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Paper 12
Entered: September 13, 2016

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

STARBUCKS CORPORATION, APPLE, INC., EVENTBRITE INC., and
STARWOOD HOTELS &
RESORTS WORLDWIDE, INC.,
Petitioner,

v.

AMERANTH, INC.,
Patent Owner.

Case CBM2015-00091[1]
Patent 6,384,850 B1

Before MEREDITH C. PETRAVICK, RICHARD E. RICE, and
STACEY G. WHITE, *Administrative Patent Judges.*

WHITE, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
Covered Business Method Patent Review
35 U.S.C. § 328 and 37 C.F.R. § 42.73

[1] Case CBM2016-00007 has been joined with this proceeding.

I. INTRODUCTION

A. Background

Starbucks Corporation filed a Petition (Paper 1, "Pet.") requesting covered business method patent review of claims 12–16 ("challenged claims") of U.S. Patent No. 6,384,850 B1 (Ex. 1001, "the '850 patent") pursuant to § 18 of the Leahy-Smith America Invents Act ("AIA"). Ameranth, Inc. ("Patent Owner") filed a Preliminary Response. Paper 7 ("Prelim. Resp.").

Pursuant to 35 U.S.C. ¶ 324, we instituted this trial on the following grounds (Paper 9, "Dec."):

References	**Basis**	**Claims Challenged**
Brandt[2] and NetHopper[3]	§ 103	12–16
Brandt, Demers,[4] and Alonso[5]	§ 103	12–16

Apple Inc., EventBrite, Inc. and Starwood Hotels & Resorts Worldwide, Inc.[6] subsequently requested covered business method patent review of the same claims based on the grounds instituted in this proceeding and sought joinder with this

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[2] Japanese Unexamined App. No. H10-247183 (published Sept. 14, 1998) (Ex. 1004) (certified translation, Ex. 1005, "Brandt").

3 NetHopper Version 3.2 User's Manual, 1–24 (1997) (Ex. 1006, "NetHopper").

[4] Alan Demers, et al., *The Bayou Architecture: Support for Data Sharing Among Mobile Users*, Mobile Computing Systems & Applications, 1995. Proceedings, Workshop on. IEEE, 1–7, 1995. (Ex. 1009, "Demers").

[5] Gustavo Alonso et al., *Exotica/FMDC: A Workflow Management System for Mobile and Disconnected Clients*, Databases & Mobile Computing, 28–45, 1996 (Ex. 1012, "Alonso").

6 The term Petitioner as used in this Decision collectively refers to Starbucks, Apple Inc., EventBrite, Inc. and Starwood Hotels & Resorts, Worldwide, Inc.

proceeding. CBM2016-00007, Paper 1, 2. We instituted reviewed on that petition and joined it with this proceeding. Paper 28.

Patent Owner filed a Corrected Patent Owner's Response. Paper 17 ("PO Resp."). Petitioner filed a Reply to Patent Owner's Response. Paper 19 ("Reply"). Patent Owner filed a Sur-Reply to Petitioner's Reply. Paper 24 (Sur-Reply); *see also* Paper 22 (Order authorizing Patent Owner's Sur-Reply). In addition, the parties filed cross motions seeking to exclude documents. *See* Paper 26 ("Pet. Mot. Excl."), Paper 25 ("PO Mot. Excl.").

An oral hearing was held on May 10, 2016. A transcript of the hearing is included in the record. Paper 37 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is issued pursuant to 35 U.S.C. § 328(a) and 37 C.F.R. § 42.73.

For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 12–16 of the '850 patent are unpatentable.

B. Related Proceedings

The parties indicate that the '850 patent is the subject of the following district court case: *Ameranth, Inc. v. Starbucks Corp.*, No. 3-13-cv-01072 (S.D. Cal.) filed May 6, 2013. Pet. 2 (citing Ex. 1045). Petitioner notes that Patent Owner has asserted the '850 patent against thirty-five other defendants in a number of civil actions that have been consolidated into *Ameranth, Inc. v. Pizza Hut*, No. 3-11-cv-01810 (S.D. Cal.). *Id.* at 3.

In a previous proceeding before the Board, claims 1–11 of the '850 patent were held to be unpatentable. *Agilysys, Inc. v. Ameranth, Inc.*, Case CBM2014-00015 (PTAB Mar. 20, 2015) (Paper 36). Petitioner also filed a petition for covered business method patent review of a related patent, U.S. Patent No.

6,871,325 B1. *Starbucks Corp. v. Ameranth, Inc.*, Case CBM2015-00099. Patent Owner identifies numerous covered business method patent reviews (both pending and completed) that it states are related to this Petition. Paper 5 (Notice of Related Matters). The previous and pending related petitions are summarized in the table below.

U.S. Patent No.	Previous CBM Reviews	Pending CBM Reviews
6,384,850 B1	CBM2014-00015 CBM2015-00080 CBM2015-00096	
6,871,325 B1	CBM2014-00016 CBM2015-00082 CBM2015-00097	CBM2015-00099
6,982,733 B1	CBM2014-00013	
8,146,077 B1	CBM2014-00014 CBM2015-00081 CBM2015-00095	
9,009,060 B2		CBM2016-00053

C. The ’850 Patent

The ’850 patent, titled “Information Management and Synchronous Communications System with Menu Generation” issued May 7, 2002 based on Application No. 09/400,413 filed September 21, 1999. Ex. 1001, at [21], [22], [45], [54]. The challenged claims are directed to an information management and synchronous communications system. *Id.* at 16:1–47. This system “results in a dramatic reduction in the amount of time, and hence cost, to generate and maintain computerized menus for, e.g., restaurants and other related applications that utilize non-PC-standard graphical formats, display sizes or applications.” *Id.* at 3:26–30.

The system includes a central database, multiple handheld devices, and a web server. *Id*. at 3:59–63. It also includes an application programming interface

("API") that enables third parties, such as point-of-sale companies, affinity program companies, and internet content providers, to integrate fully with the computerized hospitality applications. *Id.* at 2:11–16; 3:64–67; 11:15–19. The system has a communications control module to "provide[] a single point of entry for all hospitality applications, e.g., reservations, frequent customer ticketing, wait lists, etc.[,] to communicate with one another wirelessly and over the Web." *Id*. at 4:5–8. This communications control module is a layer that sits on top of any communication protocol and acts as an interface between hospitality applications and the communication protocol. *Id.* at 4:8–11; 11:24–30.

Claim 12 of the '850 patent is illustrative of the claims at issue and read as follows:

> 12. An information management and synchronous communications system for use with wireless handheld computing devices and the internet comprising:
>
> a. a central database containing hospitality applications and data,
>
> b. at least one wireless handheld computing device on which hospitality applications and data are stored,
>
> c. at least one Web server on which hospitality applications and data are stored,
>
> d. at least one Web page on which hospitality applications and data are stored,
>
> e. an application program interface, and
>
> f. a communications control module,
>
> 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; wherein the application program interface enables inte[]gration of outside applications with the hospitality applications and wherein the

> communications control module is an interface between the hospitality applications and any other communication protocol..

Ex. 1001, 16:1–22.

D. Standing for Covered Business Method Patent Review

As stated in our Decision on Institution, Petitioner provided sufficient evidence and arguments to show that claim 12 of the ’850 patent is sufficient to subject this patent to covered business method patent review. Dec. 6–9. We discern no reason to modify or further discuss in this Final Written Decision our determination regarding standing.

We do note, however, Patent Owner’s improper attempt to incorporate by reference arguments made in its Preliminary Response (Paper 7) into the Patent Owner’s Response. PO Resp. 1 n. 1 (“Patent Owner incorporates herein its Preliminary Response arguments regarding standing and preserves its right to appeal the Board’s determination thereof.”). Our Rules prohibit incorporating arguments by reference. 37 C.F.R. § 42.6(a)(3) states: “[a]rguments must not be incorporated by reference from one document into another document.” Incorporation by reference circumvents our Rule limiting the pages in the Patent Owner response to 80 pages. *See* 37 C.F.R. § 42.24(b)(2).[7] Arguments that are not developed and presented in the Patent Owner Response, itself, are not entitled to consideration. *See* Paper 10, 3 (cautioning Patent Owner “that any arguments for patentability not raised [and fully briefed] in the response will be deemed waived.”).

[7] Rule 42.24(b)(2) was amended, effective May 2, 2106. The Corrected Patent Owner’s Response, however, was filed February 1, 2016, prior to that date and, thus, we refer to the prior version of 37 C.F.R. § 42.24(b)(2).

The only other argument raised in regards to standing is Patent Owner's statement that "Petitioner's standing argument merely references CBM2014-00015, and is thus insufficient." PO Resp. 1 n. 1. As explained in our Decision, we determined that the Petition established that claim 12 of the '850 patent was eligible for covered business method patent review. *See* Dec. 6–9. The standing analysis in CBM2014-00015 was directed to claim 1 of the '850 patent. *Agilysys, Inc. v. Ameranth, Inc.*, CBM2014-00015, slip. op. at 9–14 (PTAB Mar. 26, 2014) (Paper 20). Thus, Patent Owner's contentions regarding CBM2014-00015 are not applicable to this case.

