

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**TARGET CORPORATION,**  
*Appellant*

**v.**

**PROXICOM WIRELESS, LLC,**  
*Cross-Appellant*

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2022-1282, 2022-1283, 2022-1338, 2022-1339

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Appeals from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in Nos. IPR2020-  
00931, IPR2020-00933.

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Decided: September 20, 2023

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Before LOURIE, TARANTO, and HUGHES, *Circuit Judges*.

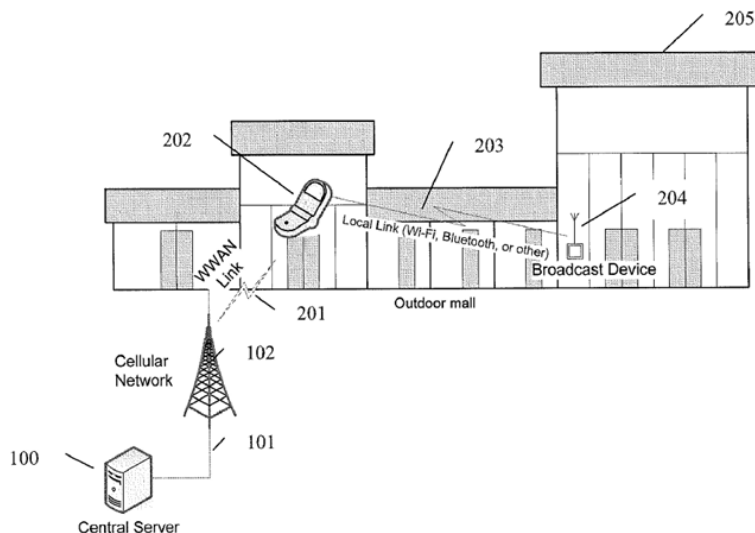
Hughes, *Circuit Judge*.

Target appeals decisions of the Patent Trial and Appeal Board determining that claims 37 and 43 of U.S. Patent No. 8,090,359 and claims 25, 26, 28, and 29 of U.S. Patent No. 8,374,592 are not unpatentable. Proxicom cross appeals the Board's decisions that claims 1–5, 14–18, 27, 31, 36, 42, 48, 49, and 52–55 of the '359 patent are anticipated by and obvious over Perttila, and claims 19–23 of the '592 patent are obvious over Perttila in view of Insolia. For the lead appeal, we *reverse* the Board's holding that claims 37 and 43 of the '359 patent have not been shown to be unpatentable and *vacate and remand* the Board's holding that claims 25–26 and 28–29 of the '592 patent have not been shown to be unpatentable. For the cross-appeal, we *affirm* the Board's determination that claims 1–5, 14–18, 27, 31, 36, 42, 48, 49, and 52–55 of the '359 patent are unpatentable.

## I

### A

Proxicom owns the '359 and '592 patents, which share substantially similar specifications. They are directed to facilitating “the exchange of information and transactions between two entities associated with two wireless devices when the devices are in close proximity to each other” utilizing both short-range and a long-range wireless capabilities. '359 patent at 2:59–62; '592 patent at 2:61–64. The invention can be used when, for instance, two individuals in proximity wish to exchange information or a payment, such as for goods or services received at a flea market. Device-to-device communications can confirm that two devices are in proximity, and the server located remotely can facilitate the exchange of information or carry out the financial transaction. The below figure illustrates an application of the patented technology.



'359 patent at Figure 2.

In this figure, the first wireless device (mobile device) detects that it is in proximity to the second wireless device (broadcast device) via a short-range communication, such as Bluetooth, and then communicates with the central server via long-range wireless connection, such as the cellular network. Once the second wireless device is detected, the first wireless device receives a unique identifier from the second wireless device via a short-range communications protocol. The first wireless device then sends the unique identifier to a central server. The server determines what information regarding the second wireless device is available and transmits a description of the information to the user's device. The user then has the option to download the information.

The method illustrated in the above figure is claimed in independent claim 1 of the '359 patent, which is representative of the challenged claims. The disputed portion of the claim is highlighted below.

