

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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**TARGET CORPORATION,**

Petitioner,

v.

**PROXICOM WIRELESS, LLC,**

Patent Owner.

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Case IPR2020-00932

U.S. Patent No. 8,090,359

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**PETITION FOR *INTER PARTES* REVIEW**

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Ex. 1030	Petitioner's Ranking and Explanation of Multiple Petitions

Pursuant to §§311-319 and §42,<sup>1</sup> Target Corporation (“Petitioner”) petitions for *inter partes* review (“IPR”) of claims 9, 22, 28, 35, 38-41 and 51 (“Challenged Claims”) of U.S. Patent 8,090,359 (“’359”) (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 §102 and/or §103.

## I. INTRODUCTION

The ’359’s purported invention is the use of a “central server” to “broker the exchange of information between” two entities associated with two wireless devices. ’359, 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.*; Williams ¶39.

The ’359 admits that, prior to the alleged invention, wireless devices already were configured to use both the short-range and wide-area connections claimed in

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<sup>1</sup> 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 '359. *Id.*, 2:11-23 (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 '359 also admits that prior art systems already were using wireless devices for e-commerce applications. *Id.*, 1:55-60; 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 '359 Challenged Claims are the specific recitations of what “information” is returned to a first wireless device from the server. For example, independent claims 1 and 14 (from which the challenged claims depend) require the “information” to be related to *any one* or more of: (1) “feedback ratings relevant to an entity associated with” either of the device identifiers; (2) “information representing a reward” for “participation in a loyalty program”; or (3) “a current step in a multiple step” electronic commerce transaction. Challenged Claims 9, 22 and 51 further specify steps performed by the server in facilitating a purchase of goods or services from a merchant associated with a 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. And it was well known to use such an arrangement of wireless devices and a server to facilitate the purchase of goods. 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]. Thus, as further explained below, **Perttila** anticipates and, at minimum, renders obvious claims 9, 22 and 51.

As to claims 28, 35, and 38-41, **Swartz** discloses known implementation details for implementing electronic commerce transactions that render these claims obvious when **Swartz**'s teachings are applied in implementing **Perttila**. Likewise, as to claims 9 and 22, to the extent it is argued that further disclosure is required beyond **Perttila**, **Swartz**'s electronic commerce teachings further render obvious those claims when applied to **Perttila**. **Swartz** discloses a system for "consumer interactive shopping and marketing" that may be implemented "within a shopping establishment," or remotely, "at a user's home." *E.g.*, **Swartz**, Abstract. The customer employs a "portable terminal," such as a "cell phone," "in communication with a central host" computer. *Id.*, 2:57-58, 5:1-11, 6:11-14, 20:18-23. This host has access to "databases that store information about customers and products" and upon receiving product data from the customer's portable terminal, "the host performs most of the computing functions" to facilitate the transaction between the customer and merchant. *Id.*, 5:12-23, 12:22-33. Thus, as further explained below, **Perttila** in view of **Swartz** renders obvious claims 9, 22, 28, 35, and 38-41.

Thus, and as explained further below, the prior art anticipates and, at minimum, renders obvious the Challenged Claims. At best, the claims of the '359 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 were anticipated by **Perttila** and, at best, 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**, **Swartz**, or any other reference providing analogous disclosures during prosecution of the '359. 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 '359, and the purported invention is anticipated by the prior art and at most no more than an obvious combination of prior art elements combined according to known methods to yield predictable results. 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 '359 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).

Petitioner is challenging the '359 in two petitions due to the length and differences of the claims challenged, and provides a further explanation of these parallel petitions in Ex. 1030:

<b>Patent No.</b>	<b>Challenged Claims</b>
IPR2020-00931	1-5, 14-18, 27, 31, 36-37, 42-43, 48-49, and 52-55
This Petition	9, 22, 28, 35, 38-41, 51

The following table lists matters regarding related patents:

<b>Patent No.</b>	<b>IPR</b>
9,038,129	IPR2020-00903
7,936,736	IPR2020-00904
8,374,592	IPR2020-00933

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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. 001008-0037-651.

#### IV. REQUIREMENTS FOR INTER PARTES REVIEW

##### A. Grounds for Standing

Pursuant to §42.104(a), Petitioner certifies that the '359 is available for IPR. Petitioner is not barred or estopped from requesting IPR challenging the claims of the '359 on the grounds identified herein.

##### B. Identification of Challenge

Pursuant to §§42.104(b), Petitioner requests IPR of claims 9, 22, 28, 35, 38-41 and 51 of the '359, and that the Board cancel the same as unpatentable. The '359 matured from U.S. Application 12/364,828 (filed 02/03/2009), and claims priority to U.S. Provisional Application 61/095,359 (filed 9/9/2008), and U.S. Provisional Application 61/095,001 (filed 9/8/2008).<sup>2</sup> Williams ¶¶78-79.

##### 1. The Specific Art on Which the Challenge is Based

Petitioner relies upon the following prior art:

<b>Name</b>	<b>Exhibit</b>	<b>Patent Publication</b>	<b>/</b>	<b>Filed</b>	<b>Issued /</b>	<b>Published</b>	<b>Prior art under at least</b>
<b>Perttila</b>	1006	U.S. 2004/0243519		6/2/2003		12/2/2004	§102(b)
<b>Swartz</b>	1007	U.S. 6,837,436		11/21/2001		1/4/2005	§102(b)

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<sup>2</sup> Petitioner takes no position as to the propriety of the priority claims since the art presented herein predates the earliest possible filing of the '359. Petitioner reserves the right to challenge these priority claims.

These references were not cited in an Information Disclosure Statement (“IDS”) or otherwise identified by the Examiner, or applied in a rejection of the claims during prosecution of the ’359. 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 10/0/2019, 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 ’359; PO served its infringement contentions on

02/10/2020 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 anticipated, and at minimum 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	§102	9, 22, 51
2		§103	9, 22, 51
3	Perttila in view of Swartz	§103	9, 22, 28, 35, 38-41

## 3. How the Challenged Claims Are Unpatentable

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

## V. THE '359 PATENT

The '359 describes techniques for using a server to broker the exchange of information between wireless devices. '359, Abstract. The background section of

the '359 concedes that wireless devices, such as mobile phones, already had access to both a "wide area" cellular connection, and local "Bluetooth" connections that permit "peer to peer" communications. '359, 1:26-37, 2:24-35. The '359 combines these two well-known communication methods, describing methods for exchanging of information using "both a short range and a long range wireless capability." '359, 2:53-57. Williams ¶¶60-61.

The '359'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 '359 shows that "a central server 100 is connected to devices 106 and 108" through a combination of the Internet, and a "cellular network 102." '359, 5:44-53. The devices are also able to communicate directly with each other via "a short range wireless link 107 such as a Bluetooth." '359, 6:33-37.

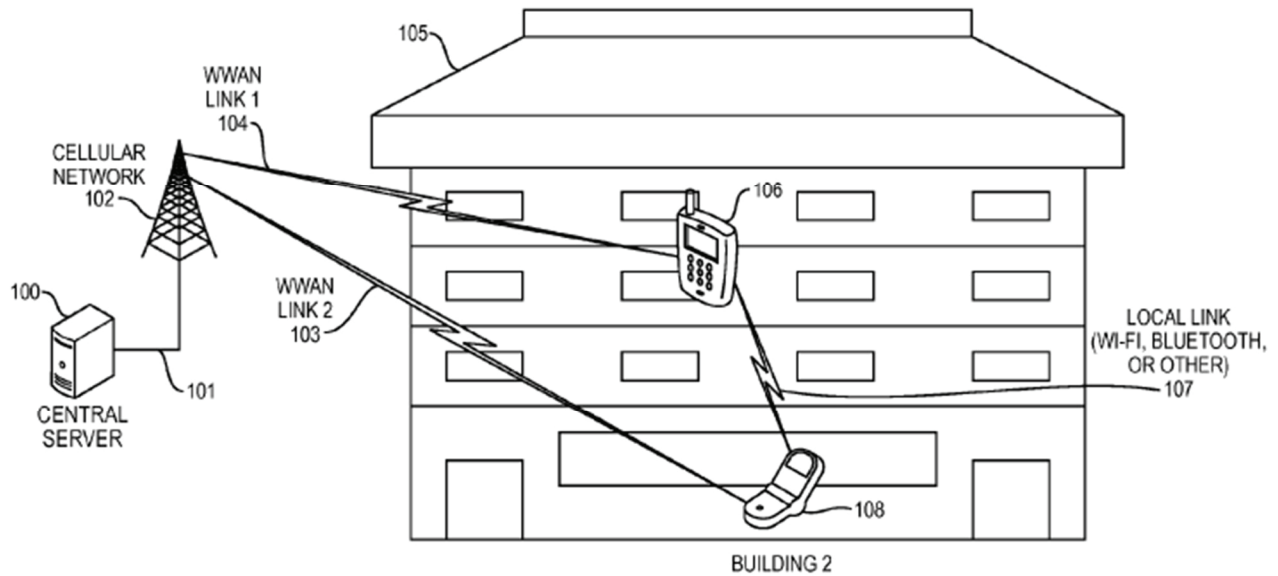


Figure 1

'359 Fig. 1. Williams ¶¶62-63.

Rather than the two devices exchanging information directly, the '359 uses a server to broker the information exchange. The '359 states that a first wireless device performs an identifier search and detects a device identifier from a second wireless device. *E.g.*, '359, 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.” '359, 11:34-39, 14:48-60, 17:26-34. Examples of such information include “an electronic coupon available for download” based on the user’s proximity to a broadcast device, and a “list of items for sale from the merchant” associated with a second device identifier. '359, 14:41-60, 17:55-18:5. The '359 further

discloses that the server is operable to facilitate transactions between the wireless devices. *E.g.*, '359, 3:40-54. According to the '359, this arrangement allows the server to be used in “electronic commerce applications” and to “facilitate the purchas[e] of goods or services” between the merchant and customer. *E.g.*, 17:35-18:5. Williams ¶¶64-66.

