

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TARGET CORPORATION,

Petitioner,

v.

PROXICOM WIRELESS, LLC,

Patent Owner.

Case IPR2020-00933

U.S. Patent No. 8,374,592

PETITION FOR *INTER PARTES* REVIEW

TABLE OF CONTENTS

I. INTRODUCTION1

II. MANDATORY NOTICES (§42.8).....6

 A. Real Party-In-Interest6

 B. Related Matters.....6

 C. Lead and Back-Up Counsel and Service Information6

III. PAYMENT OF FEES7

IV. REQUIREMENTS FOR INTER PARTES REVIEW7

 A. Grounds for Standing7

 B. Identification of Challenge.....8

 1. The Specific Art on Which the Challenge is Based8

 2. Statutory Grounds on Which the Challenge is Based.....10

 3. How the Challenged Claims Are Unpatentable.....10

V. THE '592 PATENT.....10

VI. PROSECUTION HISTORY12

VII. LEVEL OF ORDINARY SKILL14

VIII. CLAIM CONSTRUCTION14

IX. GROUNDS OF UNPATENTABILITY.....15

 A. Ground 1: Perttila in view of Insolia Renders Obvious Claims
 19-23.....17

 1. Overview of Perttila.....17

 2. Overview of Insolia and Motivation to Apply Its
 Teachings to Perttila22

 3. Claim Chart—Perttila in view of Insolia26

 B. Ground 2: Perttila in view of Davis Renders Obvious Claims
 25-26 and 28-29.....45

| | | |
|-----|--|----|
| 1. | Overview of Davis and Motivation to Apply Its Teachings to Perttila | 45 |
| 2. | Claim Chart—Perttila in view of Davis..... | 48 |
| X. | SECONDARY CONSIDERATIONS | 55 |
| XI. | CONCLUSION..... | 56 |

LIST OF EXHIBITS

| | |
|-----------------------|--|
| Ex. 1001 | U.S. Patent No. 8,374,592 (“592”) |
| Ex. 1002 | File History of U.S. Patent No. 8,374,592 (“592 FH”) |
| Ex. 1003 | Declaration of David Hilliard Williams (“Williams”) |
| Ex. 1004 | U.S. Patent App. No. 2005/0250552 (“Eagle”) |
| Ex. 1005 | Reserved |
| Ex. 1006 | U.S. Patent App. No. 2004/0243519 (“Perttila”) |
| Ex. 1007 | Reserved |
| Ex. 1008 | U.S. Patent No. 8,121,917 (“Insolia”) |
| Ex. 1009 | U.S. Patent App. No. 2010/0030638 (“Davis”) |
| Ex. 1010- Ex. 1015 | Reserved |
| Ex. 1016 | <i>Lighting Science Group Corp. v. Nicor, Inc. et al.</i> , No. 6:16-cv-413-Orl-37GJK, Dkt. 98 (M.D. Fl. May 9, 2017) |
| Ex. 1017 | <i>Lighting Science Group Corp. v. Leedarson Lighting Co. et al.</i> , No. 6:17-cv-826-Orl-37GJK, Dkt. 31 (M.D. Fl. Oct. 27, 2017) |
| Ex. 1018 | <i>Automatic Mfg. Sys., Inc. v. Primera Tech., Inc.</i> , No. 6:12-cv-1727-Orl-37DAB, Dkt. 58 (M.D. Fl. Nov. 21, 2013) |
| Ex. 1019 | <i>zIT Consulting GMBH v. BMC Software, Inc.</i> , No. 6:15-cv-1012-Orl-37KRS, Dkt. 63 (M.D. Fl. Mar. 17, 2016) |
| Ex. 1020 | <i>Proxicom Wireless, LLC v. Target Corp.</i> , No. 6:19-cv-01886-RBD-LRH, Dkt. 56 (M.D. Fl. Feb. 28, 2020) |

| | |
|-----------------------|--|
| Ex. 1021 | <i>Proxicom Wireless, LLC v. Macy's, Inc., et al.</i> , No. 6:18-cv-64-Orl-37GJK, Dkt. 94 (M.D. Fl. Feb. 12, 2019) |
| Ex. 1022- Ex. 1025 | Reserved |
| Ex. 1026 | Declaration of Crena Pacheco |

Pursuant to §§311-319 and §42,¹ Target Corporation (“Petitioner”) petitions for *inter partes* review (“IPR”) of claims 19-23, 25-26, and 28-29 (“Challenged Claims”) of U.S. Patent 8,374,592 (“’592”) (Ex. 1001), assigned to Proxicom Wireless, LLC (“PO”) according to USPTO records. There is a reasonable likelihood that at least one challenged claim is unpatentable as explained herein. Petitioner requests review of the Challenged Claims, and judgment finding them unpatentable under §103.

I. INTRODUCTION

The ’592’s purported invention is the use of a “server” to “broker the exchange of information between” two entities associated with two wireless devices. ’592, 3:9-12, Abstract. “Rather than directly exchanging application data flow between the two devices using [a] short range wireless capability, a second wireless capability allows for one or more of the devices to communicate with a central server via the internet” to perform the exchange. *Id.* at 3:4-8; Williams ¶39.

The ’592 admits that, prior to the alleged invention, wireless devices already were configured to use both the short-range and wide-area connections claimed in

¹ Section cites are to 35 U.S.C. or 37 C.F.R. as context indicates. All emphasis/annotations have been added unless noted. Annotations added to the figures herein generally quote the language of the Challenged Claims for reference.

the '592. *Id.*, 2:13-25 (admitting “[m]ost mobile phones on the market today support at least two wireless standards; one for the cellular wireless wide area network connection (WWAN) and one for a wireless personal or local area network” such as “Bluetooth”). The '592 also admits that prior art systems already were using wireless devices for e-commerce applications. *Id.*, 1:59-61; Williams ¶¶40-41. And as recognized during prosecution, the prior art already taught using a central server communicating with one or more devices over a wide-area network to broker the exchange of information between such devices communicating via a short-range network. *See* §VI; Williams ¶42.

The only purportedly novel elements of the '592 Challenged Claims are the specific recitations of what “information” is returned to the first wireless device from the server. For example, independent claim 19 requires the “information” to be based in part on “information representing a reward” for “participation in a loyalty program.” Independent claim 25 requires the “information” to be based in part on “feedback ratings of past experiences related to the entity or object located in proximity to the second wireless device.” But, as discussed herein, it was already well known to transmit such information over a network, including a network conforming to the claimed arrangement of two wireless devices communicating over a short-range network and a server communicating with one or both devices across a wide-area network. Williams ¶¶43-59.

For example, **Perttila** (Ex. 1006) discloses a known system for a remote server to communicate “service data” to a user in response to “electronic communications between a user communications device and a merchant-media arrangement...” *E.g.*, Perttila ¶[0008]. The merchant-media arrangement is a “billboard or any other...source” conveying promotional content associated with a merchant and communicating with the user communications device over a “short-range communication link,” such as a “Bluetooth” “beacon device.” *Id.*, ¶¶[0009], [0026], [0037]. As further discussed below, a user’s communication device, such as a cellular phone, receives a “merchant-media ID code” over the short-range link from the merchant-media arrangement when the two are in proximity. *Id.*, ¶¶[0015], [0037]. The user’s device generates and sends a message that includes the merchant-media ID code to the server over “a mobile network [] and/or the Internet.” *Id.*, ¶¶[0009], [0015], [0036]-[0038]. The server responds with “merchant-based service information,” such as a “personalized” “user-redeemable electronic coupon” relating to the content promoted by the billboard, which can be “validated to facilitate merchant transactions” in an “electronic commerce arrangement.” *Id.*, ¶¶[0009], [0011], [0025], [0028], [0031], [0038], [0040].

While **Perttila** teaches that the delivery of a coupon to a user’s device based on its proximity to a promotional object, such as a billboard, **Insolia** further makes explicit implementation details for a server interacting with a consumer’s wireless

device for promotional purposes. **Insolia** teaches a system for a “loyalty server” to “implement[] a loyalty program” for customers on behalf of a “good or service, brand, company, or other entity.” *E.g.*, *Insolia*, 2:15-23, 6:32-37, 8:44-60. The server provides “loyalty point[s]” to a user when the user’s “personal terminal” comes into proximity with an “interaction terminal...associated with a product or service.” *Id.*, 2:15-23, 8:44-60, 9:61-64. As further discussed in §IX.A.2, a person of ordinary skill in the art (“POSITA”) would have been motivated to apply **Insolia**’s teachings of a server providing loyalty points to a user’s device based on the device’s proximity to an advertisement in implementing **Perttila**’s server, which provides a coupon to a user’s device based on its proximity to a merchant-media arrangement, to advantageously provide an additional incentive to the user to frequently visit the advertisement.

And, while **Perttila** discloses “personaliz[ing]” e-coupons, **Davis** teaches additional implementation details of personalizing e-coupon offerings to a user by utilizing feedback ratings provided by others within that user’s “trust network.” *E.g.*, *Davis* Abstract. “Ratings made by the other users of goods or services are evaluated according to the particular trust network the user has set up. The user receives advertisements only from those vendors who have met thresholds based on the evaluated ratings.” *Id.* As discussed in §IX.B.1, a POSITA would have been motivated to apply **Davis**’s known implementation detail teachings of personalizing

e-coupons based on ratings of other user's past experiences with the advertised item or service in implementing **Perttila's** "personalized" e-coupons that correspond to information related to content promoted by the merchant media arrangement.

As demonstrated herein, the prior art renders obvious the Challenged Claims, which are directed to an obvious combination of prior art elements combined according to known methods to yield predictable results. *KSR Intern. Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007). The claimed elements and the claimed arrangement of elements are rendered obvious by **Perttila** in view of **Insolia** or **Davis**, and, at most, the combination amounts to nothing more than a "predictable use of prior art elements according to their established functions." *Id.* at 417.

The USPTO did not consider **Perttila**, **Insolia**, **Davis** or any other reference providing analogous disclosures during prosecution of the '592. Had such references been available and considered previously, the Challenged Claims would have been found unpatentable.

As explained in greater detail herein, all the features of the Challenged Claims were known well before the earliest possible priority date of the '592, and the purported invention is no more than an obvious combination of prior art elements combined according to known methods to yield predictable results. *KSR*, 550 U.S. at 416. Petitioner requests that the Board institute trial and find the Challenged Claims unpatentable.

II. MANDATORY NOTICES (§42.8)

A. Real Party-In-Interest

Target Corporation is the real party-in-interest. No other party had access to or control over the present Petition, and no other party funded or participated in preparation of the present Petition. Proxicom asserts in the litigation that Petitioner infringes the '592 by utilizing instrumentalities provided at least in part by Acuity Brands (“Acuity”), but Acuity is not funding, controlling, directing, or otherwise involved in this petition or proceeding, nor has it been in the past.

B. Related Matters

Proxicom Wireless, LLC v. Target Corporation, No. 6:19-cv-1886-Orl-37LRH (M.D. Fla.) (pending).