Claim 1: A method for a central server to exchange information between one or more wireless devices comprising the steps of:

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;

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

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.

'359 patent at 23:35–63 (emphasis added).

Claims 37 and 43 depend from claim 1 and require that “a list of goods” is transmitted to the first wireless device as part of an electronic commerce transaction. Claims 37 and 43 read,

Claim 37: The method of claim 1 wherein the further action taken by the central server comprises:

delivering a list of goods to the first wireless device as a step in a process for an electronic commerce transaction.

'359 patent at 27:56–59.

Claim 43: The method of claim 1 wherein the information delivered to the first wireless device comprises:

a list of goods or services available for selection from an entity associated with the second device identifier information as part of a step in an electronic commerce transaction.

'359 patent at 28:15–20.

Of the disputed claims in the '592 patent, claims 19 and 25 are independent and recite many of the same or similar limitations. Claim 25 reads,

Claim 25: A method for a server to exchange information between a first wireless device and a second wireless device, comprising the steps of:

...

said server using the identifier information *to determine a name of an entity or object* located in proximity to the second wireless device; . . . .

'592 patent at 25:35–54 (emphasis added).

## B

Perttila<sup>1</sup> discloses a system for a server to provide an electronic coupon to a user's mobile device in response to the user's device interacting with a merchant-media arrangement. The merchant-media arrangement can be a billboard or a poster located in a store. When the user's

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<sup>1</sup> U.S. Patent Application Publication No. 2004/0243519.

mobile device is within the proximity of merchant-media arrangement, the arrangement transmits to the user's mobile device a merchant ID code via radio frequency identification (RFID) or Bluetooth. The mobile device then transmits a merchant-information-request signal to the server through a mobile network. The server extracts the mobile device ID and the merchant ID code from the request, and then generates an electronic coupon based on the merchant ID code and provides the user with an option to download the coupon.

### C

Target filed two inter partes review petitions challenging the claims of the '359 patent and the '592 patent. In the first petition, Target challenged claims 1–5, 14–18, 27, 31, 36, 37, 42, 43, 48, 49, and 52–55 of the '359 patent. In the second petition, Target challenged claims 19–23, 25, 26, 28, and 29 of the '592 patent. The IPR proceedings raised many of the same issues, and the Board issued similar final decisions in both IPRs.

For the '359 patent, the Board found claims 1–5, 14–18, 27, 31, 36, 42, 48, 49, and 52–55 unpatentable as obvious and/or anticipated over Perttila, but found claims 37 and 43 not unpatentable. For the '592 patent, the Board found claims 19–23 of the '592 patent unpatentable as obvious over Perttila in view of Insolia,<sup>2</sup> but found claims 25, 26, 28, and 29 not unpatentable over Perttila in view of Davis.<sup>3</sup>

Target appeals the Board's patentability conclusions for claims 37 and 43 of the '359 patent and claims 25, 26, 28, and 29 of the '592 patent. Proxicom cross-appeals the Board's unpatentability conclusion for claims 1–5, 14–18,

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<sup>2</sup> U.S. Patent No. 8,121,917.

<sup>3</sup> U.S. Patent Application Publication No. 2010/0030638.

27, 31, 36, 42, 48, 49, and 52–55 of the '359 patent and claims 19–23 of the '592 patent.

## II

We set aside the Board's actions if they are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law," or "unsupported by substantial evidence." 5 U.S.C. § 706(2). We review the Board's legal decisions de novo and its factual determinations for substantial evidence. *Arendi S.A.R.L. v. Google LLC*, 882 F.3d 1132, 1133 (Fed. Cir. 2018). Substantial evidence "means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Consol. Edison Co. v. N.L.R.B.*, 305 U.S. 197, 217 (1938).