## **VI. PROSECUTION HISTORY**

U.S. Patent Application 12/364,828, which matured into the '359, was filed 02/03/2009. The originally filed claims were generally directed to using “a central server to exchange information between one or more wireless devices” by “receiving identifier information...collected by a first wireless device from a second wireless device,” storing the “identifier information,” and delivering “information or a service to the first wireless device.” '359 FH (Ex. 1002), 55-59; Williams ¶¶67-68.

The Examiner twice rejected pending independent claims 1 and 14 as anticipated by U.S. Patent No. 7,213,742 (“Birch”). *Id.*, 119-123, 165-175. The Applicant cancelled pending independent claims 1 and 14 and added new independent claims 27-58 (issued claims 1, 27-56, and 14, respectively) in a Request for Continued Examination filed on 12/22/2010, following an interview conducted on 11/3/2010. *Id.*, 192-194, 200-213. The new independent claims incorporate an “arrangement where the central server collects device identifier information from a second wireless device via a first wireless device, and then...takes further action to

deliver information or a service to the first wireless device based at least in part on that second device identifier.” *Id.*, 214-215. The Examiner issued a Notice of Allowance on 7/1/2011 allowing all pending claims and stating the newly added limitation “in combination with the remaining limitations recited in the claims” is “nowhere disclose[d]” in the reviewed prior art. *Id.*, 238-240. The ’359 patent issued 1/12/2012. Williams ¶¶69-70.

## **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, “local [area/wireless] link”), the prior art relied on herein discloses the ’359’s examples of those terms as shown in §IX below. *See e.g.*, ’359 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)”), 5:61-64 (“[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...”), 19:46-48 (“a local, or personal area network wireless protocol such as ... Bluetooth”). Williams ¶¶71-76.

Likewise, regardless of whether a server can “exchange information between” *just* “one” wireless device, the prior art relied on herein discloses the exchange of information between at least two wireless device as shown in §IX. Williams ¶77.

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 '359 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 [wireless] device; and (4) delivering information or a service to the first wireless device relating to the received identifier and one or more of “feedback ratings relevant to an entity associated with either the first wireless device or the second device[,]...information representing a reward for an entity associated with the first device’s participation in a loyalty program[, or]...a current step in a multiple step process for an ongoing electronic commerce transaction.” The claimed features are anticipated and, at minimum, obvious in view of the prior art, as explained below. Williams ¶¶80-81, 109.

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 all the claimed features of independent claims 1 and 14 from which the Challenged Claims depend, 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, and (ii) returning “an appropriate electronic commerce application” to the user’s device based on the received device identifier[s] and an ongoing electronic commerce transaction. **Perttila** also describes the additional limitations recited in the challenged dependent claims 9 and 22 (relating to facilitating a purchase of goods or services) and 51 (reciting that the second device identifier is associated with a unique account or record identifier known to the central server). Williams ¶¶108-110.

As to claims 28, 35, and 38-41, **Perttila** in view of **Swartz** renders these claims obvious. **Swartz** teaches e-commerce implementation details that would have been obvious to apply in implementing **Perttila**’s server’s e-commerce applications, such as a server requesting payment information, delivering confirmation of payment, and delivering an electronic receipt to the user’s device in an electronic commerce transaction. **Swartz** further discloses customizing e-coupons based on the user’s past purchasing behavior stored in a customer profile database, as discussed in §IX.B.1. And as to claims 9 and 22, to the extent it is argued that further disclosure is required beyond **Perttila**, **Perttila** in view of **Swartz**’s e-commerce teachings renders obvious these claims as well. Williams ¶¶196-197.

As shown below, the cited prior art renders the Challenged Claims of the ’359 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 '359. Williams ¶¶39-240.

**A. Grounds 1 and 2: Claims 9, 22 and 51**

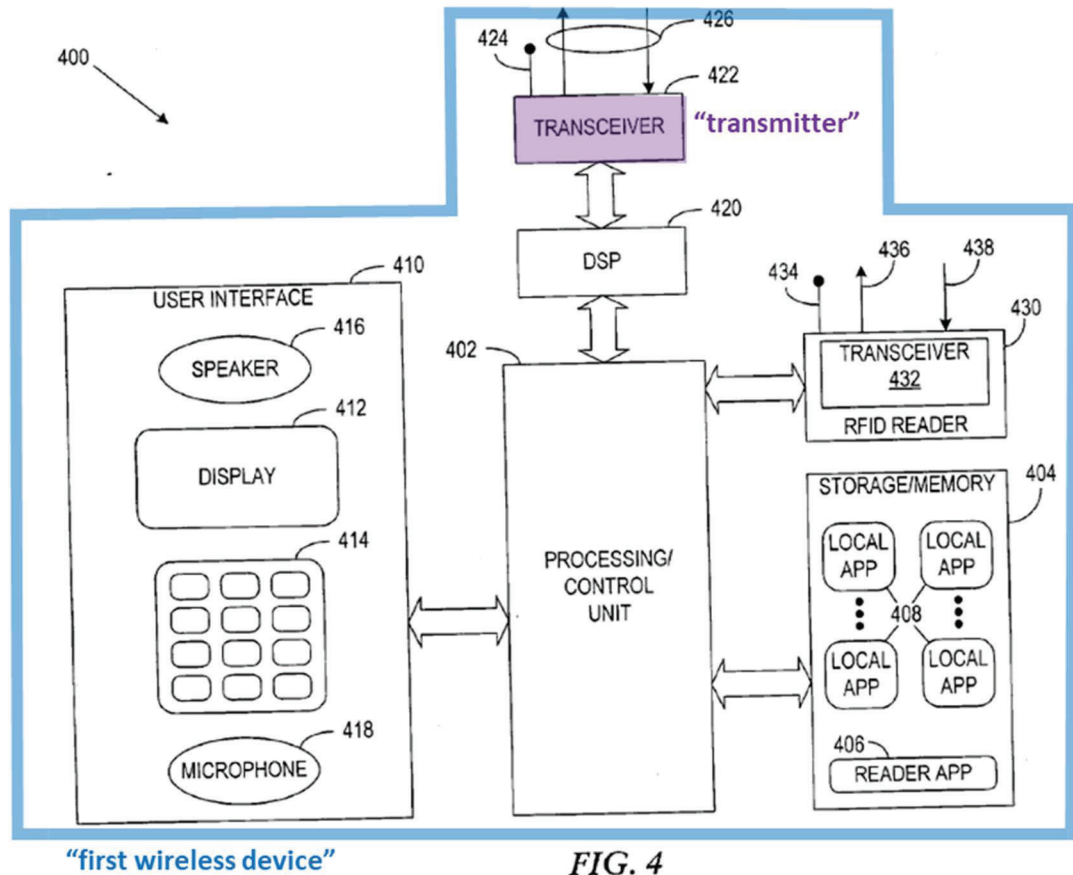
As further set forth below, claims 9, 22 and 51 are anticipated by **Perttila**. However, as further described below for particular limitations, to the extent it is argued that further evidence is required for those limitations, a POSITA would have found the limitations, as well as claim 49, obvious over **Perttila**.

**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” to enable this communication. *Id.*, ¶[0037]. Additionally, **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 ¶¶82-83.

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. Perttola ¶[0064]. A POSITA would have understood that the mobile network uses known standards, such as EDGE and LTE, which the ’359 admits were known in the field, and in implementing **Perttola**, at minimum, it would have been obvious to advantageously use known and existing networks. *Id.*; ’359, 1:26-37; Williams ¶84. An example user communications device is shown in Fig. 4, including its “processing/control unit 402, such as a microprocessor...or other central processing module” and “transceiver 422” for communicating with the server, among other components. *Id.*, ¶[0065], [0072].



Perttila Fig. 4, Williams ¶84.

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.*, ¶¶[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.*, ¶¶[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], [0038].

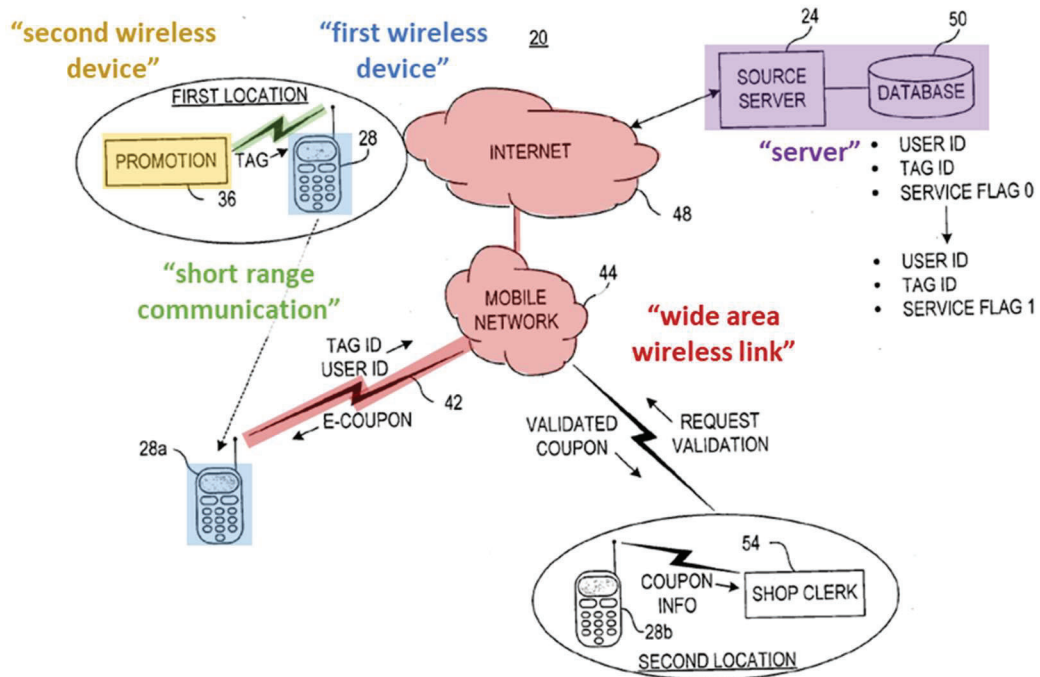


FIG. 1a

Perttila Fig. 1a; Williams ¶85.

**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” and “pricing information for a particular...product, service,” to provide to the user. *Id.*, ¶¶[0011], [0025], [0038], [0040]. Williams ¶86.