The following table lists matters regarding related patents:

| Patent No. | IPR |
|------------|---------------|
| 9,038,129 | IPR2020-00903 |
| 7,936,736 | IPR2020-00904 |
| 8,090,359 | IPR2020-00931 |
| 8,090,359 | IPR2020-00932 |

C. Lead and Back-Up Counsel and Service Information

James L. Davis, Jr. (Reg. No. 57,325) (Lead)
ROPES & GRAY LLP
1900 University Avenue, 6th Floor
East Palo Alto, CA 94303-2284
Phone: 650-617-4000

Fax: 617-235-9492
james.l.davis@ropesgray.com
Target-Proxicom-IPR-Service@ropesgray.com

Cassandra Roth (Reg. No. 73,747)
ROPES & GRAY LLP
1211 Avenue of the Americas
New York, NY 10036-8704
Phone: (212) 596-9000
Cassandra.Roth@ropesgray.com

Customer No. 28120

Mailing address for all PTAB correspondence:
ROPES & GRAY LLP, IPRM—Floor 43
Prudential Tower, 800 Boylston Street,
Boston, MA 02199-3600

Petitioner consents to electronic service of documents to the email addresses of the counsel identified above.

III. PAYMENT OF FEES

The undersigned authorizes the Office to charge the fee required by §42.15(a) and any additional fees to Deposit Account No. 18-1945, under Order No. 001008-0037-653.

IV. REQUIREMENTS FOR INTER PARTES REVIEW

A. Grounds for Standing

Pursuant to §42.104(a), Petitioner certifies that the '592 is available for IPR. Petitioner is not barred or estopped from requesting IPR challenging the claims of the '592 on the grounds identified herein.

B. Identification of Challenge

Pursuant to §§42.104(b), Petitioner requests IPR of claims 19-23, 25-26, and 28-29 of the '592, and that the Board cancel the same as unpatentable. The '592 matured from U.S. Application 13/212,766 (filed 08/18/2011), and claims priority to U.S. Application 12/364,828, (filed 02/03/2009, matured into U.S. Patent 8,090,359), and U.S. Provisional Application Nos. 61/095,359 (filed 9/9/2008) and 61/095,001 (filed 9/8/2008).² Williams ¶¶77-78.

1. The Specific Art on Which the Challenge is Based

Petitioner relies upon the following prior art:

| Name | Exhibit | Patent Publication | Filed | Issued / Published | Prior art under at least |
|-----------------|----------------|---------------------------|--------------|---------------------------|---------------------------------|
| Perttila | 1006 | U.S. 2004/0243519 | 6/2/2003 | 12/2/2004 | §102(b) |
| Insolia | 1008 | U.S. 8,121,917 | 3/3/2008 | 2/21/2012 | §102(e) |
| Davis | 1009 | U.S. 2010/0030638 | 9/24/2007 | 2/4/2010 | §102(e) |

These references were not cited in an Information Disclosure Statement (“IDS”) or otherwise identified by the Examiner, or applied in a rejection of the

² Petitioner takes no position as to the propriety of the priority claims since the art presented herein predates the earliest possible filing of the '592 patent. Petitioner reserves the right to challenge these priority claims.

claims during prosecution of the '592. The Examiner never considered the grounds presented herein or the testimony of Petitioner's expert David Williams ("Williams," Ex. 1003) regarding the scope and content of the prior art. *See* Ex. 1002. Because the presented grounds are not cumulative of any prior art previously considered, and are not the same or substantially the same as prior art or arguments previously considered, the Board should not exercise its discretion under §325(d). Co-pending district court proceedings also do not warrant the exercise of discretion under §314(a). *See, e.g., Precision Planting, LLC v. Deere & Company*, IPR2019-01044, Paper 17, *9-18. Applying the factors from *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (Mar. 20, 2020), the Board should not exercise its discretion to deny institution under §§314(a): (1) the district judge before whom this case is pending has granted every post-institution motion to stay that Petitioner has found (Exs. 1016-1019); (2) this case was filed on 10/2/2019, and while trial is currently set for 9/7/2021, it may be delayed due to a variety of factors including those relating to COVID-19; (3) the litigation is in its early stages and Petitioner did not delay in filing this Petition—the court has not ruled on Petitioner's motion to dismiss or any substantive issue relating to the '592, PO served its infringement contentions on 2/10/2020 identifying over 120 claims at issue in the litigation; PO has refused to reduce the number of asserted claims, which would have also narrowed the number of claims challenged before the Board; and PO has not yet responded to Petitioner's

invalidity contentions in the litigation; (4) in addition to the claims asserted in the litigation, the petition challenges some claims not asserted in the litigation; (5) the litigation and PTAB parties are the same; and (6) as demonstrated herein, the Challenged Claims are rendered obvious by art that the USPTO never considered during prosecution, and PO has indicated that it intends to continue to assert this patent against numerous other defendants (Ex. 1020). This IPR should be instituted.

2. Statutory Grounds on Which the Challenge is Based

| Ground | References | Basis | Claims |
|--------|-----------------------------|-------|--------------|
| 1 | Perttila in view of Insolia | §103 | 19-23 |
| 2 | Perttila in view of Davis | §103 | 25-26, 28-29 |

3. How the Challenged Claims Are Unpatentable

Petitioner provides the information required under §§42.104(b)(4)-(5) in §IX.

V. THE '592 PATENT

The '592 describes techniques for using a server to broker the exchange of information between wireless devices. '592, Abstract. The background section of the '592 concedes that wireless devices, such as mobile phones, had access to both a “wide area” cellular connection, and local “Bluetooth” connections that permit “peer to peer” communications. *Id.*, 1:27-39, 2:26-37. The '592 combines these two well-known communication methods, describing methods for the exchange of

information using “both a short range and a long range wireless capability.” *Id.*, 2:55-59. Williams ¶¶60-61.

The '592's embodiments are directed to some variant of the same general functionality: (1) send an identifier from a second device to a first device using a short-range connection between the devices; (2) communicate the received identifier from the first device to a server; and (3) determine additional information that the server should communicate back to one or both devices. For example, Figure 1 of the '592 shows that “a central server 100 is connected to devices 106 and 108” through a combination of the Internet and a “cellular network 102.” *Id.*, 5:46-55. The devices are also able to communicate directly with each other via “a short range wireless link 107 such as a Bluetooth.” *Id.*, 6:33-37.

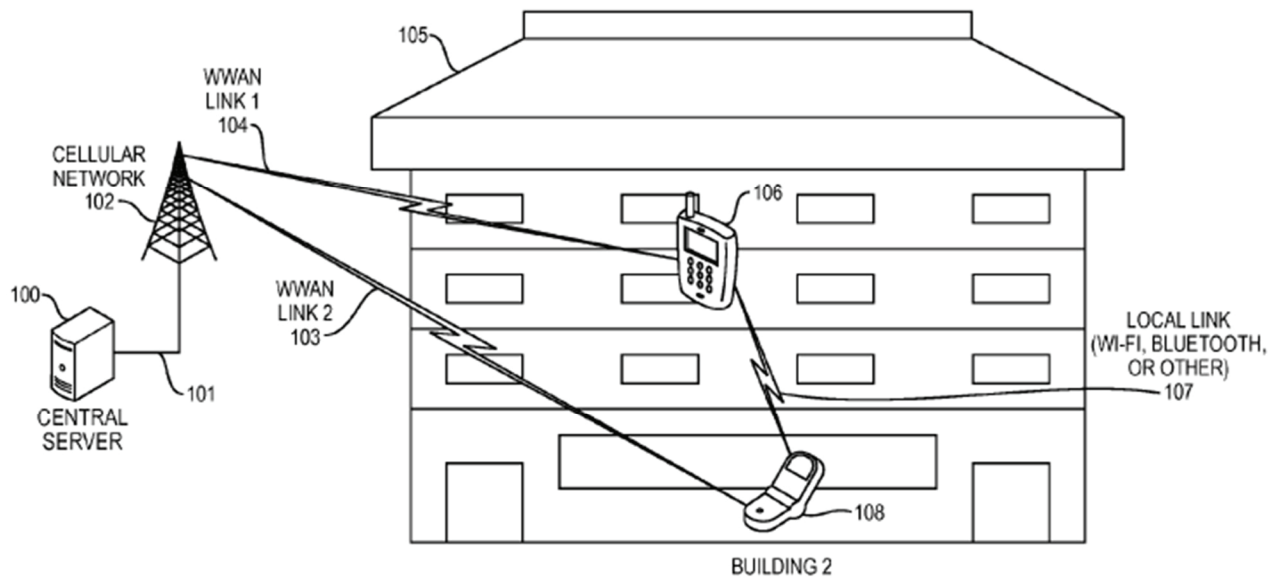


Figure 1

'592 Fig. 1. Williams ¶¶62-63.

Rather than the two devices exchanging information directly, the '592 uses a server to broker the information exchange. The '592 states that a first wireless device performs an identifier search and detects a device identifier from a second wireless device. *E.g.*, '592, 11:31-34, 14:41-52. The first wireless device transmits this received identifying information to a “central server” using a cellular or Internet connection, and the server returns “information associated with that [second] device identifier.” *Id.*, 3:3-12, 11:34-39, 14:48-60. Examples of such information include “electronic coupons” awarded as a part of a “loyalty program” or based on “feedback ratings relevant to an entity associated with...the second device identifier.” *Id.*, Abstract, 7:50-52, 15:17-23. The '592 further discloses this arrangement used in “electronic commerce applications” to “facilitate the purchas[e] of the goods or services” between the merchant and customer. *E.g.*, '592, 17:35-18:5. Williams ¶¶64-66.

VI. PROSECUTION HISTORY

U.S. Patent Application 13/212,766, which matured into the '592, was filed 08/18/2011. The originally filed claims were generally directed to using a server to “exchange information between one or more wireless devices” by “receiving identifier information from a first wireless device using a wide area wireless network, the identifier information provided...from a second device using short

range wireless communication,” using the identifier information to determine information or a name “concerning an entity or object located in proximity to the second device,” and “delivering information to the first wireless device based...in part upon the identifier information” and at least one of “feedback ratings for the entity or object located in proximity to the second device” or “a reward for an entity associated with the first device’s participation in a loyalty program.” ’592 FH (Ex. 1002), 79-83; Williams ¶¶67-68.

The Examiner issued a Non-Final Office Action on 4/6/2012 rejecting independent claims 1, 19 and 25 as unpatentable over U.S. Patent No. 7,213,742 (“Birch”) in view of U.S. Patent Application Publication No. 2009/0307133 (“Holloway”). *Id.*, 121-135. The Applicant conducted an interview with the Examiner and filed a response on 7/20/2012 adding four new claims and amending independent claims 19 and 25 to include the added limitation of the server determining “a name associated with said loyalty program” and a name of “the entity or object located in proximity to the second wireless device” to return to the first wireless device. *Id.*, 216-217. The Applicant argued that the cited references do not disclose or suggest the server delivering information to the first wireless device representing a reward for the first device’s participation in a loyalty program and “do[] not disclose ‘delivering information to the first wireless device...including feedback ratings.’” *Id.*, 221-231. The Applicant further added the phrase feedback

ratings of “past experiences” to claim 25 as suggested by the Examiner in the interview. *Id.*, 216-217, 245; Williams ¶¶69.

The Examiner issued a Notice of Allowance on 9/18/2012 allowing claims 1-33 (issued claims 1-33). *Id.*, 254-256. The patent issued on 2/12/2013. Williams ¶70.