II. ANALYSIS

A. Claim Construction

The Board interprets claims of unexpired patents using the broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.300(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation approach). Under the broadest reasonable construction standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set forth with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). In the absence of such a definition, limitations are not to be read from the specification into the claims. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

1. "hospitality applications"

Independent claim 12 recites "hospitality applications." Ex. 1001, 16:7–22. In our Institution Decision, we analyzed this term and determined that the

construction implied in a previous case "applications used to perform services or tasks in the hospitality industry" should also apply in this case. Dec. 11 (citing *Agilysys, Inc. v. Ameranth, Inc.*, Case CBM2014-00014, slip op. at 16–17 (PTAB Mar. 26, 2014) (Paper 19)). We also stated that the broadest reasonable interpretation of hospitality includes businesses such as car rental agencies, which provide services to travelers. *Id.* at 12. Patent Owner and Petitioner agree with this construction, but Patent Owner seeks clarification as to its scope. PO Resp. 5; Reply 1–4. Specifically, Patent Owner seeks to exclude car rental agencies from the construction. PO Resp. 5.

According to Patent Owner, the invention of the'850 is directed to "the **traditional** restaurant processes" and as such, the construction of hospitality excludes both car rentals and the broader travel/tourism industry. *Id*. at 7 (quoting Ex. 2044, 1). Patent Owner contends that the specification shows that the recited term "hospitality" excluded travel and tourism. *Id.* at 6–7. In addition, Patent Owner argues that portions of the Dittmer reference (Ex. 1035) submitted with the Petition omitted key portions of the textbook that would have shown travel and tourism to be distinct from hospitality. PO Resp. 7–8. Patent Owner has placed the entire Dittmer textbook in evidence. *See* Ex. 2040.

First, we start with the text of the '850 patent. *See Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1298 (Fed. Cir. 2015). The specification discusses the use of "PDA type devices in the restaurant and hospitality fields." Ex. 1001, 1:57–58; *see also id* at 1:65–67 (noting that "substantial use of such devices in the restaurant and hospitality context has not occurred to date"); and 2:1–2 ("PDAs have not been quickly assimilated into the restaurant and hospitality industries"). Thus, we determine that the specification's repeated discussions of "restaurants and hospitality" indicate that the Patentee viewed restaurants and

hospitality as two distinct fields or industries. *See id.* There is a single mention of a "restaurant and hospitality industry." *Id.* at 3:40–43. This indicates that the Patentee viewed these distinct fields or industries as related and that one could broadly view restaurants and hospitality as part of the same industry. Thus, we find that the specification supports a construction of hospitality that includes but is not limited to the restaurant industry.

During the prosecution of a related patent, the Patentee stated that to one of ordinary skill in the art, "a hospitality software application is, *for example*, a piece of software used to provide operational solutions in hospitality industries *such as* restaurants and hotels concerning, for example, food ordering, menus, wait-lists and reservations." Ex. 2039, 7 (emphases added). Hotels are not discussed in the '850 patent, but according to the Patent Owner they are an example of a type of business that is included within the hospitality industry. *See* PO Resp. 6. We look to the specification to see if the Patentee provided insight as to what other businesses properly may be included within the construction of this term. The specification provides several generic examples of hospitality applications. Ex. 1001, 4:6–7 ("hospitality applications, e.g., reservations, frequent customer ticketing, wait lists, etc."). These applications, however, have utility in a broad range of fields (e.g., table reservation, rental car reservation, room reservation, etc.) and thus, we do not find this language to be limiting as to the proper construction of hospitality.

We then look to evidence outside of the patent and its prosecution history to gain additional insight into how one of ordinary skill in the art would have understood this term. In the Institution Decision, we cited a section of the Dittmer reference titled "A Definition of Hospitality." Dec. 11 (citing Ex. 1035, 5–6). We noted that Dittmer provided both a "traditional view" of hospitality and a broader

view. *Id.* The traditional view "refers to the act of providing food, beverages, or lodging to travelers." *Id.* Patent Owner urges that we adopt that view of the scope of the term. PO Resp. 7. In our Decision, we also noted the broader view that includes "services primarily to travelers in a broad sense of the term. By contrast, other service businesses ordinarily deal with customers who are local residents rather than travelers." Dec. 11–12 (quoting Ex. 1035, 6). We also cited Dittmer's statement that the definition of hospitality "is really quite broad" (*id*. at 12 (citing Ex. 1035, 7)) and Dittmer's listing car rental agencies as a business providing service to travelers (*id*. (citing Ex. 1035, 404)).

Patent Owner contends that Dittmer also includes statements that differentiate food, beverages, and lodging from travel and tourism. Specifically, Patent Owner relies upon the following statement found in Dittmer: "In this chapter and the two that follow, we will turn [] <u>from</u> the specifics of <u>food, beverage and lodging</u> operations to ***the <u>larger</u> industry, of which <u>hospitality</u> operations are <u>a part</u>; <u>travel and tourism</u>.***" PO Resp. 8 (quoting Ex. 2040, 396) (emphasis in original). According to Patent Owner, this shows that travel and tourism is a broad industry and hospitality is a subset of that industry. *Id.* Petitioner points out that Dittmer is a book titled "Dimensions of the Hospitality Industry" and it includes three chapters on travel and tourism, which it argues indicates that travel and tourism are a part of hospitality. Reply. 1.

Petitioner also provides declaration evidence from Dr. Mahmood A. Khan. *See* Ex. 1064. Dr. Khan is a professor in the Hospitality and Tourism Department at Virginia Polytechnic Institute and State University. *Id.* ¶ 1. He has over forty years of experience in the hospitality industry. *Id.* ¶ 1, App'x A. Dr. Khan testified that "the hospitality industry encompassed and included 'travel and tourism' (including car rentals)." *Id.* ¶ 15. According to Dr. Khan,

> Among the wide ranging services in the hospitability industry, transportation services, lodging services and services of food and beverages in connection with the needs of people away from home are fundamentally intertwined and practically inseparable for travelers. It is difficult for people in the hospitability industry to image how one of those three types of services be separated from one another.

Id. ¶ 16. He explained that car rental applications were integrated into centralized systems for airline and hotel room reservations and provided examples of such centralized systems that were available in 1999. *Id.* ¶ 19.

Patent Owner challenges Dr. Khan's testimony by asserting that he is not a computer scientist and not qualified to testify as to applications. Tr. 94:13–95:20.[8] This argument is misplaced. Dr. Khan testimony goes to scope of the hospitality industry as it would have been understood at the time of the invention of the '850 patent. We find Dr. Khan to be qualified to opine as to the boundaries of the hospitality industry and as to the types of applications that would be used within that industry at the relevant time.

We find that the evidence supports the view that one of ordinary skill in the art would have understood hospitality to be a broad term that includes travel and tourism as well as hotels and restaurants. As discussed above, we find that the specification treats restaurants and hospitality as separate but related industries. Patent Owner includes hotels and restaurants in its view of hospitality, however, hotels and restaurants are part of travel and tourism. *See, e.g.*, Ex. 2040, 403–04 (noting that "travel service providers" includes car rental companies, hotels, and restaurants). The specification focuses on hospitality industry problems involving the use of paper based systems for "ordering, reservations and wait-list

[8] Petitioner submitted Dr. Khan's declaration along with its Reply. Thus, Patent Owner could not have addressed this declaration in its Patent Owner Response.

management." Ex. 1001, 1:21–24. Brandt describes ordering (specifying the type of car to be rented) (Ex. 1005 ¶ 90) and reservations (*id.* ¶¶ 89, 91) in the rental car context. Dittmer intertwines food, beverage, lodging, travel, and tourism because these industries are related and interdependent. Thus, we determine that the broadest reasonable interpretation of hospitality would include travel and tourism related businesses such as car rental businesses.

2. "web page"

We construed the term "web page" to mean "a document, with associated files for graphics, scripts, and other resources, accessible over the internet and viewable in a web browser" in our Decision on Institution. Dec. 10–11. Based on our review of the full record of this proceeding we see no reason to modify that construction. *See* PO Resp. 4–5; Reply 4.

3. other terms

Patent Owner proposes constructions for various other claim terms. *See* PO Resp. 3–15. We find, however, that these terms need no explicit construction. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

B. Proposed Grounds of Obviousness over Brandt and NetHopper

Petitioner argues that claims 12–16 would have been obvious over the teachings of Brandt and NetHopper. Pet. 45–64. Patent Owner disputes Petitioner's contentions, arguing that these asserted grounds do not render obvious the challenged claims. PO Resp. 24–51. We have reviewed the Petition, the Patent Owner's Response, Petitioner's Reply, as well as the relevant evidence discussed in those papers and other record papers. As described in further detail below, we determine the record supports Petitioner's contentions and adopt Petitioner's contentions discussed below as our own. For reasons that follow, we

determine that Petitioner has shown by a preponderance of the evidence that claims 12–16 are unpatentable as obvious over the teachings of Brandt and NetHopper.

1. Overview of Brandt

Brandt is a Japanese patent publication directed to "provid[ing] the capability to easily access many different application programs over the [world wide web ("WWW")] via a common user interface." Ex. 1005, Abstract. Figure 3 of Brandt is reproduced below.