**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], [0039]. The e-coupon 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 ¶87.

**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 coupons. Perttila ¶¶[0031], [0038], [0042]-[0043]. At minimum, it would have been obvious to personalize the coupons 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 ¶88. 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 ¶88.

**Perttila** discloses a consumer redeeming the coupon to facilitate "merchant transactions" involving the purchase of goods or services. *Id.*, ¶¶[0028], [0042], [0053]. The server initiates coupon redemption in response to receiving a redemption or "void request" from a redemption data-processing station in the store, wherein the request includes the requesting user ID and merchant ID. *Id.*, ¶¶[0041], [0053]. The server first "performs coupon-verification and credit actions" to "ensure that the user has rights to use the...offering." *Id.*, ¶¶[0042]-[0043]. To see whether the offering is valid and verify the user's identity and that the user may redeem the coupon, the server checks whether its database has "a file with user ID and tag

[merchant] ID” of the request, which correspond to the user’s account and the merchant’s account, respectively, and if so, “records a service flag to indicate that the coupon is valid.” *Id.*, ¶¶[0039], [0041]-[0043], Fig. 1b. A POSITA would have understood that the server has a processor to perform coupon verification. Williams ¶89. It would have been well known to a POSITA that servers make use of a processor, as the ’359 patent admits (’359, 6:1-10), and it would have been an obvious design choice to include such a processor in the server to perform coupon verification to advantageously facilitate a merchant transaction based on these disclosures. Williams ¶89. In this way, the coupon is “redeemed” and “void[ed]” to complete a “merchant transaction[.]” *Id.*, ¶¶[0028], [0042]. Williams ¶89.

**Perttila** discloses that the server receives customer confirmation of receipt of a good or service from the mobile communications device to complete a transaction when the user redeems the coupon, e.g., a previously purchased movie ticket. *E.g.*, Perttila ¶¶[0028], [0042], Fig. 1b. For example, when the user’s mobile communications device enters the theater and “read[s] the bookmark ID” associated with the theater, the mobile device sends the ID to the server, and causes the server to “determine the right phase of the service process and provide the right support for that phase” by causing “the [e]-ticket to enter next phase (i.e., ticket verification) in order to gain access to enter the movie theatre”—thus confirming the customer has received the service. *E.g.*, Perttila ¶¶[0045], [0053]. Williams ¶90.

**Perttila** is in the same field and is analogous art to the '359—both are in the same field related to the exchange of information between wireless communication devices in an e-commerce transaction. *E.g.*, '359, Abstract, 1:55-2:10, 2:45-40, 7:30-51, 11:20-30; Perttila Abstract, ¶¶[0001], [0007]-[0008]. **Perttila** is also reasonably pertinent to the alleged problem(s) identified in the '359 of the alleged need for a “third trusted party to help facilitate...electronic transaction[s].” *E.g.*, '359, 2:3-8; Perttila ¶¶[0006]-[0007]. For example, **Perttila** is directed to a system for information exchange for “electronic commerce” facilitated 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]. The '359 further identifies a need for e-commerce services that “cross validate the identities of the individuals engaged in the transaction,” and “work in indoors locations.” *E.g.*, '359, 2:8-10. **Perttila** explicitly discloses “coupon verification” methods to “ensure that the user has rights to use the...offering,” and “short-range communication link[s]” that work indoors “for transmitting service-related information to requesting...[user] devices.” Perttila ¶¶[0016], [0026], [0042]-[0043]. Williams ¶¶91-92.

## 2. Claim Chart—Perttila

Challenged Claims 9, 22 and 51 depend from one of claims 1 and 14. As demonstrated herein, Perttila discloses or renders obvious the limitations of the

Challenged Claims 9, 22 and 51 and the independent claims from which they depend.

Claim Element	<u>Perttila</u>
<p>[1.pre] A method for a central server to exchange information between one or more wireless devices comprising the steps of:</p>	<p><b>Perttila discloses a method for a central server</b> (e.g., “server”) <b>to exchange information</b> (e.g., “system for the communication”) <b>between one or more wireless devices</b> (e.g., “communications between a [wireless] user communications device and a merchant-media arrangement”).</p> <p><b><u>E.g., Perttila:</u></b></p> <p><b>Perttila</b> discloses an “interactive communications system” for a remote server to communicate “service information...that corresponds to [a] merchant media” arrangement “in response to electronic communications between a [wireless] user communications device and [the] 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 the portable merchant-media arrangement is wireless, 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 (e.g., without having to plug the device into an outlet). <i>Id.</i>, ¶[0060] (discussing “a portable add-on media communications arrangement”); Williams ¶113.</p> <ul style="list-style-type: none"> <li>• <b>[0019]</b> (“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.”)</li> <li>• <b>[0008]</b> (“The present invention is directed to a system, apparatus, and method for <u>sending service data in response to electronic communications</u>”)</li> </ul>

Claim Element	<u>Perttita</u>
	<p><i>between a user communications device and a merchant-media arrangement (e.g., audio and/or visual advertisements).”)</i></p> <ul style="list-style-type: none"> <li> <b>Fig. 1a</b> </li> </ul> <p style="text-align: center;"><i>FIG. 1a</i></p> <ul style="list-style-type: none"> <li> <b>[0009]</b> (“...<i>an interactive communications system conveys service information to a user-communications device by way of a merchant-media arrangement.</i>”)         </li> <li> <b>[0012]</b> (“...<i>[T]he user-communications device may be, for example, a wireless telephone....,</i>”)         </li> <li> <b>[0025]</b> (“<i>[T]he 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.... [L]ocal communication can be implemented in various forms, such as using short-range RF communication technologies, to provide interaction between a user's mobile communications device (e.g., mobile telephone or PDA) and a communication-enhanced merchant-media</i>”)         </li> </ul>

Claim Element	<u>Perttila</u>
	<p><i>arrangement</i> that is adapted to convey necessary information for allowing the mobile communications device to request electronic commerce applications from the remote server.”)</p> <p>See also <b>Perttila</b> ¶¶[0011]-[0015], [0025]-[0027], [0037], [0041], [0060].</p> <p>Williams ¶¶111-113.</p>
<p>[1.a] the central server receiving second device identifier information from a first wireless device, the second device identifier information having been collected by the first wireless device from a second device and wherein said second device provides the second device identifier information to the first wireless device using short range communication without the use of wires from the second device to the first wireless device;</p>	<p><b>Perttila discloses the central server receiving second device identifier information from a first wireless device</b> (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”), <b>the second device identifier information having been collected by the first wireless device from a second device and wherein said second device provides the second device identifier information to the first wireless device using short range communication without the use of wires from the second device to the first wireless device</b> (e.g., “user-communications device picking up a short-range ID code from the merchant-media arrangement” wirelessly using “Bluetooth”).</p> <p><b><u>E.g., Perttila:</u></b></p> <p><b>Perttila</b> 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.”</p> <ul style="list-style-type: none"> <li>• [0009] (“<u>The merchant-media arrangement has a merchant-media ID code and is adapted to communicate</u> service initiation information, including the merchant-media ID code, to requesting devices <u>over a short-range communication link</u>. <u>The user-communications</u></li> </ul>

Claim Element	<u>Perttila</u>
	<p><i>device is adapted to receive the service initiation information, including <u>at least the merchant-media ID code</u>, and in response to receiving the service initiation information, is adapted to <u>send a merchant-information-request signal that includes the merchant-media ID code.</u>”)</i></p> <ul style="list-style-type: none"> <li>• <b>[0015]</b> (“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.”)</li> <li>• <b>[0012]-[0014]</b> (“...<u>the user-communications device may be</u>, for example, <u>a wireless telephone...</u>”)</li> <li>• <b>[0037]-[0038]</b> (“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 article 36), and is used to communicate a merchant ID code.... <u>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...</u> <u>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</u> through a mobile network 44 and/or the Internet 48 with the received link information, depicted at block 74 of FIG. 1b.”)</li> </ul> <p>See also <b>Perttila</b> ¶¶[0012], [0016], [0020], [0025], [0027], [0029]-[0030], [0054]-[0055].</p>

Claim Element	<u>Perttila</u>
	Williams ¶¶114-116.
<p>[1.b] said central server using the second device identifier information to determine one or more of an identity or related information concerning an entity or object located in proximity to the second device; and</p>	<p><b>Perttila discloses said central server using the second device identifier information to determine one or more of an identity or related information concerning an entity or object located in proximity to the second device</b> (“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><b><u>E.g., Perttila:</u></b></p> <p><b>Perttila</b> discloses that the remote source server uses the “merchant-media ID” to “associate the promotional information with an e-coupon...linked to this particular location.” <i>E.g.</i>, Perttila, ¶¶[0027]-[0029], [0037], [0039]. The remote server uses the ID “to determine the location of the merchant media arrangement,” which is “located at the store itself,” and deliver relevant electronic coupon offerings for the store to the user’s mobile communications device indicating the presence of the “offerings” in the store. <i>Id.</i> 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> <ul style="list-style-type: none"> <li>• [0037] (“An RFID <i>tag 38 is co-located at the merchant-media arrangement at the first location (e.g., attached to the merchant promotional article 36), and is used to communicate a merchant ID code</i> (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, <i>the merchant ID code can be communicated through an alternative short-range communication link such as</i></li> </ul>

Claim Element	<u>Perttila</u>
	<p><i>a Bluetooth link...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.”)</i></p> <ul style="list-style-type: none"> <li>• <b>[0039]</b> (“For such electronic coupons, the user's terminal visits a second location such as a merchant-purchase center.... It should be noted that <u>the second location may also be the same as the first location</u>, for example, in cases where the <u>coupon offerings are provided to mobile users through tag or beacons located at the store itself.</u>”)</li> <li>• <b>[0015]</b> (“... <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</u> sent to the user in the form of <u>an electronic data set corresponding to the merchant-media's ID code.</u>”)</li> <li>• <b>[0027]-[0028]</b> (“[T]he remote processing arrangement to provide the user with...a downloadable electronic coupon that corresponds to the content promoted by the billboard. <u>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</u>, which may be stationary or mobile (such as an advertising banner in a train or bus). In this manner, the <u>promotion information is linked to this particular location</u>, and the user visits and views the</li> </ul>