VII. LEVEL OF ORDINARY SKILL

A person of ordinary skill in the art (“POSITA”) on or before 9/8/2008, would have had a minimum of a Bachelor’s degree in Electrical Engineering, or a related field, and approximately 3-5 years of professional experience in the field of wireless communications. Additional graduate education could substitute for professional experience, or significant experience in the field could substitute for formal education. Williams ¶¶36-38.

VIII. CLAIM CONSTRUCTION

Terms of claims subject to IPR are to be “construed using the same claim construction standard that would be used to construe the claim in a civil action under §282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” §42.100(b). Only terms necessary to resolve the controversy need to be construed. *Nidec Motor v. Zhongshan Broad Ocean Motor*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

For review purposes, Petitioner interprets the claim terms according to their plain and ordinary meaning consistent with the specification.

While the Challenged Claims use terms of degree (e.g., “short range” communication/link, “wide area” link/network/technology), the prior art relied on herein discloses the ’592’s examples of those terms as shown in §IX below. *See e.g.*, ’592, 10:58-60 (“WWAN [wireless wide area network] (*cellular* data link such as GPRS, EDGE, 1xEV-DO, IS-2000, Wi-Max, LTE, or the like)”), 5:63-66 (“[c]ommunications network(s) providing the connection 101 can typically be part of...a global network (e.g., the Internet)”), 17:50-52 (“The device detects a broadcast device, and interacts over the internet with the server via the WWAN connection...”), 19:44-46 (“a local, or personal area network wireless protocol such as ... *Bluetooth*”). Williams ¶¶71-76.

A district court in another proceeding has construed terms of this patent, but these constructions do not impact the outcome of this IPR as the prior art discussed in §IX meets the limitations under these constructions. *See* Ex. 1021. Williams ¶71.

IX. GROUNDS OF UNPATENTABILITY

The ’592 is directed to a method and system for facilitating communications between two wireless devices through a server. At their core, the claims are directed to (1) sending an identifier from a second wireless device to a first wireless device using a short-range connection; (2) communicating the identifier from the first

wireless device to a server; (3) the server determining information concerning an entity or object near the second device; and (4) the server delivering information or a service to the first device based in part upon the identifier information and at least one of “information representing a reward for...the first wireless device’s participation in a loyalty program” or “feedback ratings of past experiences related to the entity of object located in proximity to the second wireless device.” The claimed features are obvious in view of the prior art, as explained below. Williams ¶¶79-80, 105.

For example, **Perttila** discloses a system for facilitating communications between a user’s wireless communications device and a wireless merchant media arrangement through a remote server. **Perttila** discloses the claimed arrangement of the devices and the server recited in independent claims 19 and 25, including the devices exchanging “identifiers” over a short-range communication link, and the server (i) associating identifiers received from the first wireless device with information concerning a user and/or promotional object near the second wireless device devices, and (ii) returning “an appropriate electronic commerce application” such as a personalized e-coupon to the user’s device based on the received device identifier[s]. **Perttila** also discloses the additional limitations recited in the challenged dependent claims, including, e.g., the first wireless device being mobile and the second wireless device not being mobile. Williams ¶¶104-106.

As to claim 19's requirement that the "information" delivered to the first wireless device be based on participation in a loyalty program, **Insolia** teaches a server providing a user's portable terminal with "loyalty rewards" based on a history of previous detections related to received identifier information in a "system for implementing a loyalty program." Williams ¶106. And as to claim 25's requirement that the "information" be based on "feedback ratings," **Davis** teaches "filter[ing]" and "target[ing]" personalized e-coupon content delivered to a user based in part upon an "aggregation of [feedback] ratings" by other trusted users of the product and/or service portrayed by an advertisement. Williams ¶¶132-134.

As shown below, the prior art renders the Challenged Claims of the '592 unpatentable. This Petition is supported by the Declaration of David Williams, which describes the scope and content of the prior art at the time of the alleged invention of the '592. Williams ¶¶39-161.

A. Ground 1: Perttila in view of Insolia Renders Obvious Claims 19-23

1. Overview of Perttila

Perttila teaches a system and method for a remote server to communicate "service data" to a user in response to "electronic communications between a user communications device and a merchant-media arrangement...." *E.g.*, Perttila ¶[0008]. The merchant-media arrangement is a "billboard...[,] which may be

stationary or mobile,” conveying promotional content associated with a merchant and communicating with the user communications device over a “short-range communication link.” *Id.*, ¶¶[0009], [0026], [0028]. **Perttila** discloses “co-locat[ing]” the merchant-media arrangement with a wireless “Bluetooth” “beacon device” or “RFID tag” to enable this communication. *Id.*, ¶[0037]. **Perttila** discloses that the merchant-media arrangement can include a wireless device (“a portable add-on media communications arrangement”) in addition to a conventional advertising arrangement. *Id.*, ¶[0060]. To the extent it is argued that further disclosure of a wireless merchant-media arrangement is required, at minimum, it would have been an obvious implementation choice to use a wireless merchant-media arrangement, such as a mobile battery-powered device, to advantageously enable easy location of the portable device in a store (*e.g.*, without having to plug the device into an outlet). Williams ¶¶81-82.

The user communications device is a “mobile communications device,” which may be “any number of wireless devices,” *e.g.*, a “wireless/cellular telephone[,]” associated with a user. **Perttila** ¶[0064]. As illustrated below in Fig. 1a, the “user communications device” (annotated blue) receives a “merchant-media ID code” from the “merchant-media arrangement” (annotated yellow) over the wireless short-range link (annotated green) when it is within range. *Id.*, ¶¶[0008], [0015], [0037]. In response to receiving the merchant media ID, **Perttila** teaches that the user

communications device generates and sends “a merchant-information-request signal that includes the merchant-media ID code” to the remote server (annotated purple). *Id.*, ¶¶[0008]-[0009], [0015]. The user communications device 28a sends the merchant media ID (e.g., “tag ID”) to the server 24 over a link provided by “a mobile network 44 and/or the Internet 48” (annotated red). *Id.*, ¶¶[0026], [0036], [0038].

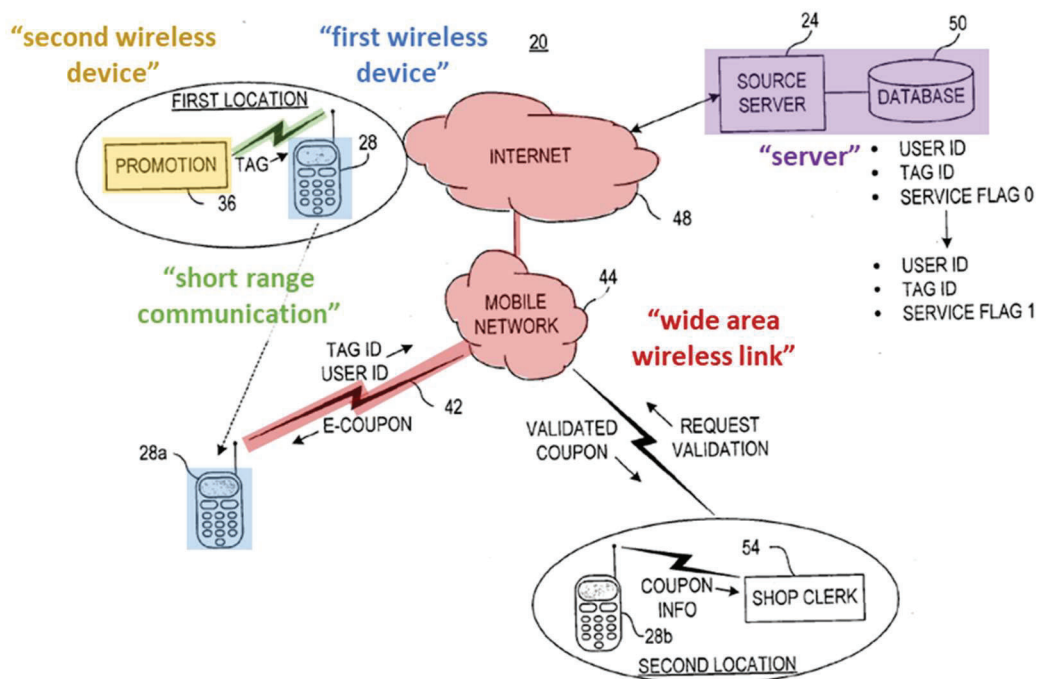


FIG. 1a

Perttila Fig. 1a; Williams ¶¶83-84.

Perttila teaches that, after receiving the merchant information request signal the server “extracts [and stores] the user/terminal ID along with the tag (merchant-media) ID from the request” in order to generate “merchant-based service

information,” such as “a user-redeemable electronic coupon,” to provide to the user. *Id.*, ¶¶[0011], [0025], [0038], [0040]. Williams ¶85.

Perttila teaches that the server associates the received merchant media ID with a “service information data set” provided to the user visiting the merchant-media arrangement. Perttila ¶¶[0009], [0027]-[0028]. The server uses the merchant ID code to “identify the type of product conveyed by the merchant-media arrangement” and “determine the location of the merchant media arrangement.” *Id.*, ¶¶[0029], [0033]. For example, **Perttila** discloses locating the merchant media arrangement “at the store itself.” *Id.*, ¶[0039]. In this way, the server sends to the user communications device an “electronic coupon” that “correspond[s] to the merchant-media’s ID code,” such as “offerings” in the store. *Id.*, ¶[0015], [0038]. The offering is in the form of “an electronic data set,” or “Java Midlet[...]downloadable by the user’s mobile terminal.” *Id.*, ¶¶[0011], [0015], [0034]. Further, the server retrieves and transmits to the user communications device a list of items or services to which the offering may be applied. *Id.*, ¶¶[0026], [0044]-[0050]. For example, **Perttila** discloses a list of items on “a restaurant menu or a recipe” based on a “billboard...promoting a food product,” or a list of movie showtimes based on a “movie ticket” that was purchased earlier. *Id.*, ¶¶[0026], [0044], [0046]-[0050]. Williams ¶86.

Perttila teaches personalizing the offering based on the requesting “user[‘s] profile information,” which is retrieved from a database using the “user/terminal ID” (e.g., MSISDN and BD_ADDR) received from the user communications device. *Id.*, ¶¶[0031], [0038], Fig. 1b. Additionally, the server’s “database” stores “user/terminal ID along with [previously received] tag (merchant-media) ID[s]”—a history of the user’s past behavior that is also used to personalize the offering or coupons. *Perttila* ¶¶[0031], [0038], [0042]-[0043]. At minimum, it would have been obvious to personalize the offering based on this information, which reflects the past coupons that the user has received and used, to advantageously provide a more targeted advertisement. *Id.*; Williams ¶87. Additionally, **Perttila** discloses the server collecting user responses to questions “regarding user demographics” to further personalize the offering. *E.g.*, *Perttila* ¶[0070]. The server stores “[t]he extracted user/terminal ID and the tag ID” from the merchant information request signal for subsequent validation of the coupon. *Id.*, ¶¶[0038], [0042]. Williams ¶87.

