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. 6,871,325

PETITION FOR COVERED BUSINESS METHOD REVIEW OF U.S. PATENT NO. 6,871,325

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i

TABLE OF CONTENTS

I.	INTRODUCTION			
II.	COMPLIANCE WITH FORMAL REQUIREMENTS			1
	А.	Mandatory Notices Under 37 C.F.R. §§ 42.8(b)(1)-(4)		
		1.	Real Parties-In-Interest	1
		2.	Related Matters	2
		3.	Lead and Back-up Counsel	4
		4.	Power of Attorney and Service Information	4
	В.	Proof	f of Service on the Patent Owner	5
	C.	Fee		5
III.	GRO	UNDS	FOR STANDING	5
	А.	The '	325 Patent Is a Covered Business Method Patent	6
IV.	STA	ГЕМЕ	NT OF PRECISE RELIEF REQUESTED	8
V.	IDEN	ENTIFICATION OF PATENTABILITY CHALLENGES		
VI.	LEV	EL OF ORDINARY SKILL IN THE ART9		
VII.	SUM	MARY OF THE '325 PATENT10		
	A.	Paten	t Specification and Claims	10
	В.	Over	view of the Prosecution History	14
	C.	. Failure to Establish Conception and/or Reduction to Practice1		15
		1.	Statement of the Law	16
		2.	Patent Owner's Declarations Do Not Establish Conception.	17
		3.	Patent Owner's Declarations Do Not Establish Actual Reduction To Practice	18
		4.	Patent Owner's Declarations do not establish diligence	19
VIII.	CLA	IM CC	ONSTRUCTION	21
	А.	Legal	l Standard	21
		truction of the Terms Used in the Claims	21	

		1.	"web page"	22
		2.	"applications" (claims 11-13)	22
		3.	"application program interface" (claims 11-13)	22
		4.	"communications control module" (claims 11-13)	23
		5.	"database" (claims 11-13)	23
		6.	"data are synchronized between the central database, the at least one wireless handheld computing device, at least one Web server and at least one Web page" (claims 11- 13)	23
		7.	The Preamble is Not Limiting	24
IX.	STAT	TE OF	THE ART PRIOR TO THE '325 PATENT	24
Х.	WILL	PRE	A REASONABLE LIKELIHOOD THAT PETITIONER VAIL WITH RESPECT TO AT LEAST ONE CLAIM OF ATENT.	27
XI.			EXPLANATION OF THE GROUNDS FOR	27
	A.		enge to Claims 11, 13 and 15 Based on Inkpen, Nokia and stor.	28
		1.	Summary of Inkpen	28
		2.	Summary of Digestor	30
		3.	Summary of Nokia	31
		4.	Patentability Challenge Based on Inkpen, Nokia, and Digestor.	32
	B.		enge to Claim 12 Based on Inkpen, Nokia, Digestor and	49
	C.	Chall	enge to The Challenged Claims Based on DeLorme	51
		1.	Summary of DeLorme	51
		2.	Patentability Challenge Based on DeLorme	52
	D.		enge to The Challenged Claims Based on Blinn and	63
		1.	Summary of Blinn	63
		2.	Patentability Challenge Based on Blinn and Inkpen	65

XII.	NONE OF THE CHALLENGES ARE REDUNDANT	.78
XIII.	CONCLUSION	.79

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 Application)
1007	U.S. Patent Application Number 10/015,729 (the "729 application") ('325 Application)
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
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Cal. Filed June 29, 2012) (ECF No. 1)
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, ECF No. 106 (E.D. Tex. Apr. 21,2010)
1033	Ameranth, Inc. v. Par Technology Corp., et al., 2:10-CV-294-
	JRG-RSP (E.D. Tex.) ECF No. 169 (Claim Construction)
1034	Definitions from <i>Microsoft Computer Dictionary</i> (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
	"cascade")
1037	http://catalogue.pearsoned.co.uk/educator/product/Information-
	Technology-for-Travel-and-Tourism/9780582310025.page
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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
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1049	WIPO Patent Publication No. WO 97/27556 to Flake et al.
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1051	U.S. Patent No. 6,300,947 to Kanevsky et al.
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	(E.D. Tex. 2010) – Opening post-trial JMOL Brief
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1062	Sep. 13, 2010 Trial Testimony. Ameranth v. MenuSoft, 07-cv-

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I. INTRODUCTION

Covered business method review of claims 11-13 and 15 of U.S. Patent No. 6,871,325 (Exhibit 1003) (hereinafter "the '325 patent") is hereby requested. The '325 patent has been asserted against Apple Inc. ("Apple"), Eventbrite Inc. ("Eventbrite") and Starwood Hotels & Resorts Worldwide, Inc. ("Starwood") (collectively, the "Petitioner") and at least 29 other different pending lawsuits. Exs. 1030, 1031.

The '325 patent, which claims priority to an application filed in 1999 after the Internet had become widely known and used, relates generally to the field of menu generation and synchronous communication. *See* Ex. 1018 at 3. Claims 11-13 and 15 of the '325 patent (the "Challenged Claims") relate to an information management and synchronous communications system for use with wireless handheld computing devices. Ex. 1003 at 17:4-18:38. As explained below, each of the particular techniques recited in the claims had been developed and was well known in the menu generation and synchronous communication field long before the application for the '325 patent was filed. Indeed, many of these techniques were already used in the market. *See* Exs. 1021-25. The Challenged Claims of the '325 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 a number of other parties, previously sought Covered Business Method ("CBM") Review of the '325 patent in CBM2014-00016 under 35 U.S.C. §§ 101 and 112. The Board, however, only granted review of claims 1-10 of the '325 patent under § 101 grounds. Ex. 1018 at 27.

Ameranth, Inc. ("Patent Owner") has asserted the '325 patent in the following 32 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., filed Sept. 26, 2012); Starbucks Corp., Case No. 3-13-cv-01072 (S.D. Cal., filed May 6, 2013); TicketBiscuit, LLC, Case No. 3-13-cv-00352 (S.D. Cal., filed Feb. 13, 2013); Ticketfly, Inc., Case No. 3-13-cv-00353(S.D. Cal., filed Feb. 13, 2013); Eventbrite, Inc., Case No. 3-13-cv-00350(S.D. Cal., filed Feb. 13, 2013); Hilton Resorts Corp. et al, Case No. 3-12-cv-01636 (S.D. Cal., filed July 2, 2012); Kayak Software Corp., Case No. 3-12-cv-01640 (S.D. Cal., filed June 29, 2012); Usablenet, Inc., Case No. 3-12-cv-01650(S.D. Cal., filed June 29, 2012); Starwood Hotels & Resorts Worldwide, Inc., Case No. 3-12-cv-01629 (S.D. Cal., filed June 29, 2012); Hotels.com, LP, Case No. 3-12-cv-01634 (S.D. Cal., filed June 29,

2012); Orbitz, LLC, Case No. 3-12-cv-01644(S.D. Cal., filed June 29, 2012); ATX Innovation, Inc., Case No. 3-12-cv-01656 (S.D. Cal., filed June 29, 2012); Best Western International, Inc., Case No. 3-12-cv-01630 (S.D. Cal., filed June 29, 2012); NAAMA Networks, Inc. et al, Case No. 3-12-cv-01643 (S.D. Cal., filed June 29, 2012); Hotel Tonight, Inc., Case No. 3-12-cv-01633 (S.D. Cal., filed June 29, 2012); Travelocity.com, LP, Case No. 3-12-cv-01649 (S.D. Cal., filed June 29, 2012); *Expedia, Inc.*, Case No. 3-12-cv-01654 (S.D. Cal., filed June 29, 2012); Hyatt Corporation, Case No. 3-12-cv-01627 (S.D. Cal., filed June 29, 2012); Hotwire, Inc., Case No. 3-12-cv-01653 (S.D. Cal., filed June 29, 2012); Wanderspot LLC, Case No. 3-12-cv-01652 (S.D. Cal., filed June 29, 2012); *Micros Systems, Inc.*, Case No. 3-12-cv-01655 (S.D. Cal., filed June 29, 2012); Marriott International, Inc. et al, Case No. 3-12-cv-01631 (S.D. Cal., filed June 29, 2012); Mobo Systems, Inc., Case No. 3-12-cv-01642 (S.D. Cal., filed June 29, 2012); Fandango, Inc., Case No. 3-12-cv-01651 (S.D. Cal., filed June 29, 2012); StubHub, Inc., Case No. 3-12-cv-01646(S.D. Cal., filed June 29, 2012); TicketMaster, LLC et al, Case No. 3-12-cv-01648 (S.D. Cal., filed June 29, 2012); Agilysys, Inc., Case No. 3-12-cv-00858 (S.D. Cal., filed April 6, 2012); Domino's Pizza, LLC et al, Case No. 3-12-cv-00733 (S.D. Cal., filed March 27, 2012); Pizza Hut, Inc. et al, Case No. 3-12-cv-00742 (S.D. Cal., filed March 27, 2012); Papa John's USA, Inc. 12-cv-0729 (S.D. Cal. Filed March 27, 2012); and OpenTable,

Inc., Case Nos. 3-12-cv-00731 and 3-13-cv-01840 (S.D. Cal., filed March 27, 2012 and Aug. 8, 2013, respectively).

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 at: 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 at: ryan.cobb@dlapiper.com; by mail and hand delivery at: 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 counsels in

accordance with 37 C.F.R. § 42.10(b). Service information for lead and back-up counsels 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 address of the respective lead and back-up counsels designated above. Petitioner hereby consents to electronic service.

B. Proof of Service on the Patent Owner

As identified in the attached Certificate of Service, a copy of this Petition in its entirety is being served to the Patent Owner'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 '325 patent is available for CBM review because, as explained further below, the '325 patent constitutes a covered business method patent as defined by Section 18 of the America Invents Act (*see* AIA § 18(d)(1)), and further certifies that the Petitioner is not barred or estopped from requesting CBM review of the Challenged Claims of the '325 patent on the grounds identified in this Petition. Petitioner is eligible to file this petition because Ameranth has sued Petitioner for

alleged infringement of the '325 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 and thus has not issued a final written decision on the Challenged Claims.

A. The '325 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 See CRS Advanced Technologies, Inc. v Frontline Technologies, Inc., claim. CBM2012-0005, Paper 17 at 6-9 (granting CBM review of claims 3, 6, 7, 16, 24 and 33 while relying in part on recitation of "retail bank" in claim 1 to fulfill the requirement that the patent be directed to a financial activity).

As the Board has previously determined, at least claim 1 of the '325 patent qualifies as a covered business method. *See* Ex. 1018 at 11. Claim 1 is directed

toward a "system for generating and transmitting menus" and recites a second menu "applicable to a predetermined type of ordering." Ex. 1003 at 14:60-61 and 15:22-23. The "ordering" in this phrase relates to the ordering of a meal at a restaurant (Ex. 1003 at Abstract), and therefore is at least incidental to and complementary to the sale of the meal. Thus, the subject matter of at least claim 1 is directed toward a system that performs a covered business method and therefore satisfies the first requirement of AIA § 18(d)(1). Ex. 1018 at 11.

Claim 1 does not fit within the exception to a covered business method as defined by AIA § 18(d)(1) 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. The Board has previously found that neither prong applies to claim 1 of the '325 patent. See id. Furthermore, 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 '325 patent makes abundantly clear that the system of claim 1 utilizes nothing but known prior art technology:

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. 1003 at 5:39-43.

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 5:43-50.

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 11:56-61.

Accordingly, at least claim 1 of the '325 patent does not satisfy the technological invention exception, and the '325 patent is therefore 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 the Challenged Claims of the '325 patent be invalidated 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 the Challenged Claims is requested in view of the following grounds:

A. Claims 11, 13 and 15 are unpatentable under 35 U.S.C. § 103 (pre-AIA) as being obvious over Inkpen, Gary, INFORMATION TECHNOLOGY FOR TRAVEL AND TOURISM (2d ed. 1998) ("Inkpen") (Ex. 1021, "Inkpen"), in view of Timothy Bickmore, "Digestor: Device Independent Access to the World Wide Web," Computer Networks and ISDN Systems 29, 1075-82 (1997) (Ex. 1022, "Digestor") and the Nokia 9000i Communicator Owner's Manual (1997) (Ex. 1023, "Nokia").

B. Claim 12 is unpatentable under 35 U.S.C. § 103 (pre-AIA) as being obvious over Inkpen, Digestor, Nokia and WIPO Patent Publication No. WO 97/27556 to Flake et al. (Ex. 1049, "Flake").

