

NOTE: This disposition is nonprecedential.

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

---

**BILLJCO, LLC,**  
*Appellant*

v.

**APPLE INC.,**  
*Appellee*

---

2023-2348

---

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2022-00426.

---

Decided: March 14, 2025

---

JOSEPH KUO, Saul Ewing Arnstein & Lehr LLP, Chicago, IL, argued for appellant. Also represented by BRIAN MICHALEK, ELIZABETH A. THOMPSON; BRIAN LANDRY, Boston, MA; COURTLAND COLLINSON MERRILL, Minneapolis, MN.

JAMES LAWRENCE DAVIS, JR., Ropes & Gray LLP, East Palo Alto, CA, argued for appellee. Also represented by JAMES RICHARD BATCHELDER, CHRISTOPHER M. BONNY;

DOUGLAS HALLWARD-DRIEMEIER, Washington, DC; BRIAN LEBOW, CASSANDRA B. ROTH, New York, NY.

---

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

REYNA, *Circuit Judge*

BillJCo, LLC appeals from the final written decision of the U.S. Patent Trial and Appeal Board that claims 1 and 10–12 of the ’804 patent are unpatentable as obvious. We affirm.

#### BACKGROUND

BillJCo, LLC (“BillJCo”) owns U.S. Patent No. 8,761,804 (the “’804 patent”), which relates to providing peer-to-peer location-based services for mobile data processing systems. ’804 patent, Abstract. The patent explains that prior art systems typically exchanged data via a centralized server, leading to slower data processing speeds, high infrastructure costs, and privacy concerns, particularly when transmitting a user’s location data. *Id.* at 1:66–2:26, 2:43–58. The ’804 patent addresses these issues by providing a computer architecture that allows mobile systems to exchange location-based data without requiring a centralized server. *Id.* at 3:53–4:23.

Claims 1 and 10–12 (the “challenged claims”) of the ’804 patent are at issue on appeal. Claim 1, which is representative and dispositive of the remaining claims, recites in relevant part:

1. A method by a sending data processing system [] comprising: . . . **transmitting**, by the sending data processing system, **the broadcast unidirectional wireless data record for receipt by a plurality of receiving mobile data processing systems in a wireless vicinity of the sending data processing system**

**wherein the broadcast unidirectional wireless data record is beacons** by the sending data processing system in accordance with the configuration for when to perform **beaconing**[.]

'804 patent, Cl. 1 (118:24–31) (emphasis added).

Apple Inc. (“Apple”) petitioned for inter partes review (“IPR”) of the challenged claims. The Board granted institution and issued a final written decision in Apple’s favor. *See Apple Inc. v. BillJCo LLC*, No. IPR2022-00426 (P.T.A.B. June 27, 2023) (“*Final Decision*”), at J.A. 1. During review, the parties disputed the meaning of “transmitting” and “beacon.” The Board interpreted both terms according to their plain and ordinary meaning. *Id.* at 7–8. The Board declined BillJCo’s proposed construction that precluded transmitting data “to the receiving system through an intermediary.”<sup>1</sup> *Id.* at 8. The Board also agreed with Apple that the term “beacon” refers to “a simple periodic broadcast.” *Id.* at 7.

Apple argued the challenged claims were obvious over Himmelstein<sup>2</sup> in combination with Myr.<sup>3</sup> Himmelstein relates to a system for providing information to users based on the user’s location, where a vehicle can transmit information to either neighboring vehicles or a fixed base station. Myr relates to a system for gathering traffic

---

<sup>1</sup> The parties repeatedly reference the term “intermediary,” although the patent only mentions this term once when discussing the “[a]dvantages of having a service as the intermediary point between clients, users, and systems.” ’804 patent, 1:39–41. We therefore understand the term “intermediary” to mean “an intermediary point between clients, users, or systems.”

<sup>2</sup> U.S. Patent No. 7,123,926 (“Himmelstein”).