Perttila is in the same field and is analogous art to the ’592—both are in the same field related to the exchange of information between wireless communication devices in an electronic commerce application. *E.g.*, ’592, Abstract, 2:47-51, 2:53-57, 7:32-53; *Perttila* Abstract, ¶¶[0001], [0007]-[0008]. **Perttila** is also reasonably pertinent to the alleged problem(s) identified in the ’592 of devices communicating over wireless wide area network (WWAN) services “not receiving sufficient signal

strength” for indoor proximity-based interactions and devices communicating over “short range wireless” services being unable to communicate “once the devices are no longer in proximity.” *E.g.*, ’592, 1:28-32, 1:45-56, 2:6-39. For example, **Perttila** is directed to a system for exchanging service information utilizing both a WWAN such as “a mobile network 44 and/or the Internet” and a “short-range communication link” that works indoors such as “Bluetooth” or “RFID.” *E.g.*, Perttila ¶¶[0037]-[0038]. **Perttila** is also reasonably pertinent to the alleged problem(s) identified in the ’592 of the alleged need for a “third trusted party” in facilitating information exchange between wireless devices. *E.g.*, ’592, 2:3-8. Information exchange in **Perttila**’s system is mediated by a “remote server” “that is convenient and inexpensive” wherein communication with a “particular device or address” is “directed by a predetermined program or data stored at the server.” *E.g.*, Perttila ¶¶[0007], [0025], [0035]. Williams ¶¶88-89.

2. Overview of Insolia and Motivation to Apply Its Teachings to Perttila

Insolia teaches a system for a “loyalty server” to “implement[] a loyalty program” for customers on behalf of a “good or service, brand, company, or other entity.” *E.g.*, Insolia 2:15-23, 6:32-37, 8:44-60. The server provides a benefit to a user when the user’s “personal terminal” comes into proximity with an “interaction terminal...associated with a product or service.” *Id.*, 2:15-23, 8:44-60. The benefit

can be in the form of a “loyalty point, a monetary value, a credit toward at least a portion of a product or service.” *Id.*, 9:61-64. **Insolia** teaches that its loyalty program “encourage[s] loyalty to a particular product” and “serves as a way in which to inform the consumer about the product,” including “that the product is in the company’s portfolio of products.” *Id.*, 5:38-43, 35:38-42. Williams ¶90.

Insolia’s interaction terminal is associated with a “promotional object,” such as a poster, and communicates with a personal terminal brought in proximity with the interaction terminal. *Id.*, 2:32-35, 6:32-37. The personal terminal, in turn, establishes communication with the loyalty server, a “Data Processing Resource,” by way of a “network 3510, such as the internet.” *Id.*, 30:33-37, Fig. 35:

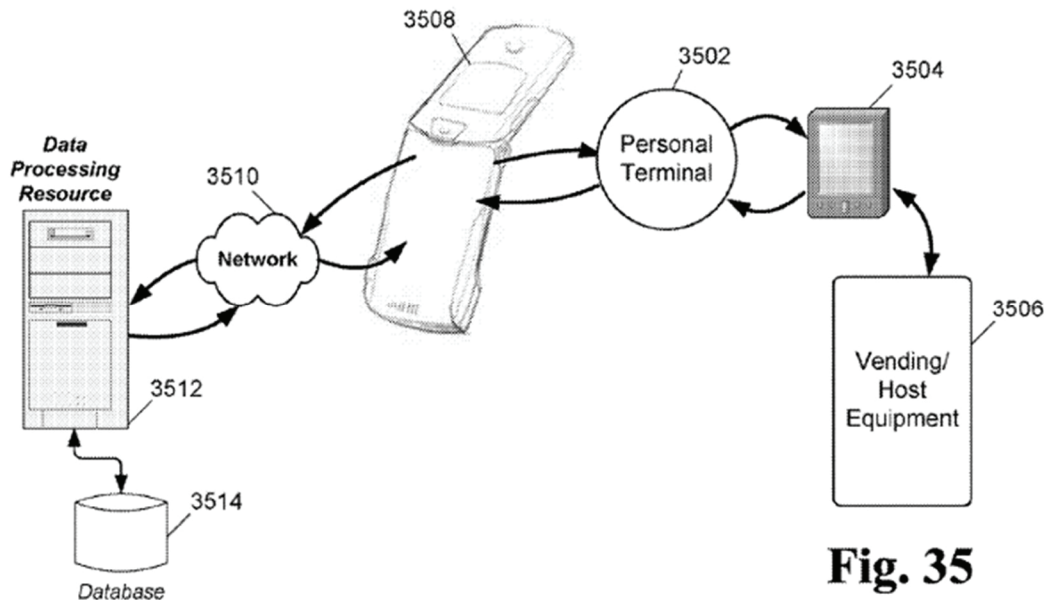


Fig. 35

Williams ¶91.

Insolia's loyalty server includes a "loyalty management...module 66" to "process the interaction" between the two terminals and "determine the benefit" to be provided to the personal terminal. *Id.*, 8:44-60, 11:8-30. **Insolia** teaches that the server analyzes past purchasing behavior of a user, including "product[s]...purchased...[and] cost of the product," for "trends or other relevant information," and "provide[s] the user 16 with a benefit as a result of the analysis." *Id.*, 16:40-58. In addition, **Insolia** teaches "limit[ing] the accrual of loyalty rewards" by basing the benefit "on a pre-defined criteria," such as "frequency," so the user is "prevented from...repeatedly interacting with the same...promotional object." *Id.*, 2:44-47, 13:18-34, 36:19-26. Williams ¶¶92.

While **Perttila** teaches that the delivery of a coupon to a user's device based on its proximity to a promotional object, such as a billboard, **Insolia** teaches additional details for how to encourage customer loyalty when a customer is in proximity to a promotional object through implementation of a loyalty program. A POSITA would have been motivated, and would have found it advantageous, to apply these known loyalty-program teachings in implementing **Perttila**'s promotional e-coupon system. Like **Perttila**, **Insolia** is in the same field and is analogous art to the '592, namely communications with a user's personal terminal for e-commerce purposes. *E.g.*, **Perttila** ¶¶[0026]-[0028]; **Insolia**, 5:27-64, 35:60-36:2; Williams ¶¶93-94.

A POSITA would have recognized that **Insolia**'s teachings of implementing a loyalty rewards program using proximity data—including providing loyalty points to a user in proximity to a promotional object, limiting the number of loyalty points awarded based on a history of prior detections, and varying the loyalty reward based on a history of past purchasing behavior, and identifying the name of the company providing the promotion—would have advantageously improved **Perttila**'s promotional e-coupon system. Indeed, **Perttila** itself recognizes the benefit of promoting particular objects and products by linking such promotion “to this particular location” and having the user “visit[] and view[] the promotional information in order to receive the coupon offering,” *i.e.*, a promotional reward. **Perttila** ¶[0028]. Likewise, **Insolia** “encourage[s] loyalty to a particular brand, company, or other entity, by rewarding a user for interacting with,” e.g., by visiting, “objects promoting the brand, company, or entity.” **Insolia**, 5:38-46. Moreover, **Insolia**'s loyalty program increases brand awareness and educates the consumer about the particular products within a “company’s portfolio of products.” *Id.*, 35:38-42. Likewise, a POSITA would have recognized that **Insolia**'s teachings of utilizing past consumer behavior would have improved **Perttila**'s e-coupon system by increasing consumer confidence in the system and ensuring that businesses are maximizing the impact of the offered promotions. *E.g.*, **Insolia**, 1:56-60, 1:66-2:3. **Insolia** recognizes the benefits of “consumer confidence” and the need to offer

promotions that “breed[] consumer loyalty” (*id.*), and **Perttila** recognizes the benefits of offering a “more personalized offering to the user” (Perttila ¶[0031]). A POSITA would have recognized that **Insolia’s** teachings provide known implementation details for these personalized offerings. Williams ¶¶94-95.

In light of the foregoing, a POSITA would have found it obvious and straightforward to apply **Insolia’s** teachings for utilizing a loyalty rewards program in implementing **Perttila’s** e-coupon system, and would have known that such a combination (yielding the claimed limitations) would predictably work and provide the expected functionality. Williams ¶96.

3. Claim Chart—Perttila in view of Insolia

| Claim Element | <u>Perttila in view of Insolia</u> |
|---|--|
| [19.pre] A method for a server to exchange information with one or more wireless devices comprising the steps of: | <p>Perttila discloses a method for a server (e.g., “server”) to exchange information with (e.g., “system for the communication”) one or more wireless devices (e.g., communicate “service information” to a wireless “user communications device” “in response to electronic communications between [the] user communications device and a merchant-media arrangement”).</p> <p><u>E.g., Perttila:</u></p> <p>Perttila discloses an “interactive communications system” for a remote server to communicate “service information” to a wireless “user communications device” “in response to electronic communications between a [wireless] user communications device and a merchant-media arrangement.” <i>E.g.</i>, Perttila ¶¶[0008]-[0009]. As discussed above in §IX.A.1, a POSITA would have understood that Perttila discloses a wireless merchant-</p> |

| Claim Element | <u>Perttola in view of Insolia</u> |
|---------------|--|
| | <p>media arrangement and at minimum it would have been obvious to use a wireless merchant-media arrangement, such as a mobile battery-powered device that communicates wirelessly, to advantageously enable easy location in a store. <i>Id.</i>, ¶[0060] (discussing “a portable add-on media communications arrangement”); Williams ¶109.</p> <ul style="list-style-type: none"> • [0019] (“FIG. 1a is <u>a system for the communication of an electronic coupon to a user via a link established with a source server by a mobile communications device</u>, according to an example embodiment of the present invention.”) • [0008] (“The present invention is directed to a system, apparatus, and method for <u>sending service data in response to electronic communications between a user communications device and a merchant-media arrangement</u> (e.g., audio and/or visual advertisements).”) • Fig. 1a <p style="text-align: center;">FIG. 1a</p> <ul style="list-style-type: none"> • [0009] (“According to an example embodiment of the present invention, <u>an interactive</u> |

| Claim Element | <u>Perttala in view of Insolia</u> |
|---|--|
| | <p><u>communications system conveys service information to a user-communications device by way of a merchant-media arrangement.</u>”)</p> <ul style="list-style-type: none"> • [0012] (“...[T]he user-communications device may be, for example, a wireless telephone....”) • [0025] (“Generally, the present invention is directed to use of local communication technology, to initiate electronic commerce, such as <u>retrieval of coupon-based information from a remote source server</u>...The local communication can be implemented in various forms, such as using short-range RF communication technologies, to provide interaction between <u>a user's mobile communications device</u> (e.g., <u>mobile telephone or PDA</u>) and a communication-enhanced <u>merchant-media arrangement</u> that is adapted to convey necessary information for allowing the mobile communications device to request electronic commerce applications from the remote server.”) <p>See also Perttala ¶¶[0011]-[0015], [0025]-[0027], [0037], [0041], [0060].</p> <p>Williams ¶¶107-109.</p> |
| <p>[19.a] the server receiving identifier information from a first wireless device using a wide area wireless network, the identifier information provided to the first wireless device from a second wireless device using short range</p> | <p>Perttala discloses the server receiving identifier information from a first wireless device using a wide area wireless network (e.g. “user-communications device” is a “wireless telephone” and “sends the ID signal [from the merchant-media arrangement] (along with the user's ID code in some implementations) to the remote source server” over “a mobile network 44 and/or the Internet 48”), the identifier information provided to the first wireless device from a second wireless device using short range wireless communication (e.g., “user-communications device picking up a short-range ID code from the merchant-media arrangement” wirelessly using “RFID” or “Bluetooth”).</p> |