C. Claims 11, 13 and 15 are unpatentable under 35 U.S.C. § 103 (pre-AIA) as being obvious in view of U.S. Pat. No. 5,948,040 (Ex. 1024, "DeLorme").

D. The Challenged Claims are unpatentable under 35 U.S.C. § 103 (pre-AIA) as being obvious over U.S. Pat. No. 6,058,373 to Blinn et al. (Ex. 1025, "Blinn") in view of Inkpen.

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 '325 patent (hereinafter 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 Internetbased systems or applications, or an equivalent experience in software development of up to 5 years. Ex. $1002 \, \P \, 71-72$.

VII. SUMMARY OF THE '325 PATENT

A. Patent Specification and Claims

The '325 patent, entitled "Information Management and Synchronous Communications System With Menu Generation," issued on March 22, 2005, and arises from a patent application, No. 10/015,729 (the "729 application"), which was filed on Nov. 1, 2001. Ex. 1003 at 1. The patent was assigned upon issuance to Ameranth, Inc. Upon information and belief, this patent is currently assigned to Patent Owner.

The '325 patent claims priority to, and is a continuation of, patent application No. 09/400,413, filed on Sept. 21, 1999, now U.S. Pat. No. 6,384,850 (Ex. 1001, the "'850 patent"). No other priority is claimed. Thus, Sept. 21, 1999 is the earliest possible effective filing date of the '325 application.

A primary theme of the '325 patent, and the "principal object" of the alleged invention therein, is to provide a system that "facilitates user-friendly and efficient generation of computerized menus for restaurants and other applications that utilize equipment with non-PC-standard graphical formats, display sizes and/or applications." Ex. 1003 at 2:56-62. Menu generation is the subject matter of

claims 1-10, which are the subject matter of a prior CBM proceeding (CBM2014-00016), and a large majority of the specification is devoted to describing such menus and how they are generated. Ex. $1002 \, \P$ 57-65.

The Challenged Claims of the '325 patent at issue here, however, do not recite "menu" or any other limitations relating to menu generation. *See*, Ex. 1003 at Claims 11-13 and 15. The claims are instead directed toward an "information management and synchronous communications system." *Id.* The system of the Challenged Claims includes "a central database," "at least one handheld wireless computing device," "at least one web server," "at least one web page," and "a communications control module." *See e.g.*, Ex. 1003 at 17:7-17. "Hospitality applications and data" are stored on the handheld wireless computing device, the web server and the web page, and the central database. *Id.* The hospitality applications and data are "synchronized" between the central database, the web server, the web page and the wireless handheld computing device. *Id.* at 17:18-20; *see also* Ex. 1018 at 4-5. Ex. 1002 ¶ 59.

The '325 patent does not provide any diagram of the system formed by these components, and independent claims 11-13 do not specify any relationship between these components. Thus, it is not clear to one of ordinary skill in the art how these various components are connected to each other and/or interact with each other. Ex. $1002 \ 60$.

For example, the "application program interface" ("API") recited in claims 11-13 is mentioned only three times in the specification, and all we are told about the API is that it is a feature that is missing from software for fully realizing the potential of wireless handheld computing devices and that it "enables third parties such as point of sale ("POS") companies, affinity program companies and internet content providers to fully integrate with computerized hospitality applications." Ex. 1003 at 2:9-19; 4:1-5, and 11:28-31. The specification of the '325 patent does not specify whether this application program interface software runs on the wireless handheld computing device or one of the other devices recited in claims 11-13 and does not explain what functions the API performs or how it enables POS companies, affinity program companies, or internet content providers to "fully integrate" with the computerized hospitality applications that claims 11-13 require be stored on the web page, the web server and the wireless handheld computing device. Accordingly, the location where the API resides in the system of claims 11-13 and what the API does is unclear. Ex. $1002 \ \mbox{\sc 0} 61$.

Similarly, the specification leaves unanswered several questions concerning the "communications control module." This module is described in the '325 patent specification as a program to monitor all devices in the network, receiving and decoding messages sent between the devices, and routing the messages to the appropriate device. Ex. 1003 at 9:35-63. The communications control module is also described as a "layer that sits on top of any communications protocol" that "provides a single point of entry for all hospitality applications to communicate with one another wirelessly or over the web." Ex. 1003 at 11:37-43. The specification does not explain if the communications control module "layer" is a single piece of software that runs on a device (sometimes referred to in the art as a communications controller or front end processor) or multiple instances of software each of which runs on a respective web page, web server, wireless handheld computing device and central database. Ex. 1002 ¶ 62. The similarity of the phrase "communications control module" to the art-recognized phrase "communications controller" and the description of the communications control module as a single point of entry and as performing a routing function suggest the former, whereas the description of a "layer that sits on top of any communications protocol" suggests the latter. Ex. 1002 ¶ 62.

The specification also states that the "single point of entry" that is provided by the communications control module "works to keep all wireless handheld devices and linked Web sites in synch with the [central database] so that the different components are in equilibrium at any given point in time and an overall consistency is achieved." Ex. 1003 at 11:45-49. The specification is silent, however, as to exactly what "work" the communications control module does to keep all wireless handheld devices and linked websites in synch with the central

database. Thus, it is not clear if this "work" is simply facilitating communications between these components, or is some additional functionality. Ex. $1002 \ \mbox{\ G3}$.

Claims 11-13 further requires that the communications control module "is an interface between the hospitality applications and any other communications protocol" Ex. 1003 at 17:23-25, 18:6-8, and 18:29-31. This requirement is problematic for the reasons discussed below and thus creates additional confusion as to the nature of the communications control module. Ex. 1002 ¶ 65.

B. Overview of the Prosecution History

In what was essentially a first action allowance, the inventors filed the '729 application on November 1, 2001 and contemporaneously requested a preliminary amendment to the claims intending to overcome rejections from the previous examination of the '850 patent to which the '729 application claimed priority. Ex. 1011 at 6. On Nov. 16, 2004, the applicants filed a terminal disclaimer agreeing to limit the enforceability of the '729 application to that of the '850 patent. Ex. 1011 at 404-09.

Following this, the examiner issued a notice of allowance on December 7, 2004. Ex. 1011 at 413-18. In the Notice of Allowance, the examiner incorrectly cited a single purportedly distinct feature for "each independent claim" as allowable subject matter:

Each independent claim is [sic] identified the uniquely distinct features "*wherein the application software facilitates the generation*

on the second menu by allowing selection of categories and items from the first menu, addition of menu categories to the second menu, addition of menu items to the second menu and assignment of parameters to items in the second menu using the graphical user interface of operating system, parameters being selected from the modifier and sub-modifier menus, wherein second menu is applicable to a predetermined type of ordering."

Ex. 1011 at 415 (emphasis in original). However, independent claims 11-13 do not recite the terms "sub-modifier," "menu" or "application software." Ameranth itself has conceded that the examiner made a mistake in his reasons for allowance. Ex. 1052 at 4-5, and 9. Accordingly, the Challenged Claims do not recite the allegedly patentable features described by the examiner, and should not have been allowed.

C. Failure to Establish Conception and/or Reduction to Practice

In the prosecution of U.S. Patent No. 8,146,077 (Ex. 1004, the "'077 patent") which is a continuation-in-part of the related '850 patent to which the '325 patent claims priority, Patent Owner made two attempts to antedate references by submitting inventor declarations. The examiner rejected the first attempt and did not address the second attempt. Patent Owner may contend that the claims of the '325 patent are entitled to a priority date that antedates Blinn or one of the other references relied on in this Petition based on these declarations. However, these

declarations are insufficient to establish an earlier priority date for the following reasons.

1. Statement of the 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, one must show that the inventor was in 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.

2. Patent Owner's Declarations Do Not Establish Conception.

Patent Owner's declarations fail to demonstrate the inventor was in possession of each claim limitation of the '077 or '325 patents. The McNally and Sanders declarations fail to even mention several elements of Challenged Claims, including, <u>among others</u>, the limitations: "menu categories," "menu items and modifiers," "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 Patent Owner's declarations suggest there may have been a prototype of the Patent Owner's 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 at 558-563; *see also* 427. Additionally, several of these exhibits (3, 5 and 6) are undated, and therefore fail to corroborate the date of Patent Owner's alleged conception for this additional reason.

3. Patent Owner's Declarations Do Not Establish Actual Reduction To Practice.

Likewise, Patent Owner's declarations and supporting evidence fail to demonstrate the inventor reduced to practice the inventions claimed in the '077 patent prior to the filing date of the '850 patent, to which the '325 patent claims priority. As discussed above, while the declarations and supporting exhibits suggest that prototypes of Patent Owner's system were developed in advance of various trade shows in 1998 and 1999, the declarations and supporting evidence fail to establish that any of these prototypes included at least the following claim limitations: "menu categories," "menu items and modifiers," "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." As is shown below, the prior art relied on in the Petition does disclose these

missing limitations. Patent Owner's evidence is therefore insufficient to establish an actual reduction to practice.

4. Patent Owner's Declarations do not establish diligence

As established above, Blinn constituted a printed publication under 35 U.S.C. § 102(a) on April 27, 1999. Patent Owner'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, Patent Owner 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 '325 patent to practice through preparation of a patent application. The sole evidence regarding any such activity after July 1999 and before September 21, 1999, is the following wholly conclusory and completely uncorroborrated statement by Mr. McNally:

Beginning in or about July 1999, I coordinated with our outside counsel to prepare a patent application directed to the presently claimed invention. To assist in preparing the application in a diligent manner, I spoke with outside counsel over the telephone, provided information used to prepare the application, exchanged information regarding the application with my co-inventors and worked with counsel to finalize and file the application. On September 21, 1999,

our outside counsel filed the application in the U.S. Patent and Trademark Office ("USPTO"). Ex. 1012 at 371.

Mr. McNally's declaration says nothing about the work performed by the patent attorney, when that work was performed, and is completely silent as to 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 Patent Owner'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.

VIII. CLAIM CONSTRUCTION

In accordance with 37 C.F.R. § 42.304(b)(3), Petitioner provides the following statement regarding construction of the '325 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 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 '325 patent in any district court litigation. Petitioner's proposed claim constructions for this proceeding are set forth below. Petitioner's claim constructions are further discussed in Ex. 1002 ¶¶ 69-91. Additionally, four district court claim construction decisions have been issued for the '325 patent and/or other patents in the same family: three in Case No. 2:07-cv-00271-TJW-CE (E.D. Tex.) (Ex. 1032), involving the '850 patent, the '325 patent, and 6,982,733 (Ex. 1005, the "'733 patent"), and one in Case No. 2:10-CV-294-JRG-RSP (E.D. Tex.), involving the '850 patent and the '325 patent (Ex. 1033). Ex. 1018 at 15-

16. Additionally, the Board has previously construed certain claim terms of the '325 claims in its decision in CBM2014-00016, and Petitioner adopts those constructions which the Board has previously construed for the '325 patent.

1. "web page"

The Board previously construed this claim term as "a document, with associated files for graphics, scripts, and other resources, accessible over the internet and viewable in a web browser." Ex. 1018 at 8. A "document" is "any self-contained piece of work created with an application program and, if saved on a disk, given a unique filename by which it can be retrieved." Ex. 1034 at 11. Ex. $1002 \P 73$.

2. "applications" (claims 11-13)

This claim term should be construed to mean "sequences of instructions that can be executed on a computer that are designed to help people perform a specific task." Ex. 1034 at 4 and 10 (definitions of "application" and "program"); *see also* Ex. 1002 ¶ 74.

3. "application program interface" (claims 11-13)

This claim term should be construed to mean "a set of routines used by an application program to direct the performance of procedures by the computer's operating system or to communicate with another application program." Ex. 1034 at 5; *see also* Ex. 1002 ¶ 75.

4. "communications control module" (claims 11-13)

This claim term should be construed to mean "a device used as an intermediary in transferring communications to and from the host computer to which it is connected." Ex. 1034 at 7 (definition of "communications controller"); *see also* Ex. 1002 ¶¶ 76-78.

5. "database" (claims 11-13)

This claim 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; *see also* Ex. 1002 ¶¶ 79-80.