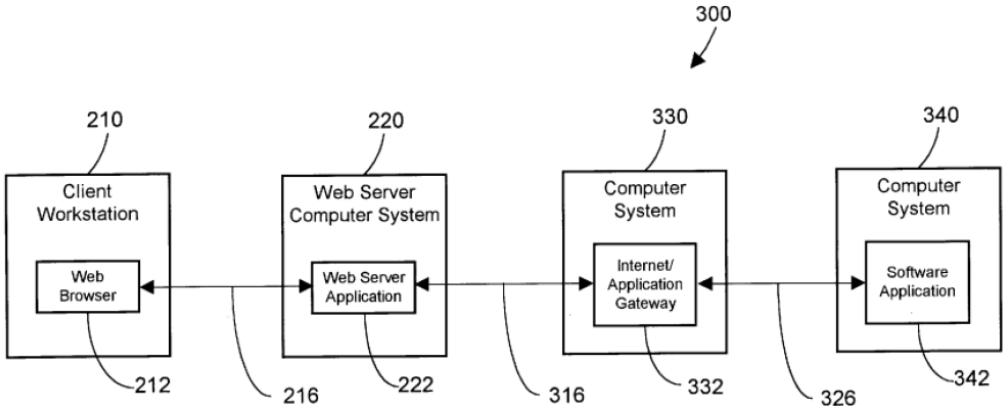

FIG. 3

Figure 3, reproduced above, is a block diagram of Brandt's system that allows access to a software application over the WWW. *Id.* at Fig. 3. Client workstation 210 "may be any computer that is capable of providing access to the WWW by using web browser 212 [including] handheld, portable or laptop computers, standard desktop computer systems, [and] Personal Digital Assistants (PDAs)." *Id.* ¶ 14. Data such as HTML code, graphics, audio, and Java applets may be transmitted to and displayed on the client workstation 210. *Id.* ¶ 16.

> Web server computer system 220 typically outputs pages of HTML data to WEB browser 212 in response to requests by web browser 212 that reflect action taken by the user at client workstation 210. In addition, as explained above, web server computer system 220 may output other types of data to web browser 212 as well.

Id. ¶ 17. This data output to the client workstations may include dynamic web pages. *Id.* When a user submits a request over the WWW, the web server application receives data from web browser 212. *Id.* ¶¶ 31, 79. If the user request requires access to an application, the web server application will pass data to CGI 420. *Id.* ¶ 80. CGI 420 is a "Common Gateway Interface (CGI) module[]. CGI modules may be used as an interface between web server application 222 and other software applications." *Id.* ¶ 19. "CGIs allow web servers to distribute dynamic data from other software applications." *Id.* CGI 420 is a component of Gateway 332. *Id.* ¶¶ 77–78. Gateway 332 utilizes conversation identifiers "to control the flow of data between the various users and software application 342." *Id.* ¶ 64. Brandt's system also includes an API that is "used by program developers to provide access to certain features of a given software application. Each application program will have APIs that allow third parties to access certain features, to interface the application program with other programs, and to provide access for end-users." *Id.* ¶ 22.

The application of Brandt's system is explained through the description of an exemplary application, FlowMark. *Id.* ¶ 75. FlowMark is a work flow application that may be used in many contexts, but an example provided describes using FlowMark to implement and improve on the existing car rental process. *Id.* ¶¶ 6, 78, 89–122. In this example, the user submits data via a reservation form on the rental car agency's web site. *Id.* ¶ 90. The reservation form is generated from an HTML template sent from web server 222 to the browser on the client's device. *Id.* ¶ 91. The user uses the form generated from the HTML template to submit data that is transmitted to the web server. *Id.* The HTML template also may contain variables including variables to substitute or replicate Java script variables or templates. *Id.* ¶¶ 95, 108. The variables could be used to start the FlowMark

application or "retrieve information from different software applications." *Id.* An application may be invoked to perform a task such as querying FlowMark database 438 to determine if the person renting the car is an existing customer of the car rental agency, updating the database to indicate that a car has been reserved, or determining that a rental request should be routed to a human operator for further processing. *Id.* ¶¶ 101–102.

2. Overview of NetHopper

NetHopper is a user's manual that discusses NetHopper version 3.2. Ex. 1006. The NetHopper application is a web browser for the Newton® PDA. *Id.* at 1. Petitioner provides a Declaration from Wayne Yurtin, an author of NetHopper, in which he testifies regarding the public accessibility of the NetHopper manual. Ex. 1007 ¶¶ 18–21. NetHopper discloses a mobile browser that is capable of viewing most HTML web pages, storing pages for later viewing, storing bookmarks, submitting forms via an HTML page, and retrieving email. Ex. 1006, 1. NetHopper discusses using and creating HTML templates. *Id.* at 15, 17, 18.

3. Analysis of Asserted Ground of Obviousness over Brandt and NetHopper

(1) Independent Claim 12

Petitioner has established that one of ordinary skill in the art would have learned all of the limitations of claim 12 of the '850 patent from the teachings of Brandt and NetHopper. As discussed above, Brandt teaches a system that includes a central database, a wireless handheld device, a web server, and a web page. Pet. 49–52. Brandt also teaches the existence of hospitality applications and data on these elements. *Id*; Reply 5–6. Specifically, Petitioner points to the web based car rental application and database as teaching hospitality applications and data. Pet. 49–52; Ex. 1003 ¶¶ 172–173. Petitioner also directs us to Brandt's discussion of dynamic web pages as teaching the claimed hospitality applications and data. Ex.

1003 ¶ 165 (quoting Ex. 1005 ¶ 17 ("Web server application 222 may dynamically build output data (e.g., an HTML page) from parts that it retrieves from within memory within web server computer system 220 or from other computer systems, or may simply pass through an HTML page or other information that has been developed at an earlier time or by another computer.")); *see also id.* ¶ 169 (quoting Ex. 1005 ¶ 55 ("Gateway 332 then outputs the HTML template to web server 222 with the real data substituted for the substation variables (step 731). Web server application 222 then provides the web server output data to web browser 212 (step 733)."). Petitioner also points out that Brandt's web pages can include executable applications such as Java applets and/or JavaScript. Pet. 52 (citing Ex. 1005 ¶¶ 16, 107).[9] Petitioner relies upon NetHopper's discussion of caching a web page to teach storage of applications and data on a handheld device. *Id.* at 49–50 (citing Ex. 1006, 17–18). Petitioner argues that Brandt teaches the claimed synchronization through its discussion of HTML templates that include input and/or substitution variables. *Id.* at 55–56. These variables are used to pass data between the components of the system. *Id.* As noted in Brandt, the data transmitted between the elements of the system includes HTML code, graphics, audio, and Java applets. Ex. 1005 ¶ 16. Brandt teaches an API to facilitate communication between its system and "other programs." *Id.* ¶ 22. Brandt also teaches the claimed communications control module through its discussion of Application Gateway 332. *Id.* at 53–54. Brandt's gateway includes CGI module 420 and FlowMark/Internet Gateway (FMIG) 430. *Id.* at 54 (citing Ex. 1005 ¶¶

[9] Patent Owner asserts that the Board *sua sponte* included Java in the asserted grounds. PO Resp. 31. We disagree. Petitioner cited Brandt's use of Java in the Petition and supporting declaration. *See* Pet. 52, Ex. 1003 ¶¶ 182–183. Thus, Petitioner brought forth this evidence in its case-in-chief and Patent Owner was on notice that evidence was being cited against its claims. Dec. 26.

77–78, 82–83, 87, Figs. 4, 10). Petitioner asserts that the gateway "enables communication over a network between the clients and the software applications." *Id.* (citing Ex. 1005 ¶¶ 56, 64, 68).

Patent Owner asserts that Brandt fails to teach a hospitality application. PO Resp. 28. This argument is premised on Patent Owner's construction of "hospitality." *Id.* As discussed above in Section II.A.1, we find that the proper construction of this term includes car rental and thus, we are persuaded that Brandt teaches a hospitality application as recited in the claim 12.

Patent Owner argues that the challenges based on Brandt should fail because Petitioner's asserted grounds would require a change in Brandt's principles of operation and Brandt teaches away from the synchronization core to the challenged claims. PO. Resp. 18–23. This argument is premised on Brandt's usage of a common user interface being inconsistent with the '850 patent's core purpose of providing synchronization and consistency across an entire system of handheld devices and non PC standard displays. *Id.* at 19. As we noted in the Decision to Institute, "[t]he claims at issue, however, are not directed to a user interface and instead focus on the back end communications between the various system elements." Dec. 30. Patent Owner asserts that it was error to exclude the user interface from the claims because "no system comprising the elements of claims 12–16 could be 'used' <u>without</u> a user interface." PO Resp. 22. It goes on to discuss the claims' need for a web browser, which Patent Owner describes as a user interface. *Id.* There are, however, many unclaimed elements that would be required for the implementation of the challenged claims. For example, the claims do not discuss a power source and one would unquestionably be required for such a device to operate. The issue here is whether the user interface is claimed as part of the invention described in the challenged claims. These claims make no

reference to any elements of a user interface. The claims are instead directed to "[a]n information management and synchronous communications system." Ex. 1001, 16:1–2. Any differences between Brandt's user interface and a user interface that may be described in the '850 patent does not preclude Brandt's communication system from rendering obvious the claimed communication system.

Patent Owner argues that the proposed combination does not teach a central database. PO Resp. 25–26. Specifically, Patent Owner asserts that Brandt lacks the "central" aspect of the claim language. *Id.* at 26. Brandt describes FlowMark database 438, which is used to store information relating to the rental car process. Ex. 1005 ¶ 78. Database 438 also includes application data such as process models and status information. *Id.* In addition, Petitioner's expert Dr. Abdelsalam Helal testified that at the time of the invention of the '850 patent that it was known to store business logic such as procedures, triggers, and constraints in a database. Ex. 1003 ¶ 156 (citing Ex. 1020, 8). Dr. Helal's testimony in conjunction with the disclosures of Brandt evidence that one of ordinary skill in the art would have found Brandt to teach a central database containing hospitality applications and data. We find that one of ordinary skill in the art would have learned the recited central database from Brandt's disclosure of a database central to the car reservation process that includes data relating to car rental and application logic such as process models, which "describe the process flow and activity" of the FlowMark transaction. *See* Ex. 1005 ¶ 76.

