Claim 1 wherein clause at p 36-37. *See also* Ex. 1002 ¶¶ 622-23.
Claim 14	**Micros 8700 Pub and Digestor**
14. The information management and real time synchronous communications system in accordance with claim 13, further including a communications systemic relationship comprising:	*See* Claim 2 preamble and claim 13. *See also* Ex. 1002 ¶ 739.
a) A Wireless Hub Application;	*See* Claim 2.a. *See also* Ex. 1002 ¶¶ 638-39.
b) A Web Hub Application;	*See* Claim 2.b. *See also*

	Ex. 1002 ¶¶ 640-43.
c) Linked Databases Between two or more different Hospitality Applications; and	*See* Claim 2.c. *See also* Ex. 1002 ¶¶ 644-45.
d) A Communications Setup Application.	*See* Claim 2.d. *See also* Ex. 1002 ¶¶ 646-48.
Claim 15	**Micros 8700 Pub and Digestor**
15. The information management and real time synchronous communications system of claim 13, wherein the system is enabled to automatically import the information from the POS (point of sale) database into the system.	*See* Claims 3 and 13. *See also* Ex. 1002 ¶¶ 649-52.
Claim 16	**Micros 8700 Pub and Digestor**
16. The information management and real time synchronous communications system of claim 13, wherein at least two different hospitality applications are integrated between and with one another.	See Claims 4 and 13. *See also* Ex. 1002 ¶¶ 653-55.
Claim 17	**Micros 8700 Pub and Digestor**
17. The information management and real time synchronous communications system in accordance with claim 13, wherein the hospitality application information also includes the completion of payment processing.	See Claims 5 and 13. *See also* Ex. 1002 ¶¶ 656-58.
Claim 18	**Micros 8700 Pub and Digestor**
18. The information management and real time synchronous communications system in accordance claim 13, wherein the configured wireless handheld computing device is a smart phone.	See Claims 6 and 13. *See also* Ex. 1002 ¶¶ 659-62.

C. Challenge to Claims 13-18 Based on Blinn and Digestor.

U.S. Patent No. 6,058,373 to Blinn et al. ("Blinn") has a filing date of October 16, 1996 and an issue date of May 2, 2000. Blinn is incorporated by reference in U.S. Patent No. 5,897,622, which was filed on October 16, 1996 and

issued on April 27, 1999. Ex. 1038 (the "'622 patent"). The '622 patent is § 102(a) prior art, and by incorporating Blinn by reference makes Blinn available to the public as of April 27, 1999. 37 C.F.R. § 1.14(a)(vi) and MPEP § 103 (unpublished application incorporated by reference into issued patent is available to public upon written request). Accordingly, Blinn was "publicly available" when the '622 patent issued as it is a "printed publication" under § 102(a). *See Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1377-78 (Fed. Cir. 2006) (holding an application referenced in a published patent is "publicly available" as a printed publication under § 102(b) even though the application was only available in the archives of the Canadian Patent Office).

1. Patent Owner's Declarations Do Not Antedate Blinn

As discussed above, PO made two attempts during prosecution of the '077 patent to antedate references by submitting inventor declarations. The examiner rejected the first attempt and did not address the second. PO cannot rely on these declarations to antedate Blinn for the following reasons.

a. Statement of the Relevant Law

A reference may be antedated by showing conception of the invention prior to the effective date of the reference, coupled with either (1) a reduction to practice prior to the effective date of the reference, or (2) diligence from a period just prior to the effective date of the reference through a reduction to practice. MPEP

§ 2138.06. The reduction to practice may be actual or constructive. *Brown v. Barbacid*, 436 F.3d 1376, 1379 (Fed. Cir. 2006); MPEP § 2138.05. To establish conception, an inventor must show possession of each claim limitation. *Coleman v. Dines*, 754 F.2d 353, 359 (Fed. Cir. 1985). Conception testimony must be corroborated. *Id*. A "rule of reason" analysis is applied to determine whether conception has been corroborated. *Id*. at 360.

During the period in which diligence must be shown, there must be a continuous exercise of reasonable diligence. *Garmin Int'l, Inc. v. Cuozzo Speed Techs. LLC*, IPR2012-00001, Paper No. 59 (PTAB 2013). A party alleging diligence must account for the entire critical period. *Griffith v. Kanamaru*, 816 F.2d 624, 626 (Fed. Cir. 1987); *Gould v. Schawlow*, 363 F.2d 908, 919 (CCPA 1966); MPEP § 2138.06. A lapse in diligence, however brief, defeats a claim of diligence. *See, e.g.*, *In re Mulder*, 716 F.2d 1542, 1542-46 (Fed. Cir. 1983) (lack of reasonable diligence where no evidence provided for 2 day period); *D'Amico v. Koike*, 347 F.2d 867, 871 (CCPA 1965) (one month lapse); MPEP § 2138.06.