6. "data are synchronized between the central database, the at least one wireless handheld computing device, at least one Web server and at least one Web page" (claims 11-13)

This claim term should be construed to mean "the same data is present in each of the central database, the at least one wireless handheld computing device, at least one Web server and at least one Web page at one time." As asserted by Patent Owner during oral argument in CBM2014-00013, downloading a menu from one device to another device constitutes synchronization. Ex. 1035 at 31-32; *see also* Ex. 1002 ¶¶ 81-83. Similarly, Patent Owner's infringement contentions dated July 22, 2013 concerning this claim element refer to "communications control software [that] interfaces with … hospitality applications including online/mobile ticketing or reservations systems such as Fandango, StubHub, Ticketmaster, LiveNation, and Starwood, in providing a single point of entry into

the Accused System, allows and facilitates synchronization and consistency of Passbook passes and associated data among at least one Web page (e.g., an email that allows a pass to be stored on an iPhone), at least one handheld device (e.g., and end user's iPhone), and the iCloud." Ex. 1060 at 43. Patent Owner should be held to a construction here that is consistent with these assertions.

7. The Preamble is Not Limiting

The preamble does 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 preamble merely sets forth the purpose ("information management and synchronous communication") and intended use ("for generating and transmitting menus") of the claimed invention. *See U.S. Bancorp v. Retirement Capital Access Mgt. Co.*, CBM2013-00014, Paper 33, at 14-15 (PTAB Aug. 22, 2014) (finding "computerized method" in preamble to be a statement of intended use and thus not a meaningful claim limitation). Accordingly, under the BRI, the preamble is not limiting.

IX. STATE OF THE ART PRIOR TO THE '325 PATENT

The state of the art prior to the '325 patent is discussed generally in Ex. 1002 ¶¶ 91-106. The techniques claimed in the '325 patent were all well known in the computer and hospitality industry well before the earliest effective filing date of the '325 patent. *See generally*, Ex. 1002 ¶¶ 328-557. For example, the concept of

storing separate copies of a database at two or more sites (sometimes referred to as database replication) using both synchronous and asynchronous distributed database technologies was well known in the art. See, e.g., Ex. 1026 at 423-24. It was further known to use different schemes to update/synchronize such replicated databases, including snapshot replication (in which replicated databases are updated on a periodic basis), near real-time replication (in which store and forward messages for each completed transaction are broadcast to all nodes to update the replicated database as soon as possible), and pull replication (in which the device on which a replicated database is stored determines when to update the replicated database). Id. at 424-25. Similarly, the synchronization of applications through real time communications of user selections (e.g., airline reservations) was also well known in the art. Id. The transmission from a central database/server to a client device of formatted documents containing user-selectable choices (which are menus) was also well-known in the art. See, e.g., Ex. 1021 at 228, Fig. 5.33 and Accordingly, the limitations in claims 11-13 requiring the 233, Fig. 5.41. synchronization of applications and data were nothing new in the art at the time of the '325 patent. See generally, Ex. 1002 ¶¶ 91-106.

The use of wireless handheld devices was also known in the computer and hospitality industries well before the '325 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.

While the HHT communicated data in a proprietary format, wireless handheld devices capable of displaying word wide web pages were also known in the art. Ex. 1022 at 1075. These wireless handheld devices include smartphones such as the Nokia 9000i Communicator and personal digital assistants such as the Apple Newton. Ex. 1022 at 1075. Also known in the art were wireless handheld personal computers such as the Novatel Contact that could be used to display web pages. Ex. 1065 at 52. It would have been obvious to one of ordinary skill in the art to use such off-the-shelf wireless handheld devices to access web pages of any kind for any purpose, including accessing hospitality related web pages such as for placing restaurant orders and airline reservations. Ex. 1002 ¶¶ 29-43, 330-40, 397-406, 419-21, and 474-79.

Thus, all of the components and techniques of the Challenged Claims of the '325 patent were in the prior art at the time the application for the '325 patent was

filed, and, as discussed below, where necessary, it would have been obvious to combine the prior art in the manner recited in those claims.

X. THERE IS A REASONABLE LIKELIHOOD THAT PETITIONER WILL PREVAIL WITH RESPECT TO AT LEAST ONE CLAIM OF THE '325 PATENT.

A petition for CBM review must demonstrate that "it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable." 35 U.S.C. § 324(a). This Petition meets that threshold. There is a reasonable likelihood that Petitioner will prevail in establishing that at least one of the Challenged Claims of the '325 patent is invalid under 35 U.S.C. §§ 102 and 103 as explained below.

XI. DETAILED EXPLANATION OF THE GROUNDS FOR REJECTION

A detailed explanation of the pertinence and manner of applying the prior art references to the Challenged Claims of the '325 patent is provided below in accordance with 37 C.F.R. §§ 42.304(b)(4) and 42.304(b)(5). Except as noted, the explanation below assumes that the claims are construed in accordance with the claim constructions set forth above. To the extent that any limitation is deemed to be absent, whether as a result of claim construction or otherwise, such limitation would have been obvious over the cited art. Ex. 1002 ¶¶ 29-43, 330-40, 397-406, 419-21, and 474-79.
A. Challenge to Claims 11, 13 and 15 Based on Inkpen, Nokia and Digestor.

1. Summary of Inkpen

Inkpen, which was not considered by the Patent Office during the original prosecution of the '325 patent, was published in July 1998—more than one year prior to the application filing date of the '325 Patent. Ex. 1037. Therefore, Inkpen is prior art under 35 U.S.C. § 102(b) because it was published at least one year prior to the effective filing date for the '325 Patent, and is also prior art under 35 U.S.C. § 102(a) based on its 1998 copyright date.

Inkpen is a book length survey of several known travel information systems. Although several such information systems are disclosed, for purposes of this Petition the information system developed by Marriott will be the focus. The Marriott system is discussed primarily at 229-234 of Inkpen, although certain components (i.e., the Thisco switch) are also discussed elsewhere. The Marriott information system is illustrated in figure 5.36 below:



In this figure, the box labeled "MARSHA III" (hereinafter "MARSHA") is a CRS (computerized reservation system) device that interacts with the storage device labeled "Marriott data base" to handle all reservations, including those submitted from the Internet via the Travel Web server and reservations from one of the GDSs (global distribution systems). Ex. 1021 at 230, col. 2, line 24 - 231, col. 1, line 20. The box labeled THISCO is a switch that acts as an access point for MARSHA and GDSs, which are typically used by travel agents and employ their own special protocols. Id. at 230, col. 2, lines 15-22. The THISCO switch also interfaces with the Travel Web Internet server/ booking engine website, which is shown as a separate box in Fig. 5.36 above. Id. The Travel Web server may be used by consumers to make reservations. Id. at 218, col.1, lines 35-40. In addition to the Travel Web server, a user may also connect to one of Marriott's front end servers to access the Marriott.com website, which were new as of 1996. Id. at 229,

col. 2, lines 37-43. A user can get certain information via the Marriott.com website (*e.g.*, room rates, property descriptions, hotel addresses), but can only check availability and make reservations via a connection through the Marriott server to the Travel Web site to the THISCO switch and then to MARSHA. *Id.* at 230, col. 1, line 44- col. 2, line 49; Ex. 1002 ¶¶ 331-32.

2. Summary of Digestor

Digestor, which was also not considered by the Patent Office during the original prosecution of the '325 patent, was published in 1997 (Ex. 1022 at 1075), more than one year prior to the effective filing date of the '325 Patent. Digestor is therefore prior art under 35 U.S.C. § 102(b). 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 multiple cascaded screens on a small screen device is shown in Fig. 3 reproduced below:



Fig. 3.

Digestor discloses four approaches for formatting documents for 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 from which the document is served, the client, or an intermediate device. *Id.*; Ex. 1002 ¶¶ 112, 333.

3. Summary of Nokia

Nokia, which was also not considered by the Patent Office during the original prosecution of the '325 patent, was published in 1997 (Ex. 1023 at copyright page), which is more than one year prior effective filing date of the '325 Patent. Nokia is therefore prior art to the '325 patent under 35 U.S.C. § 102(b).

Nokia is an owner's manual for the Nokia 9000i Communicator. *Id.* at 7. The Nokia 9000i Communicator, specifically mentioned in Digestor (Ex. 1022 at 1075), includes "a mobile phone, messaging device, Internet access terminal, and palmtop organizer all in one compact unit" with the phone interface on the device cover and the other interfaces under the device cover as shown below:



Figure 1-1: Phone interface

Figure 1-2: Communicator interface

Ex. 1023 at 7. The 9000i Communicator included a web browser for viewing world wide web pages, including HTML web pages. *Id.* at 63; Ex. 1002 ¶¶ 334-35.

4. Patentability Challenge Based on Inkpen, Nokia, and Digestor.

It would have been obvious to a POSITA to combine Inkpen, Nokia and Digestor by using the Nokia 9000i Communicator device disclosed in Nokia to access Travel Web pages such as those disclosed in Inkpen to make, e.g., hotel reservations. Ex. 1002 ¶ 336. It should be noted that claims 11, 13 and 15 do not require any reformatting of any menus or other data for a smaller screen on a wireless handheld device, do not require that the wireless handheld device utilize a hospitality application different from a Web page rendered by a browser and do not otherwise preclude the hospitality application on the wireless handheld device from being a Web page rendered by a browser. Thus, the "wireless handheld device" limitations of claims 11-13 would be satisfied by a handheld device that had wireless internet access and a web browser capable of rendering the pages on the Travel Web site. Such devices include the Nokia 9000i Communicator (Ex. 1023 at 61) as well as the Samsung Duett, Sharp TQ-G700 and Sharp MI-10 (Ex. 1022 at 1075), and the Novatel Contact (Ex. 1065 at 52). Ex. 1002 ¶ 336. It should further be noted that nothing in the claims of the '325 patent preclude both the "web page" and the "wireless handheld device" from being implemented as

wireless handheld devices with browsers, and this affects all grounds raised for patentability challenges. *Id*.

Even if the Challenged Claims were to be interpreted as requiring the reformatting of data for a small screen on a wireless handheld device, it would have been obvious to a POSITA to configure the Travel Web server of Inkpen to modify web pages for the smaller screen size of a wireless hand-held device such as the Nokia 9000i Communicator in view of Digestor. Ex. 1002 ¶ 337. For example, as Digestor discloses (Ex. 1022 at 1076, col. 1, lines 6-9), a POSITA would have known that it was possible to author Web pages for specific devices including the Nokia 9000i Communicator. Ex. 1002 ¶ 337. Alternatively, a POSITA would have known how to employ Digestor's automatic re-authoring techniques to transform a World Wide Web page for given display characteristics of a particular device such as the Nokia 9000i Communicator so that a Web page could be more appropriately displayed on that device. *Id.*

The combination of Inkpen, Nokia and Digestor renders each of claims 11, 13 and 15 obvious as shown in the following detailed claims charts, in which the following mapping of claim limitations to blocks in diagram 5.36 of Inkpen will be made:

a) The "central database" of the claims is mapped onto the combination of MARSHA CRS and the Marriott database storage device. This is proper as BRI of

33

"database" includes not only data/records but routines to search, sort and recombine the data/records. Additionally, the '325 patent describes the central database as a "backoffice server" (Ex. 1003 at 2:28), and it is was well known to a POSITA at the time of the '325 patent that a server includes both a computer and one or more storage devices, which can be as simple as a single hard disk or as complex as a SAN (storage area network) including multiple interconnected storage devices. Ex. 1002 ¶ 338a.

b) The "communications control module" is mapped onto the THISCO switch. Ex. $1002 \, \P \, 338b$.

c) The "outside applications" are mapped onto the GDSs. Ex. 1002 ¶ 338c.

d) The "application program interface" is mapped onto the code on the THISCO switch that translates the messages and commands in the various GDS protocols such as the TPF protocol to the format and protocol accepted by MARSHA. Ex. 1002 ¶ 338d.

e) The Web server is mapped onto the Travel Web server. Ex. 1002 ¶ 338e.

f) The Web page is an instance of a page from the Travel Web server rendered on any end user device such as a personal computer, laptop, PDA or smartphone. Ex. 1002 ¶ 338f.