| Claim Element | <u>Perttola in view of Insolia</u> |
|-------------------------|---|
| wireless communication; | <p><u>E.g., Perttola:</u></p> <p>Perttola discloses that the user communications device receives a “merchant-media ID code” from the “merchant-media arrangement” over a “short-range communication link such as a Bluetooth link” and transmits to the server “a merchant-information request signal that includes the merchant-media ID code” through a link provided by a “mobile network 44 and/or the Internet 48.”</p> <ul style="list-style-type: none"> • [0009] (“<u>The merchant-media arrangement has a merchant-media ID code and is adapted to communicate service initiation information, including the merchant-media ID code, to requesting devices over a short-range communication link. The user-communications device is adapted to receive the service initiation information, including at least the merchant-media ID code, and in response to receiving the service initiation information, is adapted to send a merchant-information-request signal that includes the merchant-media ID code.</u>”) • [0015] (“In response to <u>the user-communications device picking up a short-range ID code from the merchant-media arrangement,</u> merchant-information-request signal representative of the merchant-media ID code and <u>the user-communications device establishes a link with a remote source server and sends the ID signal (along with the user's ID code in some implementations) to the remote source server</u> where an electronic coupon is generated.”) • [0012]-[0014] (“...<u>the user-communications device may be, for example, a wireless telephone...</u>”) • [0037]-[0038] (“An <u>RFID tag 38 is co-located at the merchant-media arrangement</u> at the first location (e.g., attached to the merchant promotional |

| Claim Element | <u>Perttila in view of Insolia</u> |
|--|--|
| | <p>article 36), and is used to communicate a merchant ID code.... <i>As an alternative to using of the RFID tag 38, the merchant ID code can be communicated through an alternative short-range communication link such as a Bluetooth link...provided through a local short-range wireless access point or beacon device at said first location... After receiving the merchant ID code and the link information at the first location, the telephone 28a establishes the link 42 with the source server 24 through a mobile network 44 and/or the Internet 48 with the received link information, depicted at block 74 of FIG. 1b.”)</i></p> <p><i>See also Perttila ¶¶[0012], [0016], [0020], [0025], [0027], [0029]-[0030], [0054]-[0055].</i></p> <p><i>Williams ¶¶110-112.</i></p> |
| <p>[19.b] said server using identifier information to determine information concerning an entity or object located in proximity to the second wireless device; and</p> | <p>Perttila discloses said server using identifier information to determine information concerning an entity or object located in proximity to the second wireless device (e.g., “remote source server” generates “an electronic coupon” “in the form of an electronic data set corresponding to the merchant-media's ID code,” “electronic coupon that corresponds to the content promoted by the billboard”).</p> <p><u>E.g., Perttila:</u></p> <p>Perttila discloses that the remote source server uses the “merchant-media ID” to “associate the promotional information [on the merchant promotional article] with an e-coupon...linked to this particular location.” <i>E.g.</i>, Perttila ¶¶[0027]-[0029], [0037]. For example, Perttila discloses locating the merchant-media arrangement in “the store itself,” and promoting items therein. Perttila ¶[0039]. The server generates an electronic coupon “in the form of an electronic data set corresponding to the merchant-media's ID code.” Perttila ¶[0015].</p> |

| Claim Element | <u>Perttola in view of Insolia</u> |
|---------------|---|
| | <ul style="list-style-type: none"> <li data-bbox="587 317 1414 1119">• [0037] (“An RFID <i>tag 38</i> is co-located at the <u>merchant-media arrangement at the first location (e.g., attached to the merchant promotional article 36)</u>, and <u>is used to communicate a merchant ID code</u> (and, optionally, link information for connecting to the source server 24) to associate the merchant promotional article 36 with a particular coupon to be provided to the user 28. As an alternative to using of the RFID tag 38, <u>the merchant ID code can be communicated through an alternative short-range communication link such as a Bluetooth link</u>...provided through a local short-range wireless access point or beacon device <u>at said first location</u>. ... In any case, to receive the coupon information, the user physically visits the first location, and the mobile communications device receives <u>the merchant ID code which is ultimately received and processed by the source server 24</u> for generating the electronic coupon.”) <li data-bbox="587 1146 1414 1436">• [0039] (“...the <u>coupon offerings are provided to mobile users through tag or beacons located at the store itself</u>. This implementation could be useful and particularly advantageous in applications where the user might have many offerings and the mobile terminal is used to maintain the offerings until redemption.”) <li data-bbox="587 1463 1414 1793">• [0015] (“... <u>the user-communications device</u> establishes a link with a remote source server and <u>sends the ID signal</u> (along with the user's ID code in some implementations) <u>to the remote source server where an electronic coupon is generated</u>. <u>The electronic coupon is sent to the user in the form of an electronic data set corresponding to the merchant-media's ID code</u>.”) <li data-bbox="587 1820 1414 1896">• [0027]-[0028] (“[T]he remote processing arrangement to provide the user with electronic |

| Claim Element | <u>Perttila in view of Insolia</u> |
|---|--|
| | <p>commerce application, such as, a downloadable electronic coupon that corresponds to the content promoted by the billboard. <i>The merchant-media ID code is used to associate the promotional information with an e-coupon to be provided to the user visiting this billboard location</i>, which may be stationary or mobile (such as an advertising banner in a train or bus). In this manner, the <i>promotion information is linked to this particular location</i>, and the user visits and views the promotional information in order to receive the coupon offering.”)</p> <p>See also Perttila ¶[0029], Fig. 1b. Williams ¶¶113-114.</p> |
| <p>[19.c] the server delivering information to the first wireless device based at least in part upon the identifier information and information representing a reward for an entity associated with the first wireless device’s participation in a loyalty program, wherein said information includes a name associated with said entity or object located in proximity to the second</p> | <p>Perttila discloses the server delivering information to the first wireless device based at least in part upon the identifier information (e.g., “remote server ... generate[s] and return[s] an appropriate electronic commerce application, such as an electronic coupon by relying on the merchant ID code to identify the type of product conveyed by the merchant media arrangement” to the “user-communication device”; see Fig. 1b), wherein said information includes a name associated with said entity or object located in proximity to the second wireless device (e.g., “coupon-based information may or may not involve a pricing information for a particular manufacturer, product, service, event, etc.”, when a billboard “is promoting a food product,” the server delivers “a menu and/or recipe involving that particular food or food type”).</p> <p><u>E.g., Perttila:</u></p> <p>Perttila discloses the remote server provides the user-communications device with an “electronic commerce application, such as, an electronic coupon,” which corresponds to the received “merchant ID code” for the in-</p> |

| Claim Element | <u>Perttola in view of Insolia</u> |
|--|---|
| <p>wireless device or a name associated with said loyalty program as determined by the server utilizing said identifier information.</p> | <p>store merchant-media arrangement, and which can be “validated to facilitate merchant transactions” in an “electronic commerce arrangement.” <i>E.g.</i>, Perttila ¶¶[0015], [0033], [0028]. The e-coupon contains the name of a particular “manufacturer, product, service, event, etc.,” associated with the advertisement and/or product/service in the same store. <i>Id.</i> ¶[0025], [0039]. Examples of electronic coupon information include “a menu and/or recipe” involving a particular food being promoted by a billboard. <i>Id.</i>, ¶[0069]. A POSITA would have further understood that the coupon itself has the name of the store or company associated with the advertisement/company to inform the recipient where/how to redeem it. Williams ¶117.</p> <ul style="list-style-type: none"> • [0009] (“<i>An electronic commerce arrangement adapted to generate</i>, in response to receiving the merchant-information-request, <i>a service information data set</i> that corresponds to the merchant media-ID code.”) • [0025] (“Generally, the present invention is directed to use of local communication technology, to initiate electronic commerce, such as retrieval of coupon-based information from a remote source server where the <i>coupon-based information</i> may or may not <i>involve</i> a pricing information for a <i>particular manufacturer, product, service, event, etc.</i>”) • [0033] (“<i>The remote server can generate and return an appropriate electronic commerce application, such as an electronic coupon by relying on the merchant ID code to identify the type of product conveyed by the merchant-media arrangement.</i>”) • [0039] (“...the <i>coupon offerings are provided to mobile users through tag or beacons located at the store itself</i>. This implementation could be useful |

| Claim Element | <u>Perttola in view of Insolia</u> |
|---------------|---|
| | <p>and particularly advantageous in applications where the user might have many offerings and the mobile terminal is used to maintain the offerings until redemption.”)</p> <ul style="list-style-type: none"> • [0015] (“<u>The electronic coupon is sent to the user in the form of an electronic data set corresponding to the merchant-media’s ID code.</u>”) • [0028] (“<u>This electronic coupon can then be brought to a specific location where the coupon is validated to facilitate merchant transactions, e.g., discounts for the promoted merchant offerings.</u>”) • [0069] (“When the mobile computing arrangement 400 approaches a media arrangement (e.g., billboard) that is promoting a food product, the keypad 414 is used to recall this preferred type of food stored for the corresponding calendar day. The request to the remote server corresponds to a request for <u>receiving electronic coupon information including a menu and/or recipe involving that particular food or food type.</u>”) • [0020] (“FIG. 1b is a flow chart showing an example manner in which the system of FIG. 1a may be implemented, according to another aspect of the present invention;”) • Fig. 1b: |

| Claim Element | <u>Perttola in view of Insolia</u> |
|---------------|---|
| | <div data-bbox="716 310 1214 1318" data-label="Diagram"> <pre> graph TD 72[72: USER RECEIVES LINK INFORMATION VIA SHORT-RANGE COMMUNICATION] --> 74[74: USER ASSOCIATES LINK INFORMATION AND TRANSMITS TAG ID AND PERSONAL ID TO SOURCE SERVER; DOWNLOADS JAVA MIDLET INCLUDING E-COUPON] 74 --> 76[76: USER ACTIVATES THE JAVA MIDLET AND PROVIDES THE COUPON INFORMATION TO SHOP CLERK] 76 --> 78[78: SHOP CLERK (OR MOBILE TERMINAL) CONTACTS THE SOURCE SERVER FOR COUPON VALIDATION] 78 --> 80[80: SOURCE SERVER CHECKS/UPDATES DATABASE] 80 --> 82[82: COUPON IS VALIDATED AND THE OFFERING MAY BE REDEEMED] </pre> </div> <p data-bbox="889 1430 1019 1472" style="text-align: center;"><i>FIG. 1b</i></p> <p data-bbox="537 1501 1409 1627"><i>See also Perttola ¶¶[0010], [0015], [0025]-[0027], [0029], [0031], [0034]-[0040], [0042], [0044]-[0045], [0051]-[0053], [0056]-[0058].</i></p> <p data-bbox="537 1646 852 1688">Williams ¶¶115-117.</p> <p data-bbox="537 1707 1409 1869">Insolia discloses the server delivering information to the first wireless device based at least in part upon information representing a reward for an entity associated with the first wireless device's participation</p> |