Corroboration is required to prove an inventor's alleged diligence. *In re Jolley*, 308 F.3d 1317, 1328 (Fed. Cir. 2002). A "rule of reason" analysis is applied to determine whether the inventor's diligence testimony has been corroborated. *D'Amico*, 347 F.2d at 871. A party alleging diligence must provide corroboration with evidence that is specific both as to facts and dates. *Kendall v.*

Searles, 173 F.2d at 993; *Gould*, 363 F.2d at 920; *see also* MPEP § 2138.06.

b. PO's Declarations Do Not Establish Conception.

PO's declarations fail to demonstrate the inventor was in possession of each claim limitation of the '077 patent The McNally and Sanders declarations fail to even mention several elements of Challenged Claims, including, among others, the limitations: "real time interface," "cascaded sets of linked graphical user interface screens," "customized display layout unique to the wireless handheld computing device," and "wherein a cascaded set of linked graphic user interface screens for a wireless handheld computing device in the system includes a different number of user interface screens from at least one other wireless handheld computing device in the system." While the exhibits to PO's declarations suggest there may have been a prototype system in 1998, they do not provide detail sufficient to establish that the prototype included the elements of the Challenged Claims discussed above. Ex. 1012 (McNally Dec. at Exs. 1-20) at 558-613; (June 26, 2009 Rejection) at 427. Additionally, several of these exhibits (3, 5 and 6) are undated, and therefore fail to corroborate the date of PO's alleged conception for this additional reason.

c. PO's Declarations Do Not Establish Actual Reduction To Practice.

Likewise, PO's declarations and supporting evidence fail to demonstrate an actual reduction to practice of the Challenged Claims prior to the filing date of the

’850 patent, because, as discussed above, PO’s declarations and supporting evidence fail to mention, much less establish, that any of these prototypes included at least the following claim limitations: “real time interface,” “cascaded sets of linked graphical user interface screens,” “customized display layout unique to the wireless handheld computing device,” and “wherein a cascaded set of linked graphic user interface screens for a wireless handheld computing device in the system includes a different number of user interface screens from at least one other wireless handheld computing device in the system.”

d. Patent Owner’s Declarations Do Not Establish Diligence

As established below, Blinn constituted a printed publication under 35 U.S.C. § 102(a) on April 27, 1999. PO’s declarations and supporting evidence fail to demonstrate diligence during the entire critical period from April 27, 1999 until the patent application was filed on September 21, 1999, and therefore are insufficient to antedate Blinn.

First, PO fails to provide any cognizable evidence of any particular act (or even generalized activity) taken on any given day (or at any time) during this period to constructively reduce the ’077 patent to practice. The sole evidence regarding any such activity after July 1999 and before September 21, 1999 is an uncorroborated statement by Mr. McNally concerning alleged activity by him and his attorney in preparing a patent application. However, Mr. McNally’s

declaration says nothing about the work performed by the patent attorney, when that work was performed, or the extent of the patent attorney's diligence (or lack of diligence) during this period and is therefore insufficient to establish diligence. *Kendall*, 173 F.2d at 993; *Gould*, 363 F.2d at 920; *In re Jolley*, 308 F.3d at 1328.

Second, there are numerous additional large gaps of time unaccounted for by any of PO's Declarations during the critical period. For example, Mr. McNally's supplemental declaration identifies April 19, 1999 and May 17, 1999 press releases relating to two strategic partnerships formed by Ameranth, but the declarations provide no evidence of any diligence toward either actual or constructive reduction to practice during the nearly one month period in between. Similarly, the supplemental declaration describes a May 22 National Restaurant Association tradeshow in Chicago and a June 17, 1999 partnership agreement between Ameranth and food.com, but provides no evidence of diligence in the nearly one month period between these dates. Nor does the supplemental declaration provide any evidence of diligence between the June 17, 1999 partnership agreement and a press release announcing this partnership nearly a month later on July 15, 1999. These repeated nearly one month gaps in time fail to demonstrate reasonable diligence towards reducing the invention to practice. *In re Mulder*, 716 at 1542-46; *Rieser*, 255 F.2d at 424; *Fitzgerald*, 268 at 766.

2. Summary of Blinn.

Blinn discloses a method and system for processing electronic sales transactions. The method and system described in Blinn sets forth communications among client devices (including wireless personal digital assistants and standalone computers), the internet, and a merchant system including a database and communications control means. Ex. 1002 ¶ 750. While the charts below explain how Blinn anticipates the Challenged Claims in more detail, annotated Figures 1 and 2 from the patent serves as a helpful guide as to how Blinn's disclosure can be mapped onto the claims of the '077 patent:

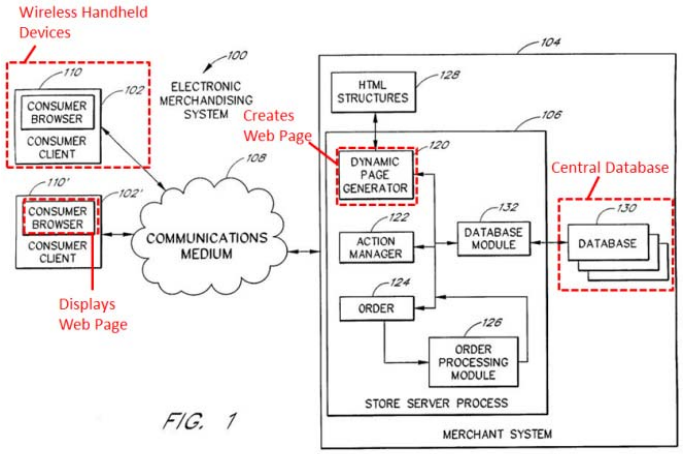


FIG. 1

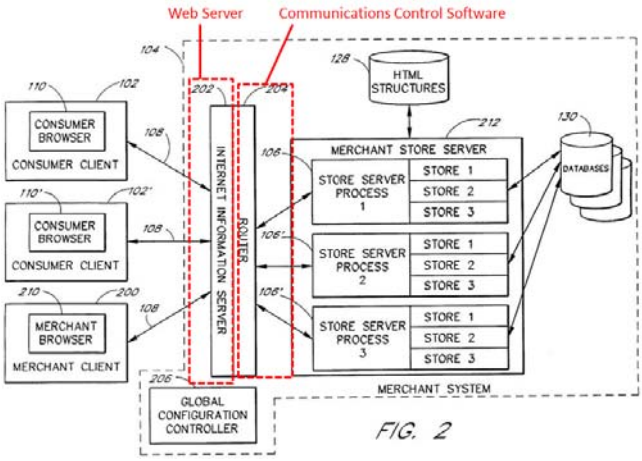


FIG. 2

Id. at ¶ 751.

3. Patentability Challenge Based on Blinn and Digestor

Claims 13-18 are unpatentable under 35 U.S.C. § 103 (pre-AIA) as being obvious in view of Blinn and Digestor. Because both Blinn and Digestor discuss display of data on multiple devices with different display configurations, it would have been obvious to a POSITA to combine Digestor's customized display layout teachings to the client devices from Blinn. This combination renders each of the claims of the '077 patent obvious as shown in the following charts. Ex. 1002 ¶¶ 752; 839.

Claim 13	**Blinn and Digestor**
13. An information management and real time synchronous communications system for use with wireless handheld computing	Blinn discloses a system for processing processing electronic sales transactions through using an information management and synchronous communications system which uses wireless handheld computing devices and the internet: "The present invention provides a method and system for processing electronic sales transactions. In a preferred embodiment, an electronic merchandising system allows merchants to create electronic orders which are easily adaptable for different sales situations." Ex. 1025 at Abstract. "Focusing now on the communications medium 108 as shown in FIG. 2, the presently preferred communications medium 108

Claim 13	Blinn and Digestor
devices and the internet comprising:	includes the Internet which is a global network of computers. The structure of the Internet, which is well known to those of ordinary skill in the art, includes a network backbone with networks branching from the backbone." Ex. 1025 at 9:10-16. "In other embodiments, the consumer computer 102 could, for example, be a computer workstation, a local area network of computers, an interactive television, an interactive kiosk, a personal digital assistant, an interactive wireless communications device or the like which can interact with the communications medium 108." Ex. 1025 at 10:9-14. *See also* Ex. 1025 at Abstract; Figs. 1, 2 at 102 and 108; 9:11-12; 10:12-14; 13:36-43. *See also* Ex. 1002 ¶¶ 753-56.
a) a master database connected in said system and configured to store hospitality application information pursuant to a master database file structure;	Blinn discloses a master database , identified as 130 in Figures 1 and 2, hosted by a centralized merchant system computer, which as a merchant system is capable of containing hospitality application information pursuant to a master database file structure, such as a Structured Query Language database. ". . . the store server process 106 is in communication with one or more databases 130 with a database module 132." Ex. 1025 at 8:9-11. "The merchant system 104 includes an internet information server 202, a router 204, a global configuration controller 205, at least one merchant store server 212, a storage medium for HTML structures 128 and one or more databases 130." Ex. 1025 at 11:31-41. "Preferably, the databases 130 are Structured Query Language (SQL) databases 130." Ex. 1025 at 13:13-14; *see also* 13:9-22. *See also* Figs. 1 and 2 at 130; Ex. 1002 ¶¶ 251-52; 757-61.

It would have been obvious to one of ordinary skill in the art that the database 130 could have contained hospitality applications and data as evidenced by the patent speaking to the availability to modify based on a "merchant's unique sales transactions," which a POSITA would understand could include hospitality-specific operations. *See* Ex. 1025 at 38:43-47; *see also* Ex. 1025 at 1:11-18, 1:30-

38, 4:66-5:3, Ex. 1002 ¶ 761. For example, it was known in the art to sell hospitality goods and services such as hotel rooms over the internet. *See* discussion regarding MARHSA computerized reservations at Ex. 1021 at Fig. 5.36 and 230-31; Ex. 1002 ¶¶ 251-52. Indeed, in Blinn, the inventors identified in a preferred embodiment the flexibility to include adaptable electronic orders for different sales situations. Ex. 1025 at 1:67-2:3; Ex. 1002 ¶ 761.