Several variations to the system of figure 5.36 would have been obvious to a POSITA at the time of the alleged invention of the Challenged Claims. For

34

example, it would have been obvious to a POSITA that the dotted line direct connection from one of the GDSs to the MARSHA CRS was optional and therefore could be omitted from the system of Figure 5.36. Ex. 1002 ¶ 339. Alternatively, the one GDS that was directly connected to the MARSHA could itself have been omitted from the system of figure 5.36. *Id.*. Additionally, Inkpen discloses that the integration of the Marriott front end servers with the MARSHA system and Marriott database was relatively new. Ex. 1021 at 229. It would have been obvious to a POSITA that the Marriott front end servers could be eliminated from the system of figure 5.36 such that all internet transactions would originate from clients connected to the Travel Web server. Ex. 1002 ¶ 339. An annotated version of figure 5.36 indicating the aforementioned modifications and mapping is set forth below:



The following charts explain in detail how the combination of Inkpen, Nokia, and Digestor renders claims 11, 13 and 15 of the '325 patent obvious under $35 \text{ U.S.C. } 103 \text{ (pre-AIA).}^1 \text{ Ex. } 1002 \text{ } 340.$

Claim 11	Inkpen, Nokia and Digestor
11. An information management and synchronous communications	
system for use with wireless handheld computing devices and the internet comprising:	"Marriott has been highly successful in using technology to market and sell hotel rooms and related services to customers around the world. The cornerstone of this distribution activity is <u>Marriott's central reservation</u> <u>system</u> , MARSHA (you can find more information on MARSHA in Marriott's interconnection to GDSs in Chapter 3).
	**** However, when an Internet user wishes to view availability or make a booking, the server routes the enquiry via a third route – a direct connection to TravelWeb. Messages passing down a direct connection to the TravelWeb Internet booking engine are routed to the Thisco switch, which passes them on to MARSHA. The MARSHA system checks its room inventory data base and formulates a response, just as though it was a regular Thisco/TravelWeb reservation message. However, in this case the response is routed back to the Marriott Internet Web servers which route the message to the consumer. * * * *
	The beauty of this approach is that it maintains the stand- alone integrity of Thisco and TravelWeb. Neither of these systems needs to hold a data base of rates or rooms. <u>All</u> <u>data and inventory records continue to be held by</u> <u>MARSHA. This is an important point because it</u> <u>eliminates any problems that would undoubtedly arise</u>

¹ Any bolding only appears in original. Bolding and underlining means emphasis added.

Claim 11	Inkpen, Nokia and Digestor
	from duplicating Marriott's hotel information on other
	servers. Another benefit is that it saves Marriott from
	having to develop a complex and costly booking interface to
	MARSHA." Ex. 1021 at 229-231; Ex 1002 ¶ 343.
	Nokia and Digestor disclose the use of wireless handheld
	devices for displaying world wide web pages. Ex 1022 at
	1076; Ex. 1023 at 61-65. See also Ex. 1002 ¶¶ 341-45.

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

9000i Communicator and the wireless handheld devices disclosed in Digestor

could have been used to access the web pages of the Travel Web site. Ex. 1002

¶ 345; Ex. 1022 at 1080.

Claim 11	Inkpen, Nokia and Digestor
a. a central database containing hospitality applications and data,	The communications system utilized by Marriott for hotel reservations includes a central database containing hospitality applications and data including the MARSHA III computerized reservation system and the storage device associated with the MARSHA system:
	"Marriott has been highly successful in using technology to market and sell hotel rooms and related services to customers around the world. The cornerstone of this distribution activity is <u>Marriott's central reservation</u> <u>system</u> , MARSHA (you can find more information on MARSHA in Marriott's interconnection to GDSs in Chapter 3). * * * *
	However, when an Internet user wishes to view availability or make a booking, the server routes the enquiry via a third route – a direct connection to TravelWeb. Messages passing down a direct connection to the TravelWeb Internet booking engine are routed to the Thisco switch, which passes them on to MARSHA. The MARSHA system checks its room inventory data base and formulates a response, just as though it was a regular Thisco/TravelWeb

	reservation message. However, in this case the response is routed back to the Marriott Internet Web servers which route the message to the consumer. * * * *
	The beauty of this approach is that it maintains the stand- alone integrity of Thisco and TravelWeb. Neither of these systems needs to hold a data base of rates or rooms. <u>All</u>
	data and inventory records continue to be held by
	MARSHA. This is an important point because it
	eliminates any problems that would undoubtedly arise
	from duplicating Marriott's hotel information on other
	servers. Another benefit is that it saves Marriott from
	having to develop a complex and costly booking interface to
	MARSHA." Ex. 1021 at 229-231. See also Ex. 1002 ¶¶
	346-47.
b. at least one	The Nokia 9000i Communicator [Ex. 1023 (Nokia 9000i
wireless handheld	
computing device on	discloses a wireless handheld computing device with a web
which hospitality	
applications and data	-
are stored,	Sony MagicLink, the Apple Newton with the AppPen
	NetHopper browser, and the Sharp MI-10. Ex. 1022 at
	1075. <i>See also</i> Ex. 1002 ¶¶ 348-50.

It would have been obvious to a POSITA to configure the Travel Web server to modify web pages for the smaller screen size of a wireless hand-held device in view of Digestor. Ex. 1022 at 1076; Ex. 1002 ¶ 350. A POSITA would understand that Travel Web pages being rendered by a browser on a handheld device are data and hospitality applications within the meaning of the '325 patent. Ex. 1002 ¶ 350. This is because the combination of the HTML files associated with the Travel Web pages and the browser together comprise "sequences of instructions that can be executed on a computer that are designed to help people perform a certain type of work," in this case making reservations. *Id.* Additionally, a POSITA would understand that web pages such as the Travel Web pages include data. *Id.* Additionally, the requirement in claim 11 that the Web page have hospitality applications and data stored thereon further supports the conclusion that Travel Web pages being rendered by a browser on a handheld device are data and hospitality applications. *Id.*

Claim 11	Inkpen, Nokia and Digestor
c. at least one Web	The communications system utilized by Marriott for hotel
server on which	reservations includes a Travel Web server on which
hospitality	hospitality applications and data are stored. Ex. 1002 ¶ 351.
applications and data	
are stored,	"The TravelWeb Internet server is linked by high speed
	telecommunications lines to Thisco's Ultraswitch computer
	(see Pegasus in Chapter 4 for more details on this major
	hotel industry switch). It is through this link that consumers
	can book a hotel room from 14,000 properties that are part
	of 16 chains. The actual booking process is carried out
	between the consumer and the hotel chain's computer
	system, with no intermediate GDS involved at all. This
	seamless connectivity is about as close to a direct point-of-
	sale relationship with a prospective guest that a hotel could
	reasonably expect to achieve. Once a booking has been
	made, consumers may choose to guarantee their rooms by
	using TravelWeb's on-line plastic card authorization
	facility. TravelWeb therefore provides its participating
	hotel customers with a truly on-line confirmed booking
	service that is available to customers all around the world."
	Ex. 1021 at 218-219.
	"One of the other main functions of the TravelWeb server
	is to act as a translator between: (a) classical text-based
	computer systems that support TravelWeb's host suppliers;
	and (b) the Internet's HTML to which all Internet users are
	connected. This translation function allows TravelWeb's

Claim 11	Inkpen, Nokia and Digestor
	host suppliers to communicate directly with the PCs of
	home and business consumers around the world." Id. at
	218.
	Digestor discloses a server that automatically re-authors
	documents for display on small screen devices. Ex. 1022 at
	1076. See also Ex. 1002 ¶¶ 351-55.

A POSITA would have understood that the Travel Web server pages are

hospitality applications and data for the reasons discussed above in connection

with claim element 11.b discussed above. Ex. 1002 ¶ 355.

Claim 11	Inkpen, Nokia and Digestor
d. at least one Web page on which hospitality applications and data are stored,	The communications system utilized by Marriott for hotel reservations includes consumer devices such as

A POSITA would have understood that Travel Web pages being rendered by a browser on a handheld device are data and hospitality applications within the meaning of the '325 patent for the reasons discussed above in connection with claim element 12.b. Ex. $1002 \ gmmmodes 358$.

Claim 11	Inkpen, Nokia and Digestor
e. an	The communications system utilized by Marriott for hotel
application	reservations includes a THISCO switch. Inkpen at Fig. 5.36. The
program	THISCO switch includes an API for communicating with other
interface,	applications: "On the demand side, the THISCO switch
and	communicates with all major GDSs using the proprietary message
	format of each one." Ex. 1021 at 264, col. 1, ll. 15-18. See also Ex.
	1002 ¶¶ 359-60.

A POSITA would have considered the software in the THISCO switch that communicates with all major GDSs using their proprietary message formats to constitute or include an application program interface for interfacing with the

GDSs. Ex. 1002 ¶ 360.

Claim 11	Inkpen, Nokia and Digestor
f. a communications control module,	
	"The newly formed Thisco developed a computerized switch called <u>Ultraswitch</u> . The way this switch works is very much like a transparent link between the travel agent and the participating hotel. The switch has a supply and demand side. On the supply side, it connects to hotel inventory systems and translates their messages and

Claim 11	Inkpen, Nokia and Digestor
	commands into a standard Thisco format that is used for all processing within Ultraswitch. On the demand side, the Thisco switch communicates with all major GDSs using the proprietary message format of each one. In many ways the Ultraswitch computer acts as a sort of super-translator between the various hotel systems and the major GDSs. It provides full support for all GDS hotel functionality, including bookings, status messages, rate updates and seamless availability." <i>Id.</i> at 164.
	<u>"Ultraswitch</u> uses technology based on a scalable client/server computer running the UNIX operation system and a relational data base management system (RDMS). It uses high speed digital data circuits carrying between 56 and 64 kb/s of data and supports many different telecommunications protocols including SNA, X25, SLC and TCP/IP." <i>Id.</i> at 164.
	"Once the travel agent has selected a property for a customer, stage two commences. This involves the creation of a booking request entry by the travel agent, using the GDS terminal. The resulting reservations message is transmitted from the GDS, via the <u>Ultraswitch</u> to the hotel system. When the reservation message is received by the hotel system, it checks the required availability and sends a response back to the travel agent via the <u>Ultraswitch</u> and the GDS. This two-way message flow continues until either a booking is made or the travel agent sign-off, i.e. the transaction is ended." <i>Id.</i> at 164.
	"The primary role of TravelWeb is to provide the technologically sophisticated traveller with a full-scale travel service via the Internet. Hotel bookings are serviced on a one-to-one basis with the consumer using <u>Thisco's</u> <u>Ultraswitch technology</u> to link him/her directly to the hotel system of his/her choice. Airline ticket sales are fulfilled with the participation of a USA based travel agent." <i>Id.</i> at 216.

Claim 11	Inkpen, Nokia and Digestor
	"TravelWeb first appeared on the Internet in October 1994
	when it was positioned as an online catalogue of hotel
	products aimed at the travel industry. In December 1995 a
	pilot version of the hotel booking engine was Beta tested by
	a controlled group of Internet users. This was the first time
	that Thisco's Ultraswitch hotel booking system had been
	connected to the Internet." Id. at 216.
	"The hotel booking engine The TravelWeb Internet server
	is linked by high speed telecommunications lines to
	Thisco's ultraswitch computer (see Pegasus and Chapter 4
	for more details on this major hotel industry switch). It is
	through this link that consumers can book a hotel room
	from 14,000 properties that are part of 16 chains. The
	actual booking process is carried out between the consumer
	and the hotel chain's computer system, with no intermediate
	GDS involved at all. This seamless connectivity is about as
	close to a direct point-of-sale relationship with a
	prospective guest that a hotel could reasonably expect to
	achieve. Once a booking has been made, consumers may
	choose to guarantee their rooms by using TravelWeb's on-
	line plastic card authorization facility. TravelWeb therefore
	provides its participating hotel customers with a truly on-
	line confirmed booking service that is available to
	customers all around the world." <i>Id.</i> at 218-219.
	"The Thisco switch (which is explained in more detail in
	Chapter 4 in the section on distribution systems), was
	designed with an in-built capability to handle both TPF
	links to hotel systems and, via its Travel Web booking
	engine, TCP/IP for Internet traffic." Id. at 230. See also
	Ex. 1002 ¶¶ 361-70.

Nothing in claim 11 requires the communications module to be comprised of a single physical device. In any event, although THISCO chose to implement the Ultraswitch and the Travel Web server as separate devices connected by high speed communications lines, it would have been obvious to a POSITA at the time of the '325 patent that this was a design choice and that the Ultraswitch and the Travel Web server could have been implemented as a single device. A POSITA would have been motivated to do so in order to avoid the cost and complexity of the high speed phone lines that linked the Ultraswitch and the Travel Web server. Ex. 1002 ¶ 370. Additionally, the final citation in chart above from Inkpen at 230 suggests to a POSITA implementation of the THISCO Ultraswitch and Travel Web server as a single system. *Id*.