Claim construction and obviousness are both questions of law that depend on underlying findings of fact, which are reviewed for substantial evidence. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 325–28 (2015); *In re Brandt*, 886 F.3d 1171, 1175 (Fed. Cir. 2018). "Anticipation is a question of fact, and a finding of anticipation requires that every limitation of the claim is present in a single prior art reference." *Ericsson Inc. v. Intell. Ventures I LLC*, 890 F.3d 1336, 1338 (Fed. Cir. 2018).

## III

On appeal, Target makes two primary arguments: (1) the Board erred by interpreting claims 37 and 43 of the '359 patent to require an unrecited "interaction" with the claimed "list of goods," and (2) the Board legally erred in concluding that claim 25 of '592 patent and dependent claims 26, 28, and 29 are unpatentable over Perttila in view of Davis, because as the Board itself acknowledged, the prior art disclosed all of the claim limitations at least some of the time. We agree with Target on both points. Thus, we reverse and hold that claims 37 and 43 are unpatentable over Perttila, vacate the Board's decision on claim 25 and dependent claims 26, 28, and 29, and remand for the Board

to consider the subsequent limitations of the claims that were not addressed in its final written decision.

A

Claims 37 and 43 both require that “a list of goods” is transmitted to the first wireless device *as part of an electronic commerce transaction*. Target argued to the Board that Perttila’s disclosure of delivering a “restaurant menu” satisfies the recitation of “a list of goods” in these claims. Perttila reads in relevant part, “[i]n another application, the billboard may be promoting a food product, and the request to the remote server corresponds to a request for receiving electronic coupon information including, for example, *a restaurant menu* or a recipe involving that particular food or food type.” J.A. 1006 (¶ 26) (emphasis added). The Board rejected the argument because in the Board’s view, Target failed to explain how Perttila discloses the user *interacting* with the menu after it has been delivered.

On appeal, Target argues that the Board erred by finding that the “list of goods” in claims 37 and 43 must be “interact[ed]” with as part of the e-commerce transaction. We agree, because the Board did not do so in claim 1 although they share the same limitations. Claim 1 recites, “the central server taking further action to deliver information or a service to the first wireless device based at least in part upon . . . *a current step in a multiple step process for an ongoing electronic commerce transaction*.” ’359 patent at 23:50–63 (emphasis added). The Board concluded that in the context of claim 1, “Perttila explains that the electronic coupon is part of an electronic commerce transaction.” J.A. 25. Notably, the Board did not find claim 1 to require the user to interact with that electronic coupon. And neither claim 37 nor 43 requires that the “list of goods” be *interacted with* as part of an e-commerce transaction. *See in re Zletz*, 893 F.2d 319, 322 (Fed. Cir. 1990) (“It was incorrect for the Board to read unwritten limitations into claims.”).



Proxicom did not argue to the Board that any of these claims require the user “interacting” with the claimed list of goods, and it does not do so here. Red Br. 48 (stating that by “interaction,” the Board merely meant “to explain what might rise to the level of meeting the claim—i.e., disclosure of a restaurant menu and an ensuing interaction in a multistep process.”). Instead, Proxicom argues that Proxicom’s “restaurant menu” did not involve a multi-step electronic commerce transaction. But Proxicom does not explain why we should reject the Board’s conclusion as to claim 1 nor does Proxicom explain why we should apply more stringent interpretations to claims 37 and 43 than the interpretation applied to claim 1.

Once we find that claims 37 and 43 do not require the user to “interact” with the “list of goods,” Perttila’s “restaurant menu” discloses the claim limitation—a “list of goods . . . as a step in a process for an electronic commerce transaction.” The Board found that Perttila’s electronic coupon is part of an electronic commerce transaction in its analysis of claim 1, and the restaurant menu, a list of food items, delivered in the form of an electronic coupon, qualifies as a “list of goods.”

We find that the Board erred by interpreting claims 37 and 43 of the ’359 patent to require an unrecited “interaction” with the claimed “list of goods.” Under the proper interpretation, Perttila discloses all limitations of claims 27 and 43. Thus, we reverse and hold that claims 37 and 43 are unpatentable over Perttila. *See Smith & Nephew, Inc. v. Rea*, 721 F.3d 1371, 1380 (Fed. Cir. 2013) (holding that reversal is appropriate where “the facts are largely undisputed, and the Board’s decision . . . was mainly the result of the analytical errors”).