Claim 13	**Blinn and Digestor**
b) at least one wireless handheld computing device connected in said system and configured to display said hospitality application information;	Blinn discloses an interactive wireless communications device such as a personal digital assistant which interacts with a communications medium and includes software allowing access to the merchant system such that the device displays the information requested from the system. The handheld wireless computing device is referenced by the consumer client 102. Ex. 1025 at Figs. 1 and 2 at 102; 10:9-32. ". . . the consumer computer 102 could, for example, be a computer workstation, a local area network of computers, an interactive television, an interactive kiosk, a personal digital assistant, an interactive wireless communications device or the like which can interact with the communications medium 108." Ex. 1025 at 10:9-14. "For example, the communications medium 108 can include . . . wireless data transmission systems." Ex. 1025 at 9:23-28. *See also* Ex. 1002 ¶¶ 762-65.

It would have been obvious to one of ordinary skill in the art that the consumer computer 102 could have stored hospitality applications and data. *See* Ex. 1025 at 38:43-47; *see also* Ex. 1025 at 1:11-18, 1:30-38, 4:66-5:3; Ex. 1002 ¶ 765.

Claim 13	Blinn and Digestor
c) at least one web server connected in said system;	Blinn discloses an Internet information server which works in conjunction with the merchant system. *See* Ex. 1025 at Fig. 2 at 202; 1:19-29; 12:23-34. "Typically, a Web site is an Internet-connected computer or computer system which runs server software for serving information using the standard protocols of the World Wide Web." Ex. 1025 1:22-25. "The Internet information server 202 is a World Wide Web server. The Internet information server 202 supports the use of virtual servers, allowing multiple web servers to run on a single computer. The Internet information server 202 also uses the HyperText Transmission Protocol (HTTP) to communicate with the consumer browsers 110 or the merchant browser 210." Ex. 1025 at 12:23-29. *See also* Ex. 1002 ¶¶ 766-68.
d) at least one web page connected in said system and configured to display said hospitality application information; and	Blinn discloses web pages hosted by merchants created by a dynamic page generator on a store server process which provides the web page to the consumer client. Ex. 1025 at Fig. 1 at 102, 106, 110 and 120; Fig. 2 at 106; 1:22-29; 8:36-44. "Typically, a Web site is an Internet-connected computer or computer system which runs server software for serving information using the standard protocols of the World Wide Web." Ex. 1025 at 1:22-25. "When a consumer directs the consumer browser 110 on the consumer computer to access the merchant system 104, the dynamic page generator 120 creates web pages with illustrate different watches offered for sale." Ex. 1025 at 8:36-39. *See also* Ex. 1002 ¶¶ 769-72.

It would have been obvious to one of ordinary skill in the art that the web page could have been configured to display said hospitality application information. *See* Ex. 1025 at 38:43-47; *see also* Ex. 1025 at 1:11-18, 1:30-38, 4:66-5:3, Ex. 1002 ¶ 772.

Claim 13	Blinn and Digestor
e) real time communications control software enabled to link and synchronize hospitality application information simultaneously between the master database, wireless handheld computing device, web server and web page, 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	Blinn discloses communications control software running on the router which acts as an interface between the internet and the store server process: "In the preferred embodiment, the router 204 and the merchant store server 212 utilize the global configuration information to interconnect the consumer browsers 110 with the store server processes 106." Ex. 1025 at 12:50-53. Additionally, the communications control module functionality is performed by the TCP/IP stack within the merchant system 104 and runs on software with the Windows® NT operating system: "The Microsoft Windows® NT operating system includes a TCP/IP stack which handles all incoming and outgoing message traffic passed over the communications medium 108." Ex. 1025 at 11:65-12:1. Blinn further discloses applications and data synchronized in real time across the central database described above in 13a, the wireless personal digital assistant described in element 13b, the Web server described in 13c, and the Web page described in 13d: "The consumer client 102 contains a consumer browser 110. The consumer browser 110 communicates with the store server process 106 and displays the web documents created by the store server process 106. Each store server process 106 provides a server architecture that supports the presentation and administration of a virtual store. Preferably, the store server process 106 comprises a number of components including a dynamic page generator 120, an action manager 122, one or more orders 124 and an order processing module 126. Furthermore, in communication with the store server process 106 is a storage device such as a hard disk which contains HTML structures 128 which define the layout of different HTML pages. In addition, the store server process 106 is in communication with one or more databases 130 with a database module 132." Ex. 1025 at 7:64-8:11 "In other embodiments, the consumer computer 102 could, for example, be a computer workstation, a local area network of computers, an interactive television, an interactive kiosk, a personal digital assistant, an interactive wireless