Claim 11	Inkpen, Nokia and Digestor
wherein applications	In the communications system utilized by Marriott for hotel
and data are	reservations, reservations information is maintained in the
synchronized	MARSHA system and distributed to Web pages on PCs or
between the central	handheld devices:
data base, at least one	
wireless handheld	
computing device, at	market and sell hotel rooms and related services to
least one Web server	customers around the world. The cornerstone of this
and at least one Web	distribution activity is Marriott's central reservation
page;	system, MARSHA (you can find more information on
	MARSHA in Marriott's interconnection to GDSs in Chapter
	3).
	* * * *
	However, when an Internet user wishes to view availability
	or make a booking, the server routes the enquiry via a third
	route – a direct connection to TravelWeb. Messages
	passing down a direct connection to the TravelWeb Internet
	booking engine are routed to the Thisco switch, which
	passes them on to MARSHA. The MARSHA system
	checks its room inventory data base and formulates a
	response, just as though it was a regular Thisco/TravelWeb
	reservation message. However, in this case the response is
	routed back to the Marriott Internet Web servers which

Claim 11	Inkpen, Nokia and Digestor
	route the message to the consumer. * * * *
	The beauty of this approach is that it maintains the stand- alone integrity of Thisco and TravelWeb. Neither of these systems needs to hold a data base of rates or rooms. <u>All</u> <u>data and inventory records continue to be held by</u> MARSHA. This is an important point because it
	eliminates any problems that would undoubtedly arise
	from duplicating Marriott's hotel information on other
	servers. Another benefit is that it saves Marriott from
	having to develop a complex and costly booking interface to
	MARSHA." Ex. 1021 at 229-231. See also Ex. 1002 ¶¶
	371-73.

It would have been obvious to a POSITA that when a PC and a wireless handheld device are both connected to the Travel Web server and viewing pages for the same hotel property, the reservations data maintained on MARSHA would be synchronized (as that term is properly construed) between MARSHA, the Travel Web server, and the Travel Web pages rendered on PCs and the wireless handheld devices such as the Nokia 9000i. Ex. 1002 ¶ 373.

Claim 11	Inkpen, Nokia and Digestor
wherein the application	The THISCO switch includes an API for communicating
program interface	with other applications: "On the demand side, the
enables integration of	THISCO switch communicates with all major GDSs
outside applications	using the proprietary message format of each one." Ex.
with the hospitality	1021 at 264, col. 1, ll. 15-1. See also Ex. 1002 ¶¶ 374-75.
applications and	

The software in the Thisco switch that accepts messages from the major GDSs in their respective proprietary message formats is an applications program interfaces (i.e., they integrate with the application programs running on the respective GDSs). Ex. 1002 ¶ 375. The API enables integration of the outside applications with the hospitality applications in that the API allows the other applications to make room reservations via the MARSHA system and such reservations will be reflected in MARSHA as well as on the Travel Web server and Web pages downloaded to customer PCs and wireless handheld devices. Ex. 1002 ¶ 375.

Claim 11	Inkpen, Nokia and Digestor
wherein the communications control module is an interface between the hospitality applications and any other	In the communications system utilized by Marriott for hotel reservations, the Travel Web internet booking engine of the THISCO switch is an interface between the TCP/IP protocol employed by the hospitality applications on the Travel Web server, the Web page on the PC and the wireless handheld devices and the protocol employed by the MARSHA CRS:
communications protocol,	"Its MARSHA system is based on operating software called transaction processing facility (TPF), which runs on an IBM mainframe. This is totally incompatible with the TCP/IP communications protocols used by the Internet. * * * *
	To build its own Internet booking engine with an on-line interface to MARSHA could be done from a technical viewpoint, however, it would be quite costly So, in the meantime, what was the answer to Marriott's Internet book problem? Well, the answer was a very pragmatic decision taken by Marriott management, which was to use the Thisco hotel switch as the interface to MARSHA. The Thisco switch (which is explained in more detail in Chapter 4 in the section on distribution systems), was designed with an in- built capability to handle both TPF links to hotel systems and, via its Travel Web booking engine, TCP/IP for Internet traffic." Ex. 1021 at 230. <i>See also</i> Ex. 1002 ¶¶ 376-77.
wherein the	Inkpen discloses the synchronized data relating to orders of
synchronized data	hotel rooms, <i>i.e.</i> hotel bookings.

Claim 11	Inkpen, Nokia and Digestor
relates to orders.	"The hotel booking engine The TravelWeb Internet server
	is linked by high speed telecommunications lines to
	Thisco's ultraswitch computer (see Pegasus and Chapter 4
	for more details on this major hotel industry switch). It is
	through this link that consumers can book a hotel room
	from 14,000 properties that are part of 16 chains. The
	actual booking process is carried out between the consumer
	and the hotel chain's computer system, with no intermediate
	GDS involved at all. This seamless connectivity is about as
	close to a direct point-of-sale relationship with a
	prospective guest that a hotel could reasonably expect to
	achieve. Once a booking has been made, consumers may
	choose to guarantee their rooms by using TravelWeb's on-
	line plastic card authorization facility. TravelWeb therefore
	provides its participating hotel customers with a truly on-
	line confirmed booking service that is available to
	customers all around the world." Ex. 1021 at 218-19. See
	<i>also</i> Ex. 1002 ¶¶ 378-80.

A POSITA would have understood that hotel bookings are orders of hotel

rooms. Ex. 1002 ¶ 380.

Claim 13	Inkpen, Nokia and Digestor
13. An information management and synchronous	See claim 11. See also Ex
communications system for use with wireless	1002 ¶¶ 341-45.
handheld computing devices and the internet	
comprising:	
a. a central database containing hospitality	See claim 11. See also Ex
applications and data,	1002 ¶¶ 346-47.
b. at least one wireless handheld computing device	See claim 11. See also Ex
on which hospitality applications and data are	1002 ¶¶ 348-50.
stored,	
c. at least one Web server on which hospitality	See claim 11. See also Ex
applications and data are stored,	1002 ¶¶ 351-55.
d. at least one Web page on which hospitality	See claim 11. See also Ex
applications and data are stored,	1002 ¶¶ 356-58.
e. an application program interface, and	See claim 11. See also Ex

Claim 13		Inkpen, Nokia and Digestor
		1002 ¶¶ 359-60.
f. a communications control module,		See claim 11. See also Ex
		1002 ¶¶ 361-70.
wherein applica	tions and data are synchronized	See claim 11. See also Ex
between the cent	ral data base, at least one wireless	1002 ¶¶ 371-73.
-	uting device, at least one Web	
server and at leas	st one Web page;	
wherein the appli	ication program interface enables	See claim 11. See also Ex
integration of our	tside applications with the	1002 ¶¶ 374-75.
hospitality applic	cations and	
wherein the com	munications control module is an	See claim 11. See also Ex
interface between	n the hospitality applications and	1002 ¶¶ 376-77.
any other commu	inications protocol,	
Claim 13	Inkpen, Nokia and Digestor	
wherein the	Inkpen discloses the synchronic	ized data relating to hotel
synchronized	reservations.	
data relates to		
reservations.	"The beauty of this approach is th	at it maintains the stand-alone
	integrity of Thisco and TravelWe	eb. Neither of these systems
	needs to hold a data base of rates or rooms. All data and	
	inventory records continue to be held by MARSHA. This is	
	an important point because it eliminates any problems that	
	would undoubtedly arise from duplicating Marriott's hotel	
	information on other servers. Another benefit is that it saves	
	Marriott from having to develop a complex and costly booking	
	interface to MARSHA." Ex. 1021	at 229-231. See also Ex. 1002
	¶¶ 378-80.	

Claim 15	Inkpen, Nokia and Digestor
15. The information	See claims 11-13 of the '325 patent above. See
management and synchronous	<i>also</i> Ex 1002 ¶¶ 393.
communications system of	
claim 11, 12, or 13	
wherein the data is sent to a	Nokia and Digestor disclose the use of wireless
wireless paging device.	handheld devices for receiving data from an
	information management and synchronous
	communications system. Ex 1022 at 1076; Ex.

Claim 15	Inkpen, Nokia and Digestor	
	1023 at 61-65. See also Ex. 1002 ¶¶ 394-96.	

It would have been obvious to one of ordinary skill in the art that the Nokia 9000i Communicator and the wireless handheld devices disclosed in Digestor could have been used as wireless paging devices to receive the data from the information management and synchronous communications system of claims 11, 13, or 15. Ex. 1002 ¶¶ 395-96; Ex. 1022 at 1080.

B. Challenge to Claim 12 Based on Inkpen, Nokia, Digestor and Flake

Flake discloses an automated travel service information management system for use by a travel agent to manage travel services for a customer. Ex. 1049 at 4. Flake's system includes a relational database that includes all pertinent information from the customer's profile. *Id.* Flake's system can aggregate data from a plurality of computer reservations systems. *Id.* Flake discloses the concept of a waitlist for a travel services that are currently sold out. *Id.* at 21. The concept of a waitlist for travel providers such as hotels and airlines was well known in the art prior to the filing of the '325 patent. Ex. 1002 ¶¶ 403-04. As discussed in the following claim chart, it would have been obvious to incorporate the waitlist concept of Flake into the travel information system disclosed in Inkpen. A POSITA would have further found it obvious to incorporate the waitlist concept of Flake into the travel information system disclosed in Inkpen.

49

industry typically utilizes waitlists in performing their industry services. Id.

Claim 12	Inkpen, Nokia, Digestor and Flake
12. An information management and synchronous communications system for use with wireless handheld computing devices and the internet comprising:	See claim 11. <i>See also</i> Ex 1002 ¶¶ 341-45.
a. a central database containing hospitality applications and data,	See claim 11. <i>See also</i> Ex 1002 ¶¶ 346-47.
b. at least one wireless handheld computing device on which hospitality applications and data are stored,	See claim 11. <i>See also</i> Ex 1002 ¶¶ 348-50.
c. at least one Web server on which hospitality applications and data are stored,	See claim 11. <i>See also</i> Ex 1002 ¶¶ 351-55.
d. at least one Web page on which hospitality applications and data are stored,	See claim 11. <i>See also</i> Ex 1002 ¶¶ 356-58.
e. an application program interface, and	See claim 11. <i>See also</i> Ex 1002 ¶¶ 359-60.
f. a communications control module,	See claim 11. <i>See also</i> Ex 1002 ¶¶ 361-70.
wherein applications and data are synchronized between the central data base, at least one wireless handheld computing device, at least one Web server and at least one Web page;	See claim 11. <i>See also</i> Ex 1002 ¶¶ 371-73.
wherein the application program interface enables integration of outside applications with the hospitality applications and	See claim 11. <i>See also</i> Ex 1002 ¶¶ 374-75.
wherein the communications control module is an interface between the hospitality applications and any other communications protocol,	See claim 11. <i>See also</i> Ex 1002 ¶¶ 376-77.
wherein the synchronized data relates to waitlists.	Flake discloses an automated travel information system for travel services, including hotels. Flake at 6. Flake further discloses the use of a wait list for travel services that are not currently

Claim 12	Inkpen, Nokia, Digestor and Flake
	available. Ex. 1049 at 21. <i>See also</i> Ex. 1002 ¶¶ 417-18.

Flake discloses the use of wait lists for travel services that are not currently available. Ex. 1049 at 21. Thus, it would have been obvious to a POSITA to incorporate the wait list concept into the computerized reservation system of Inkpen to provide a waitlist for hotel rooms that are sold out. Ex. $1002 \ 418$.

C. Challenge to The Challenged Claims Based on DeLorme.

1. Summary of DeLorme

U.S. Pat. No. 5,948,040 (Ex. 1024, "DeLorme"), which was not considered by the Patent Office during the original prosecution of the '325 patent, was filed on February 6, 1997 and issued on September 7, 1999. DeLorme is therefore prior art under pre-AIA 35 U.S.C. § 102(a).

DeLorme discloses a system for making travel arrangements and planning travel activities, called Travel Reservation and Information Planning Systems, or TRIPS. *See, e.g.* Ex. 1024 at 1:28-36; 14:24-42. The TRIPS system is a "completely integrated system enabling an individual to plan, review, locate, schedule and select or execute customized or personalized travel arrangements and activities in association with map displays or other output of travel routes, chronological events, diverse travel topics and geographic points of interests along such routes." *Id.* at 1:32-43.

51

In the TRIPS system, travel and planning related data and information are stored in a centralized relational database. *Id.* at 17:7:13; *see also* 32:1-7. The TRIPS system can be accessed by users using a variety of different types of devices using various communications protocols. For example, DeLorme discloses that the TRIPS system may be accessed "entirely online" by means of an Internet web site. *Id.* at 14:43-47. Alternatively, the TRIPS system may be accessed by users "on the go" using wireless communication units, such as wireless handheld devices. *Id.* at 72:13-19, 71:61-72:2. DeLorme discloses that whether the user accesses the system online or via a wireless handheld device, the user can access updated (*i.e.*, synchronized) "real time" or "on the spot" travel information. *Id.* at 14:24-42, 72:37-43.