Patent Owner also asserts that the cited art fails to teach the claimed synchronization between the central database, wireless handheld computing device, web server, and web page. PO Resp. 27. Brandt includes web browser 212 that is displayed on client workstation 210. Ex. 1005, Fig. 3. "Brandt teaches

that client workstations may be any type of computer with a web browser, including handheld computers and PDAs." Pet. 49 (citing Ex. 1005 ¶ 14). Petitioner relies upon this teaching in conjunction with NetHopper's discussion of a PDA that caches web pages and interactive HTML forms on the device to teach the claimed wireless handheld computing device. *Id.* at 49–50; Reply 8–9; *see also* Tr. 42:15–17 ("The HTML pages can include executable code like JavaScript and Java applets, as I mentioned. The pages can have interactive forms."). Petitioner relies upon Brandt's web server, which serves static and dynamic HTML pages to teach the recited web server and its resident data and applications. Pet. 50–51. As to the recited web page and its data and applications, Petitioner cites to Brandt's static and dynamic web pages that may include HTML forms and Java applets and/or JavaScript. *Id.* at 52; Reply 7. As shown in Figures 3 and 4 of Brandt, the cited elements of Brandt are in communication with one another. *See* Ex. 1005, Figs. 3, 4. Petitioner contends that Brandt teaches synchronization through its discussion of using HTML templates and substitution variables to pass data between the cited elements of Brandt. Pet. 56. Brandt also includes a set of APIs, which facilitate the exchange of data between applications and clients in the system. *Id.*

Patent Owner asserts that the passage of data between these elements via HTML forms and substitution variables is not enough to meet the claim language because synchronization of the recited hospitality applications requires the transmission of an executable file. Tr. 55:24–56:10. When asked for support in the specification for this requirement, Patent Owner responded that the original claims of the '850 patent included synchronization and their status as original claims causes them to be self-supporting. *Id.* at 56:16–18. The Federal Circuit, however, has held that "[n]either the statute nor legal precedent . . . distinguishes

between original and amended claims." *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). Thus, while "many original claims will satisfy the written description requirement, certain claims may not." *Id.* at 1349. Despite Patent Owner's contentions, however, the question before us at this time is not whether the claims have proper written description support, but rather whether the claims should be interpreted to require this specific form of synchronization.

As described in the specification, when a system is synchronized "the different components are in equilibrium at any given time and an overall consistency is achieved." Ex. 1001, 2:23–26. The synchronous communication system "enables automatic updating of both wireless and internet menu systems when a new menu item is added, modified or deleted from any element of the system." *Id.* at 3:1–5. Synchronization allows full integration with hospitality applications and real-time updating or batch processing performed periodically to keep multiple sites in synch. *Id.* at 3:59–4:4. The example provided in the specification notes that "a reservation made online can be automatically communicated to the backoffice server and then synchronized with all the wireless handheld devices wirelessly." *Id.* at 4:18–21.

We find that the specification does not require the transmission of an executable file. The specification contemplates that synchronization will cause the applications to be integrated and updated, but it does not indicate that an executable file must be transmitted to meet these limitations. We note that applications also are data. Such data includes instructions that can be executed to assist in the performance of a task. Tr. 18:20–19:3, 59:14–15; *see also* Ex. 2033, 27 ("computer code or instructions which perform or implement a specific hospitality-related information processing task when executed"); Ex. 2031 ¶ 171

("Computer program in the present context means any expression, in any language, code or notation, of a set of instructions intended to cause a system having an information processing capability to perform a particular function."). Thus, the passing of data that brings consistency or equilibrium to the code or instructions of the applications resident on the recited components would meet the recited limitations. Petitioner relies upon Brandt's scheme of passing data (including application data such as java) through HTML forms. Brandt's web pages pull data (which may include Java executables) from the data entered by the user on the handheld device and from the database. *See, e.g.*, Ex. 1005 ¶¶ 90–91 (data from the user), 78 (data from the database). This passage of information may occur through the use of HTML templates that include input and/or substitution variables. Pet. 55–56. Brandt's web server receives the dynamic web pages from the application gateway and transmits it to the user device. *See, e.g.* Ex. 1005 ¶¶ 31, 54–55. According to Petitioner, Brandt's approach provides for data consistency and that data throughout the system are updated on an as-needed basis. Pet. 57. Patent Owner asserts that updating data on an as-needed basis conflicts with the language of the claim and shows that Petitioner is attempting to read out the elements of this limitation. PO Resp. 27–28. We disagree because the specification contemplates periodic updating of the applications and data and we find that to be consistent with Brandt's on demand updating of data.

Patent Owner also asserts that Brandt does not require storage of data on the handheld device and thus, Brandt does not disclose synchronization of data stored on such device. *Id.* at 28. Petitioner, however, relies upon the combination of Brandt and NetHopper to teach the caching (storage) of web pages on a handheld device. Pet. 49–50. Patent Owner also argues that web page data does not teach the recited applications because an application resident on the handheld device

must be different from a web page. PO Resp. 34–35. We do not find this argument to be persuasive. The handheld device is the hardware for use with the applications and data. The specification does not require a particular type of application to be resident on the handheld device. Petitioner relies upon Brandt's discussion of dynamically generated web pages. Pet. 51–52. These web pages may receive input in the form of applications, such as Java applets or JavaScript. *Id*. at 52 (citing Ex. 1005 ¶¶ 16, 21, 107). These web pages also receive application data. *Id.* (citing Ex. 1005 ¶¶ 55, 57, 62). We find that the cited web browser and cached web pages (including both data and application data such as dynamic web pages and java) teach the recited applications and data stored on a wireless handheld device. In addition, an instance of a browser and cached data on a handheld device constitute a different set of applications and data from the instance of a browser and cached data on another device. Thus, Brandt's system which is described as including devices such as desktop computers and PDAs would teach a system that includes a web page as viewed on a desktop computer that would be different from the set of applications and data on a handheld device. As such, Brandt teaches that these instances may be synchronized and thus, we find that these disclosures teach the recited storage of applications and data and the recited synchronization.

Patent Owner argues that Petitioner reads out the requirement that the API enable integration of outside applications with the hospitality applications. PO. Resp. 42–43. Patent Owner asserts that the recited "outside applications" are third-party applications and this has not been taken into account by Petitioner's arguments. *Id.* at 42. In addition, Petitioner allegedly "incorrectly confuses the API to be part of 'messaging protocols.'" *Id.* Further, Patent Owner objects to the application of Brandt to this limitation because its "APIs provide only 'send' and

'receive' functions, and provide functionality only for communicating with a web browser." *Id.* at 43. Brandt teaches "APIs that allow *third parties* to access certain features, to interface the application program with *other programs*, and to provide access for end-users." Ex. 1005 ¶ 22 (emphases added). The APIs taught in Brandt are not limited to particular functionality, and the API descriptions provided in the text of the reference are "examples of APIs that are commonly found in many different software applications." *Id.* Thus, we are persuaded that Brandt would have taught one of ordinary skill in the art the recited "application program interface [that] enables integration of outside applications with the hospitality applications."

Finally, Patent Owner asserts that the cited art does not teach the communications control module. PO Resp. 43–48. According to Patent Owner, the claimed system must synchronize and integrate with HTTP and non-HTTP protocols. *Id.* at 44. Patent Owner argues that cited references also are insufficient because the only communication protocols discussed are those generated by web browsers. PO Resp. 45. Claim 12 recites that the communications control module "is an interface between the hospitality applications and any other communication protocol." Ex. 1001, 16:19–21. The specification further states that "[a] communications control program monitors and routes all communications to appropriate devices." *Id.* at 9:21–22. Petitioner relies upon Brandt's gateway module to teach the recited communication control module. Pet. 60. According to Petitioner the "centralized 'application gateway' . . . facilitates client access to and communication with the applications. [Ex. 1005] ¶ 31. The gateway receives user input and communicates with the applications to process that input and/or respond accordingly. *Id.* at ¶¶ 54–55." Pet. 45. The only specific protocol discussed in the specification is HTTP, a web based communications protocol. *See* Ex. 1001, 12:7–

12. Thus, we do not find support for Patent Owner's assertion that non-HTTP protocols are required. As to routing, Brandt discloses "the application gateway including the identifier mechanism, the identifier mechanism generating an identifier for each of the plurality of web browsers and routing data from the software application to the selected one of the plurality of web browsers that correspond to the identifier." Ex. 1005, claim 7; Reply 12. Patent Owner also argues that Brandt's gateway is not "functionally independent from Brandt's other software." PO Resp. 46. Brandt's gateway, however, may be both logically distinct (Ex. 1005 ¶ 56) and physically distinct from other components of Brandt's system (Ex. 1005 ¶ 35). This evidence persuades us that one of ordinary skill in the art would have understood Brandt to teach the recited communications control module.

Thus, for all of the foregoing reasons, we are persuaded that Petitioner has shown by a preponderance of the evidence that all of the limitations of independent claim 12 were taught by the disclosures of Brandt and NetHopper.

