

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

**BOARDACTIVE CORPORATION,**

*Plaintiff,*

v.

**FOURSQUARE LABS, INC.,**

*Defendant.*

**Case No. 1:22-cv-00597-JDW**

**MEMORANDUM**

Not everyone is as receptive to a billboard advertisement as Homer Simpson on New Billboard Day.<sup>1</sup> To make billboards more effective when targeting the rest of us, BoardActive Corporation patented an approach to digital advertisement based on consumers' proximity to billboards and the direction of their travel, among other things. However, three of those patents are directed to a common and abstract idea: targeted digital marketing. Those patents are therefore invalid. Other companies, including Foursquare Labs, Inc., can therefore use the same technology to persuade us all to surprise our families and go to clown college (including but not limited to Princeton).<sup>2</sup>

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<sup>1</sup> See *The Simpsons: Homie The Clown* (Fox television broadcast Feb. 12, 1995).

<sup>2</sup> Compare *id.* ("you people have held me back long enough, I'm going to clown college!") with *The Simpsons: Brother From Another Series* (Fox television broadcast Feb. 23, 1997) ("'four years at clown college' ... 'I'd thank you not to refer to Princeton that way.'").

## **I. BACKGROUND**

BoardActive alleges that Foursquare infringes five of its patents: (a) U.S. Patent No. 10,521,822 (the '822 Patent); (b) U.S. Patent No. 10,621,620 (the '620 Patent); (c) U.S. Patent No. 10,621,621 (the '621 Patent); (d) U.S. Patent No. 10,685,380 (the '380 Patent); and (e) U.S. Patent No. 10,692,108 (the '108 Patent). These patents are part of the same patent family, which provides a "platform for location and time based advertising." They claim methods and systems for determining course of travel based on at least two geolocation indications, associating content with delivery conditions, including course of travel, and transmitting content when the delivery conditions are met. The '822 Patent is the parent patent with two child patent branches. One branch consists of the '621 and '380 Patents. The '621 Patent is a continuation of '822 Patent and the '380 Patent is a continuation of the '621 Patent. Both are subject to terminal disclaimers. The second branch consists of the '620 and '108 Patents. The '620 Patent is a partial continuation of the '822 Patent and the '108 Patent is a continuation of the '620 Patent. The '620 Patent is not subject to a terminal disclaimer, but the '108 Patent is, in light of the '620 Patent.

Foursquare has moved to dismiss. It argues that the asserted patents may all be represented by Claim 1 of the '380 Patent and they are all invalid under Section 101. BoardActive disagrees. The Motion is ripe for disposition.

## II. LEGAL STANDARD

A district court may dismiss a complaint for failure to state a claim upon which relief can be granted. *See* FED. R. CIV. P. 12(b)(6). The Federal Circuit applies regional circuit law to procedural questions that are not themselves substantive patent law issues so long as they do not (A) pertain to patent law, (B) bear an essential relationship to matters committed to the Federal Circuit's exclusive control by statute, or (C) implicate the jurisprudential responsibilities of the Federal Circuit in a field within its exclusive jurisdiction. *See GFI, Inc. v. Franklin Corp.*, 265 F.3d 1268, 1272 (Fed. Cir. 2001). Thus, I apply Third Circuit law with respect to the motion to dismiss. *See Aatrix Software, Inc. v. GreenShades Software, Inc.*, 882 F.3d 1121, 1124 (Fed. Cir. 2018).

"To survive a motion to dismiss, a complaint must contain sufficient factual matter, accepted as true, to state a claim to relief that is plausible on its face." *Connelly v. Lane Const. Corp.*, 809 F.3d 780, 786 (3d Cir. 2016). The Third Circuit has a three-step process to determine whether a complaint meets this standard. First, the court must identify the elements needed to state a particular claim. *See id.* at 787. Second, the court should identify conclusory allegations, such as legal conclusions, that are not entitled to the presumption of truth. *See id.* Third, the court should accept as true well-pleaded allegations and "determine whether they plausibly give rise to an entitlement to relief." *See id.* The court must "construe those truths in the light most favorable to the plaintiff, and then draw all reasonable inferences from them." *Id.* at 790.

A defendant bears the burden of demonstrating that the plaintiff has not stated a claim upon which relief can be granted. *See* FED. R. CIV. P. 12(b). In deciding a motion to dismiss, the court must “draw on its judicial experience and common sense.” *Ashcroft v. Iqbal*, 556 U.S. 662, 679 (2009).

### **III. ANALYSIS**

#### **A. Representative Claim**

Foursquare argues that Claim 1 of the '380 Patent is representative of all the asserted patent claims. The Federal Circuit has held that a court may treat a patent claim as representative of others when the claims are “substantially similar and linked to the same abstract idea.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1348 (Fed. Cir. 2014). Where representativeness is contested, patentees bear the burden of making a “meaningful argument for the distinctive significance of any claim limitations not found in the representative claim.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018). Claim language is the primary consideration in determining if a claim is representative. *See Cleveland Clinic Foundation v. True Health Diagnostics, LLC*, No. 15-cv-2331, 2016 WL 705244, at \*3 (N.D. Ohio February 23, 2016) (analyzing claim language to find patent claim representative), *aff'd*, 859 F.3d 1352, 1360 (Fed. Cir. 2017).