2. Patentability Challenge Based on DeLorme.

DeLorme renders obvious claims 11, 13 and 15 under 35 U.S.C. § 103 (pre-AIA), as shown in the following claims charts. Ex. 1002 ¶¶ 419-421.

Claim 11	DeLorme
11. An information	DeLorme discloses an information management and
management and	synchronous communications system for making travel
synchronous	arrangements and planning travel activities, called
communications system	Travel Reservation and Information Planning Systems,
for use with wireless	or TRIPS. See, e.g. Ex. 1024 at 1:28-36; 14:24-42.
handheld computing	
devices and the internet	DeLorme discloses that users may interact with updated
comprising:	TRIPS data using the internet or a wireless handheld
	computing device. For example, DeLorme discloses:
	"Alternatively all TRIPS functions data and services
	computing device. For example, DeLorme discloses: "Alternatively, all TRIPS functions, data and services

Claim 11	DeLorme
	can be provided entirely online (i.e. without significant stand-alone software components)—for example, from a central TRIPS service bureau, <u>or by means of a TRIPS</u> <u>Internet World Wide Web Site</u> . <i>Id.</i> at 14:43-47.
a. a central database containing hospitality	FIG. 9 illustrates an important alternative or additional embodiment of TRIPS—that permits mobile users 901, at remote locations (for example, en route in vehicles or on foot), two-way access by wireless communications 903 to engage the novel travel reservation information planning system of one or more TRIPS 904 communications facilities or service bureaus. FIG. 9 includes <u>a wireless communication unit or WCU 907,</u> <u>typically hand-held 906</u> or mounted or used in a vehicle 905 like an automobile." <i>Id.</i> at 71:61-72:2. <i>See</i> <i>also</i> Ex. 1002 ¶¶ 422-25. DeLorme discloses a relational database for storing TRIPS hospitality data:
applications and data,	"Preferred TRIPS embodiments respond with interactive processing to these "user friendly" travel planning inquiries by sets of operations or sequences of functions which retrieve, focus, and integrate characteristic travel information within TRIPS Subsystems for processing geographical, topical, temporal and accounting data records organized as a <u>state-of-the-art relational</u> <u>database</u> ." Ex. 1024 at 17:7:13; <i>see also</i> 32:1-7.
	DeLorme further discloses that the TRIPS database includes hospitality applications, such as software for managing hospitality data in the TRIPS database:
	"FIG. 3 is a simplified representation of the preferred data structure for storage, retrieval and processing of the characteristic species TRIPS travel information—i.e. for the <u>software management of geographic, temporal,</u> <u>topical and/or transactional records in TRIPS</u> ." <i>Id.</i> at 30:58-65; <i>see also</i> 8:23-32 (describing GIS applications). <i>See also</i> Ex. 1002 ¶¶ 426-28.
b. at least one wireless	DeLorme discloses a handheld wireless communication
handheld computing	unit (WCU) 907 for accessing TRIPS hospitality data

Claim 11	DeLorme
device on which	and applications:
hospitality applications and data are stored,	"FIG. 9 illustrates an important alternative or additional embodiment of TRIPS—that permits mobile users 901 to engage the novel travel reservation information planning system of one or more TRIPS 904 communications facilities or service bureaus. FIG. 9 includes <u>a wireless communication unit or WCU 907,</u> <u>typically hand-held 906</u> or mounted or used in a vehicle 905 like an automobile." Ex. 1024 at 71:61- 72:2.
	"TRIPS WCUs 907 facilitate two way communications at 903 of standard TRIPS data packets 939 with at least one TRIPS travel information and service 15 provider 904. In sum, FIG. 9 outlines embodiments of the TRIPS invention <u>enabling users to get travel information</u> <u>and/or make travel arrangements ''on the go''</u> , walking in a city, from their vehicle, during an off-road expedition and so forth." <i>Id.</i> at 72:13-19. <i>See also id.</i> at 18:35-42 and Ex. 1002 ¶¶ 429-31.
c. at least one Web	DeLorme discloses TRIPS data and applications
server on which hospitality applications and data are stored,	 available online via a World Wide Web Site: "Alternatively, all TRIPS function, data and service can be provided entirely online_(i.e. without significant standalone software components)—for example, from a central TRIPS service bureau, or by means of a <u>TRIPS</u> <u>Internet World Wide Web Site</u>." Ex. 1024 at 14:43-47.
	"Preferred online TRIPS embodiments—such as <u>an</u> <u>Internet travel reservation information planning</u> <u>system</u> —are designed to facilitate flexible and independent user consideration and manipulation of travel information in association with dates/times in order to construct and/or modify personalized itineraries or travel schedules" <i>Id.</i> at 51:13-22. <i>See also</i> Ex. 1002 ¶ 432-34.
d. at least one Web page on which hospitality	DeLorme discloses this limitation. Ex. 1002 ¶ 435. For example, DeLorme discloses TRIPS data and

Claim 11	DeLorme
applications and data are stored,	applications available online via a World Wide Web Site:
	"Alternatively, all TRIPS function, data and service can be provided entirely online_(i.e. without significant standalone software components)—for example, from a central TRIPS service bureau, or by means of a <u>TRIPS</u> <u>Internet World Wide Web Site</u> ." Ex. 1024 14:43-47.
	DeLorme further discloses using distributed applications, such as Java "applets," on Web pages to provide TRIPS hospitality functionality:
	"Such purely online TRIPS embodiments can be implemented utilizing recent advances in <u>distributed</u> <u>applications, "agents" or online "applets" developed</u>
	in Java, or equivalent computer languages—plus
	other state-of-the-art software enhancements for
	online or Internet usage." <i>Id.</i> at 14:47-52. <i>See also</i> Ex. 1002 ¶¶ 435-37.
e. an application	DeLorme discloses Provider Input/Output 231 for
program interface, and	integrating third party applications with TRIPS:
	"Preferably, TRIPS 203 further offers/brokers
	Provider Input/Output 231 to and from third-party
	providers of travel information and services –
	optimally in real time online . Such third party participation online enables enrolled TRIPS users to enjoy more immediate offerings, such as updated information on accommodations availability i.e. vacancies, special offers for price discounts or extra services, reservations and/or tickets for diverse accommodations or events and so forth – as described in more detail hereinafter, particularly referring to FIG. 8." Ex. 1024 at 31:42-51.
	DeLorme further discloses the Accounting Subsystem as comprising software and communication links for integrating accounting, billing and other services:
	"These transactions are negotiated, consummated,

Claim 11	DeLorme	
	recorded, confirmed, accounted for, and as appropriate,	
	charged, invoiced and/or reconciled within the	
	TRANSACTION COMMUNICATIONS	
	ACCOUNTING MANAGER block—at 816 in FIG.	
	8A—by means of state-of-the-art software and communication links for electronic commerce or	
	<u>communication links for electronic commerce or</u>	
	online contracts, related accounting, billing, or austomor services, and so forth "Id at 64:37.44 See	
	<u>customer services</u> , and so forth." <i>Id.</i> at 64:37-44. <i>See</i> <i>also id</i> at 63:61-67: 50:45-48. <i>See also</i> Ex. 1002	
	<i>also id.</i> at 63:61-67; 50:45-48. <i>See also</i> Ex. 1002	
f. a communications	¶¶ 438-40.	
control module,	DeLorme discloses that the TRIPS system communicates with different end-user devices using	
control module,	different communication protocols:	
	different communication protocols.	
	"TRIPS can also work with alternative end-user	
	hardware platforms; e.g., networked work stations;	
	"kiosk" information terminals linked to a central server;	
	portable laptop, notebook, in-vehicle, or handheld	
	personal digital assistant (PDA) portable computer	
	devices TRIPS can also be provided via "smart Cable	
	TV" interfaces that combine simplified PC functionality,	
	input/output with a mass-market "home" television	
	appliance" Ex. 1024 at 14:66-15:13.	
	"For convenient use en route, e.g., in a vehicle or on	
	foot, the WCU 907 preferably provides simplified or	
	<u>"push-button" input means</u> at 914, 915, 916, 918 and	
	920, for example to make TRIPS inquiries from a	
	moving car, as described hereinafter The TRIPS	
	service bureau or provider 904 in FIG. 9 receives the	
	simplified input or remote queries, which get	
	processed by series or sequences of TRIPS geographic,	
	temporal, topical and accounting operations" <i>Id.</i> at	
	73:26-45; <i>see also</i> 73:64-74:29.	
	DeLorme further discloses a communication control	
	module (<i>i.e.</i> Interface and Interaction Bus 209 in Fig. 2	
	or Main Menu 413 and Interaction Bus 414 in Fig. 4)	
	that coordinates communication with different end-user	

Claim 11	DeLorme
	devices:
	"A TRIPS Retail Consumer Input is shown at 205 in
	FIG. 2. Retail user input 205 includes travel planning
	inquiries The TRIPS Interface & Interaction Bus
	209 functions to furnish flexible user-directed access
	to, from and among the four Subsystems at 221, 223,
	<u>213 and 217 within TRIPS 203</u> ." Ex. 1024 at 30:67-
	31:22; <i>see also</i> 22:63-66; Fig. 2.
	"In FIG. 4, the Main Menu 413 and the Interaction
	Bus 414 correspond to the TRIPS Interface &
	Interaction Bus 209 in FIG. 2—as well as the main
	input menus at 155, 157, 161 and 163 in FIG. 1C—plus
	equivalent input means like graphical user interfaces
	(GUIs). Moreover, the Main Menu 413 and <u>Interaction</u>
	Bus 414 in FIG. 4 correspond to, and coordinate the
	response to, alternative input means embedded in
	specialized TRIPS field or in-vehicle embodiments that
	typically include the wireless communication of GPS
	position sensor data along with simplified, "push-
	button" travel information inquiries sent by users
	actually en route or at remote locations" Ex. 1024 at
	37:54-67. <i>See also</i> Ex. 1002 ¶¶ 441-47.

A POSITA would understand or find obvious that the Interface and Interaction Bus 209 in Fig. 2 or Main Menu 413 and Interaction Bus 414 in Fig. 4 constitute a communications control module that serves as an interface between retail consumer users (e.g. 205 in Fig. 2) and the various subsystems that comprise TRIPS (e.g. Topical Subsystem 213, Accounting Subsystem 217, Geographic Subsystem 221, and Temporal Subsystem 223). A POSITA would further understand or find obvious that the communication control module is configured to interface with retail consumer users using different types of devices using different communication protocols, including both Internet based access (Ex. 1024 at 14:66-15:13) as well as access via a "simplified" request protocol from wireless communication devices (Ex. 1024 at 73:26-45; 73:67-74:29). Ex. 1002 ¶ 447.

Claim 11	DeLorme	
wherein applications	DeLorme discloses that users may view updated real-	
and data are	time TRIPS data via the internet site.	
synchronized between	time TKH 5 data via the internet site.	
-	"Once online, the proferred embediment lets the user	
the central data base, at least one wireless	"Once online, the preferred embodiment lets the user	
	"view" or download updated TRIPS map data, functions	
handheld computing	and timely, topical travel information When needed,	
device, at least one Web	TRIPS user inquiries can be processed online or via	
server and at least one	computer communications for immediate treatment and	
Web page;	response. In sum, the FIG. 1A preferred embodiment	
	facilitates access to current information and "real-	
	time" services online" Ex. 1024 at 14:24-42. See	
	also 14:43-47.	
	Del orma further discloses providing undeted TPIPS	
	DeLorme further discloses providing updated TRIPS	
	data to wireless communication units:	
	"FIG. 9 also depicts alternative TRIPS embodiments	
	and remote usage scenarios which facilitate "on the	
	spot" simplified travel planning and transactions, via	
	WCU 907 from remote locations, by retail users actually	
	en route, who have not necessarily engaged in previous	
	desktop TRIPS travel planning sessions, arrangements,	
	output or transfers specifically related to their current	
	trip In other words, FIG. 9 illustrates TRIPS	
	embodiments for immediate travel inquiries and	
	responses to and from TRIPS retail users "on the	
	road" or at remote "field" locations." Ex. 1024 at	
	72:37-43; 72:67-73:6. See also Ex. 1002 ¶¶ 448-50.	
wherein the application	DeLorme discloses Provider Input/Output 231 for	
program interface	integrating third party applications with TRIPS	
enables integration of	hospitality applications:	