(2) Dependent Claims

Claims 13–16 depend directly or indirectly from claim 12. Petitioner has established that one of ordinary skill in the art would have learned all of the limitations of claims 13–16 of the '850 patent from the teachings of Brandt and NetHopper. Claim 13 further recites that the communications control module provides a single point of entry for all hospitality applications and that the single point of entry allows synchronization so that the recited handheld device, web page, and database are consistent. Petitioner relies upon Brandt's teaching of a gateway that provides an interface to "a plurality of software applications" and connects multiple clients to multiple applications. Pet. 62. Patent Owner reiterates its argument that the cited references do not teach hospitality applications or a

communications control module and thus, cannot teach a single point of entry for hospitality applications. PO Resp. 48–49. As discussed above, we are not persuaded by these arguments. Patent Owner also argues that Brandt is not designed to interface with multiple hospitality application. *Id.* Brandt, however, states that its gateway "interface[s] between a web server and a plurality of software applications." Ex. 1005 ¶ 96. We find Petitioner's interpretation of Brandt's teachings to be reasonable, and we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that Brandt and NetHopper teach the limitations of claim 13.

Claims 14 and 15 recite the automatic communication of information from a web page (claim 14) or a handheld device (claim 15) to the central database and other system components. Petitioner argues that Brandt teaches these limitations through its discussion of submitting a reservation request from a web page via a handheld device and the reflection of that request in the database. Pet. 63–64. Patent Owner argues that there is no evidence that this information is communicated *automatically*. PO Resp. 49. According to Patent Owner, the broadest reasonable construction of automatic is "done or produced as if by machine." *Id.* at 12. We are persuaded that the term automatic is at least broad enough to encompass Patent Owner's proposed construction. Brandt recites that data moves between the handheld device and database via machines such as a web server. Ex. 1005 ¶ 14. Patent Owner argues that Brandt's teaching is insufficient because it states that "information ***may be*** communicated to a rental agent's wireless handheld computing device." PO Resp. 50 (citing Ex. 1005 ¶ 14). According to Patent Owner, the conditional language "may" indicates that there must be intervening action from a user. *Id.* Patent Owner's argument, however,

does not take into account other passages of Brandt that are explicit about the automation of its process.

> Alternatively, the FlowMark process model may specify that the car rental request should be routed to a human agent for further processing. In that case, the car rental request would show up on a FlowMark task list for the agent. *Alternatively, the entire process may be completely automated.* In either case, the car rental agent or activity program 432 processes the web client's car rental request and if the desired car is available, FlowMark database 438 will be updated to indicate that the car has been "reserved."

Ex. 1005 ¶ 102 (emphasis added); Reply 17. We find that Petitioner's interpretation of Brandt's teaching is reasonable. As such, we find that Petitioner has demonstrated by a preponderance of the evidence that Brandt and NetHopper teach the limitations of claims 14 and 15.

Claim 16 recites that the claimed synchronization be performed by digital data transmission. Patent Owner put forth no additional arguments in regards to claim 16. *See* PO Resp. 48–51. Petitioner's expert testified that Brandt disclosed digital transmissions including direct connections, internet connections, intranet connections, infrared connections, and high speed connections over T1 lines. Ex. 1003 ¶ 242 (citing Ex. 1005 ¶¶ 15, 86). Thus, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that Brandt and NetHopper teach the limitations of claim 16.

C. Proposed Obviousness Over Brandt, Demers, and Alonso

Petitioner asserts that claims 12–16 would have been obvious over Brandt, Demers, and Alonso. Pet. 64–69. Patent Owner disputes Petitioner's contentions, arguing that these asserted grounds do not render obvious the challenged claims. PO Resp. 24–51. We have reviewed the Petition, the Patent Owner's Response, and Petitioner's Reply, as well as the relevant evidence discussed in those papers

and other record papers. As described in further detail below, we determine the record supports Petitioner's contentions and adopt Petitioner's contentions discussed below as our own. For reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 12–16 are unpatentable as obvious over the teachings of Brandt, Demers, and Alonso.

1. Overview of Demers

Demers is a publication titled "The Bayou Architecture: Support for Data Sharing among Mobile Users." Ex. 1009, 2. "The Bayou System is a platform of replicated, highly available, variable-consistency, mobile databases on which to build collaborative applications." *Id.* The system is intended to run on portable machines including PDAs. *Id.* The intent was to present to mobile users what appears to be "a centralized, highly-available database service." *Id.* Demers discussed using anti-entropy protocols to perform reconciliation to synchronize file systems. *Id.* at 3. "Anti-entropy ensures that all copies of a database are converging towards the same state and will eventually converge to identical states if there are no new updates." *Id.* Eventually all servers in such a system will be in a "mutually consistent state." *Id.* In order to provide stability for database updates that may be occurring throughout the system "each Bayou database has one distinguished server, the 'primary,' which is responsible for committing writes. The other, 'secondary' servers tentatively accept writes and propagate them toward the primary using anti-entropy." *Id.* at 5.

2. Overview of Alonso

Alonso is a publication titled "Exocita/FMDC: A Workflow Management System for Mobile and Disconnected Clients." Ex. 1012, 27. Alonso discusses the same FlowMark application described in Brandt. *Id.* at 29, 31. One of the goals of the paper is to address methods to "maintain the overall correctness and

consistency of the processes being executed" on disconnected mobile devices. *Id.* at 28. Applications and data are loaded on "powerful portable and home desktop computers" that are then disconnected from the centralized server while users perform business tasks using the FlowMark application. *Id.* at 28–29. Performance of these tasks is described as a process that consists of activities and relevant data that is transferred between activities. *Id.* at 30. APIs are used to access and return data. *Id.* "[P]ersistent data resides in a single database server, ObjectStore." *Id.* at 32. Applications and data are stored and executed locally on the mobile devices. *Id.* at 34. When a user reconnects with the system, the central database is updated to reflect the work done on the mobile device. *Id.* at 35.

3. Analysis of Proposed Ground of Obviousness Over Brandt, Demers, and Alonso

Petitioner has established that one of ordinary skill in the art would have learned all of the limitations of claim 12 of the '850 patent from the teachings of Brandt, Demers, and Alonso. Petitioner relies upon the previously discussed disclosures of Brandt in conjunction with the teachings of Demers and Alonso regarding database synchronization and Alonso's teaching of an application locally resident on a mobile device. Thus, instead of relying on NetHopper to teach storing applications and data on a mobile computing device, Petitioner relies on Alonso's local client application that is updated and synchronized with the other mobile devices in the system and the central database. Pet. 66–67. Petitioner asserts that one of ordinary skill in the art would have been motivated to combine the teachings of these references because Brandt and Alonso are directed to increasing accessibility of the same FlowMark workflow management system. Petitioner contends that Demers's teaching also would have been combined with Brandt and Alonso because Demers is directed to a well-known project that those

skilled in the art would have looked to for teachings regarding mobile database replication. *Id.* at 65–66.

Patent Owner provided a combined response to both asserted grounds of obviousness and for reasons discussed above, we do not find persuasive Patent Owner's arguments that were directed to the disclosures of Brandt. Patent Owner's combined response did include arguments directed to the combination of Brandt, Demers, and Alonso, and we address those arguments in turn.

Patent Owner argues that by removing NetHopper and instead relying on the additional teachings of Demers and Alonso the cited combination lacks a web browser as would be required by Brandt's teaching. PO Resp. 17–18. Brandt's mobile devices were defined as "any computer that is capable[10] of providing access to the WWW by using web browser 212." Ex. 1005 ¶ 14. Demers discusses mobile devices connected to a network via "a wireless communication device, such as a cell modem or packet radio transceiver" or a computer with "a conventional modem requiring it to be physically connected to a phone line." Ex. 1009, 2. The computing devices in Alonso are connected via an unspecified network. *See* Ex.

[10] In our Institution Decision, we stated that "we are not persuaded that the devices discussed in Alonso and Demers would not be *capable* of providing access to the WWW via a web browser." Dec. 38. Patent Owner argued that this reduced the obviousness analysis to a mere determination of whether it was possible to do something. PO Resp. 32. This mischaracterizes our statement. The discussion of capability was limited to analysis of whether the devices in Demers and Alonso meet Brandt's definition of a mobile device. As described in Brandt, a device capable of providing access to the WWW via web browser could be a mobile device. Thus, the discussion of capability did not go to the ultimate issue of obviousness, but instead was an additional point of information indicating that the mobile devices of Demers and Alonso met the criteria for a mobile device in Brandt. We find that the evidence supports Petitioner's assertion that the mobile devices of Demers and Alonso fit the description of mobile devices in Brandt.

1012, Fig. 2. Thus, according to Patent Owner's argument, without evidence of a web browser in Demers or Alonso Petitioner has not established that these teachings may be combined. "[I]t is not necessary[, however,] that the inventions of the references be physically combinable to render obvious the invention under review." *In re Sneed*, 710 F.2d 1544, 1550 (Fed. Cir. 1983) (citing *Orthopedic Equip. Co. v. United States*, 702 F.2d 1005, 1013 (Fed. Cir. 1983)); s*ee also In re Nievelt*, 482 F.2d 965, 968 (CCPA 1973) ("Combining the teachings of references does not involve an ability to combine their specific structures."). The issue here is what one of ordinary skill in the art would have learned from the disclosures and not whether the references physically could operate as a unit. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 424 (2007). Petitioner's evidence shows that one of ordinary skill in the art would have learned of a local software application that could be resident on a handheld device and would have seen this as a way to improve the functionality provided by Brandt because it would allow for the system to function during periods when the device may be disconnected from the network. Pet. 65. Specifically, one of skill in the art would have learned the usage of a local application from Alonso's teachings and would have combined that with Brandt's teaching of using the same FlowMark software to implement a hospitality application. Demers would have supplemented these teachings by showing that the local application could be resident on a PDA and by providing a detailed teaching as to how data consistency and synchronization could be achieved on this disconnected device. Thus, we are not persuaded by Patent Owner's arguments regarding the inability to combine the cited references due to a lack of a web browser in Demers or Alonso.