| Claim Element | <u>Perttila in view of Insolia</u> |
|---------------|---|
| | <p>in a loyalty program (e.g., “a loyalty server” with a “loyalty module” that is “operable to provide a benefit to the user[’s]” personal terminal such as “a loyalty point, a monetary value, and a credit toward at least a portion of a product or service”) wherein said information includes ... a name associated with said loyalty program as determined by the server utilizing said identifier information (e.g., “encourage loyalty to a particular brand, company, or other entity...by rewarding a user for interacting with products and equipment associated with the brand, company, or entity”; “interaction terminal serves as a way in which to inform the consumer about the product”).</p> <p><u>E.g., Insolia:</u></p> <p>While Perttila discloses the server delivering promotional information through electronic coupons to a first wireless device coming into proximity with billboard, it does not disclose a loyalty program. Insolia discloses “a system for implementing a loyalty program” that includes “a personal terminal, an interaction terminal, and a loyalty module,” where “the personal terminal [] may include an RFID reader and the interaction terminal [] may include an RFID tag.” <i>E.g., Insolia</i>, Abstract, 9:39-41. The interaction terminal may “be associated with a promotional object” such as “a poster, an advertisement...or a display,” and the server provides loyalty rewards to a user’s personal terminal when it is “in proximity” with the promotional object. <i>Id.</i>, 2:21-23, 6:32-37, 9:16-18. The loyalty program “serves...to inform the consumer about [a] product,” including “that the product is in [a] company’s portfolio of products” and “encourage[s] loyalty to a particular brand, company, or other entity...by rewarding a user for interacting with products and equipment associated with the brand, company, or entity.” <i>Id.</i>, 5:38-43, 35:38-42. As discussed above in §IX.A.2, in implementing Perttila’s server, a</p> |

| Claim Element | <u>Perttila in view of Insolia</u> |
|---------------|---|
| | <p>POSITA would have been motivated to apply Insolia's teachings of a server providing loyalty points to a user's device when the device is in proximity to an advertisement or other merchant-media arrangement in implementing Perttila's server that provides an e-coupon based on the merchant-media ID, such that the e-coupon is given as an award for participation in a loyalty program, to advantageously provide an additional incentive to engage with the advertisement. Williams ¶120. Further, a POSITA would have understood that the name associated with the loyalty program—such as the company promoting a particular product—is included with the e-coupon to meet Insolia's stated goal of “inform[ing] the consumer about the product” and “that the product is in the company's portfolio of products,” and at minimum it would have been obvious to do so for the same reason. Williams ¶117, 119.</p> <ul style="list-style-type: none"> • Abstract (“A system for implementing a loyalty program includes <u>a personal terminal, an interaction terminal, and a loyalty module.</u>”) • 5:31-46 (“For example, an embodiment of the system may encourage loyalty to <u>a particular product</u> by rewarding a user for interacting with the product, equipment that provides the product or accepts payment for the product, or <u>objects promoting the product, such as advertisements and displays.</u> ... Furthermore, an embodiment of the system may encourage loyalty to <u>a particular brand, company, or other entity,</u> by rewarding a user for interacting with <u>products or equipment associated with the brand, company, or entity, or with objects promoting the brand, company, or entity.</u>”) • 5:47-53 (“Embodiments of a system, such as 10, also known as <u>a loyalty program management</u> |

| Claim Element | <u>Perttola in view of Insolia</u> |
|---------------|---|
| | <p><i>system, may include at least one personal terminal, such as 12, and at least one interaction terminal, such as 14. <u>The personal terminal may be associated with a user, such as 16...</u></i>)</p> <ul style="list-style-type: none"> • 6:32-37 (“<i>The interaction terminal 14 may also be associated with a promotional object 22. The promotional object 22 may be associated with a particular good or service, brand, company, or other entity...[F]or example, a poster, an advertisement, a kiosk, or a display.</i>”) • 35:37-42 (“Trademark loyalty first rewards the consumer and then presents the company's products to the consumer. In certain cases the consumer may not be aware that the product is in the company's portfolio of products and as such the interaction terminal serves as a way in which to inform the consumer about the product.”) • 5:53-63 (“When an interaction occurs between the user 16 and the product 18, equipment 20, or promotional object 22, <u>the personal terminal 12 and the interaction terminal 14 may communicate with each other.</u> In embodiments, for example, <u>the personal terminal 12 and the interaction terminal 14 may communicate via radio-frequency signals</u> or infrared signals.... A benefit may be provided to the user 16, such as a loyalty point that rewards the user 16 for interacting with the product 18 or the equipment 20.”) • 9:39-41 (“In cases in which <u>the signals 70 are radio-frequency signals,</u> the personal terminal 12 may include an RFID reader and the interaction terminal 14 may include an RFID tag.”) • 9:16-18 (“[T]he <u>signals 70 may be transmitted between the interfaces 30, 48 when the terminals 12, 14 are in proximity of each other.</u>”) |

| Claim Element | <u>Perttita in view of Insolia</u> |
|---|--|
| | <ul style="list-style-type: none"> • 8:44-57 (“The system 10 may also include a loyalty server 24. An example <u>loyalty server 24 may include</u> a user interface 58, a processor 60, a memory 62, and a database 64. The memory 62 may store <u>a loyalty management engine or module 66</u>.... The data base 64 may include <u>an account 68 associated with the user 16</u>. The account 68 may store information such as information identifying the user 16, a balance of the benefits, such as loyalty points, accrued by the user 16, a credit-card number of the user 16, a debit card number of the user 16, or a pre-paid cash balance supplied by the user 16, among others.”) • 2:21-23 (“The <u>loyalty module may be operable to provide a benefit to the user</u> in response to the communication.”) • 2:29-31 (“<u>The benefit may include at least one of the following: a loyalty point</u>, a monetary value, and a credit toward at least a portion of a product or a service.”) <p><i>See also Insolia</i>, 2:25-26, 2:32-35, 5:27-46, 5:65-6:8, 7:52-8:9, 8:28-43, 8:47-9:22.</p> <p>Williams ¶¶118-120.</p> |
| <p>[20] The method of claim 19, wherein said information delivered by said server to the first wireless device is further based upon a history of previous detections related to said</p> | <p>See [19].</p> <p>Insolia discloses that said information delivered by said server to the first wireless device is further based upon a history of previous detections related to said identifier information (e.g., “the loyalty reward is filtered to limit the accrual of loyalty rewards to a predefined rate,” “the consumer may obtain loyalty rewards from the interaction terminal at a rate that is no faster than the predefined rate”).</p> <p><u>E.g., Insolia:</u></p> |

| Claim Element | <u>Perttila in view of Insolia</u> |
|-------------------------|--|
| identifier information. | <p><i>See [19.c].</i></p> <p>In addition, Insolia discloses a server limiting the loyalty rewards given to a user’s “personal terminal” to a “predefined rate,” based on past interactions with the “interaction terminal” stored by the server and loyalty awards sent to the terminal, to “reduce[] repeated visits” to the same equipment “too frequently.” <i>E.g.</i>, Insolia, 11:10-30, 36:19-22. When a user has visited the interaction terminal too frequently, the loyalty award is suppressed and not sent. <i>Id.</i> As discussed above in §IX.A.2 and [19.c], a POSITA would have been motivated to apply Insolia’s teachings of limiting the number of loyalty rewards a server sends based on the user’s history of detections of an “interaction terminal” and awards sent to the terminal in implementing Perttila’s server, which provides an e-coupon (through an electronic commerce application) to a user’s device in proximity to a merchant-media arrangement, such that the user does not “visit[]...the same vending or host equipment too frequently.” Williams ¶123.</p> <ul style="list-style-type: none"> • 11:10-30 (“The loyalty management engine or module 66 stored in the memory 62 of <i>the loyalty server 24 may be configured to process the interaction</i>, and the processor 60 of the loyalty server 24 may execute the loyalty management engine or module <i>to determine and store the benefit</i>...[T]he loyalty management engine or module 66 may further process and filter the information to determine the benefit.”) • 13:18-34 (“The loyalty management engine or module 38 also <i>may vary or limit the benefit based on a pre-defined criteria</i>. The pre-defined criteria may be one or more of time, location, product, brand, frequency, quantity, price. For example, the user 16 may work in an office environment having a fountain machine that dispenses beverages for free. |

| Claim Element | <u>Perttola in view of Insolia</u> |
|--|---|
| | <p>The loyalty management engine or module 38 may limit the benefit that may be obtained by placing the personal terminal 12 in proximity of the fountain machine to, for example, one benefit per hour. As another example, the loyalty management engine or module 38 may limit the benefit that may be obtained by placing the personal terminal 12 in proximity of the product 18. <i>For example, the user 16 may receive the benefit the first time the personal terminal 12 is placed in proximity of the product 18, but not thereafter. Thus, the user 16 may be prevented from receiving benefits for repeatedly interacting with the same product 18, equipment 20, or promotional object 22.”)</i></p> <ul style="list-style-type: none"> • 36:10-12 (“The consumer demonstrates trademark loyalty by using the personal terminal to obtain loyalty rewards from a number of interaction terminals.”) • 36:19-26 (“In block 4106, the loyalty reward is filtered to limit the accrual of loyalty rewards to a predefined rate. Therefore, the consumer may obtain loyalty rewards from the interaction terminal at a rate that is no faster than the predefined rate. Such a predefined rate can be daily, although any rate is possible. Such a configuration <i>reduces repeated visits to the same vending or host equipment too frequently</i>. The method 4100 then moves to block 4108.”) <p><i>See also, Insolia, 36:8-16.</i></p> <p>Williams ¶¶121-123.</p> |
| <p>[21] The method of claim 19, wherein said information delivered by said server to the first</p> | <p><i>See [19].</i></p> <p>Insolia discloses that said information delivered by said server to the first wireless device is further based upon a history of previous information delivered to said first wireless device representing a reward or electronic</p> |

| Claim Element | <u>Perttila in view of Insolia</u> |
|--|---|
| <p>wireless device is further based upon a history of previous information delivered to said first wireless device representing a reward or electronic coupon.</p> | <p>coupon (e.g., “the loyalty reward is filtered to limit the accrual of loyalty rewards to a predefined rate,” “the consumer may obtain loyalty rewards from the interaction terminal at a rate that is no faster than the predefined rate”).</p> <p><u>E.g., Insolia:</u> See [19.c], [20].</p> <p>In addition, Insolia discloses that the “accrual of loyalty awards” is reflected in the user’s “accrued loyalty reward balance,” which is based on a record of loyalty awards previously provided to the user. <i>E.g.</i>, Insolia, 36:34-38, 36:53-60. Insolia discloses that “[l]oyalty rewards can be accrued” by a user, such that the user “may redeem the loyalty rewards” for products and services “when a suitable balance has accrued.” <i>Id.</i>, 35:19-21. As discussed in Section IX.A.2, a POSITA would have been motivated to apply Insolia’s known implementation detail teachings of limiting the award of loyalty points provided to a user based on the user’s accrual of loyalty rewards in implementing Perttila’s promotional e-coupon system, such that the e-coupon and loyalty point awards are limited to a rate based on a history of previous loyalty awards awarded to the user’s device. A POSITA would have understood that such an arrangement advantageously limits the value of “products of services” that can be redeemed using loyalty points. <i>Id.</i>, 35:21-22, 36:56-60. Williams ¶126.</p> <ul style="list-style-type: none"> • 35:19-22 (“<u>Loyalty rewards can be accrued, and when a suitable balance has accrued, the consumer may redeem the loyalty rewards.</u> The loyalty rewards can be redeemed online for products and services.”) • 36:34-38 (“For example, <u>the consumer can trade at least a portion of the accrued loyalty reward balance for products or services online, or for</u>” |