## B

Target next argues that with respect to claim 25, the Board applied the wrong legal standard, causing the Board to improperly reject prior art disclosures that meet the

relevant claim limitations some of the time, but not all of the time. Claim 25 requires the server “to determine a name of an entity or object located in proximity to the second wireless device.” Target argued to the Board that when Perttila’s billboard is located “in the store itself” where the coupons are to be redeemed, this limitation is met. J.A. 1426 (¶ 39) (Perttila discloses that for certain types of electronic coupons, such as “product offerings with price discounts,” the coupons are “provided to mobile users through tag or beacons located at the store itself.”). Target explained that in this embodiment, the server receives a merchant ID corresponding to the billboard; then sends a coupon that contains a name of the store or products located in proximity to the billboard.

The Board found that Target’s assertions regarding product offerings within the store “rely on speculation,” and hence were insufficient to conclude that Perttila discloses all limitations of claim 25. J.A. 85. The Board explained that “while it may be likely that the advertised products are in the store, this is not necessarily the case. For example, the products may be out of stock, in which case [Target] acknowledges that the claim language is not satisfied” during those times. J.A. 72. Based on this rationale—that the claim limitation is met based on chance and speculation alone—the Board concluded that claim 25 and its dependent claims had not been shown to be obvious over Perttila in view of Davis. J.A. 84–87. The Board did not analyze the subsequent limitations of claim 25 or its dependent claims.

On appeal, Target argues that because there is no dispute that the recitation is met by Perttila at least some of the time, Perttila teaches that aspect of the claims. Blue Br. 30. Target mainly relies on our precedent *Unwired Planet, LLC v. Google Inc.*, where we held that “combinations of prior art that *sometimes* meet the claim elements are sufficient to show obviousness.” 841 F.3d 995, 1002 (Fed. Cir. 2016) (emphasis added). In *Unwired Planet*, the

claim at issue recited “farther-over-nearer ordering,” which prioritizes preferred providers that are farther away over providers that are nearer in distance. *Id.* at 998. The prior art taught a prioritization scheme based on an alphabetical ordering, which will “often result in locations that are farther away being given a higher priority than locations that are nearer.” *Id.* at 1002. We held that the prior art taught the recited claim because “[i]t is enough that the combination would sometimes perform all the method steps.” *Id.*

Similarly here, the Board acknowledged that Perttila’s disclosure met the determining recitation at least some of the times (i.e., when products are in stock). Specifically, it found that Perttila’s server sometimes provided e-coupons for products that are in the same store as the billboard. In such instances, the Board does not dispute that the coupon would identify the name of the store or products in that store located in proximity to the billboard, satisfying all of claim 25’s determining recitation. Because there is no dispute that Perttila would perform claim 25’s determining recitation at least some of the time, we hold that Perttila teaches that aspect of the claims. *See Hewlett-Packard Co. v. Mustek Sys. Inc.*, 340 F.3d 1314, 1326 (Fed. Cir. 2003) (quoting *Bell Commc’ns Rsch., Inc. v. Vitalink Commc’ns Corp.*, 55 F.3d 615, 622–623 (Fed. Cir. 1995)) (“Just as an ‘accused product that sometimes, but not always, embodies a claimed method nonetheless infringes,’ a prior art product that sometimes, but not always, embodies a claimed method nonetheless teaches that aspect of the invention.”).

Accordingly, we vacate the Board’s decision on claim 25 and its dependent claims 26, 28, and 29 and remand for the Board to consider the subsequent limitations of the claims.