Patent Owner also asserts that the database teachings of Brandt, Demers, and Alonso may not be combined in a manner that would render obvious the claimed

centralized database. PO Resp. 25–27. Petitioner asserts that Brandt discloses a central database and that teaching is complemented by Demers's teaching of a "primary database" and Alonso's teaching of a central database. Pet. 66. Demers's primary database is a database with particular responsibility for ensuring database synchronization and consistency. Ex. 1009, 3, 5. Data committed to the primary database is replicated throughout the system, and application settings can be used to determine whether a particular application would interact with any of the less reliable other databases in the system. *Id.* at 5. Thus, while Demers may have multiple databases there is a single centralized primary database with a particular responsibility for ensuring synchronization and consistency. We find that Demers's primary database would teach the claimed central database. Alonso discusses the use of FlowMark with all "persistent data resid[ing] in a single database server, ObjectStore." Ex. 1012, 32. Patent Owner relies upon another document's discussion of the Bayou system at issue in Alonso to support its argument that data in Alonso is not stored in a central database. PO Resp. 26 (citing Ex. 2034, 1), 28 (citing same). A reference, however, is relied upon for what it discloses. That another document may discuss the underlying system in a different manner does not take away from the disclosures in the cited reference. This ground is based on the printed publication and not the underlying product, and as such, the proper inquiry is whether the cited publication teaches the claim element and not whether it can be shown that the underlying product may have a different structure. As noted above, Alonso teaches a system with a single centralized database. Ex. 1012, 32.

Patent Owner also asserts that Alonso is "antithetical to the claimed invention because it requires that a user of a client device 'lock' an activity so that no other user in the system can work on the activity." PO Resp. 29 (citing Ex.

1012, 238). Petitioner contends that locking an item is not prohibited by the challenged claims. Reply 11. As described in Alonso, locking is performed to prevent users from concurrently working on the same item. Ex. 1012, 35. This prevents users from overwriting each other's updates before the information can be committed to the database. *Id.* We find that this would preserve the integrity of information in the database and thus, promote equilibrium and consistency required by the recited synchronization to the central database. As such, Alonso's database locking mechanism is not "antithetical to the claimed invention." Therefore, we are not persuaded by Patent Owner's arguments regarding the databases in Brandt, Demers, and Alonso.

Thus, for all of the foregoing reasons, Petitioner has demonstrated by a preponderance of the evidence that Brandt, Demers, and Alonso teach the limitations of claims 12–16.

D. Objective Evidence of Non-Obviousness

Patent Owner contends that objective factors including praise, industry awards, commercial success, copying, failure of others, and licensing confirm the non-obviousness of all challenged claims of the '850 patent. PO Resp. 51–80, Sur-Reply 1–5. Such evidence must be analyzed before determining whether any claim has been rendered obvious. *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1075–76 (Fed. Cir. 2012) (citing *Richardson-Vicks Inc. v. Upjohn Co.*, 122 F.3d 1476, 1483 (Fed. Cir. 1997)). We have considered Patent Owner's arguments and evidence concerning objective indicia of non-obviousness, but are not persuaded that it is sufficient to support a finding of non-obviousness when considered in light of Petitioner's showing that each and every limitation of the challenged claims was taught by the cited art. We note that Patent Owner has provided a large quantity of documents (more than 500

pages) in support of its contentions. We have reviewed the evidence of record and have found it to be insufficient. The discussion below summarizes that analysis.

1. Nexus

Factual inquiries for an obviousness determination include secondary considerations based on evaluation and crediting of objective evidence of nonobviousness. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17–18 (1966). To be relevant, evidence of nonobviousness must be commensurate in scope with the claimed invention. *In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011). Thus, to be accorded substantial weight, there must be a nexus between the merits of the claimed invention and the evidence of secondary considerations. *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995). "Nexus" is a legally and factually sufficient connection between the objective evidence and the claimed invention, such that the objective evidence should be considered in determining nonobviousness. *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988).

Patent Owner contends that the invention of claims 12–16 are coextensive with its 21st Century Restaurant™ ("21CR") system and, thus, a nexus is established between the merits of the claimed invention and its evidence of praise, awards, commercial success, copying, failure of others, and licensing. PO Resp. 54–64 (citing *Teva Pharm., Inc. v. Sandoz, Inc.*, 723 F.3d 1363, 1372 (Fed. Cir. 2013) ("There is a 'presumption of a nexus' when a product is 'coextensive' with a patent claim."). Patent Owner argues that Figures 1 and 6 of the '850 patent, as originally filed in the patent application, an annotated brochure of the 21CR system ("the 21CR Product Brochure), and other articles and evidence establish that its 21CR system is coextensive with the invention of claims 12–16. PO Resp. 53–63.

Petitioner argues that Patent Owner's evidence of nexus is insufficient because it is based on an oversimplified and inaccurate view of the challenged claims. Reply 19. The challenged claims are directed to "[a]n information management and synchronous communications system for use with wireless handheld computing devices." Ex. 1001, 16:1–3. Patent Owner argues that the 21CR system has a nexus to the "inventive 'synchronization, integration and consistency' of th[e] claims." PO Resp. 55. We find that these features are but a subset of the functionality provided by the 21CR system.

The Federal Circuit has found an exception to the presumption of nexus in cases where the patented invention is only a component of the product to which the asserted objective considerations are tied. *Demaco*, 851 F.2d at 1392. In this case, there are two aspects to the system disclosed by the '850 patent: menu generation and synchronous communication. *See* Ex. 1001, 3:15–23. The first aspect includes a "desktop software application that enables the rapid creation and building of a menu" (*id.* at col. 3:15–17) and is claimed in claims 1–11, which are not challenged in this proceeding. Claims 12–16, which are challenged in this proceeding, are directed to the second aspect of the system, synchronous communication and are devoid of elements directed to menu generation. *See id.* at 2:56–62; 3:1–5.

Figure 6, as originally filed, depicts an alleged screen shot of a communications control window of the 21CR system and Figure 1, as originally filed, depicts a screen shot of the menu generation system. Ex. 2061. Patent Owner alleges that the screen shots are of a live or operational 21CR system (PO Resp. 55), but does not provide any evidence of such. Further, contrary to Patent Owner's argument that the 21CR system is coextensive with the invention of claims 12–16, originally filed Figure 1 depicts a menu generation wizard. Claims

12–16 are devoid of elements directed to the menu wizard. In addition, these Figures do not include many of the aspects of the challenged claims such as the web server, web page, and API. Figures 1 and 6, thus, do not demonstrate persuasively that the 21CR system is coextensive with the invention of claims 12–16.

Further, as discussed in detail below, other evidence provided by Patent Owner suggests that the 21CR system is not coextensive with the invention of claims 12–16. Patent Owner has submitted documents describing a wide set of features in its 21CR system. For example, an article from Hospitality Technology Magazine stated that "[o]perators may process orders and payments, take inventory counts and manage guest-seating arrangements with the portable, handheld solution." Ex. 2062, 65. In addition, Patent Owner states that HostAlert, for which it won an award, is "a subset of the 21st Century Restaurant™ system/technology, inclusive of waitlisting, table management and reservations, but not including food and drink ordering." PO Resp. 70 (citing Ex. 2050). This indicates that the 21CR system includes additional features other than those of the challenged claims, such as matching a waiting party in a database to a newly available table in a restaurant, based on party size and longest wait-time or adding a customer to a sister restaurant's waiting list. *See* Ex. 2050, 6.

In addition to arguing that the 21CR system is coextensive with the claims 12–16, Patent Owner argues that the evidence of secondary considerations has a nexus with the "synchronization, integration, and consistency" features of claims 12–16, which are required by the wherein clause of claim 12. *See* PO Resp. 55. In the analysis below, we address whether the evidence of secondary considerations

has a sufficient nexus between the merits of the claimed invention and the evidence of secondary considerations.

2. Licensing

Licenses taken under the patent in suit may constitute evidence of non-obviousness; however, only little weight can be attributed to such evidence if the patentee does not demonstrate "a nexus between the merits of the invention and the licenses of record." *GPAC*, 57 F.3d at 1580 (citations omitted).

Patent Owner contends that the patents in the '850 family have been licensed by 44[11] companies, "the majority of these licenses occurring outside of litigation." PO Resp. 64, Sur-Reply 2. To support its contention, Patent Owner provides its own press releases announcing the licenses (Ex. 2003) and an amendment to a license with Agilysys, Inc. (Ex. 2048). Patent Owner argues that its press releases were jointly issued (PO. Resp. 64) and that "[t]he majority of these licenses occurred outside of litigation" (*id.*). When assessing Patent Owner's licensing evidence, "the relevant inquiry is whether there is a nexus between the patent and the licensing activity itself, such that the factfinder can infer that the licensing 'arose out of recognition and acceptance of the subject matter claimed' in the patent." *S. Ala. Med. Sci. Found. v. Gnosis S.P.A.*, 808 F.3d 823, 827 (Fed. Cir. 2015) (quoting *GPAC*, 57 F.3d at 1580)).