Claim Element	<u>Perttila</u>
	<p>promotional information in order to receive the coupon offering.”)</p> <p><i>See also Perttila ¶¶0029], Fig. 1b.</i></p> <p>Williams ¶¶117-118.</p>
<p>[1.c] subsequent to the step of the central server receiving the second device identifier information from the first wireless device, the central server taking further action to deliver information or a service to the first wireless device based at least in part upon (a) the second device identifier and (b) at least one of the following: ... (iii) a current step in a multiple step process for an ongoing electronic commerce transaction.</p>	<p><b>Perttila discloses subsequent to the step of the central server receiving the second device identifier information from the first wireless device, the central server taking further action to deliver information or a service to the first wireless device based at least in part upon (a) the second device identifier and (b) ... (iii) a current step in a multiple step process for an ongoing electronic commerce transaction (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”; see Fig. 1b).</b></p> <p><b><u>E.g., Perttila:</u></b></p> <p><b>Perttila discloses that the remote server provides the mobile communications device with an “electronic commerce application, such as, an electronic coupon,” which corresponds to the received “merchant ID code,” and which can be “validated to facilitate merchant transactions” in an “electronic commerce arrangement.”</b></p> <ul style="list-style-type: none"> <li>• <b>[0009]</b> (“<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.”)</li> <li>• <b>[0033]</b> (“<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>”)</li> </ul>

Claim Element	<u>Perttila</u>
	<ul style="list-style-type: none"><li data-bbox="589 310 1419 436">• [0015] (“<i>The electronic coupon is sent to the user in the form of an electronic data set <u>corresponding to the merchant-media’s ID code.</u></i>”)</li><li data-bbox="589 457 1419 625">• [0028] (“<i>This electronic coupon can then be brought to a specific location where the coupon <u>is validated to facilitate merchant transactions,</u> e.g., discounts for the promoted merchant offerings.</i>”)</li><li data-bbox="589 646 1419 814">• [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;”)</li><li data-bbox="589 835 760 877">• <b>Fig. 1b:</b></li></ul>

Claim Element	<u>Perttila</u>
	<pre>             graph TD             72[72 USER RECEIVES LINK INFORMATION VIA SHORT-RANGE COMMUNICATION] --&gt; 74[74 USER ASSOCIATES LINK INFORMATION AND TRANSMITS TAG ID AND PERSONAL ID TO SOURCE SERVER; DOWNLOADS JAVA MIDLET INCLUDING E-COUPON]             74 --&gt; 76[76 USER ACTIVATES THE JAVA MIDLET AND PROVIDES THE COUPON INFORMATION TO SHOP CLERK]             76 --&gt; 78[78 SHOP CLERK (OR MOBILE TERMINAL) CONTACTS THE SOURCE SERVER FOR COUPON VALIDATION]             78 --&gt; 80[80 SOURCE SERVER CHECKS/UPDATES DATABASE]             80 --&gt; 82[82 COUPON IS VALIDATED AND THE OFFERING MAY BE REDEEMED]             </pre> <p style="text-align: center;"><b>FIG. 1b</b></p> <p><i>See also Perttila ¶¶</i>[0010], [0015], [0025]-[0027], [0029], [0031], [0034]-[0040], [0042], [0044]-[0045], [0051]-[0053], [0056]-[0058].                  Williams ¶¶119-120.</p>
[9] The method of claim 1 wherein the steps performed	<p><b>See [1].</b></p> <p><b>Perttila discloses that the steps performed by the central server further comprise facilitating a purchase</b></p>

Claim Element	<u>Perttila</u>
<p>by the central server further comprise: facilitating a purchase of the goods or services from a merchant account associated with the second wireless device and a customer account associated with the first wireless device;</p> <p>providing confirmation to each account; and/or</p> <p>receiving customer confirmation of receipt of a good or service via the first wireless device, thereby completing a transaction.</p>	<p><b>of the goods or services from a merchant account associated with the second wireless device and a customer account associated with the first wireless device</b> (e.g., “Upon receiving this request from the redemption data-processing station 54, the source server 24 performs coupon-verification and credit actions and updates its coupon-database” such that the database entry for the “user ID” and “merchant-media ID” is “void[ed]”); <b>providing confirmation to each account</b> (e.g., <i>id.</i>); <b>and/or receiving customer confirmation of receipt of a good or service via the first wireless device, thereby completing a transaction</b> (e.g., “when the user enters the cinema doorway with the paid-for movie ticket in hand, his mobile terminal is used to read the bookmark ID that triggers the [e]-ticket to enter next phase (i.e., ticket verification) in order to gain access to enter the movie theatre,” “By providing the server both the local merchant ID (such as the cinema theatre hall doorway) and the user ID, the server can determine the right phase of the service process and provide the right support for that phase”).</p> <p><b><u>E.g., Perttila:</u></b></p> <p><b>See [1.c].</b></p> <p>In addition, <b>Perttila</b> discloses that the server also facilitates a purchase of goods or services from a merchant account associated with the merchant-media arrangement in the store and a customer account associated with the first wireless device by receiving a request to “redeem,” “verif[ying]” the presence of, and “void[ing]” a coupon in the database, which is stored based on the “merchant ID” (the merchant account) and the “user ID” (the customer account). <i>E.g.</i>, Perttila ¶¶[0042], [0053]. Updating the database, which stores the coupon information for both accounts, further comprises providing confirmation to each account. <i>Id.</i> While not required by [9], it also would have been an obvious implementation choice for the redemption data-processing station that sends the request</p>

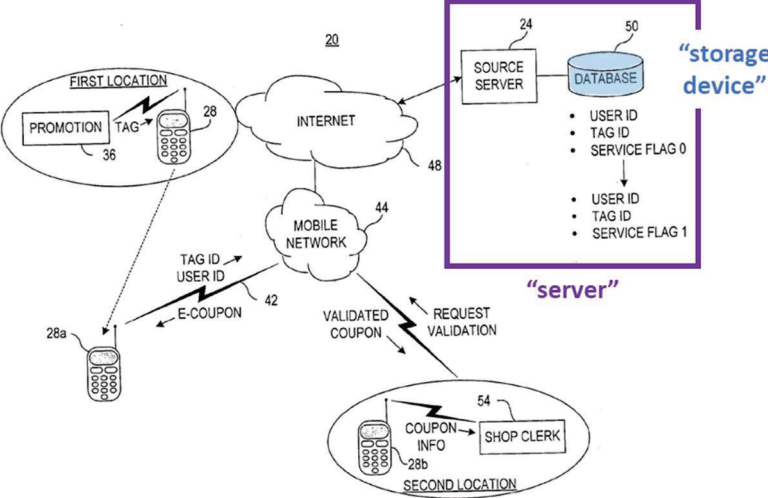
Claim Element	<u>Perttila</u>
	<p>to be part of the in-store “merchant-media arrangement,” such that the second device sends the request to redeem the coupon. <i>Id.</i> ¶¶[0042], [0053]; Williams ¶140.</p> <p>In addition, <b>Perttila</b> discloses that the server receives customer confirmation of receipt of a good or service from the mobile communications device to complete a transaction when the user redeems the coupon, e.g., a previously purchased movie ticket. <i>E.g.</i>, Perttila ¶¶[0028], [0042], Fig. 1b. When the user’s mobile communications device enters the theater and “read[s] the bookmark ID” associated with the theater, the mobile device sends the ID to the server as discussed in [1.a], and causes the server to “determine the right phase of the service process and provide[s] the right support for that phase” by causing “the [e]-ticket to enter next phase (i.e., ticket verification) in order to gain access to enter the movie theatre”—thus confirming that the customer has received the service. <i>E.g.</i>, Perttila ¶¶[0045], [0053].</p> <ul style="list-style-type: none"> <li>• [0045] (“[A] ‘contextual bookmarking’ is used with <u>a bookmark ID tag being provided for triggering the coupon to a next ‘phase’ in order to carry out the e-coupon offering.</u> One example applies to the situation when a user has already paid for a movie ticket and received an e-coupon; when the user enters the cinema doorway with the paid-for movie ticket in hand, <u>this mobile terminal is used to read the bookmark ID that triggers the c-ticket to enter next phase (i.e., ticket verification) in order to gain access to enter the movie theatre.</u>”)</li> <li>• [0053] (“<u>By providing the server both the local merchant ID (such as the cinema theatre hall doorway) and the user ID, the server can determine the right phase of the service process and provide the right support for that phase.</u>”)</li> </ul>

Claim Element	<u>Perttita</u>
	<ul style="list-style-type: none"> <li data-bbox="589 310 1419 947">• <b>[0042]</b> (“Upon receiving this request from the redemption data-processing station 54, <u>the source server 24 performs coupon-verification and credit actions and updates its coupon-database accordingly</u>. As a more specific example depicted at block 80 of FIG. 1b, the source server 24 receives the void request, and then checks the database 50 to determine whether the coupon is valid. This <u>validity check can be performed by searching the database for a file with user ID and tag ID of the void request</u>. If such a file is found, the source server records a service flag to indicate that the coupon is valid (flag is set to “0”).... <u>In this manner, the coupon is validated and the offering can be redeemed</u> (Block 82 of FIG. 1b).”)</li> <li data-bbox="589 972 1419 1136">• <b>[0028]</b> (“This electronic coupon can then be brought to a specific location where <u>the coupon is validated to facilitate merchant transactions, e.g., discounts for the promoted merchant offerings.</u>”)</li> <li data-bbox="589 1161 760 1203">• <b>Fig. 1b:</b></li> </ul>

Claim Element	<u>Perttila</u>
	<p style="text-align: center;"><i>FIG. 1b</i></p> <p><i>See also Perttila ¶¶[0010]-[0011], [0015], [0027], [0039], [0041], [0058].</i></p> <p><i>Williams ¶¶138-141.</i></p>
<p>[14.pre] A server for exchanging information between one or more wireless devices, the server comprising:</p>	<p><b><i>See [1.pre].</i></b></p> <p><i>Williams ¶¶142-143.</i></p>
<p>[14.a] a receiver, for receiving second device identifier information from a first wireless</p>	<p><b>Perttila discloses the server comprising a receiver (e.g., server “receive[r]”) for receiving second device identifier information from a first wireless device (e.g., see [1.a]), the second device identifier information having been collected by the first wireless device from</b></p>