Claim 11	DeLorme	
outside applications	"Preferably, TRIPS 203 further offers/brokers	
with the hospitality	Provider Input/Output 231 to and from third-party	
applications and	providers of travel information and services –	
	optimally in real time online. Such third party	
	participation online enables enrolled TRIPS users to	
	enjoy more immediate offerings, such as updated	
	information on accommodations availability i.e.	
	vacancies, special offers for price discounts or extra	
	services, reservations and/or tickets for diverse	
	accommodations or events and so forth – as described in	
	more detail hereinafter, particularly referring to FIG. 8."	
	Ex. 1024 at 31:42-51. See also Ex. 1002 ¶ 451.	
wherein the	DeLorme discloses that the TRIPS system	
communications control	communicates with different end-user devices using	
module is an interface	different communication protocols:	
between the hospitality		
applications and any	"TRIPS can also work with alternative end-user	
other communications	hardware platforms; e.g., networked work stations;	
protocol,	"kiosk" information terminals linked to a central server;	
	portable laptop, notebook, in-vehicle, or handheld	
	personal digital assistant (PDA) portable computer	
	devices TRIPS can also be provided via "smart Cable	
	TV" interfaces that combine simplified PC functionality,	
	input/output with a mass-market "home" television	
	appliance" Ex. 1024 at 14:66-15:13.	
	"For convenient use en route, e.g., in a vehicle or on	
	foot, the WCU 907 preferably provides simplified or	
	"push-button" input means at 914, 915, 916, 918 and	
	920, for example to make TRIPS inquiries from a	
	moving car, as described hereinafter The TRIPS	
	service bureau or provider 904 in FIG. 9 receives the	
	simplified input or remote queries, which get	
	processed by series or sequences of TRIPS geographic,	
	temporal, topical and accounting operations" <i>Id.</i> at	
	73:26-45; <i>see also</i> 73:64-74:29.	
	DeLorme further discloses a communication control	
	module (<i>i.e.</i> Interface and Interaction Bus 209 in Fig. 2	
	module (i.e. mortaee and micraenon bus 207 m r 1g. 2	

Claim 11	DeLorme
	or Main Menu 413 and Interaction Bus 414 in Fig. 4)
	that coordinates communication with different end-user
	devices:
	"A TRIPS Retail Consumer Input is shown at 205 in
	FIG. 2. Retail user input 205 includes travel planning
	inquiries The TRIPS Interface & Interaction Bus
	209 functions to furnish flexible user-directed access
	to, from and among the four Subsystems at 221, 223,
	<u>213 and 217 within TRIPS 203</u> ." <i>Id.</i> at 30:67-31:22;
	see also 22:63-66; Fig. 2.
	"In FIG. 4, the Main Menu 413 and the Interaction
	Bus 414 correspond to the TRIPS Interface &
	Interaction Bus 209 in FIG. 2—as well as the main
	input menus at 155, 157, 161 and 163 in FIG. 1C—plus
	equivalent input means like graphical user interfaces
	(GUIs). Moreover, the Main Menu 413 and Interaction
	Bus 414 in FIG. 4 correspond to, and coordinate the
	response to, alternative input means embedded in
	specialized TRIPS field or in-vehicle embodiments that
	typically include the wireless communication of GPS
	position sensor data along with simplified, "push-
	button" travel information inquiries sent by users
	actually en route or at remote locations" Id. at 37:54-
	67. <i>See also</i> Ex. 1002 ¶¶ 452-56.

A POSITA would understand that that the communication control module (*i.e.* Ex. 1024 at Interface and Interaction Bus 209 in Fig. 2 or Main Menu 413 and Interaction Bus 414 in Fig. 4) serves as an interface between retail consumer users (*e.g.* Ex. 1024 at 205 in Fig. 2) and the various subsystems that comprise TRIPS (*e.g.* Ex. 1024 at Topical Subsystem 213, Accounting Subsystem 217, Geographic Subsystem 221, and Temporal Subsystem 223). A POSITA would further

understand that the communication control module is configured to interface with retail consumer users using different types of devices using different communication protocols, including both Internet based access (Ex. 1024 at 14:66-15:13) as well as access via a "simplified" request protocol from wireless communication devices (Ex. 1024 at 73:26-45; 73:67-74:29). Ex 1002 ¶ 456.

Claim 11	DeLorme
wherein the	DeLorme discloses synchronized data relating to orders
synchronized data	of services, such as reservations and/or tickets.
relates to orders.	"Preferably, TRIPS 203 further offers/brokers Provider Input/Output 231 to and from third-party providers of travel information and services – optimally in real time online. Such third party participation online enables enrolled TRIPS users to enjoy more immediate offerings, <u>such as updated information on</u> <u>accommodations availability i.e. vacancies, special</u>
	offers for price discounts or extra services,
	reservations and/or tickets for diverse
	accommodations or events and so forth – as described
	in more detail hereinafter, particularly referring to
	FIG. 8." Ex. 1024 at 31:42-51. See also Ex. 1002
	¶¶ 457-58.

Claim 13	DeLorme
13. An information management and synchronous	See claim 11. See also
communications system for use with wireless handheld	Ex 1002 ¶¶ 422-25.
computing devices and the internet comprising:	
a. a central database containing hospitality applications	See claim 11. See also
and data,	Ex 1002 ¶¶ 426-28.
b. at least one wireless handheld computing device on	See claim 11. See also
which hospitality applications and data are stored,	Ex 1002 ¶¶ 429-31.
c. at least one Web server on which hospitality	See claim 11. See also
applications and data are stored,	Ex 1002 ¶¶ 432-34.

Claim 13		DeLorme
d. at least one Web page on which hospitality applications and data are stored,		See claim 11. <i>See also</i> Ex 1002 ¶¶ 435-37.
e. an application program interface, and		See claim 11. <i>See also</i> Ex 1002 ¶¶ 438-40.
f. a communications control module,		See claim 11. <i>See also</i> Ex 1002 ¶¶ 441-47.
wherein applications and data are synchronized between the central data base, at least one wireless handheld computing device, at least one Web server and at least one Web page;		See claim 11. <i>See also</i> Ex 1002 ¶¶ 448-50.
wherein the application program interface enables integration of outside applications with the hospitality applications and		See claim 11. <i>See also</i> Ex 1002 ¶ 451.
wherein the communications control module is an interface between the hospitality applications and any other communications protocol,		See claim 11. <i>See also</i> Ex 1002 ¶¶ 452-56.
wherein the synchronized data relates to reservations.	DeLorme discloses the synchroniz reservations. "Preferably, TRIPS 203 further of Input/Output 231 to and from third travel information and services – of online. Such third party participate enrolled TRIPS users to enjoy more such as updated information on act availability i.e. vacancies, special discounts or extra services, reserved diverse accommodations or events described in more detail hereinafted to FIG. 8." Ex. 1024 at 31:42-51. <i>See also</i> Ex. 1002 ¶¶ 469-70.	fers/brokers Provider d-party providers of optimally in real time tion online enables re immediate offerings, commodations offers for price ations and/or tickets for s and so forth – as er, particularly referring

Claim 15	DeLorme
15. The information	See claims 11, 12, and 13 above. <i>See also</i> Ex 1002 ¶ 471.
management and	
synchronous	
communication system	

Claim 15	DeLorme
of claim 11, 12, or 13	
wherein the data is	DeLorme discloses communication with a wireless two-
sent to a wireless	way pager.
paging device.	"Various portable devices can perform the functions of the WCU 907e.g. a notebook or laptop personal computer, a personal digital assistant or PDA, a "smart" cellular phone, two-way pager, an "accessorized" GPS sensor, as well as a dedicated or specially manufactured appliance, and so forth" Ex. 1024 at 75:33-45. <i>See</i> <i>also</i> Ex. 1002 ¶¶ 472-73.

D. Challenge to The Challenged Claims Based on Blinn and Inkpen.

1. Summary of Blinn

Blinn, which was not considered by the Patent Office during the original prosecution of the '325 patent, has a filing date of October 16, 1996 and an issue date of May 2, 2000. Ex. 1025 at 1. Blinn is incorporated by reference in U.S. Patent No. 5,897,622 (Ex. 1038, the "622 patent"), which was filed on October 16, 1996 and issued on April 27, 1999. Ex. 1038 at 9:63-10:1. The '622 patent is § 102(a) prior art, and by incorporating Blinn by reference made 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).

Blinn discloses a method and system for processing electronic sales transactions. The method and system described in Blinn set 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. $1002 \ 475$. While the charts below explain how Blinn anticipates the Challenged Claims in more detail, annotated Figures 1 and 2 from the patent serve as a helpful guide as to how Blinn's disclosure can be mapped onto the claims of the '325 patent:





2. Patentability Challenge Based on Blinn and Inkpen

The Challenged Claims are unpatentable under 35 U.S.C. § 103 (pre-AIA) as being obvious in view of Blinn and Inkpen (Ex. 1021). Ex. 1002 ¶¶ 474-79. It would have been obvious to a person of ordinary skill in the art to combine the prior art elements of Blinn and Inkpen to achieve an online merchant system that includes the capability for online transactions with hospitality applications. Such a combination would have been a use of a known technique to improve a similar device in the same way because it simply would have integrated the functionality of two methods of user interaction including online sales of specific types, such as hospitality applications. *Id.* at ¶ 478.

Claim 11	Blinn and Inkpen
11. An information	Blinn discloses a system for processing electronic sales
management and	transactions through using an information management and
synchronous	synchronous communications system, which includes
communications	

Claim 11	Blinn and Inkpen
system for use with	wireless handheld computing devices and the internet:
wireless handheld computing devices and the internet comprising:	"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 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.
a. a central database containing hospitality applications and data,	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 ¶¶ 480-83. Blinn discloses a database, identified as 130 in Figures 1 and 2, hosted by a centralized merchant system computer that includes hospitality applications and data on store server process 106:
	" 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

Claim 11	Blinn and Inkpen
	databases 130." Ex. 1025 at 11:31-41.
	Inkpen discloses a central database including the MARSHA computerized reservation system that includes a database that stores reservation records. Ex. 1021 at Figure 5.36 and 230-231.
	<i>See also</i> Ex. 1025 Figs. 1 and 2 at 130. <i>See also</i> Ex. 1002 ¶¶ 484-88.

It would have been obvious to a POSITA that the database 130 could contain hospitality applications and data. For instance, Blinn's describes the capability to modify the application based on a "merchant's unique sales transactions," which a POSITA would understand could include hospitality-specific transactions. *See* Ex. 1025 at 38:43-47; *see also* 1:11-18, 1:30-38, 4:66-5:3, Ex. 1002 ¶ 488. 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 ¶ 488. Additionally, as discussed above, Inkpen discloses hospitality applications and data for use in its MARSHA computerized reservation system, and a POSITA would have found it obvious to include the hospitality applications from Inkpen/MARSHA into the system disclosed by Blinn. Ex. 1002 ¶ 488.

Claim 11	Blinn and Inkpen
b. at least one wireless	Blinn discloses an interactive wireless communications
handheld computing	device such as a personal digital assistant which interacts
device on which	with a communications medium and includes software
hospitality applications	allowing access to the merchant system. The consumer
and data are stored,	client 102 is a wireless computing device. Ex. 1025 at
	Figs. 1 and 2 at 102; 10:9-32.

Claim 11	Blinn and Inkpen
	" 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 includewireless data transmission systems" – <i>Id.</i> at 9:23-28 <i>See also</i> Ex. 1002 ¶¶ 489-93. <i>See</i> 11a above for disclosure of "hospitality applications."

It would have been obvious to a POSITA that the consumer computer 102 could have stored hospitality applications and data. *See* Ex. 1025 at 38:43-47; *see also* 1:11-18, 1:30-38, 4:66-5:3, Ex. 1002 ¶ 493. It would further have been obvious to a POSITA that Blinn's interactive wireless communications device could be a handheld device. Ex. 1002 ¶ 493.

Claim 11	Blinn and Inkpen
c. at least one Web	Blinn discloses an Internet information server which
server on which	works in conjunction with the merchant system. See Ex.
hospitality applications	1025 at Fig. 2 at 202; 1:19-29; 12:23-34.
and data are stored,	
	"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

Claim 11	Blinn and Inkpen
	browsers 110 or the merchant browser 210." - Ex. 1025
	12:23-29. <i>See also</i> Ex. 1002 ¶¶ 494-98. <i>See</i> 11a above
	for disclosure of "hospitality applications."

It would have been obvious to a POSITA that the web server 202 could have

stored hospitality applications and data. See Ex. 1025 at 38:43-47; see also 1:11-

18, 1:30-38, 4:66-5:3, Ex. 1002 ¶ 498.