The Agilysys Amendment provides up to 425 licenses of Patent Owner's 21CR Software and related patents (including the '850 patent) for a fee of $85,000. Ex. 2048. This Amendment, however, is an update to an existing agreement that has not been put into evidence in this proceeding. Thus, we do not have evidence as to breadth of services provided under this agreement nor do we have evidence to

[11] In its Sur-Reply, Patent Owner asserts 46 licenses of the patents of the '850 family. Sur-Reply 2.

establish whether the overarching agreement was entered into for reasons related to the subject matter of the challenged claims. None of the other forty or more purported license agreements were placed into evidence by Patent Owner. Further, although Patent Owner states that most of the licenses occurred outside of litigation, Patent Owner provides no evidence to show that any of its licenses occurred outside of litigation. Without such evidence that the licenses occurred outside of litigation, Patent Owner's argument is merely attorney argument and entitled to little weight. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997). Indeed, Agilysys, Inc. is listed as a defendant in a related matter on Patent Owner's mandatory notices. Paper 5. In addition, Petitioner provides evidence that purported licensees MenuSoft, Par, ChowNow, EMN8, MonkeyMedia, SubtleData, and TicketMob each has settled litigation with Patent Owner and thus, any agreements may be the product of litigation. Reply 20 (citing Exs. 1088–1094).

As to the press releases, each describes a different set of functionality as the subject of the agreement. For example, the press release purporting to announce an agreement with Jersey Mike's states that the license "includes mobile ordering, mobile frequency/rewards, delivery, mobile payments and other elements/fields critical to mobile/web deployments in the hospitality space." Ex. 2048, 1.[12] We note that none of these features are recited in the challenged claims. The press release purporting to announce an agreement with Darden does not mention any specific patents as part of the agreement. *Id.* at 3. In addition, it notes that Patent Owner and Darden worked together to develop calorie and nutrition look-up features. *Id.* at 4.

[12] This Exhibit does not include page numbers. The numbers are based on our own count.

We are not persuaded that the evidence presented sufficiently establishes a nexus between the licensing and the merits of the claimed invention. We, thus, give little weight to Patent Owner's argument that evidence of licensing overcomes Petitioner's showing of obviousness.

3. Commercial Success

Patent Owner argues that evidence of "substantial, widespread commercial success" demonstrates the non-obviousness of the claims 12–16. PO Resp. 66–68. Patent Owner argues that "the measure of the claimed invention's commercial success are the partnerships and/or licenses of its products and co-existent intellectual property, as a result of its May 1999 launch at the National Restaurant Association ("NRA") show." *Id.* at 67.

We are not persuaded that the evidence sufficiently establishes the alleged commercial success or that a nexus exists between the alleged commercial success and the merits of the claimed invention. For example, Patent Owner cites to the entirety of Exhibit 2029 to show that "[t]he 2004 and 2006 HT POS market reports and rankings show that Ameranth licensed 21CR to most of these leading POS companies, and achieved overwhelming market share." PO Resp. 67. Exhibit 2029 consists of two Hospitality Technology magazines ranking food service point-of-sale systems. The magazines do not show sufficiently that Patent Owner licensed its 21CR system to most of the leading point-of-sale companies or that Patent Owner achieved overwhelming market share. The magazines do not mention the 21CR system. Patent Owner also alleges that it has licenses with nearly all of the leading POS companies, but it has not placed these licenses into evidence so we do not have sufficient proof to establish whether and for what purpose any agreement was entered with any of these companies.

In addition, Patent Owner's submission of a purported draft of a term sheet for a non-consummated agreement with Micros does not establish that an industry leading company sought to partner with Patent Owner. *See* Ex. 2062, 128–129. This and the purported email directed to an individual at Micros at most establish that Patent Owner was "very excited about the prospect of working with MICROS." *Id.* at 132. These documents do not establish Micros's view of challenged claims or their subject matter. We find that a draft term sheet and purported communication with Micros are not evidence tending prove commercial success.

Patent Owner relies upon deposition testimony of Mr. John Harker to show commercial success, including "the incredible market reception that the 21CR system received at the May 1999 NRA show." PO Resp. 56–58 (citing Ex. 2045). For example, Mr. Harker testifies that tens of thousands walked by Ameranth's booth and hundreds stopped. Ex. 2045, 175:11–16. This, however, does not explain sufficiently what attracted people to Amaranth's display, nor does it establish that the 21CR product captured a significant market share as a result of the May 1999 NRA show, commercial success of the 21CR product, or that the merits of the challenged claims were the cause of the commercial success.

Patent Owner's press release describing a purported "undisclosed investment"[13] in Ameranth by Microsoft also is insufficient to show commercial

[13] Patent Owner provides a Declaration from Keith R. McNally, a named inventor of the '850 patent. Ex. 2062. This declaration was submitted to the USPTO as part of the prosecution of U.S. Patent No. 8,146,077 B1. *Id.* In this declaration, he stated that Microsoft made a multimillion dollar investment into Ameranth. *Id.* ¶ 3. Mr. McNally's declaration does not provide sufficient detail as to why such an investment would have made. Thus, we accord little weight to this declaration testimony.

success. Ex. 2062, 135–137. The press release does not mention the ’850 patent and it provides no detail as to the purported agreement between Patent Owner and Microsoft other than to say that Microsoft obtained an undisclosed amount of equity in Ameranth, a privately held company. *Id.* at 136. Investments may be made in a company for any number of reasons, and we have no evidence of record indicating that the purported agreement was related to the substance of the challenged claims.

We are not persuaded that the evidence sufficiently establishes the alleged commercial success or that a nexus exists between the alleged commercial success and the merits of the claimed invention. We, thus, give little weight to Patent Owner’s argument that evidence of commercial success overcomes Petitioner’s showing of obviousness.

4. Awards/Industry Praise

Industry praise for an invention may provide evidence of non-obviousness where the industry praise is linked to the claimed invention. *See Geo. M. Martin Co. v. Alliance Mach. Sys. Int’l. LLC,* 618 F.3d 1294, 1305 (Fed. Cir. 2010); *Asyst Techs., Inc. v. Emtrak, Inc.,* 544 F.3d 1310, 1316 (Fed. Cir. 2008).

First, according to Patent Owner, it was awarded four awards for its 21CR system and that these awards demonstrate the non-obviousness of claims 12–16. PO Resp. 68–70; *see* Sur-Reply 4.

The first award is the Innovation of the Year Award from the European Hospitality Solutions Technology Show in 1999. PO Rep. 69. The cited pages of Exhibit 2062 are Patent Owner’s own press release concerning the award. The press release purports that the award was for its UltraPad™2700 and alleges that the UltraPad™2700 is the wireless hand-held computer of a number of Patent Owner’s systems, including its 21CR system. Ex. 2062, 95–96. The press release,

however, fails to show sufficiently a nexus between the award for the UltraPad™2700 and the merits of the invention of the challenged claims. It does not sufficiently describe how the UltraPad™2700 is integrated or synchronized with the 21CR system or that the award is for how the UltraPad™2700 is integrated or synced with the 21CR system. Nor does it provide information regarding the award sufficient to assess whether the award is indicative of widespread praise from within the industry.

The second award is the Moby Award from Mobile Insights and the third award is the 2001 Computerworld Honors Program and Collection. PO Resp. 69 (citing Ex. 2062, 140–41, 156–60). Pages 140–41 of Exhibit 2062 are Patent Owner's own press release concerning the Moby Award and page 155 is a letter concerning the 2001 Computerworld Honors Program and Collection ("the Computerworld Honor"). According to the press release and letter, Patent Owner received these awards for the deployment of the 21CR system at the Improv Comedy Club in Dallas. Ex. 2062, 141, 156. The press releases state that the Moby Award "specifically recognizes the wireless handheld computer ticket authorization and seating assignment application" (*id.* at 141), and the letter states that the honor was for a "case study" of the Ameranth Wireless's Improv Comedy Club Solution but does not specifically mention any feature of the solution. The press release and letter fail to show, sufficiently, a nexus been the Moby Award and the Computerworld Honor and the merits of the invention of the challenged claim. A ticket authorization and seating assignment application is not a feature of the invention of the challenged claims.

With regards to the third award, the Patent Owner argues:

> Noteworthy in this award was the express confirmation that the innovations, reflected in the challenged claims as illustrate above, were <u>not available from any other company</u>. This award also shows

> that Tom Castillo, owner of the Improv, based his selection of Ameranth on the actual 21CR System demonstrated to him, at the May 1999 NRA show, thus confirming nexus of this award to that product/technology as it existed and was policy shown/demonstrated in May 1999.

PO Resp. 69–70. The letter, however, contains no indication that the alleged innovations, reflected in the challenged claims, were not available from any other company or any mention of Tom Castillo or the basis of his selection.

The fourth award is a Microsoft Retail Application Developer (R.A.D.) Award for Patent Owner's HostAlert system. *See id*. at 70, Ex. 2050. Patent Owner alleges that HostAlert is "a subset of the 21st Century Restaurant™ system/technology, inclusive of waitlisting, table management and reservations, but not including food and drink ordering." *Id.* (citing Ex. 2050). Patent Owner, however, provides no evidence to support its assertion that HostAlert is a subset of its 21CR system or that the subset includes the features of the challenged claims. To the contrary, the article relied upon by Patent Owner indicates that HostAlert includes additional features than those of the challenged claims, such as matching a waiting party in a database to a newly available table in a restaurant, based on party size and longest wait-time or adding a customer to a sister restaurant's waiting list. Ex. 2050, 6.