Claim Element	<u>Perttila</u>
device, the second device identifier information having been collected by the first wireless device from a second device, and wherein said second device provides the second device identifier information to the first wireless device using a short range link from the second device to the first wireless device;	<p><b>a second device, and wherein said second device provides the second device identifier information to the first wireless device using a short range link from the second device to the first wireless device (e.g., see [1.a]).</b></p> <p><b><u>E.g., Perttila:</u></b></p> <p><b>See [1.a]</b></p> <p>In addition, <b>Perttila</b> discloses that “the merchant ID code...is ultimately received and processed by the source server.” <i>E.g., Perttila ¶¶[0037]-[0038].</i> A POSITA would have understood that the server thus has a “receiver” in order to “receive” the second device identifier information from a first wireless device as expressly taught in <b>Perttila</b> (see [1.a]), and at minimum it would have been obvious to use the well-known component of a receiver to do so in order to advantageously receive the information. Williams ¶147.</p> <ul style="list-style-type: none"> <li>• <b>[0037]-[0038]</b> (“...In any case, to receive the coupon information, the user physically visits the first location, and <i>the mobile communications device receives the merchant ID code which is ultimately received and processed by the source server 24</i> for generating the electronic coupon.... <i>When receiving the request from the terminal, the source server 24 extracts the user/terminal ID along with the tag (merchant-media) ID from the request...</i>”)</li> </ul> <p><i>See also Perttila ¶¶[0031]-[0032].</i></p> <p>Williams ¶¶144-147.</p>
[14.b] a storage device, for storing the second device identifier information and one or more of an	<p><b>Perttila discloses the server comprising a storage device (e.g., “coupon-database,” “database 50”), for storing the second device identifier information and one or more of an identity or related information concerning an entity or object located in proximity to the second device (e.g., storing “electronic coupon,”</b></p>

Claim Element	<u>Perttila</u>
identity or related information concerning an entity or object located in proximity to the second device; and	<p>which is later “sent to the user 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><b><u>E.g., Perttila:</u></b>  <b>See [1.b], [2].</b></p> <p>In addition, <b>Perttila</b> discloses that the server stores coupons in “the database 50” according to “the user/terminal ID along with the tag (merchant media) ID,” which can later be used to look up and void the coupon in the database.</p> <ul style="list-style-type: none"> <li>• <b>[0038]</b> (“When receiving the request from the terminal, the source server 24 extracts the user/terminal ID along with the tag (merchant-media) ID from the request.... The extracted user/terminal ID and <u>the tag ID are stored by the source server....</u>”)</li> <li>• <b>[0027]-[0028]</b> (“The link to the remote source server is obtainable by visiting this particular billboard location.... The mobile communications device, in turn, establishes a link with the remote processing arrangement to provide the user with electronic commerce application, such as, a downloadable electronic coupon that corresponds to the content promoted by the billboard. <u>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,</u> which may be stationary or mobile (such as an advertising banner in a train or bus).”)</li> <li>• <b>[0042]</b> (“[T]he source server 24 performs coupon-verification and credit actions and updates its <u>coupon-database</u> accordingly. As a more specific example depicted at block 80 of FIG. 1b, <u>the source server 24</u> receives the void request, and then <u>checks</u></li> </ul>

Claim Element	<u>Perttila</u>
	<p><i>the database 50 to determine whether the coupon is valid. This validity check can be performed by searching the database for a file with user ID and tag ID of the void request.”)</i></p> <ul style="list-style-type: none"> <li>• <b>Fig. 1a:</b></li> </ul>  <p style="text-align: center;">FIG. 1a</p> <ul style="list-style-type: none"> <li>• [0015] (“<i>The electronic coupon is sent to the user in the form of an electronic data set corresponding to the merchant-media’s ID code.</i>”)</li> </ul> <p>See also Perttila ¶¶[0029], [0035], [0075]-[0076], Fig. 1b. Williams ¶¶148-150.</p>
<p>[14.c] a transmitter, for subsequent to the step of receiving the second device identifier information from the first wireless device, delivering information or a service to the first wireless device based at least in part</p>	<p><b>Perttila discloses the server comprising a transmitter (e.g., server transmitter), for subsequent to the step of receiving the second device identifier information from the first wireless device, delivering information or a service to the first wireless device based at least in part upon (a) the second device identifier and (b) ... (iii) a current step in a multiple step process for an ongoing electronic commerce transaction (e.g., see [1.c]).</b></p> <p><b><u>E.g., Perttila:</u></b>  <b>See [1.c].</b></p>

Claim Element	<u>Perttila</u>
<p>upon (a) the second device identifier and (b) at least one of ...                      (iii) a current step in a multiple step process for an ongoing electronic commerce transaction.</p>	<p>In addition, <b>Perttila</b> discloses that the electronic commerce application and e-coupon are provided to the mobile communications device from the server by a “[m]idlet transmission...over...communications link 42.” E.g., Perttila ¶¶[0033]-[0034], [0038]. A POSITA would have understood that the server thus has a “transmitter” in order to transmit the application and coupon to the mobile communications device as expressly taught in <b>Perttila</b> (see [1.c]), and at minimum it would have been obvious to use the well-known component of a transmitter to do so in order to advantageously send the information. Williams ¶153.</p> <ul style="list-style-type: none"> <li>• <b>[0033]-[0034]</b> (“<u>The remote server can generate and return an appropriate electronic commerce application, such as an electronic coupon.... In more specific embodiments, the electronic coupons (“e-coupons”) are Java Midlets that are downloadable by the user's mobile terminal in response to the communications link to the remote source server, or by the equipment that establishes the link. The remote source server is adapted to provide the electronic coupon information in this Java Midlet form.</u>”)</li> <li>• <b>[0038]</b> (“The extracted user/terminal ID and the tag ID are stored by <u>the source server and the source server provides the user terminal with an option to download for example a Java Midlet that corresponds to the request. This Midlet transmission can occur over the same communications link 42 or over another subsequently-established link (not shown) involving the same terminal or another terminal designated by way of the user ID and/or other instruction data provided to the source server 24.</u>”)</li> </ul> <p>See also <b>Perttila</b> ¶¶[0031], [0035]-[0036], [0056], [0075].</p>

Claim Element	<u>Perttila</u>
	Williams ¶¶151-153.
<p>[22] The server of claim 14 further comprising: a processor for facilitating a purchase of goods or services from a merchant account associated with the second device and a customer account associated with the first wireless device;</p> <p>providing confirmation to each account;</p> <p>and/or</p> <p>receiving customer confirmation of receipt of a good or service via the first wireless device, thereby completing a transaction.</p>	<p><i>See</i> [14].</p> <p><b>Perttila discloses the server of claim 14 further comprising: a processor (e.g., server’s processor) for facilitating a purchase of goods or services from a merchant account associated with the second device and a customer account associated with the first wireless device; providing confirmation to each account; and/or receiving customer confirmation of receipt of a good or service via the first wireless device, thereby completing a transaction (e.g., see [9]).</b></p> <p><u><i>E.g., Perttila:</i></u></p> <p><i>See</i> [9].</p> <p>In addition, <b>Perttila</b> discloses the source server is a “remote processing arrangement.” <i>E.g.</i>, Perttila, ¶¶[0055], [0029]. As discussed above in §IX.A.1, a POSITA would have understood that the server has a “processor” in order to perform coupon verification and credit actions as expressly taught in <b>Perttila</b> (see [9]), and, at minimum, it would have been obvious to use a processor to do so in order to advantageously facilitate a merchant transaction. Williams ¶166.</p> <ul style="list-style-type: none"> <li>• [0019] (“FIG. 1a is a system for the communication of an electronic coupon to a user via <u>a link established with a source server by a mobile communications device...</u>”)</li> <li>• [0029] (“<u>The link for communicating with the remote processing arrangement (or server) can be transmitted to the mobile communications device automatically...</u>”)</li> </ul> <p><i>See also</i> <b>Perttila</b> ¶¶[0012]-[0013], [0027], and [0075]-[0076].</p> <p>Williams ¶¶163-166.</p>

Claim Element	<u>Perttila</u>
<p>[51] The method of of claim 1 wherein said second device identifier is associated with a unique account or record identifier known to the central server.</p>	<p><i>See [1].</i></p> <p><b>Perttila discloses that said second device identifier (e.g., “merchant-media ID”) is associated with a unique account or record identifier (e.g., “unique ID”) known to the central server.</b></p> <p><b><u>E.g., Perttila:</u></b></p> <p><i>See [1.a].</i></p> <p>In addition, <b>Perttila</b> discloses that the “remote processing arrangement (or server)” associates the received “RFID tag” or “Bluetooth” “beacon” information, including the “merchant ID code,” with a “unique ID” and is “pre-programmed” to retrieve “media content information assigned to the unique ID for the media communications arrangement.”</p> <ul style="list-style-type: none"> <li>• <b>[0037]</b> (“...An <i>RFID tag 38 is co-located at the merchant-media arrangement at the first location...</i>, and is used to communicate a merchant <i>ID code...</i> to associate the merchant promotional article 36 with a particular coupon to be provided to the user 28.”)</li> <li>• <b>[0060]</b> (“<i>The media communications arrangement 300 includes an RF device 310 (a tag for an embodiment consistent with FIG. 1a or an RFID reader for an embodiment consistent with FIG. 2) and an identification (ID) storage device 330 that are coupled to a transceiver 320.</i>”)</li> <li>• <b>[0029]</b> (“...the remote processing arrangement (or server)...”)</li> <li>• <b>[0061]</b> (“In response to the RFID reader receiving tag information, the transceiver 320 <i>sends a wireless signal to a remote wireless processor arrangement 350, the wireless signal including the unique ID for the media communications arrangement 300 and the RFID tag information.</i>”)</li> </ul>

Claim Element	<u>Perttila</u>
	<p>The remote wireless processor arrangement 350 is <u>pre-programmed with media content information assigned to the unique ID for the media communications arrangement</u>. . . . In response to receiving the wireless signal from the transceiver 320, <u>the remote wireless processor arrangement 350 uses the unique ID to retrieve media content information associated therewith</u>. . . .”)</p> <p>See also <b>Perttila</b> ¶¶[0009], [0015], [0027], [0029], [0033], [0037].</p> <p>Williams ¶¶188-190.</p>

**B. Ground 3: Claims 9, 22, 28, 35, 38-41**

**1. Overview of Swartz and Motivation to Apply Its Teachings to Perttila**

**Swartz** discloses a system for “consumer interactive shopping and marketing” that may be implemented “within a shopping establishment,” or remotely, “at a user’s home.” *E.g.*, Swartz, Abstract. The customer employs a “portable terminal,” such as a “cell phone,” “in communication with a central host” computer. *Id.*, 2:57-58, 5:1-11, 6:11-14, 20:18-23. This host has access to “databases that store information about customers and products” and, upon receiving product data from the customer’s portable terminal, “the host performs most of the computing functions” to facilitate the transaction between the customer and merchant. *Id.*, 5:12-23, 12:22-33. Williams ¶93.