Claim 13	Blinn and Digestor
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,	communications device or the like which can interact with the communications medium 108. While in such systems the operating systems will differ, they will continue to provide the appropriate communications protocols needed to establish communication links with the communications medium 108." Ex. 1025 at 10:9-18. "During a typical shopping session, the consumer browser 110 and the store server process 106 communicate with each other over the communications medium 108. Typically, the consumer browser 110 sends URL addresses to the store server process 106, and the store server process 106 responds with HTML documents. The HTML documents may contain registration information, product offerings, promotional advertisements, order forms, etc." Ex. 1025 at 13:36-43. "Associated with the shopper table 300 is the shopper manager 320. The shopper manager 320 adds, modifies and deletes the entries existing in the shopper table 300." Ex. 1025 at 16:1-6. "The product variant table 802 is also merchant defined and stores information for a specific product within the product family. Each row in the product variant table 802 is a record corresponding to a particular product while each column contains information related to the products. For example, the product variant columns may contain a product's family identifier, stock keeping unit (sku), a color value, a size value, etc. The format of the product family table 800 is merchant defined and can contain wide variety of product characteristics. The merchant specifies the location of a query which queries the product variant table 802 in the registry." Ex. 1025 at 16:34-45. "In addition, the URL can contain the number of items (quantity) and the price of the items." Ex. 1025 at 18:26-28. "The OrderItemValidate component 1226*b* is configured to check the order 124 for required items, and verify that the required items exist." Ex. 1025 at 24:36-38. "The components in the inventory stage 386 verify that every selected item is in stock." Ex. 1025 at 29:61-62 "When the ReduceLocalInventory component 1282e receives the order 124, the ReduceLocalInventory component 1282e reduces the inventory in an inventory database 130 by the

Claim 13	Blinn and Digestor
	number of products ordered. The ReduceLocalInventory component 1282e uses the sku key-value pairs and the quantity key-value pairs to specify a database query which deducts the quantity amounts from the database 130." Ex. 1025 at 38:25-31. *See also* Ex. 1025 at Figure 6. *See also* Ex. 1002 ¶¶ 773-87.

It would have been obvious to a POSITA that upon the store server process and consumer browsers on computers and handheld devices becoming connected, the sales and item data maintained on the store server databases would be sent to the consumer browsers for rendering on the consumer computer and wireless handheld device, and thereby the data and applications on the store server process and the consumer computers and handheld devices would become synchronized (as that term is properly construed) in real time. Ex. 1002 ¶ 787. This is further evidenced by the inventory stage, which adjusts the quantities in the database upon a sale made via one of the consumer browsers such that future downloads reflect the adjusted inventor levels, thereby achieving real time synchronization. Ex. 1025 at 36:29-51 and 38:25:31; Ex. 1002 ¶ 787.

Claim 13	Blinn and Digestor
wherein the communications control software is enabled to act as a real time interface between the elements of the system and any	Blinn discloses software acting as a real time interface between the elements of the system and the applicable communications protocol such as the software running on the router handling all incoming and outgoing message traffic. *See* Ex. 1025 at 1:25-29; 8:9-11; 10:9-18; 11:67; 13:36-43. "In the preferred embodiment, the router 204 and the merchant store server 212 utilize the global configuration information to interconnect the consumer browsers 110 with the store server processes 106." Ex. 1025 at 12:50-53.

Claim 13	Blinn and Digestor
applicable communications protocol,	Additionally, the communications control module functionality is performed by the TCP/IP stack within the merchant system 104 and runs on software with the Windows® NT operating system: "The Microsoft Windows® NT operating system includes a TCP/IP stack which handles all incoming and outgoing message traffic passed over the communications medium 108." Ex. 1025 at 11:65-12:1. *See also* Ex. 1002 ¶¶ 788-91.
wherein the communications control software is enabled to automatically and simultaneously configure the hospitality application information for display on both the wireless handheld computing device and the web page in conformity with a customized display layout unique to the wireless handheld computing device or the web page, wherein said customized display layout is compatible with the displayable	Blinn discloses the communications control software described above as automatically and simultaneously configuring the hospitality application information for display on the wireless handheld computing device described in 13b and the web page described in 13d in conformity with the customized display layout through customized HTML pages unique to the wireless handheld computing device described in 13b or the web page described in 13d, such that the customized HTML pages are compatible with the handheld computing device described in 13b or the web page described in 13d. Ex. 1025 at Fig. 2, 7:64-8:17. "Broadly speaking, the dynamic page generator 120 responds to consumer browser 110 requests for the HTML pages. The dynamic page generator 120 can generate customized HTML pages with the HTML structures 128." Ex. 1025 at 8:12-14. Additionally, Digestor discloses customizing the display for handheld graphic user interfaces: "Finally, automatic re-authoring involves developing software which can take an arbitrary web document designed for the desktop, along with characteristics of the target display device, and re-author the document through a series of transformations so that it can be appropriately displayed on the device. This process can be performed either on the client, on the server, or on an intermediary HTTP proxy server (as in [7]) which exists solely for the purpose of providing these transformation services. An example of this latter approach is the UC Berkeley Pythia proxy [9], which performs transformations on web page images, although the focus of this work is on minimizing page retrieval time, not on producing the most appropriate page layout for the display device." Ex. 1022 at 2. "Automatic re-authoring is thus the ideal approach to providing

Claim 13	Blinn and Digestor
size of the handheld computing device display screen or the web page, and	broad access to the web from a wide range of devices, if it can be made to produce legible, navigable and aesthetically pleasing re-authored documents without loss of information." Ex. 1022 at 1077. *See also* Ex. 1002 ¶¶ 792-97.

A POSITA would have understood that Blinn's ability to create customized HTML pages would have permitted the HTML page to be customized for display on a wireless handheld device. Ex. 1002 ¶ 797. Additionally, a POSITA would have found it obvious to combine the Digestor disclosure of re-authoring information for handheld devices with its disclosure of PDAs used in the Blinn system such that the web pages would be displayed appropriately on the PDA. *Id*.