Claim 11	Blinn and Inkpen
d. at least one Web	Blinn discloses web pages hosted by merchants created
page on which	by a dynamic page generator on a store server process
hospitality applications	which provides the web page to the consumer client. Ex.
and data are stored,	1025 at Fig. 1 at 102, 106, 110 and 120; Fig. 2 at 106; 1:22-29; 8:36-44.
	1.22-29, 8.30-44.
	"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.
	Wohld Wilde Web. EX. 1023 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." Id. at
	8:36-39. See also Ex. 1002 ¶¶ 499-503. See 11a above
	for disclosure of "hospitality applications."

Blinn discloses that a "merchant can add other components to customize the flexible electronic merchandising system 100 for the merchant's unique sales transactions." Ex. 1025 at 38:43-47. It would have been obvious a POSITA that to customize Blinn's system to store hospitality applications and data on the

wireless handheld computing device, for example, rendering the web page via a browser. *See also id.* at 1:11-18, 1:30-38, 4:66-5:3, Ex. 1002 ¶ 503.

Claim 11	Blinn and Inkpen
e. an application	Blinn discloses communication with third party credit
program interface, and	card authorization software including "VeriFone's Point
	of Sale (vPOS) software." Ex. 1025 37:61-62; see also
	Fig. 12C, 30:32-37, and 37:55-64. See also Ex. 1002
	¶¶ 504-05.

In order to integrate the VeriFone Point of Sale software with the Merchant

System 104, an application program interface would be required so that the two

systems could communicate with each other. Ex. 1002 ¶ 505. Accordingly, a

POSITA would understand Blinn to disclose	se an application program interface. Id.
---	--

Claim 11	Blinn and Inkpen
f. a communications	Blinn discloses a communications control module
control module,	comprised of 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:
	"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. <i>See also</i> Ex. 1002 ¶¶ 506- 09.

By handling "all incoming and outgoing message traffic" sent to and from the merchant system, the TCP/IP stack working in conjunction with the router 204 serve the role of the communications control module. Ex. $1002 \ \mbox{\$}$ 509.

Claim 11	Rlinn and Inknon
handheld computing device, at least one Web server and at least one Web page;	 Blinn and Inkpen Blinn discloses applications and data synchronized across the central database described above in 12a, the wireless personal digital assistant described in element 12b, the Web server described in 12c, and the Web page described in 12d: "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 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

Claim 11	Blinn and Inkpen
	108." <i>Id.</i> 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." <i>Id.</i> 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." <i>Id.</i> 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." <i>Id.</i> at 16:34-45.
	"In addition, the URL can contain the number of items (quantity) and the price of the items." <i>Id.</i> at 18:26-28.
	"The OrderItemValidate component 1226b is configured to check the order 124 for required items, and verify that the required items exist." <i>Id.</i> 24:36-38.
	"The components in the inventory stage 386 verify that every selected item is in stock." <i>Id.</i> at 29:61-62

Claim 11	Blinn and Inkpen
	"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." Id. at 38:25-31. See
	<i>also id.</i> at Figure 6. <i>See also</i> Ex. 1002 ¶¶ 510-20.

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, including PocketWeb and NetHopper, rendered on the consumer computer and wireless handheld device, and thereby the data and applications on the store server process and the consumer browsers on the computers and handheld devices would become synchronized (as that term is properly construed). Ex. 1002 \P 520. 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 inventory levels, thereby achieving synchronization. Ex. 1025 at 36:29-51 and 38:25:31; Ex. 1002 ¶ 520. Additionally, Figure 6's display of the credit card user's name "Gary" evidences synchronization among the devices of Blinn's system because the user "Gary" had to input his name prior to the display of Figure 6, and the fact that "Gary's" name is displayed in Fig. 6 indicates that it was communicated to the requisite devices (i.e., the Web server, etc.). Ex. 1002 ¶ 520. A POSITA would have understood and found it obvious to communicate the information input by the user to the Web server. *Id*.

Claim 11	Blinn and Inkpen
wherein the application	Blinn discloses that the system discloses communication
program interface	with third party credit card authorization software
enables integration of	including "VeriFone's Point of Sale (vPOS) software"
outside applications	that integrates with the hospitality applications on the
with the hospitality	store server process 106 to process the order. Blinn
applications and	37:61-62. See also Ex. 1025 at 8:23-34, 37:55-38:4. See
	also Ex. 1002 ¶¶ 521-23. See 11a above for disclosure of
	"hospitality applications."

The store server process 106 in creating and completing an order integrates with the third party VeriFone Point of Sale software. Ex. 1002 ¶ 523. This evidences the claimed integration of the outside applications, such as VeriFone's Point of Sale software, with the store server processes that allows the VeriFone vPOS software to verify the credit card payments of the end user, including information input by the purchaser which shows up on the purchase screen in Figure 6. Ex. 1002 ¶ 523. This information will thus be reflected in the database, store server process as well as on the web server and web pages downloaded to the consumer computer and wireless handheld device. Ex. 1002 ¶ 523.

Claim 11	Blinn and Inkpen
wherein the	Blinn discloses the communications control module described in
communications	element 11f above serving as an interface between the
control module is	hospitality applications on the store server processes and any

Claim 11	Blinn and Inkpen
an interface	other communications protocol because the communications
between the	control module disclosed by Blinn handles all incoming and
hospitality	outgoing message traffic, which would include the hospitality
applications and	applications and other communications protocol:
any other	
communications	"The Microsoft Windows® NT operating system includes a
protocol,	TCP/IP stack which handles all incoming and outgoing message
	traffic passed over the communications medium 108." Ex. 1025
	at 11:65-12:1.
	"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." Id. at 12:50-53.
	Additionally, Blinn contains a communications control module
	that interfaces between the store server process and one or more
	other communications protocols, which is necessarily present
	given the system features identified in this chart. See Ex. 1002
	¶ 527. See also, Ex. 1025 at Fig. 2 at 204. See also Ex. 1002
	¶¶ 524-28. <i>See</i> 11a above for disclosure of "hospitality
	applications."
wherein the	Blinn discloses the synchronized data relating to orders because
synchronized	the "system allows merchants to create electronic orders, which
data relates to	are easily adaptable for different sales situations." Ex. 1025 at
orders.	Abstract. See also Ex. 1002 ¶ 529.

Claim 12	Blinn and Inkpen
12. An information management and synchronous communications system for use with wireless handheld computing devices and the internet comprising:	See claim 11. <i>See also</i> Ex 1002 ¶¶ 480-83.
a. a central database containing hospitality applications and data,	See claim 11. <i>See</i> also Ex 1002 ¶¶ 484- 88.
b. at least one wireless handheld computing device on which hospitality applications and data are stored,	See claim 11. <i>See also</i> Ex 1002 ¶¶ 489-

Claim 12		Blinn and Inkpen
c. at least one Web server on which hospitality applications and data are stored,		See claim 11. <i>See</i> <i>also</i> Ex. 1002 ¶¶ 494-98.
d. at least one Web page on which hospitality applications and data are stored,		See claim 11. <i>See</i> <i>also</i> Ex 1002 ¶¶ 499- 503.
e. an application program interface, and		See claim 11. <i>See</i> <i>also</i> Ex 1002 ¶¶ 504- 05.
f. a communications control module,		See claim 11. <i>See</i> <i>also</i> Ex 1002 ¶¶ 506- 09.
wherein applications and data are synchronized between the central data base, at least one wireless handheld computing device, at least one Web server and at least one Web page;		See claim 11. <i>See</i> also Ex 1002 ¶¶ 510- 20.
wherein the application program interface enables integration of outside applications with the hospitality applications and		See claim 11. <i>See</i> also Ex 1002 ¶¶ 521- 23.
wherein the communications control module is an interface between the hospitality applications and any other communications protocol,		See claim 11. <i>See</i> <i>also</i> Ex 1002 ¶¶ 524- 28.
Claim 12	Blinn and Inkpen	
wherein the synchronized data relates to waitlists.	Blinn discloses synchronized data relating to backorders (<i>i.e.</i> waitlists) for orders of components that are not in inventory. "The LocalInventory component 1270b uses the sku key-value pairs to perform one or more database queries which determine whether the product local inventory amount contains enough of the desired items. If not, the LocalInventory component 1270b sets the inventory backorder flag which indicates to the consumer that the merchant is out of the selected items. The merchant adds the LocalInventory component 1270b to the registry with the "WLStdOrder.LocalInventory" command." Ex. 1025 at 30:16-24. <i>See also</i> Ex. 1002 ¶¶ 540-42.	

A POSITA would have understood that the lists disclosed in Blinn to relate

to waitlists because a backorder is a form of a waitlist. Ex. 1002 \P 542.

Claim 13	Blinn and Inkpen
13. An information management and	See claim 11. See also Ex 1002
synchronous communications system for use	¶¶ 480-83.
with wireless handheld computing devices and	
the internet comprising:	
a. a central database containing hospitality	See claim 11. See also Ex 1002
applications and data,	¶¶ 484-88.
b. at least one wireless handheld computing	See claim 11. See also Ex 1002
device on which hospitality applications and data	¶¶ 489-93.
are stored,	
c. at least one Web server on which hospitality	See claim 11. See also Ex.
applications and data are stored,	1002 ¶¶ 494-98.
d. at least one Web page on which hospitality	See claim 11. See also Ex 1002
applications and data are stored,	¶¶ 499-503.
e. an application program interface, and	See claim 11. See also Ex 1002
	¶¶ 504-05.
f. a communications control module,	See claim 11. See also Ex 1002
	¶¶ 506-09.
wherein applications and data are synchronized	See claim 11. See also Ex 1002
between the central data base, at least one	¶¶ 510-20.
wireless handheld computing device, at least one	
Web server and at least one Web page;	
wherein the application program interface	See claim 11. See also Ex 1002
enables integration of outside applications with	¶¶ 521-23.
the hospitality applications and	
wherein the communications control module is	See claim 11. See also Ex 1002
an interface between the hospitality applications	¶¶ 524-28.
and any other communications protocol,	

Claim 13	Blinn and Inkpen
wherein the synchronized data	Blinn discloses the synchronized data relating to
relates to reservations.	reservations because Blinn discusses the ability to
	hold orders. Ex. 1025 at 18:30-33. See also Ex.
	1002 ¶¶ 553-54.

A POSITA would have understood that the lists disclosed in Blinn to relate

to waitlists. Ex. 1002 \P 554. This is further evidenced by the disclosure of U.S.

patent 7,783,506 which relates to reserving items in an inventory and is disclosed in the "references" section of the Blinn patent. *Id*.

Claim 15	Blinn and Inkpen
15. The information	See claims 11, 12, or 13 above. See also Ex 1002
management and synchronous	¶ 555.
communications system of	
claim 11, 12, or 13	
wherein the data is sent to a	Blinn discloses the data sent to a wireless paging
wireless paging device.	device by its disclosure of data being sent to an
	interactive wireless communications device. Ex.
	1025 at 10:9-14. See also Ex. 1002 ¶¶ 556-57.

A POSITA would have understood that the interactive wireless communications device from Blinn is a wireless paging device as required by claim 15. Ex. $1002 \ \mbox{\ \ } 557.$

XII. NONE OF THE CHALLENGES ARE REDUNDANT

None of the three challenges to independent claim 11 in this petition are redundant, and therefore trial should be instituted with respect to all three challenges. Challenge 1 (obviousness over on Inkpen, Digestor and Nokia) is stronger than Challenge 2 (obviousness over on DeLorme) and Challenge 3 (obviousness over Blinn and Delorme) because none of the three references in Challenge 1 can be antedated, whereas at least one reference in each of Challenge 2 (DeLorme) and Challenge 3 (Blinn) is capable of being antedated. This issue is particularly important given the existence of Rule 131 declarations in the file history of the related '077 patent. *See* Section VII.C, *supra*. Accordingly,

78

Challenge 1 is not redundant over either Challenge 2 or 3. Challenge 2 is stronger than Challenges 1 or 3, and therefore is not redundant over either of them, in that it is based on a single reference and therefore is not subject to attack based on lack of motivation to combine references. Challenge 3 is stronger than Challenge 1 in that the primary reference in Challenge 3 (Blinn) explicitly discloses a handheld device, whereas the primary reference in Challenge 1 (Inkpen) does not. Challenge 3 is stronger than Challenge 2 in that antedating Blinn (Inkpen cannot be antedated) requires swearing back to April 27, 1999, whereas antedating DeLorme only requires swearing back to September 7, 1999, a difference of more than 4 months. Accordingly, Challenge 3 is not redundant over either Challenge 1 or 2.

XIII. CONCLUSION

For the foregoing reasons, Petitioner requests that Trial be instituted and the Challenged Claims 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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