**Swartz**'s portable terminal uses a "bar code scanner" to read a product ID and create a shopping list. *Id.*, 6:45-52. "[T]he customer may then select to have the list stored, items collected for pick-up or delivery." *Id.*, 2:51-53. This list is provided to the host computer which, upon completion of a shopping trip, will "retrieve[] the customer information from the portable terminal" and after payment, "return[] the price...for each item, as well as...the total price, tax, discounts" to the customer's terminal to confirm payment. *Id.*, 23:8-27; Williams ¶94. In addition, the host computer stores "credit account" information in the customer's profile and "the credit account is automatically charged when the customer completes his product selection." Swartz, 51:4-8, 23:66-24:7. Finally, the host computer delivers a receipt to the customer that may "be emailed to an email address associated with the customer" as an electronic receipt. *Id.*, 23:24-36; Williams ¶94.

**Swartz** further discloses the host computer using a "messaging agent" to provide "promotional messages," such as "discount[s]" and reminders to "purchase...products...not currently selected," to "display on the portable terminal." *Id.*, 34:8-11, 34:41-51, 34:58-65, 56:64-57:5. The display also includes information about the scanned items, including images of the item and recommendations for using the item. *Id.*, 29:50-61. The messaging agent leverages a "customer profile database" accessible to the host computer that stores "records...relate[d] to features of the customer's shopping history" to "detect correlation of [past] purchased items"

and “target specific messages to specific customers.” *Id.*, 15:16-24, 34:41-60; Williams ¶95.

**Swartz** further discloses the portable terminal including a “graphical user interface that simulates a store layout” to enable the customer to select products for purchase in a “‘virtual shopping’ visit” while “at home or on the road.” *Id.*, 40:62-65, 41:20-23, 41:58-62. In this implementation, “[a]s the customer views items on the virtual visit, he can select items for purchase” and then “arrange to have the products shipped” or set aside “for the customer to pick up.” *Id.*, 41:39-57. The portable terminal sends a customer “identification code” to the host computer to “identif[y] the particular customer,” allowing the host to “access...[a] customer profile database associated with the customer.” *Id.*, 41:60-65; Williams ¶96.

While **Perttila** teaches the delivery of a coupon to a user’s device based on its proximity to the mobile-media arrangement, **Swartz** provides additional implementation details for how to personalize that coupon and subsequently redeem that coupon and purchase goods from the server using the mobile terminal. A POSITA would have been motivated to apply these known e-commerce teachings in implementing **Perttila**’s e-commerce transaction. *E.g.*, **Perttila** ¶¶[0028], [0031]; Williams ¶¶97-98. Like **Perttila**, **Swartz** is in the same field and is analogous art to the ’359, namely communicating between devices for e-commerce transactions. *E.g.*, **Swartz**, Abstract, 2:3-9, 2:23-33; Williams ¶99. **Swartz** is also pertinent to the

alleged problem(s) identified in the '359 of the alleged need for a “third trusted party to help facilitate...electronic transaction[s].” *E.g.*, '359, 2:3-8; Swartz, 5:12-23. For example, **Swartz** discloses the host computer “communicat[ing] with third party servers...to transmit/retrieve data in a secure fashion.” *E.g.*, Swartz, 5:19-23; Williams ¶99.

A POSITA would have recognized that **Swartz**'s teachings of a central server handling aspects of an e-commerce transaction—including providing information about products, processing payment and credit information, and confirming purchases with receipts—would have improved **Perttila**'s “electronic commerce arrangement.” *E.g.*, Perttila ¶[0009]. Indeed, **Perttila** itself recognizes the benefits of a central server handling “coupon-verification and credit actions,” and a POSITA would have understood that **Swartz**'s teachings provide known implementation details for such an arrangement. *Id.*, ¶[0042]; Williams ¶100. Likewise, a POSITA would have found it advantageous to apply **Swartz**'s teachings of personalizing coupon offerings based on a customer's history of purchasing behavior in implementing **Perttila**'s e-coupon system. *E.g.*, Perttila ¶¶[0031], [0038]; Williams ¶98. Indeed, **Perttila** recognizes the benefits of providing a “more personalized offering to the user,” and a POSITA would have recognized that **Swartz**'s teachings provide known implementation details for these personalized offerings. *E.g.*, Perttila ¶[0031]; Williams ¶98.

In light of the foregoing, a POSITA would have found it obvious and straightforward to apply **Swartz’s** teachings of a central host facilitating marketing and e-commerce transactions in implementing **Perttila’s** system for processing electronic commerce transactions, and would have known that such a combination (yielding the claimed limitations) would predictably work and provide the expected functionality. *Williams ¶¶101, 196-197.*

**2. Claim Chart—Perttila in view of Swartz**

Claim Element	<u>Perttila in view of Swartz</u>
<p>[9] The method of claim 1 wherein the steps performed by the central server further comprise: facilitating a purchase of the goods or services from a merchant account associated with the second wireless device and a customer account associated with the first wireless device;                      providing confirmation to each account;                      and/or                      receiving customer confirmation of receipt of a good or</p>	<p><i>See</i> §IX.A.2.[1]; §IX.A.2.[9].  <b>To the extent further disclosure is required, Swartz discloses that the steps performed by the central server further comprise facilitating a purchase of the goods or services from a merchant account and a customer account associated with the first wireless device (e.g., “software necessary to operate the virtual shopping visit could be loaded onto the remote terminal,” “the host computer has access to a database that stores information about a credit account associated with the customer and wherein the credit account is automatically charged when the customer completes his product selection”); [and] providing confirmation to each account (<i>id.</i>).</b>  <u><b>E.g., Swartz:</b></u>  <b>Swartz</b> discloses a system for “portable shopping and order fulfillment” wherein a customer uses a “cell phone” to detect and scan products for purchase. <i>E.g.</i>, Swartz, 2:12-14, 6:11-14, 6:45-57, 41:58-65. A “host computer [server]” associated with the merchant has access to “databases that store information about customers and products,” and “automatically charge[s]” the customer’s “credit account” associated with the merchant account</p>

Claim Element	<u>Perttila in view of Swartz</u>
<p>service via the first wireless device, thereby completing a transaction.</p>	<p>“when the customer completes his product selection”— thus providing confirmation to each account. <i>Id.</i>, 12:22-33, 51:4-8, 52:52-55, 55:55-67. As discussed in §IX.B.1, a POSITA would have been motivated to apply <b>Swartz’s</b> known implementation detail teachings of a server facilitating the purchase of goods from a merchant account associated with the merchant’s store by charging a customer’s “credit account” associated with the customer’s mobile device in implementing <b>Perttila’s</b> server, which performs “credit actions.” Williams ¶200.</p> <ul style="list-style-type: none"> <li>• <b>2:12-14</b> (“It is the object of the present invention to <u>provide an improved marketing and shopping system which may be used in a portable shopping and order fulfillment system.</u>”)</li> <li>• <b>20:18-23</b> (“<u>The customer</u> proceeds through the retail facility and <u>uses the portable terminal 240 to record purchases.</u> Preferably <u>each item is either coded with a code which is recognizable to the portable terminal....</u>”)</li> <li>• <b>6:11-14</b> (“In another preferred embodiment <u>the portable terminal is a cell phone</u> modified for use by the system. The cellphone would preferably include <u>a product identification reader.</u>”)</li> <li>• <b>4:59-61</b> (“Although the system will be described in terms of <u>a portable terminal employing an integrated bar code laser scanner...</u>”)</li> <li>• <b>6:45-52</b> (“Collection of data is preferably performed by a bar code scanner 75. Preferably <u>the scanner will be able to read one and two dimensional bar codes such as the ubiquitous UPC/EAN/JAN code and PDF417 code. The scanner could be provided with either a short range radio link</u> and its own battery supply or a wired connection. In a preferred embodiment <u>the short</u></li> </ul>

Claim Element	<u>Perttola in view of Swartz</u>
	<p><i>range radio link complies with the Bluetooth standard.”)</i></p> <ul style="list-style-type: none"> <li>• <b>41:58-65</b> (“The software necessary to operate the virtual shopping visit could be loaded onto the remote terminal as plug in software. After a customer logs onto the system, <u>an identification code is sent from the remote terminal to a host computer associated with the merchant</u>. The identification code identifies the particular customer. <u>The host computer can then access files in the customer profile database associated with the customer.</u>”)</li> <li>• <b>12:22-33</b> (“<u>Accessible to the host computer are one or more databases that store information about customers and products</u> that are relevant to determine the customers shopping behavior. The information within <u>the database may be compiled by a particular store....</u> The database includes information about each profiled product in the database.”)</li> <li>• <b>51:4-8</b> (“14. The system of claim 10 wherein <u>the host computer has access to a database that stores information about a credit account associated with the customer</u> and wherein <u>the credit account is automatically charged when the customer completes his product selection.</u>”)</li> </ul> <p>Williams ¶¶198-200.</p>
<p>[22] The server of claim 14 further comprising: a processor for facilitating a purchase of goods or services from a merchant account</p>	<p><b>See §IX.A.2.[14]; §IX.B.2.[9].</b></p> <p>Williams ¶¶201-202.</p>