Claim 13	Blinn and Digestor
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	Blinn discloses the communications control software, in conjunction with the dynamic page generator on the merchant system, is enabled to format a programmed handheld configuration for display as cascaded sets of linked graphical user interface screens, including hyperlinks to related pages, on handheld computing devices such as PDAs. "Broadly speaking, the dynamic page generator 120 responds to consumer browser 110 requests for the HTML pages. The dynamic page generator 120 can generate customized HTML pages with the HTML structures 128." Ex. 1025 at 8:12-14. ". . . the consumer computer 102 could, for example, be a computer workstation, a local area network of computers, an interactive television, an interactive kiosk, a personal digital assistant, an interactive wireless communications device or the like which can interact with the communications medium 108." Ex. 1025 at 10:9-14. "The dynamic page generator 120 generates the HTML documents sent to the consumer browser 110. The dynamic page generator 120 dynamically creates HTML documents in

Claim 13	Blinn and Digestor
different wireless handheld computing device display sizes in the same connected system, and	response to commands generated by the consumer browser 110. The commands generated by the consumer browser 110 utilize the standard GET/POST format of the HyperText Transport Protocol (HTTP). For example, as discussed in more detail below, the buttons or other content items in an HTML page contain a hyperlink to a URL." Ex. 1025 at 13:44-52. Additionally, Digestor discloses customizing the display for handheld graphic user interfaces: "Finally, automatic re-authoring involves developing software which can take an arbitrary web document designed for the desktop, along with characteristics of the target display device, and re-author the document through a series of transformations so that it can be appropriately displayed on the device. This process can be performed either on the client, on the server, or on an intermediary HTTP proxy server (as in [7]) which exists solely for the purpose of providing these transformation services. An example of this latter approach is the UC Berkeley Pythia proxy [9], which performs transformations on web page images, although the focus of this work is on minimizing page retrieval time, not on producing the most appropriate page layout for the display device." Ex. 1022 at 1076. "Automatic re-authoring is thus the ideal approach to providing broad access to the web from a wide range of devices, if it can be made to produce legible, navigable and aesthetically pleasing re-authored documents without loss of information." Ex. 1022 at 1077. *See also* Ex. 1002 ¶¶ 798-805.

A POSITA would have found it obvious to combine the Digestor disclosure of re-authoring information for handheld devices with its disclosure of PDAs used in the Blinn system such that the web pages would be displayed appropriately on the PDA. Ex. 1002 ¶ 805.

Claim 13	Blinn and Digestor
wherein a cascaded set of linked graphical user interface screens	Digestor discloses the ability to re-author web documents based on the "the target display device, and re-author the document through a series of transformations so that it

Claim 13	Blinn and Digestor
for a wireless handheld computing device in the system includes a different number of user interface screens from at least one other wireless handheld computing device in the system, and	can be appropriately displayed on the device. This process can be performed either on the client, on the server, or on an intermediary HTTP proxy server (as in [7]) which exists solely for the purpose of providing these transformation services. An example of this latter approach is the UC Berkeley Pythia proxy [9], which performs transformations on web page images, although the focus of this work is on minimizing page retrieval time, not on producing the most appropriate page layout for the display device." Ex. 1022 at 1076. *See also* Ex. 1002 ¶¶ 806-07.

A POSITA would have found it obvious to combine the Digestor disclosure of re-authoring information for handheld devices with its disclosure of PDAs used in the Blinn system such that the web pages would be displayed appropriately unique handheld devices. Ex. 1002 ¶ 807.

Claim 13	Blinn and Digestor
wherein the system is enabled for real time synchronous transmission of the configured hospitality application information to the wireless handheld computing device, the web server and the web	Blinn discloses a merchant system for handling "all incoming and outgoing message traffic passed over the communications medium 108. The computers in the merchant system 104, can, however, include a wide range of devices which provide information, graphics or text. These devices may contain specialized operating systems which communicate using their respective communications protocols." Ex. 1025 at 11:66-12:6. Blinn further discusses the real time, synchronous nature of its system: "The consumer client 102 contains a consumer browser 110. The consumer browser 110 communicates with the store server process 106 and displays the web documents created by the store server process 106. Each store server process 106 provides a server architecture that supports the presentation and administration of a virtual store. Preferably, the store server process 106 comprises a number of components including a dynamic page generator 120, an action manager 122, one or more orders 124 and an order