#### IV

Finally, we consider Proxicom’s cross-appeal. Proxicom’s primary argument is that the Board committed legal error by implicitly adopting and applying a claim construction that permits the “entity” or “object” to be intangible

and without physical presence.<sup>4</sup> Claims 1 and 14 of the '359 patent and claim 19 of the '592 patent require the central server to determine or store “one or more of an identity or related information concerning an entity or object located in proximity to the second device.” '359 patent at 23:45–49; 25:35–38; '592 patent at 24:63–65. The Board found that a construction of “object or entity” is immaterial to the outcome of this case. The Board then mapped the recited second device to the short-range transmitter (RFID tag) and the recited object to the billboard and the content promoted by billboard.

Proxicom argues that “content promoted by the billboard” is not an object or entity with physical presence, but for the object to be located *in proximity* to another object, the claimed object must be physically present. We fail to see, and Proxicom does not explain, why a coupon that corresponds to “content promoted by the billboard” does not also correspond to the billboard itself. Moreover, the specification of the '359 and '592 patents recognize that the object may be intangible. It states, “the ‘object’ is intended to include a physical thing, such as a product that is being

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<sup>4</sup> Target argues that Proxicom is collaterally estopped from raising these challenges. Appellant’s Response and Reply Br. 2–3. In a separate IPR proceeding, IPR2020-00932, the Board determined that claims 9, 22, and 51 of the '359 patent are unpatentable as anticipated and obvious over Perttila. *Target Corp. v. Proxicom Wireless, LLC*, No. 2020-00932, 2021 WL 5203113, at \*16 (P.T.A.B. Nov. 8, 2021). Proxicom raises the same issues in its cross-appeal that it lost on in that IPR. Because Proxicom did not appeal the Board’s decision in that proceeding, Target argues that Proxicom is bound by the Board’s findings and holdings on this appeal. While Target appears to be correct, we need not decide this issue given our conclusions on the merits.

offered for sale and may include a tangible article or *intangible such as an electronic music or video file or photograph.*” ’359 patent at 8:30–33; ’592 patent at 8:32–35 (emphasis added). Thus, the Board did not legally err by mapping the recited object to include the content promoted by billboard.

Proxicom next argues that Target shifted its mappings from its petition to reply, and the Board’s adoption of Target’s new mapping deprived Proxicom of due process. According to Proxicom, Target identified the “merchant media arrangement” as the second device in its petition, but later switched its position by arguing that the RFID tag is the second device. We disagree. The Board, in its institution decision, explicitly acknowledged that Perttila’s merchant-media arrangement includes both a billboard and a short-range communicator such as an “RFID tag” or “Bluetooth link.” J.A. 535–36 (“Perttila discloses that the merchant-media arrangement includes a poster or billboard. An RFID tag 38 is *co-located* at the merchant-media arrangement”) (internal citation and quotation omitted) (emphasis added).

Moreover, “[t]he critical question for compliance with the APA and due process is whether [Patent Owner] received ‘adequate notice of the issues that would be considered, and ultimately resolved, at that hearing.’” *Genzyme Therapeutics Prods. LP v. Biomarin Pharm. Inc.*, 825 F.3d 1360, 1367 (Fed. Cir. 2016) (quoting *Pub. Serv. Comm’n of Ky. v. FERC*, 397 F.3d 1004, 1012 (D.C. Cir. 2005)). Proxicom does not dispute that it had notice and opportunity to address the allegedly “new” mapping. Red Br. 59 (stating that these issues were raised at oral argument). Proxicom indeed addressed Target’s “new” mapping in its sur-replies. See J.A. 698–706; J.A. 2735–43. Because Target’s mapping was consistent with the Board’s institution decision, and Proxicom had notice and opportunity to respond to Target’s mapping, the Board did not deprive Proxicom of due process.

We have considered Proxicom's remaining arguments and find them unpersuasive. For the reasons above, we affirm the Board's determination that claims 1–5, 14–18, 27, 31, 36, 42, 48, 49, and 52–55 of the '359 patent and claims 19–23 of the '592 patent are unpatentable.

**AFFIRMED-IN-PART, REVERSED-IN-PART,  
VACATED-IN-PART, AND REMANDED**

COSTS

Costs to appellant.