<sup>3</sup> U.S. Patent Pub. No. 2003/0014181 (“Myr”).

information using cellular networks and, pertinent here, discloses using periodic data transmissions. BillJCo also asserted objective indicia of non-obviousness.

The Board determined that the challenged claims were unpatentable in view of Himmelstein and Myr. *Id.* at 20. The Board determined that Himmelstein disclosed every disputed claim element, except periodic beaconing, which it found was disclosed by Myr. *Id.* at 10–14. It also agreed with Apple that a skilled artisan would be motivated to combine Himmelstein with Myr’s periodic beaconing to conserve power and reduce cost. *Id.* at 14–16. The Board rejected BillJCo’s assertion of non-obviousness. *Id.* at 19.

BillJCo timely appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

## DISCUSSION

BillJCo raises two principal issues on appeal: that the Board erred in claim construction, and that the Board’s determinations relative to obviousness and objective indicia of non-obviousness are unsupported by substantial evidence. We review the Board’s legal determinations de novo, *In re Elsner*, 381 F.3d 1125, 1127 (Fed. Cir. 2004), and its factual findings for substantial evidence, *In re Gartside*, 203 F.3d 1305, 1315 (Fed. Cir. 2000).

### I. CLAIM CONSTRUCTION

BillJCo asserts that the Board erred by construing the “transmitting” and “beacon” terms by their plain and ordinary meaning. We disagree. Claim construction is a question of law that can involve factual underpinnings. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 333 (2015). We review de novo the Board’s claim constructions that are based solely on intrinsic evidence, while we review subsidiary factual findings involving extrinsic evidence for substantial evidence. *Personalized Media Commc’ns, LLC v. Apple Inc.*, 952 F.3d 1336, 1339 (Fed. Cir. 2020).

## A

BillJCo argues the Board erred in its construction of the term “transmitting” to not preclude transmission via an intermediary. Appellant Br. 14. We disagree. Claim 1 requires that the unidirectional wireless data record is sent using “the sending data processing system [and received] by a plurality of receiving mobile data processing systems in a wireless vicinity” of the sender. ’804 patent, Cl. 1 (118:24–27). We see no requirement that the system precludes the use of an intermediary to facilitate the transmission.

BillJCo appears to argue that the plain meaning of the claim term “unidirectional” means to exclude an intermediary. Appellant Br. 19–20. But the patent only refers to “unidirectional” as the direction of the communication path (i.e., a one-way path from the sender to the receiver versus a bidirectional or two-way path where the receiver returns information). ’804 patent, 18:4–22, 38–42. A “unidirectional” communication could therefore be transmitted in one direction from the sender through an intermediary and to the receiving mobile system.

BillJCo asserts that the specification discloses an embodiment that does not require an intermediary service, but it also discloses an embodiment where intermediary services such as centralized processing may be warranted, for example, “to house [a mobile system’s] whereabouts information.” ’804 patent, 57:33–41. BillJCo does not argue, nor do we see, any disclaimer of the use of an intermediary, such as a “clear and unmistakable” prosecution history disclaimer. *See Cont’l Cirs. LLC v. Intel Corp.*, 915 F.3d 788, 798–99 (Fed. Cir. 2019) (holding that a disavowal of claim scope, whether in the specification or prosecution history, must be clear and unmistakable). The Board, therefore, correctly concluded the “transmitting” limitation does not preclude transmission via an intermediary.

## B

With respect to the claim term “beacon,” the parties agree that the term should be construed according to its plain and ordinary meaning but disagree on what that meaning is. Appellant Br. 29. Apple argues that the correct construction was: “a simple periodic broadcast.” *Final Decision*, J.A. 7. BillJCo asserts a beacon must also attract attention to the sender. Appellant Br. 29–30.