page and real time synchronous transmissions of inputs responding to the configured hospitality application information from the wireless handheld computing device, or the web server or the web page.	processing module 126. Furthermore, in communication with the store server process 106 is a storage device such as a hard disk which contains HTML structures 128 which define the layout of different HTML pages. In addition, the store server process 106 is in communication with one or more databases 130 with a database module 132." Ex. 1025 at 7:64-8:11. "In other embodiments, the consumer computer 102 could, for example, be a computer workstation, a local area network of computers, an interactive television, an interactive kiosk, a personal digital assistant, an interactive wireless communications device or the like which can interact with the communications medium 108. While in such systems the operating systems will differ, they will continue to provide the appropriate communications protocols needed to establish communication links with the communications medium 108." Ex. 1025 at 10:9-18. "Associated with the shopper table 300 is the shopper manager 320. The shopper manager 320 adds, modifies and deletes the entries existing in the shopper table 300." Ex. 1025 at 16:1-6. "The product variant table 802 is also merchant defined and stores information for a specific product within the product family. Each row in the product variant table 802 is a record corresponding to a particular product while each column contains information related to the products. For example, the product variant columns may contain a product's family identifier, stock keeping unit (sku), a color value, a size value, etc. The format of the product family table 800 is merchant defined and can contain wide variety of product characteristics. The merchant specifies the location of a query which queries the product variant table 802 in the registry." Ex. 1025 at 16:34-45. "In addition, the URL can contain the number of items (quantity) and the price of the items." Ex. 1025 at 18:26-28. "The OrderItemValidate component 1226*b* is configured to check the order 124 for required items, and verify that the required items exist." Ex. 1025 at 24:36-38. "The components in the inventory stage 386 verify that every selected item is in stock." Ex. 1025 at 29:61-62 "When the ReduceLocalInventory component 1282e receives the order 124, the ReduceLocalInventory component 1282e reduces the inventory in an inventory database 130 by the number of

	products ordered. The ReduceLocalInventory component 1282e uses the sku key-value pairs and the quantity key-value pairs to specify a database query which deducts the quantity amounts from the database 130." Ex. 1025 at 38:25-31. *See also* Ex. 1025 at Figure 6. *See also* Ex. 1002 ¶¶ 808-17.
Claim 14	**Blinn and Digestor**
14. The information management and real time synchronous communications system in accordance with claim 13, further including a communications systemic relationship comprising:	Blinn discloses the information management and real time synchronous communications system in accordance with claim 13 described above including a communications systemic relationship. See claim 13 above. "The present invention provides a method and system for processing electronic sales transactions. In a preferred embodiment, an electronic merchandising system allows merchants to create electronic orders which are easily adaptable for different sales situations. The preferred electronic order comprises flexible blackboards which allow merchants to add sales information with what are called key-value pairs. In the preferred embodiment, the order is an object which contains at least one order blackboard and one or more item blackboards. In addition, the preferred embodiment contains an order processing module with multiple stages which process the order. The preferred stages include a product information stage, a merchant information stage, a shopper information stage, an order initialization stage, an order check stage, an item price adjust stage, an order price adjust stage, a shipping stage, a handling stage, a tax stage, an order total stage, an inventory stage, a payment stage and an accept stage." Ex. 1025 at Abstract. *See also* Ex. 1002 ¶¶ 818-19.
a) A Wireless Hub Application;	Blinn discloses a "consumer computer 102 [that] could, for example, be a computer workstation, a local area network of computers, an interactive television, an interactive kiosk, a personal digital assistant, an interactive wireless communications device or the like which can interact with the communications medium 108. While in such systems the operating systems will differ, they will continue to provide the appropriate communications protocols needed to establish communication links with the communications medium 108." Ex. 1025 at 10:9-18. *See also* Ex. 1002 ¶¶ 820-21.

The Wireless Hub Application is served by the communications medium

108, such as the internet, through which the consumer client communicates with the merchant system 104. Ex. 1002 ¶ 821.

Claim 14	Blinn and Digestor
b) A Web Hub Application;	Blinn discloses an "Internet information server 202 is a World Wide Web server. The Internet information server 202 supports the use of virtual servers, allowing multiple web servers to run on a single computer." Ex. 1025 at 12:23-27; *see also id.* at 7:34-49, 12:24-34. *See also* Ex. 1002 ¶¶ 822-23.

The Web Hub Application sits in the merchant system at the Internet Information Server allowing the consumer client communicates with the merchant system 104 over the internet. Ex. 1002 ¶ 823.

Claim 14	Blinn and Digestor
c) Linked Databases Between two or more different Hospitality Applications; and	Blinn discloses linked databases between two or more different hospitality applications through store server processes in communication with multiple databases: "In the preferred embodiment, the consumer browser 110 is a software program which allows a consumer to access the merchant system 104 over the communications medium 108. In the preferred embodiment, the consumer browser 110 is the Microsoft Internet Explorer version 3.0 developed by Microsoft Corporation. One of ordinary skill in the art, however, will recognize that numerous other types of access software could also be used to implement the present invention. These other types of access software could, for example, be other types of Internet browsers such as the Netscape Navigator developed by Netscape, Inc., or other types of client applications including custom network browsers, two-way communications software, cable modem software, point-to-point software and the like." Ex. 1025 at 10:19-32. *See also* Ex. 1002 ¶¶ 824-25.
d) A Communications Setup Application.	Blinn discloses a communications setup application through its two-way communications software, cable modem software and network browsers: *See* Ex. 1025 at 10:19-32 (*supra*). *See also* Ex. 1002 ¶¶ 826-27.
Claim 15	**Blinn and Digestor**