Claim Element	<u>Perttila in view of Swartz</u>
<p>associated with the second device and a customer account associated with the first wireless device;</p> <p>providing confirmation to each account;</p> <p>and/or</p> <p>receiving customer confirmation of receipt of a good or service via the first wireless device, thereby completing a transaction.</p>	
<p>[28] The method of claim 1 wherein the further action is additionally based on a history of past purchasing behavior associated with an account associated with either the first wireless device or the second device identifier information.</p>	<p><i>See</i> §IX.A.2.[1].</p> <p><b>Perttila discloses that the further action is additionally based on a history associated with an account associated with either the first wireless device or the second device identifier information</b> (e.g., “MSISDN and BD ADDR data may also be used to fetch user profile information from the remote server or from another entity in order to provide more personalized offering to the user”).</p> <p><b><u>E.g., Perttila:</u></b></p> <p><i>See</i> §§IX.A.2. [1.c].</p> <p>In addition, <b>Perttila</b> discloses that the server associates the mobile communications device ID received from the first device with stored “user profile information...to provide more personalized” electronic coupon offerings to the user. <i>E.g.</i>, Perttila, ¶¶[0031], [0034], [0038]. The server’s “database” stores “user/terminal ID along with the</p>

Claim Element	<u>Perttola in view of Swartz</u>
	<p>[previously received] tag (merchant media) ID[s]” that can be used to personalize the coupons. Perttola ¶¶[0038], [0042]-[0043]; Williams ¶170.</p> <ul style="list-style-type: none"> <li>• [0026] (“The transmitted information allows <i>the mobile communications device to initiate an electronic commerce application, for example by sending a request over cellular network to a remote server for receiving electronic coupon information including various offerings.</i>”)</li> <li>• [0034] (“In more specific embodiments, <i>the electronic coupons (“e-coupons”) are Java Midlets that are downloadable by the user's mobile terminal in response to the communications link to the remote source server...</i>”)</li> <li>• [0038] (“<i>When receiving the request from the terminal, the source server 24 extracts the user/terminal ID along with the tag (merchant-media) ID from the request.... The extracted user/terminal ID and the tag ID are stored by the source server and the source server provides the user terminal with an option to download for example a Java Midlet that corresponds to the request.... In various embodiments of the present invention, the user/terminal ID may affect the Midlet contents, so the offerings may be mobile-ized to the user if there is a database 50 with user profile information already stored and accessible to the source server 24.</i>”)</li> <li>• [0031] (“<i>...MSISDN and BD_ADDR data may also be used to fetch user profile information from the remote server or from another entity in order to provide more personalized offering to the user.</i>”)</li> </ul>

Claim Element	<u>Perttila in view of Swartz</u>
	<ul style="list-style-type: none"> <li>• [0039] (“...<u>certain example types of electronic coupons (e.g., product offering with price discounts) may require validation and/or redemption.</u>”)</li> <li>• [0042]-[0043] (“...<u>the source server 24 receives the void request, and then checks the database 50 to determine whether the coupon is valid. This validity check can be performed by searching the database for a file with user ID and tag ID of the void request.</u> If such a file is found, the source server records a service flag to indicate that the coupon is valid (flag is set to “0”)..... In this manner, <u>the coupon is validated and the offering can be redeemed</u> (Block 82 of FIG. 1b).... [A] <u>confirmation is typically received before providing the user with the coupon offering</u> to ensure that the user has rights to use the coupon offering.”)</li> </ul> <p>See also <b>Perttila</b> ¶¶[0035], [0041].</p> <p><b>Swartz discloses personalizing coupons based on a history of past purchasing behavior associated with an account associated with either the first wireless device or the second device</b> (e.g., “the central host may access the customer profile database and determine the customer's prior purchase records, and detect correlation of purchased items”).</p> <p><u><b>E.g., Swartz:</b></u></p> <p>While <b>Perttila</b> does not expressly reference using a purchasing history in the customer’s profile to personalize e-coupons, <b>Swartz</b> discloses the central host “provid[ing]... discount[s]” and “messaging” to the “wireless shopping device of the customer[.]” based on the customer’s “prior purchase[s]”/“shopping history” in the customer’s profile. <i>E.g.</i>, Swartz, 15:16-24, 34:41-60, 35:11-27, 56:65-57:5. As discussed in §IX.B.1, a POSITA would have been motivated to apply <b>Swartz’s</b></p>

Claim Element	<u>Perttila in view of Swartz</u>
	<p>known implementation detail teachings of a server personalizing an e-coupon to return to the customer's device based on the customer's prior purchase records in implementing <b>Perttila's</b> server, which personalizes e-coupons based on the customer's profile. Williams ¶207.</p> <ul style="list-style-type: none"> <li>• <b>56:64-57:5</b> (“<i>[T]he central host with a messaging agent that selects messages to be presented to the customer... d) transmitting said message to said wireless shopping device of the customers that...</i>”)</li> <li>• <b>34:41-60</b> (“<i>The messaging agent uses a rules based algorithm that utilizes prior shopping history to target specific messages to specific customers.... If a customer never purchases an item in a certain category or always ignores messages directed to an item in a certain category, the messaging agent will not provide promotional messages about this product to the particular customer... Alternatively, the central host may access the customer profile database and determine the customer's prior purchase records, and detect correlation of purchased items.</i>”)</li> <li>• <b>35:11-27</b> (“<i>The system accesses the customer profile and product profile databases to determine the most effective messages to send to the customer. The system should not send a message to a customer that would be inconsistent with the messaging agent's rules. For instance, if the customer profile indicates that a customer is a vegetarian and that he never purchases meat, the system would not send a message providing a discount on hamburgers. Instead, the customer may be provided a message concerning a discount on tofu burgers. On the other hand, if a customer's customer profile indicates that he always purchases brand X orange juice, the system may offer a big</i></li> </ul>

Claim Element	<u>Perttila in view of Swartz</u>																																																																	
	<p><i>discount on brand Y to entice the customer to switch brands.”)</i></p> <ul style="list-style-type: none"> <li>• <b>15:16-24</b> (“<i>The system of the present invention may also maintain a customer profile database. This database maintains records for each of the profiled customers who have a shopping history. <u>Certain records in this database relate to features of the customer's shopping history....</u></i>”)</li> <li>• <b>4:47-50</b> (“FIG. 20 is a table of <i>records relating to shopping behavior for a particular customer stored in a customer profile data base</i> in accordance with one embodiment of the present invention...”)</li> <li>• <b>Fig. 20:</b></li> </ul> <p>Figure 20                      Customer ID Number 10-0001</p> <table border="1" data-bbox="544 982 1403 1209"> <thead> <tr> <th></th> <th>950</th> <th>952</th> <th>954</th> <th>956</th> <th>958</th> <th>958</th> <th>958</th> <th>958</th> </tr> <tr> <th>Products Purchased</th> <th>Linked Products</th> <th>Price Sensitivity Factor</th> <th>Replenishment Frequency</th> <th>Date of visit</th> <th>Date of visit</th> <th>Date of visit</th> <th>Date of visit</th> </tr> </thead> <tbody> <tr> <td>0002</td> <td>N/A</td> <td>1</td> <td>1</td> <td>6/16/01</td> <td>6/23/01</td> <td>6/30/01</td> <td>7/07/01</td> </tr> <tr> <td>0005</td> <td>0045, 0067, 0072, 0089, 0139, 0202</td> <td>5</td> <td>7</td> <td>--</td> <td>--</td> <td>6/30/01</td> <td>--</td> </tr> <tr> <td>0006</td> <td>0090</td> <td>2</td> <td>3</td> <td>6/16/01</td> <td>--</td> <td>--</td> <td>7/07/01</td> </tr> <tr> <td>0016</td> <td>N/A</td> <td>4</td> <td>4</td> <td>--</td> <td>6/23/01</td> <td>--</td> <td>--</td> </tr> <tr> <td>0050</td> <td>N/A</td> <td>3</td> <td>3</td> <td>6/16/01</td> <td>--</td> <td>6/30/01</td> <td>--</td> </tr> <tr> <td>0058</td> <td>0016</td> <td>3</td> <td>3</td> <td>--</td> <td>6/23/01</td> <td>--</td> <td>7/07/01</td> </tr> </tbody> </table> <p><i>See also Swartz, 4:50-54, 12:2-24, 15:31-43, 26:31-35, 26:46-27:2, 31:46-64, 35:66-36:18, 36:27-32, 36:59-61, 39:12-14, 40:1-8, 50:38-57, 54:42-55.</i></p> <p>Williams ¶¶203-207.</p>		950	952	954	956	958	958	958	958	Products Purchased	Linked Products	Price Sensitivity Factor	Replenishment Frequency	Date of visit	Date of visit	Date of visit	Date of visit	0002	N/A	1	1	6/16/01	6/23/01	6/30/01	7/07/01	0005	0045, 0067, 0072, 0089, 0139, 0202	5	7	--	--	6/30/01	--	0006	0090	2	3	6/16/01	--	--	7/07/01	0016	N/A	4	4	--	6/23/01	--	--	0050	N/A	3	3	6/16/01	--	6/30/01	--	0058	0016	3	3	--	6/23/01	--	7/07/01
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0058	0016	3	3	--	6/23/01	--	7/07/01																																																											
<p>[35] The method of claim 1 wherein the information delivered to the first wireless device additionally comprises: an image of an entity or object associated with the second</p>	<p><b>See §IX.A.2.[1].</b></p> <p><b>Perttila discloses delivering information to the first wireless device associated with an entity or object associated with the second device identifier information</b> (e.g., see [1.b]-[1.c], “coupon offerings are provided to mobile users through ... beacons located at the store itself,” “electronic coupon that corresponds to the content promoted by the billboard”).</p> <p><b><u>E.g., Perttila:</u></b></p>																																																																	