Second, Patent Owner argues that overwhelming industry praise for the 21CR system is evidence of non-obviousness. PO Resp. 70–73. Patent Owner states that "[t]he hospitality market press and numerous nationally renowned publications including the Wall Street Journal, Time Magazine and Harvard Business review have praised [the 21CR system]." PO Resp. 71. Patent Owner,

however, does not provide a citation to any Wall Street Journal,[14] Time Magazine,[15] or Harvard Business Review article in the record.

Patent Owner also refers to an article titled "Brainstorm Eases Restaurant Ordering Process" on pages 165–67 of Exhibit 2062. According to Patent Owner, this article shows contemporaneous praise for its products. PO Resp. 71. The article, however, merely provides Ameranth's views as to how its product may save time in a restaurant along with statements from restauranteurs planning to test the system or professing an interest in the field. Ex. 2062, 166. We do not find this article to contain praise or acclaim for the subject matter of the challenged claims.

Patent Owner, further, argues that for the Computerworld Honor, "Microsoft founder Bill Gates personally nominated Ameranth with the praise that 'Ameranth is one of the leading pioneers of the information age for the betterment of mankind."' PO Resp. 71 (citing Ex. 2062, 151–53). This purported quotation is mentioned in several Ameranth press releases, but there is no evidence of this statement in any documents from Microsoft or any industry publication. *See* Ex.

[14] Page 162 of Exhibit 2062 purports to be a copy of an undated Wall Street Journal article. This portion of the exhibit was not cited in Patent Owner's response. It purports to describe feature of the 21CR system including the ability to email regular customers with special announcement or on special dates. Ex. 2062, 162.

[15] Page 164 of Exhibit 2062 purports to be a copy of a Time Magazine article. This portion of the exhibit was not cited in Patent Owner's response. The discussion of Patent Owner's product appears in a short (approximately 100 word) article that describe the product as including the ability to permit waiters to process credit-card payments and print receipts right at the table. Ex. 2062, 164.

2046, 2, 6; Ex. 2022 (Ex. A). Thus, we give little weight to this purported praise from Bill Gates.

Patent Owner also argues that Marriott's vice-president Steve Glen and Harvard Business School Press also praised the 21CR system. PO Resp. 72 (quoting Ex. 2062, 106–108 ("the Marriot Letter"); Ex. 2051 ("the Harvard Book)). The Marriott Letter and the Harvard Book, however, praise features of the 21CR system that are not features of the challenged claims, such as "laser bar-code scanning of customer frequency cards," "wait-list management functions" (Ex. 2062, 107), and "payment processing" (Ex. 2051).

Patent Owner has not sufficiently shown that the four awards and the alleged industry praise are linked to the merits of the claimed invention. We, thus, give little weight to Patent Owner's argument that evidence of awards and industry praise overcomes Petitioner's showing of obviousness.

5. Copying

"[C]opying by a competitor may be a relevant consideration in the secondary factor analysis." *Iron Grip Barbell Co., Inc. v. USA Sports, Inc.*, 392 F.3d 1317, 1325 (Fed. Cir. 2004) (citing *Vandenberg v. Dairy Equip. Co.*, 740 F.2d 1560, 1567 (Fed.Cir.1984). "[A] nexus between the copying and the novel aspects of the claimed invention must exist for evidence of copying to be given significant weight in an obviousness analysis." *Wm. Wrigley Jr. Co. v. Cadbury Adams USA LLC*, 683 F.3d 1356, 1364 (Fed. Cir. 2012) (internal quotation omitted).

Patent Owner alleges that multiple entities have copied its 21CR system and this copying is evidence of nonobviousness. PO Resp. 73–78. To support its

allegations Patent Owner points to numerous statements from competitors and the testimony of Dr. Weaver. *Id.*

We are not persuaded that the evidence sufficiently establishes the alleged copying or that a nexus exists between the alleged copying and the merits of the claimed invention. Patent Owner cites to statements made by employees of competitors, who allegedly had knowledge of the 21CR system, and articles to show copying. PO Resp. 73–78 (citing, for example, Ex. 2009). This evidence, however, fails to establish copying or a nexus between the alleged copies and the merits of the claimed invention. For example, Patent Owner cites articles that discuss Starbucks's "mobile order and pay" system (Ex. 2009) and "ordering ahead and new payment features" (Ex. 2008). The articles, however, do not sufficiently describes Starbucks's mobile order and pay system as having the claimed synchronization, integration, and consistency features required by the wherein clause of claim 12 (i.e., the claimed communication control module and application program interface).

Further, Patent Owner relies upon the testimony of Dr. Weaver to show the Starbucks's system and certain pizza chains copied the relevant "synchronization, integration, and consistency" features of the challenged claims. Ex. 2041 ¶¶ 147, 151. We do not find Dr. Weaver's testimony to be persuasive or helpful. Dr. Weaver testifies that his opinion is based upon the evidence cited by Patent Owner and Starbucks's own materials on its "Mobile Order & Pay" system (*id.* ¶ 147) and his "review of their systems including their mobile apps" (*id.* ¶ 151). As discussed in the paragraph above, the evidence cited by Patent Owner does not sufficiently describe Starbucks's mobile order and pay system or the pizza chain's systems to establish that these systems are copies of the 21CR system. Further, Dr. Weaver's testimony that he reviewed Starbucks's and the pizza chain's systems is conclusory

with little or no elaboration on those systems. *See* 37 C.F.R. § 42.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight."); *see also Rohm and Haas Co. v. Brotech Corp.*, 127 F.3d 1089, 1092 (Fed. Cir. 1997) (nothing requires a fact finder to credit the inadequately explained testimony of an expert).

We are not persuaded that the evidence sufficiently establishes the alleged copying or that a nexus exists between the alleged copying and the merits of the claimed invention. We, thus, give little weight to Patent Owner's argument that evidence of copying overcomes Petitioner's showing of obviousness.

6. Failure of Others

Patent Owner must show that any evidence of long-felt need "demonstrates both that a demand existed for the patented invention, and that others tried but failed to satisfy that demand." *Cyclobenzaprine*, 676 F.3d at 1082.

Patent Owner argues that many companies tried but failed to achieve synchronization and integration with point-of-sale systems and other third party systems and this failure by others is evidence of nonobviousness. PO Resp. 78–80. To support its allegation, Patent Owner points to numerous statements from employees of other companies and the testimony of Dr. Weaver. *Id.*

We are not persuaded that the evidence sufficiently establishes the alleged long-felt need and failure of others or that a nexus exists between the alleged long-felt need and failure of others and the merits of the claimed invention. Patent Owner cites to numerous exhibits as allegedly showing the failure of others. PO Resp. 78–80. For example, Exhibit 2001 is an email from a Food.com employee discussing a license agreement with Patent Owner and specifying the product and services it requires. This, however, does not show sufficiently that Food.com tried but failed to satisfy a demand for the patented invention. In addition, Patent

Owner states that "Food.com admitted it needed Ameranth's technology in its public release on July 16, 1999" (PO Resp. 78) but provides no citation to such a release in the record. We cannot consider evidence not adequately cited to in the record or not provided in the record. *DeSilva v. DiLeonardi*, 181 F.3d 865, 866-67 (7th Cir. 1999) ("A brief must make all arguments accessible to the judges, rather than ask them to play archeologist with the record.") Without such evidence, Patent Owner's argument is merely attorney argument and entitled to little weight.

We are not persuaded that the evidence sufficiently establishes the alleged failure of others or that a nexus exists between the alleged failure of others and the merits of the claimed invention. We, thus, give little weight to Patent Owner's argument that evidence of failure of others overcomes Petitioner's showing of obviousness.

7. Conclusion as to Secondary Considerations

Patent Owner's evidence fails to sufficiently demonstrate commercial success, licensing, copying, and long-felt-but-unmet need for the claimed invention. We, thus, determine that the proffered evidence of objective indicia of non-obviousness is insufficient to overcome the previously discussed evidence establishing that every limitation from the challenge claims was taught by the cited references. Thus, we find that Petitioner has demonstrated by a preponderance of the evidence that the challenged claims would have been obvious over the cited references.

E. Motions to Exclude Evidence

Both Petitioner and Patent Owner filed motions to exclude evidence. Patent Owner moves to exclude certain paragraphs of Exhibit 1063 and the entirety of Exhibits 1065, 1067–1076, 1081, 1083–1085, 1095–1099, 1101, 1102 and 1106.

Paper 25. We do not rely on these exhibits in reaching our Decision and, thus, dismiss Patent Owner's motion to exclude these exhibits as moot.

Petitioner moves to exclude the entirety of Exhibits 2047–48, 2050, 2053, 2059, 2062 and 2077–78 and with the annotated portions of Exhibit 2047. Paper 26. We also dismiss Petitioner's motion to exclude these exhibits. Petitioner's motion to exclude theses exhibits is moot because we have found this evidence insufficient regardless of its admissibility.

III.CONCLUSION

Based on the evidence and arguments, Petitioner has demonstrated by a preponderance of the evidence that claims 12–16 of the '850 patent would have been obvious over Brandt and NetHopper as well as the combination of Brandt, Demers, and Alonso.

IV. ORDER

For the reasons given, it is

ORDERED that claims 12–16 of U.S. Patent No. 6,384,850 B1 have been shown to be unpatentable;

FURTHER ORDERED that Patent Owner's Motion to Exclude Evidence is *dismissed*;

FURTHER ORDERED that Petitioner's Motion to Exclude Evidence is *dismissed;* and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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