| Claim Element | <u>Perttita in view of Insolia</u> |
|--|---|
| | <p><i>products or services available from the vending or host equipment</i>, in cases in which the vending or host equipment is operationally related to the interaction terminal.”)</p> <ul style="list-style-type: none"> • 36:53-60 (“The loyalty reward can be added to an accrued loyalty reward balance, and when an appropriate balance has been earned, the consumer can be allowed to redeem the rewards. <i>The loyalty rewards can be redeemed online for products or services, or the loyalty rewards can be redeemed at the vending or host equipment</i>, if the interaction terminal is operationally related to the vending or host equipment.”) <p>Williams ¶¶124-126.</p> |
| <p>[22] The method of claim 19 wherein said first server is prevented from delivering information representing a reward or electronic coupon to the first wireless device based upon a history of previous information delivered to said first wireless device representing a reward or electronic coupon.</p> | <p>See [19].</p> <p>Insolia discloses that said first server is prevented from delivering information representing a reward or electronic coupon to the first wireless device based upon a history of previous information delivered to said first wireless device representing a reward or electronic coupon (e.g., “the loyalty reward is filtered to limit the accrual of loyalty rewards to a predefined rate,” “the consumer may obtain loyalty rewards from the interaction terminal at a rate that is no faster than the predefined rate”).</p> <p><u>E.g., Insolia:</u></p> <p>See [19.c], [20]-[21].</p> <p>Williams ¶¶127-128.</p> |
| <p>[23] The method of claim 19 wherein said information</p> | <p>See [19].</p> <p>Insolia discloses that said information delivered by said server to the first wireless device is additionally based</p> |

| Claim Element | <u>Perttila in view of Insolia</u> |
|--|---|
| <p>delivered by said server to the first wireless device is additionally based on a history of past purchasing behavior associated with an account associated with either the first wireless device or the identifier information.</p> | <p>on a history of past purchasing behavior associated with an account associated with either the first wireless device or the identifier information (e.g., “additional loyalty rewards or promotional rewards can be given to the consumer when the consumer demonstrates product loyalty”).</p> <p><u>E.g., Insolia:</u></p> <p><u>See [19.c].</u></p> <p>In addition, Insolia discloses varying the loyalty and promotional awards delivered to a user’s “personal terminal” based on whether that consumer demonstrated “product loyalty” by “choos[ing] to purchase some of the products.” <i>E.g.</i>, <i>Insolia</i>, 35:31-36, 35:60-36:7. As discussed above in §IX.A.2, a POSITA would have been motivated to apply Insolia’s teachings of varying the loyalty reward provided to a user based on a history of past purchasing behavior in implementing Perttila’s server, which provides promotional information to a user’s device based on its proximity to a merchant-media arrangement, such that the merchant can “breed[] consumer loyalty.” <i>E.g.</i>, <i>Insolia</i>, 2:1-3; Williams ¶131.</p> <ul style="list-style-type: none"> • 12:45-56 (“The loyalty management engine or module 38 also may <i>vary or limit the benefit depending on the nature of the interaction</i> of the user 16 with the product 18, equipment 20, or promotional object 22. For example, the <i>loyalty management engine or module 38 may set a relatively more valuable benefit when the loyalty management engine or module 38 can confirm that the user 16 actually purchased or received a product from the equipment 20</i>, and the loyalty management engine or module 38 may set a relatively less valuable benefit when the loyalty management engine or module 38 cannot confirm |

| Claim Element | <u>Perttila in view of Insolita</u> |
|---------------|--|
| | <p>that the user 16 purchased or received a product from the equipment 20.”)</p> <ul style="list-style-type: none"> • 35:31-36 (“The consumer may recognize the interaction terminal and may be drawn to it to obtain a loyalty reward, demonstrating trademark loyalty. Once there, the consumer may discover the products that the entity is selling and <u>in a demonstration of product loyalty may choose to purchase some of the products.</u>”) • 35:60-36:2 (“Furthermore, <u>additional loyalty rewards or promotional awards can be given to the consumer when the consumer demonstrates trademark loyalty and product loyalty.</u> For example, when a consumer acquires a loyalty reward from an interaction terminal without making a purchase, the consumer demonstrates trademark loyalty. <u>When the consumer purchases a product, the consumer demonstrates product loyalty.</u> When the consumer demonstrates both trademark loyalty and product loyalty, <u>the consumer may receive an additional reward.</u>”) <p><i>See also Insolita</i>, 36:27-32. <i>Williams ¶¶129-131.</i></p> |

B. Ground 2: Perttila in view of Davis Renders Obvious Claims 25-26 and 28-29

1. Overview of Davis and Motivation to Apply Its Teachings to Perttila

Davis teaches a “trust network rating system” that provides users with personalized service information, such as “advertisement[s] and coupon[s],” for products and services based on an “Effective Rating” that represents feedback

ratings by others in the users' trust network. *E.g.*, Davis Abstract, ¶¶[0013], [0019]; Williams ¶97. The user "sets up a trust network," and an "Effective Rating (ER) for a given advertised item or service" is calculated based on "[r]atings made by the other users" and their level of "contextual trust" within the user's trust network. *Id.*, Abstract, ¶¶[0038], [0040]; Williams ¶98. Offerings to the user are then filtered "according to the effective rating of the advertisements" so that the user receives content "only from those vendors who have met [ER] thresholds." *Id.*, Abstract, ¶[0019]; Williams ¶99. "This ensures that the user receives only pertinent and interesting advertisements so that the user is more likely to respond positively to the advertisements." *Id.*, Abstract. "For example, instead of a non-drinker being delivered beer advertisements the non-drinker might get an advertisement and coupon for a book that their trust network recommends highly." *Id.*, ¶[0013]; Williams ¶100.

While **Perttila** teaches using information about a user "in order to provide more personalized offering[s] to the user" in the delivery of promotional electronic coupons, **Davis** teaches additional implementation details for how to better target advertisements and coupons for a user to "ensure[] that the user receives only pertinent and interesting advertisements" by using feedback ratings provided by that user's trusted network. Perttila ¶[0031]; Davis Abstract. A POSITA would have been motivated, and would have found it advantageous, to apply these known

teachings in implementing **Perttila**'s promotional e-coupon system. Williams ¶101. Like **Perttila**, **Davis** is in the same field and is analogous art to the '592—all are in the same field related to providing advertising and coupon offerings to a user in an electronic commerce application. *E.g.*, **Perttila** Abstract, ¶[0027]; **Davis**, Abstract, ¶¶[0004], [0006]-[0007]; '592, 7:39-53, 14:47-60; Williams ¶102. Moreover, the '592's objective of “deliver[ing]...content customized to the recipient” was already well-known to a POSITA and implemented in the prior art. *E.g.*, '592, 4:10-13; **Davis** ¶[0011]; Williams ¶102. For example, **Perttila** discloses “provid[ing] more personalized offering to the user[s].” *E.g.*, **Perttila** ¶[0031]. **Davis**'s system addresses this objective by “target[ing]” offerings “to viewers most likely to use the advertised item or service based upon their trust network recommendations.” *E.g.*, **Davis** ¶[0012].

A POSITA would have recognized that **Davis**'s teachings of using feedback ratings by a user's trust network would have advantageously improved **Perttila**'s promotional e-coupon system by “ensur[ing] that the user receives only pertinent and interesting advertisements so that the user is more likely to respond positively to the advertisements.” *Id.*, Abstract; Williams ¶101. Indeed, a POSITA would have recognized that **Davis**'s teachings provide known implementation details for **Perttila**'s “personalized offering[s].” **Perttila** ¶[0031]; Williams ¶101.

In light of the foregoing, a POSITA would have found it obvious and straightforward to apply **Davis**'s teachings for utilizing feedback ratings in implementing **Perttila**'s e-coupon system, and would have known that such a combination (yielding the claimed limitations) would predictably work and provide the expected functionality. Williams ¶103.

2. Claim Chart—Perttila in view of Davis

| Claim Element | <u>Perttila in view of Davis</u> |
|--|--|
| <p>[25.pre] A method for a server to exchange information between a first wireless device and a second wireless device, comprising the steps of:</p> | <p>Perttila discloses a server (e.g., “server”) to exchange information (e.g., communicate “service information” to a wireless “user communications device” “in response to electronic communications between [the] user communications device and a merchant-media arrangement”) between a first wireless device (e.g. wireless “user-communications device”) and a second wireless device (e.g., “merchant-media arrangement”).</p> <p><u>E.g., Perttila:</u></p> <p><i>See [19.pre].</i></p> <p>In addition, Perttila discloses that the remote server provides the mobile communications device with an “electronic commerce application,” “such as, a[n]...electronic coupon that corresponds to the content promoted by the billboard” merchant media arrangement. <i>E.g., Perttila ¶[0027].</i> As discussed in [19.pre], Perttila discloses exchanging information between a merchant media arrangement and a mobile communications device.</p> <ul style="list-style-type: none"> • [0026] (“According to one embodiment of the present invention, with a mobile communications device in hand, the user approaches <i>a merchant-media arrangement including a billboard</i> or any other information providing source....”) |

| Claim Element | <u>Perttila in view of Davis</u> |
|---|---|
| | <ul style="list-style-type: none"> • [0027] (“The mobile communications device, in turn, establishes a link with the remote processing arrangement to <i>provide the user with</i> electronic commerce application, such as, <i>a downloadable electronic coupon that corresponds to the content promoted by the billboard.</i>”) <p><i>See also Perttila ¶¶[0011]-[0015], [0025]-[0027], [0037], [0041], [0060].</i></p> <p>Williams ¶¶135-137.</p> |
| [25.a] the server receiving identifier information from said first wireless device using a wide area wireless network, the identifier information provided to the first wireless device from the second wireless device using short range wireless communication; | <p>See [19.a].</p> <p>Williams ¶¶138-139.</p> |
| [25.b] said server using the identifier information to determine a name of an entity or object located in proximity to the second wireless device; and | <p>Perttila discloses said server using the identifier information to determine a name of an entity or object located in proximity to the second wireless device (e.g., “remote source server” generates “an electronic coupon” “in the form of an electronic data set corresponding to the merchant-media's ID code,” “electronic coupon that corresponds to the content promoted by the billboard,” “coupon-based information may or may not involve a pricing information for a particular manufacturer, product, service, event, etc.”, when a billboard “is promoting a</p> |