Claim Element	<u>Perttila in view of Swartz</u>
device identifier information.	<p><i>See [1.b]-[1.c].</i></p> <p>In addition, <b>Perttila</b> discloses that the remote server uses information from the wireless beacons “to determine the location of the merchant media arrangement,” which is “located at the store itself,” and deliver relevant electronic coupon offerings for the store to the user’s mobile communications device indicating the presence of the “offerings” in the store. <i>E.g.</i>, Perttila ¶¶[0027], [0029], [0037], [0039]. A POSITA would have understood that the e-coupon comprises an image of the object being promoted on the advertisement, and at least found it obvious to do so to promote the item. Williams ¶209.</p> <ul style="list-style-type: none"> <li>• [0029] (“<i>The remote server can also use the merchant ID code to determine the location of the merchant media arrangement; this determination is advantageous for coupons having location-dependent price and/or expiration periods restrictions.</i>”)</li> <li>• [0037] (“<i>An RFID tag 38 is co-located at the merchant-media arrangement at the first location (e.g., attached to the merchant promotional article 36), and is used to... associate the merchant promotional article 36 with a particular coupon to be provided to the user 28.</i>”)</li> <li>• [0039] (“For such electronic coupons, the user's terminal visits a second location such as a merchant-purchase center.... It should be noted that <i>the second location may also be the same as the first location</i>, for example, in cases where the <i>coupon offerings are provided to mobile users through tag or beacons located at the store itself.</i>”)</li> <li>• [0027] (“<i>The link to the remote source server is obtainable by visiting this particular billboard location...[A] link with the remote processing arrangement to provide the user with electronic</i> </li></ul>

Claim Element	<u>Perttila in view of Swartz</u>
	<p><i>commerce application, such as, a downloadable electronic coupon that corresponds to the content promoted by the billboard.”)</i></p> <p>See also <b>Perttila</b> ¶¶[0012], [0031]-[0032], Fig. 2.</p> <p><b>To the extent it is argued that further disclosure is required, Swartz discloses that the information delivered to the first wireless device additionally comprises: an image of an entity or object (e.g., “multi-media files associated with an item identified by a portable terminal” “[are] downloaded to the portable terminal” “for displaying...graphics”).</b></p> <p><b><u>E.g., Swartz:</u></b></p> <p><b>Swartz</b> discloses the customer’s mobile device downloading and displaying “graphics” associated with “scanned item[s]” “identified by” the customer. <i>E.g.</i>, Swartz, 2:22-25, 27:35-38, 28:49-51, 29:51-61. As discussed in §IX.B.1, a POSITA would have been motivated to apply <b>Swartz’s</b> known implementation detail teachings of information delivered to the first wireless device additionally comprising an image of an entity or object in implementing <b>Perttila’s</b> server, which delivers to the mobile communication device an “electronic coupon” associated with “the merchant-media’s ID code” detected by the mobile communication device. <i>E.g.</i>, Perttila ¶[0015]; Williams ¶210.</p> <ul style="list-style-type: none"> <li>• <b>2:22-25</b> (“It is a further object of the present invention to provide improved <i>access to</i> generally available <i>multi-media data files associated with an item identified by a portable terminal.</i>”)</li> <li>• <b>28:49-51</b> (“In the preferred embodiment of the present invention illustrated in FIG. 4, <i>this information is downloaded to the portable terminal 100 over the wireless network 130.</i>”)</li> </ul>

Claim Element	<u>Perttila in view of Swartz</u>
	<ul style="list-style-type: none"> <li>• <b>27:35-38</b> (“As discussed above, in a preferred embodiment of the present invention <i>a portable terminal is provided</i> with a high resolution graphical screen <i>for displaying text and graphics to the consumer</i>, and a two-way radio.”)</li> <li>• <b>29:51-61</b> (“The <i>consumer has scanned an item</i> of broccoli, a no cholesterol item. <i>The scanned item is displayed</i>.... In the event a larger display was used such as...the graphics version of the page would be displayed.”)</li> </ul> <p><i>See also Swartz</i>, 27:41-28:38, 29:50-61.  <i>Williams ¶¶208-210.</i></p>
<p>[38] The method of claim 1 wherein the further action taken by the central server comprises: requesting payment information as a step in a process for an electronic commerce transaction.</p>	<p><b><i>See §IX.A.2.[1].</i></b></p> <p><b>Swartz discloses that the further action taken by the central server comprises: requesting payment information as a step in a process for an electronic commerce transaction</b> (e.g., “‘virtual shopping’ visit using a remote terminal such as a portable terminal,” “[t]he host computer then returns the price and item description for each item, as well as calculating the total price, tax, discounts, etc.”).</p> <p><b><u>E.g., Swartz:</u></b></p> <p>While <b>Perttila</b> does not expressly reference requesting payment information for the server to process “credit actions,” <b>Swartz</b> discloses the customer engaging in “a ‘virtual shopping’ visit using a remote terminal such as a portable terminal...” <i>E.g.</i>, <i>Swartz</i>, 41:20-23. After product selection, the “host computer...returns the price and...total price, tax, discounts” to the customer’s “portable terminal” and can charge a “credit account associated with the customer.” <i>E.g.</i>, <i>id.</i> 23:8-27, 23:66-24:7, 51:4-8, 52:13-17. A POSITA would have understood that the central server would request payment information in this way during a virtual shopping visit and</p>

Claim Element	<u>Perttila in view of Swartz</u>
	<p>at minimum it would have been obvious to do so as discussed in §IX.B.1. Williams ¶212.</p> <p>As discussed in §IX.B.1, a POSITA would have been motivated to apply <b>Swartz’s</b> known implementation detail teachings of a server requesting payment information to facilitate a purchase of goods to be purchased using the customer’s device in implementing <b>Perttila’s</b> server, which performs “credit actions.” Williams ¶213.</p> <ul style="list-style-type: none"> <li>• <b>41:20-23:</b> (“<i>The graphical user interface can also be used by the customer at home or on the road as part of a “virtual shopping” visit using a remote terminal such as a portable terminal or home computer.</i>”)</li> <li>• <b>23:8-27</b> (“<i>Once the central processing system has successfully retrieved the customer information from the portable terminal 240, the customer then proceeds to a checkout register 170 for payment of the products selected.... The host computer then returns the price and item description for each item, as well as calculating the total price, tax, discounts, etc., just as it would if the items had been scanned by a clerk using a traditional slot scanner.</i>”)</li> <li>• <b>23:66-24:7</b> (“The customer would need to pay for his purchases in any of the ways normally available at a supermarket, such as by using cash, a check, credit card, etc... When the customer finishes shopping <i>the customer can be charged for his selections automatically.</i>”)</li> <li>• <b>52:12-16</b> (“<i>[T]he host computer has access to a database that stores information about a credit account associated with the customer and wherein the credit account is automatically charged when the customer completes his product selection.</i>”)</li> </ul>

Claim Element	<u>Perttila in view of Swartz</u>
	<p><i>See also Swartz</i>, 18:20-37, 22:14-23, 45:7-17, 47:8-16, Figs. 7A-7E, 10, 13, 14, and 15.</p> <p>Williams ¶¶211-213.</p>
<p>[39] The method of claim 1 wherein the further action taken by the central server comprises: delivering a confirmation of payment as a step in a process for an electronic commerce transaction.</p>	<p><i>See §IX.A.2.[1].</i></p> <p><b>Swartz discloses that the further action taken by the central server comprises: delivering a confirmation of payment as a step in a process for an electronic commerce transaction</b> (e.g., “virtual shopping’ visit using a remote terminal such as a portable terminal,” “receipt could optionally be emailed to an email address associated with the customer”).</p> <p><u><i>E.g., Swartz:</i></u></p> <p><i>See §IX.B.2.[38].</i></p> <p>In addition, <b>Swartz</b> discloses the host computer sending a “receipt” via email to the customer—thus confirming payment during a “virtual shopping visit.” <i>E.g.</i>, Swartz, 23:35-36, 41:20-23. As discussed in §IX.B.1, a POSITA would have been motivated to apply <b>Swartz’s</b> known implementation detail teachings of a server sending a receipt to a customer during a virtual shopping visit in implementing <b>Perttila’s</b> server, which performs “credit actions.” Williams ¶217.</p> <ul style="list-style-type: none"> <li>• <b>41:20-23:</b> (“The <i>graphical user interface can also be used</i> by the customer at home or on the road <i>as part of a “virtual shopping” visit using a remote terminal such as a portable terminal</i> or home computer.”)</li> <li>• <b>23:21-36</b> (“In systems that operate in batch mode, the customer hands his scanner to a clerk who places it in a download well, which downloads the information to the host computer. <i>The host computer then returns the price and item description for each item, as well as calculating the total price, tax, discounts, etc., just as it would if the</i></li> </ul>

Claim Element	<u>Perttola in view of Swartz</u>
	<p><i>items had been scanned by a clerk using a traditional slot scanner. The receipt printer prints out the entire list of all purchased items.... <u>This receipt could optionally be emailed to an email address associated with the customer...</u>)</i></p> <p>See also <b>Swartz</b>, 22:1-8, 43:55-50, 44:34-45:28, 47:8-10.  Williams ¶¶214-217.</p>
<p>[40] The method of claim 1 wherein the further action taken by the central server comprises: delivering an electronic receipt as step in a process for an electronic commerce transaction.</p>	<p><b>See §IX.A.2.[1].</b></p> <p><b>Swartz discloses the further action taken by the central server comprises: delivering an electronic receipt as step in a process for an electronic commerce transaction</b> (e.g., “virtual shopping’ visit using a remote terminal such as a portable terminal,” “receipt could optionally be emailed to an email address associated with the customer”).</p> <p><b><u>E.g., Swartz:</u></b></p> <p><b>See §IX.B.2.[39].</b></p> <p>Williams ¶¶218-219.</p>
<p>[41] The method of claim 1 wherein the further action taken by the central server comprises: delivering a confirmation of payment as a step in a process for an electronic transaction.</p>	<p><b>See §§IX.A.2.[1], IX.B.2.[39].</b></p> <p>Williams ¶¶220-221.</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 ¶¶234-235. Indeed, as demonstrated by the prior art referenced herein, any purported problems, solutions or unexpected results in the '359 were already well known. Williams ¶¶234-235. 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.” '359, 2:3-10. 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 ¶¶234-235. 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 '359. Claims 9, 22, and 51 are anticipated and all Challenged Claims are rendered obvious for the reasons set forth above. Williams

¶¶236-239. There is a reasonable likelihood that Petitioner will prevail as to each of those claims. *Inter Partes* review of claims 9, 22, 28, 35, 38-41, and 51 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 13,322 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 '359 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:

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Dated: May 15, 2020

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