The specification supports the Board’s construction. The specification discusses a beacon in the context of “[b]eaconing hotspots, or other broadcasters.” ’804 patent, 114:14–15. It refers to services that “periodically broadcast (beacon) their reference whereabouts.” *Id.* at 113:54. BillJCo asserts that beacon may also refer to an alternative transmission type because the term is used in parentheses. Appellant Br. 35–36. But we find no such hidden meaning in the specification’s use of parentheses.<sup>4</sup> BillJCo also argues that whether a broadcast is a beacon depends on an intent to direct attention to the sender. Appellant Br. 29–30. The specification, however, does not support this interpretation. Although the specification references “beacon” or “beaconing” eight times, it does not explicitly discuss an intent to attract attention to the sender. *See generally* ’804 patent.

Finally, BillJCo contends the Board improperly ignored expert testimony that supports its construction. Appellant Br. 29–30. But we find no error in the Board not addressing “extrinsic evidence that limits the claim scope

---

<sup>4</sup> Indeed, the specification utilizes parentheses extensively to reference acronyms or terms used synonymously. *See, e.g., id.* at 15:43 (“Send queue 24 (Transmit (Tx) queue”). Parentheticals are also used in conjunction with the term “or” to reference alternatives. *See, e.g., id.* at 18:63 (“bus (or switch)”).

in a manner not contemplated by the intrinsic record.” *Weber, Inc. v. Provisur Techs., Inc.*, 92 F.4th 1059, 1070 (Fed. Cir.), *cert. denied sub nom. Provisur Techs., Inc. v. Weber, Inc.*, 145 S. Ct. 173 (2024).

In sum, the Board’s construction of the term “beacon” as “a simple periodic broadcast” is supported by substantial evidence and we see no reason to disturb it. *Final Decision*, J.A. 7.

## II. OBVIOUSNESS

BillJCo argues that the Board erred in its determination that Himmelstein and Myr together disclose the asserted claims, and that a person of skill in the art would not be motivated to combine Himmelstein and Myr. We disagree. We first note that BillJCo’s obviousness arguments are largely premised on its failed claim construction that the Board properly rejected. *See, e.g., Kamstrup A/S v. Axioma Metering UAB*, 43 F.4th 1374, 1385 (Fed. Cir. 2022); Appellants Br. 41; *supra* Discussion Section I. Second, the Board rejected BillJCo’s argument that Himmelstein disparaged using cell phone-based systems like those disclosed in Myr. Instead, the Board credited Apple’s expert testimony that a skilled artisan would use Myr’s periodic beaconing to provide accurate location data with minimal power. *Final Decision*, J.A. 14–16. The Board also cited Federal Circuit precedent that increased energy efficiency may establish a motivation to combine. *Id.* at 14–15 (citing *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 784, 797–99 (Fed. Cir. 2021)). Substantial evidence therefore supports the Board’s obviousness findings.

## III. OBJECTIVE INDICIA OF NON-OBVIOUSNESS

Finally, BillJCo argues that the Board erred in its analysis of non-obviousness. With respect to copying, the Board found that BillJCo’s sole evidence of copying—unsolicited communications to Apple regarding its then-pending patent applications—failed to show that Apple altered its

product designs to incorporate BillJCo's patented technology. *Id* (citing *Liqwd, Inc. v. L'Oreal USA, Inc.*, 941 F.3d 1133, 1138 (Fed. Cir. 2019)). Concerning commercial success, the Board determined that BillJCo's licensing efforts were "unconvincing," noting that BillJCo failed to show the '804 patent's significance among over thirty licensed patents. *Final Decision*, J.A. 18–19. We have noted that "the mere existence" of licenses, alone, does not establish secondary considerations sufficient to overcome an obviousness finding. *Iron Grip Barbell Co. v. USA Sports, Inc.*, 392 F.3d 1317, 1324 (Fed. Cir. 2004) (internal quotations and citation omitted). Based on the foregoing, we conclude that the Board's non-obviousness determination is supported by substantial evidence.

#### CONCLUSION

We have considered BillJCo's remaining arguments and find them unpersuasive. For the foregoing reasons, we affirm the Board's decision that claims 1 and 10–12 of the '804 patent are unpatentable as obvious.

#### AFFIRMED

#### COSTS

Costs against BillJCo.