| Claim Element | <u>Perttila in view of Davis</u> |
|--|--|
| | <p>food product,” the server delivers “a menu and/or recipe involving that particular food or food type”).</p> <p>See [19.b]-[19.c].</p> <p>As discussed in [19.b]-[19.c], the merchant-media ID is used to determine information, including a name of the product being promoted as well as its manufacturer, associated with the merchant-arrangement that is subsequently sent to the user communication device.</p> <p>Williams ¶¶140-141.</p> |
| <p>[25.c] the server delivering information to the first wireless device based at least in part upon the identifier information and feedback ratings of past experiences related to the entity or object located in proximity to the second wireless device, wherein said information includes the name as determined by the server utilizing said identifier information.</p> | <p>Perttila discloses the server delivering information to the first wireless device based at least in part upon the identifier information (e.g., “remote server ... generate[s] and return[s] an appropriate electronic commerce application, such as an electronic coupon by relying on the merchant ID code to identify the type of product conveyed by the merchant media arrangement” to the “user communication device”; see Fig. 1b), wherein said information includes the name as determined by the server utilizing said identifier information (e.g., “coupon-based information may or may not involve a pricing information for a particular manufacturer, product, service, event, etc.”, when a billboard “is promoting a food product,” the server delivers “a menu and/or recipe involving that particular food or food type”).</p> <p>See [19.c].</p> <p>Davis discloses delivering information based at least in part upon feedback ratings of past experiences related to the entity or object located in proximity to the second wireless device (e.g., “The user receives advertisements only from those vendors who have met the thresholds based on the...ratings”).</p> <p><u>E.g., Davis:</u></p> |

| Claim Element | <u>Perttila in view of Davis</u> |
|---------------|--|
| | <p>While Perttila discloses “personalizing” e-coupons delivered to a user, Davis discloses the additional implementation detail of “filter[ing], target[ing], and/or weight[ing]” “advertisement[s] and coupon[s]” delivered to a user based on an “Effective Rating (ER)” that represents an “aggregation of ratings” by other trusted users familiar with the “advertised item or service.” <i>E.g.</i>, Davis ¶¶[0013], [0019], [0038]. As discussed in §IX.B.1, a POSITA would have been motivated to apply Davis’s known implementation detail teachings of personalizing e-coupons based on ratings of other user’s past experiences with the advertised item or service in implementing Perttila’s “personaliz[ed]” e-coupons that correspond to information related to content promoted by the merchant media arrangement. Williams ¶147.</p> <ul style="list-style-type: none"> • Abstract (“A user of an online system sets up a trust network by indicating criteria whereby the user trusts other users. <u>Ratings made by the other users of goods or services are evaluated</u> according to the particular trust network the user has set up. <u>The user receives advertisements only from those vendors who have met thresholds based on the evaluated ratings.</u>”) • [0004] (“This application is related to...a system of advertising which uses an online trust network to <u>target advertisements based upon the ratings of the advertisements content or source according to the user's trust network.</u>”) • [0038] (“Some <u>form of normalization and aggregation of ratings would be used</u> by most embodiments of this inventive system <u>to arrive at an Effective Rating (ER) for a given advertised item or service</u> for a particular user.”) • [0019] (“In the present system <u>advertisements are filtered, targeted, and/or weighted according to the</u> |

| Claim Element | <u>Perttila in view of Davis</u> |
|---------------|---|
| | <p><i>effective rating of the advertisements'</i> content, style or source by the viewer's trust network across any number of degrees of separation of trust.”)</p> <ul style="list-style-type: none"> • [0040] (“FIG. 6 outlines the steps involved in one embodiment of this trust network advertising system.... In a first step <i>a user U1 indicates his level of contextual trust for users U2 and U3</i>. In a second step <i>users U2 and U3 rate two restaurants R1 and R2</i> which user U1 has yet not rated (i.e., has not yet tried).... In a third step <i>advertisements for restaurants with an effective trust network rating for the user U1 are served to the user U1</i>. In this example, <i>the effective rating for one restaurant R2 is below the threshold effective rating value of 7, so the user U1 is not shown advertisements for that restaurant</i>. For simplicity the advertisement in the third step is show as coming directly from the restaurant.... The point is that the user will receive an advertisement from a restaurant he is not familiar with and yet is very likely to try and to appreciate. <i>The user obtains great value by seeing only advertisements for places he is likely to approve of</i>. The advertise obtains great value because its advertisements go to new customers who are likely to become repeat customers. Many other advertisement systems send advertisements to the wrong parties—consumers who are not at all interested or consumers who are already customers—rather like preaching to the choir.”) • [0041] (“It is likely that advertisements sent under such a system will be “branded” (<i>name</i>, logo, etc.) so that the consumer recognizes the potential value of certain advertisements as compared to the regular mass of unread junk mail.”) • [0013]-[0014] (“This system can provide viewers with advertising for items and services they find |

| Claim Element | <u>Perttila in view of Davis</u> |
|--|--|
| | <p>more valuable. For example, <i>instead of a non-drinker being delivered beer advertisements the non-drinker might get an advertisement and coupon for a book that their trust network recommends highly</i>. This system can help provide advertising for safer ‘trust network approved’ products and services.”)</p> <p><i>See also, Davis ¶¶[0024], [0035], [0037], Claim 7. Williams ¶¶142-147.</i></p> |
| <p>[26] The method of claim 25 wherein said server provides coupons to the first wireless device or said second wireless device.</p> | <p><i>See [25].</i></p> <p>Perttila discloses that said server provides coupons to the first wireless device (e.g., “remote server ... generate[s] and return[s] an appropriate electronic commerce application, such as an electronic coupon” to the “user-communication device”).</p> <p><i>See [25.c]. Williams ¶¶148-149.</i></p> |
| <p>[28] The method of claim 25 wherein the first wireless device is mobile and the second wireless device is not mobile.</p> | <p><i>See [25].</i></p> <p>Perttila discloses that the first wireless device is mobile (e.g., “mobile communications device”) and the second wireless device is not mobile (e.g., “stationary” “merchant-media arrangement”).</p> <p><u><i>E.g., Perttila:</i></u></p> <p><i>See [19.pre].</i></p> <p>In addition, Perttila discloses that the merchant-media arrangement is a “billboard...which may be stationary.”</p> <ul style="list-style-type: none"> • [0026] (“According to one embodiment of the present invention, with <i>a mobile communications device in hand</i>, the user approaches <i>a merchant-media arrangement including a billboard</i> or any other information providing source, which is directed to provide some general information of |

| Claim Element | <u>Perttila in view of Davis</u> |
|--|--|
| | <p>available services offered by the merchant-media arrangement.”)</p> <ul style="list-style-type: none"> • [0028] (“The merchant-media ID code is used to associate the promotional information with an e-coupon to be provided to the user visiting <i>this billboard location, which may be stationary or mobile.</i>”) <p>Williams ¶¶150-152.</p> |
| <p>[29] The method of claim 25 wherein the short range wireless communication has a range substantially equivalent to radio frequency identification (RFID).</p> | <p><i>See</i> [25].</p> <p>Perttila discloses that the short range wireless communication has a range substantially equivalent to radio frequency identification (RFID) (e.g., “the merchant ID code is transmitted by the merchant-media arrangement” “when the tag is within sufficient range of the RFID reader”).</p> <p><u>E.g., Perttila:</u></p> <p><i>See</i> [19.a].</p> <p>In addition, Perttila discloses that the “merchant ID code is transmitted” from the RFID tag of “the merchant-media ID” when it is “within sufficient range of the RFID reader” of the “user’s mobile communications device.”</p> <ul style="list-style-type: none"> • [0009] (“<i>The merchant-media arrangement</i> has a merchant-media ID code and is adapted to <i>communicate</i> service initiation information, including <i>the merchant-media ID code, to requesting devices over a short-range communication link.</i>”) • [0030] (“In one particular example embodiment, a merchant-media arrangement is equipped with an electromagnetic and/or electrostatic coupling device for use in the radio frequency (RF) portion of the electromagnetic spectrum, using radio frequency identification (RFID). The user's mobile |

| Claim Element | <u>Perttila in view of Davis</u> |
|---------------|---|
| | <p>communications device is equipped with an RFID reader adapted to emit RF activation waves, and transponders or 'tags' brought within the range of the RFID reader are activated by the RF activation. When activated, the tags transmit information to the RFID reader. For instance, <u>when the tag is within sufficient range of the RFID reader to enable communications therebetween, the merchant ID code is transmitted by the merchant-media arrangement</u>, optionally along with the server link information, from the tag to the RFID reader.”)</p> <p>See also, Perttila ¶¶[0025], [0060], [0072]. Williams ¶¶153-155.</p> |

X. SECONDARY CONSIDERATIONS

There is no evidence in the prosecution history of this or any related application that any arguments regarding secondary considerations exist, let alone that any such evidence could overcome the strong showing of obviousness above or that there is a sufficient nexus to any of the Challenged Claims. *See generally*, Ex. 1002; *see also* Williams ¶156. Indeed, as demonstrated by the prior art referenced herein, any purported problems, solutions or unexpected results in the '592 were already well known. Williams ¶156. For example, the alleged needs in the specification do not have a nexus to the claims, which do not require, e.g., a “third trusted party,” a “convenient, electronically secure, personally secure and anonymous method,” “cross validat[ing] the identities of the individuals,” or use “indoors.” '592, 2:5-12. Nevertheless, to the extent PO argues that any of the claims

satisfy unmet needs, the prior art already met these alleged needs for the reasons discussed in §IX. Williams ¶156. To the extent PO asserts the existence of any secondary considerations in its responses, Petitioner reserves the right to address any such evidence.

XI. CONCLUSION

Substantial, new, and noncumulative technical teachings have been presented for the Challenged Claims of the '592, which are rendered obvious for the reasons set forth above. Williams ¶¶157-159. There is a reasonable likelihood that Petitioner will prevail as to each of those claims. *Inter Partes* review of claims 19-23, 25-26, and 28-29 is accordingly requested.

Dated: May 15, 2020

/James L. Davis, Jr./
James L. Davis, Jr.

CERTIFICATE OF COMPLIANCE

Pursuant to 37 CFR §42.24(a) and (d), the undersigned hereby certifies that this Petition for Inter Partes Review complies with the type-volume limitation of 37 CFR §42.24(a)(i) because, exclusive of the exempted portions, it contains 12,083 words as counted by the word processing program used to prepare the paper.

Dated: May 15, 2020

/James L. Davis, Jr./

James L. Davis, Jr.

CERTIFICATE OF SERVICE

The undersigned certifies service pursuant to 37 C.F.R. §§ 42.6(e) and 42.105(b) on the Patent Owner by FedEx of a copy of this Petition for *Inter Partes* Review and supporting materials at the correspondence address of record for the '592 patent:

VLP Law Group LLP
555 Bryant Street, Suite 820
Palo Alto, CA 94301

Courtesy copies of the same documents were also served at the following email addresses of record for Proxicom's litigation counsel for the subject patent in the district court litigation at the U.S. District Court for the Middle District of Florida, Case No. 6:19-cv-01886-RBD-LRH:

KING, BLACKWELL, ZEHNDER & WERMUTH, P.A.
Taylor F. Ford - tford@kbzwlaw.com
Dustin Mauser-Claassen - dmauser@kbzwlaw.com

BUNSOW DE MORY LL
Denise M. De Mory - ddemory@bdiplaw.com
Chris J. Coulson - ccoulson@bdiplaw.com

Dated: May 15, 2020

/James L. Davis, Jr./
James L. Davis, Jr.