15. The information management and real time synchronous communications system of claim 13, wherein the system is enabled to automatically import the information from the POS (point of sale) database into the system.	Blinn discloses the system automatically importing information from the Point of Sale software database into the system from the generation of purchase orders to saving the purchase order in a specified database: "The POGenPipe component 1282b generates a purchase order by directing the dynamic page generator 120 to generate an HTML purchase order with a purchase order HTML template. The POGenPipe component 1282b then uses standard techniques such as named pipes to direct the dynamic page generator 120 to send the HTML purchase order to another program. The SaveOrderToDb component 1282c uses well-known database techniques to save a purchase order in a specified database 130. The SaveItemsToDb component 1282d uses well-known database techniques to saves information about the purchased items to a specified database 130." Ex. 1025 at 30:60-31:4. *See also*, Ex. 1025 at 30:29-39. *See also* Ex. 1002 ¶¶ 828-29.
Claim 16	**Blinn and Digestor**
16. The information management and real time synchronous communications system of claim 13, wherein at least two different hospitality applications are integrated between and with one another.	Blinn discloses the information management and real time synchronous communications system of claim 13 where numerous types of access software are used to implement the system permitting at least two different hospitality applications integrated between and one another. "In the preferred embodiment, the consumer browser 110 is a software program which allows a consumer to access the merchant system 104 over the communications medium 108. In the preferred embodiment, the consumer browser 110 is the Microsoft Internet Explorer version 3.0 developed by Microsoft Corporation. One of ordinary skill in the art, however, will recognize that numerous other types of access software could also be used to implement the present invention. These other types of access software could, for example, be other types of Internet browsers such as the Netscape Navigator developed by Netscape, Inc., or other types of client applications including custom network browsers, two-way communications software, cable modem software, point-to-point software and the like." Ex. 1025 at 10:19-32. *See also* Ex. 1002 ¶¶ 830-32.

It would have been obvious to one of ordinary skill in the art that the web

page could have been configured to display said hospitality application information. *See* Ex. 1025 at 38:43-47; *see also* Ex. 1025 at 1:11-18, 1:30-38, 4:66-5:3, Ex. 1002 ¶ 832.

Claim 17	**Blinn and Digestor**
17. The information management and real time synchronous communications system in accordance with claim 13, wherein the hospitality application information also includes the completion of payment processing.	Blinn discloses the information management and real time synchronous communications system of claim 13 where credit card payments are one form of implementing the completion of payment processing in the hospitality application information. "The components in the payment stage 388 approve credit-card payments. A payment default component 1274 sets the payment-- auth-- code key-value pair in the order blackboard 350 to "FAITH." While the preferred embodiment does not have a payment optional component 1276 which performs card authorization, software such as VeriFone's Point of Sale (vPOS) software could be used. VeriFone's Point of Sale (vPOS) software is publicly available and can be obtained from VeriFone, Inc. The payment required component 1278 evaluates whether the value associated with the payment-- auth-- code key has been set." Ex. 1025 at 30:29-39. *See also* Ex. 1002 ¶¶ 833-34.
Claim 18	**Blinn and Digestor**
18. The information management and real time synchronous communications system in accordance claim 13, wherein the configured wireless handheld computing device is a smart phone.	Blinn discloses the information management and real time synchronous communications system in accordance claim 13, where the personal digital assistant or interactive wireless communications device is a smart phone. "In other embodiments, the consumer computer 102 could, for example, be a computer workstation, a local area network of computers, an interactive television, an interactive kiosk, a personal digital assistant, an interactive wireless communications device or the like which can interact with the communications medium 108." Ex. 1025 at 10:9-18 (emphasis added). Digestor discloses wireless handheld devices such as the Nokia 9000i cell phone, the Sony MagicLink, the Apple Newton with the AppPen NetHopper browser, and the Sharp MI-10. Ex. 1022 at 1075. *See also* Ex. 1002 ¶¶ 835-38.

A POSITA would have understood that the "interactive wireless communications device" referred to in Blinn could encompass a smart phone such as the Nokia 9000i smartphone disclosed in Digestor. Ex. 1002 ¶ 838.

XII. THE CHALLENGES ARE NOT REDUNDANT

Neither of the two challenges to independent claim 13 in this petition are redundant, and therefore trial should be instituted with respect to both challenges. Challenge 1 (obviousness over on Micros Pub and Digestor) cannot be antedated by PO, whereas Challenge 2 (obviousness over on Blinn and Digestor) is capable of being antedated. This issue is particularly important given the existence of Rule 131 declarations in the file history of the '077 patent. Accordingly, Challenge 1 is not redundant over Challenge 2. Challenge 2 is not redundant over Challenge 1 because Challenge 2's primary reference, Blinn, explicitly discloses use of the Internet within the disclosed system, whereas Challenge 1's primary reference, Micros Pub, does not. Accordingly, Challenge 2 is not redundant over Challenge 1.

XIII. CONCLUSION

For the foregoing reasons, Petitioner requests that Trial be instituted and claims 1-18 be cancelled.

Respectfully Submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing petition for Covered Business Method Review and all Exhibits and other documents filed together with the petition were served on February 19, 2015, via courier, directed to patent owner and patent owner correspondent at the following addresses:

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