BoardActive argues that Claim 1 of the '822 Patent is a better representative claim than Claim 1 of the '380 Patent, and I agree. Claim 1 of the '822 Patent is substantially

similar to the claims in the '822, '621, and '380 Patents. All claims describe a process of identifying a first and second location based on device signal and delivering content when certain conditions are met (*e.g.*, course of travel, time of travel). The independent claims of the '822 and '621 Patents are nearly identical. (*Compare* '822 Patent, Claim 13 *with* '621 Patent, Claim 13.) Where differences exist between the independent claims, such as the addition of unspecified consumer characteristics (*see, e.g.*, '380 Patent, Claim 20), they do not change the concept of Claim 1 of the '822 Patent or add inventiveness such that Claim 1 of the '822 Patent cannot be representative. *See Fast 101 Pty Ltd. v. CitiGroup Inc.*, 424 F.Supp.3d 385, 388 (D. Del. 2020) *aff'd*, 834 Fed. Appx. 591, 592 (Fed. Cir. 2020). The system claims also fail to provide any distinctive significance from the method claims. (*Compare* '380 Patent, Claim 13 *with* '380 Patent, Claim 20.) They just use generic computer parts to execute the claimed method—they do not add, claim, or invent new technology. And the dependent claims only offer specific applications of the independent claim limitations. For example, “geolocation” may be associated with “signage,”<sup>3</sup> the “content” received may be an advertisement,<sup>4</sup> and the “analytics associated with the content” include things like the “number of views,” “number of actions performed,” and “a number of saves.”<sup>5</sup> None of these changes the concept articulated in Claim 1 of the '822 Patent.

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<sup>3</sup> Claim 2 of the '822 Patent

<sup>4</sup> Claim 3 of the '822 Patent

<sup>5</sup> Claim 8 of the '822 Patent

The specification and issuance of terminal disclaimers adds force to the idea that the '822, '621, and '380 Patents are substantially similar and linked to the same idea. The substantive components of the disclosures of the '822, '621, and '380 Patents are identical. "A common specification is some additional indication of representativeness, because claims must be supported by a written description of the invention in the specification. *PPS Data, LLC v. Jack Henry & Assocs., Inc.*, 404 F. Supp. 3d 1021, 1035 (E.D. Tex. 2019)". Also, the '621 and '380 Patents are subject to a terminal disclaimer in light of the '822 Patent, and a "terminal disclaimer is a strong clue that a patent examiner and, by concession, the applicant, thought the claims in the continuation lacked a patentable distinction over the parent". *SimpleAir, Inc. v. Google LLC*, 884 F.3d 1160, 1168 (Fed. Cir. 2018)

The outcome is different for the '620 and '108 Patents. These patents are not substantively similar to Claim 1 of the '822. For example, the '620 and '108 Patents teach further techniques to influence the end-user's course of travel. This is reflected in the continued tracking of the devices' locations and ability to update the delivered content when subsequent rules are met. Furthermore, the specifications of the '620 and '108 Patents add flow charts and accompanying descriptions of methods "for providing standalone application, API, or SDK" in the form of new Figures 22–26 that differentiate the specifications from those of the '822, '621, and '380 Patents. Also, neither patent is subject to a terminal disclaimer in light of the '822 Patent; the '620 Patent is only a

continuation in part of the '822 Patent. In whole, this differentiates the '620 and '108 Patents such that I cannot at this early stage of the proceedings determine that Claim 1 of the '822 Patent is representative of these other patents' claims.

## **B. Invalidity**

Once a patent issues, the law presumes its validity, and anyone attacking that validity carries the burden of proof to show invalidity by clear and convincing evidence. *See* 35 U.S.C. § 282; *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016). Patent validity under Section 101 is a question of law suitable for resolution on a motion to dismiss. *See, e.g., Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

An invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. The Supreme Court, however, has long interpreted Section 101 to contain an implicit exception: "laws of nature, natural phenomena, and abstract ideas" are not patentable. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (quotations omitted). Courts use the two-step *Alice* framework to determine whether a patent is invalid under Section 101. The *Alice* framework first requires a court determine whether the claims at issue are "directed to" a patent ineligible concept, such as abstract ideas. *Id.* at 217 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66 (2012)). If they are directed to an ineligible concept, the court considers the elements of each claim, "both individually and as an ordered combination," to determine whether the additional elements amount to "significantly" more than just

the abstract idea. *Id.* at 217-18 (same). *See also Yu v. Apple Inc.*, 1 F.4th 1040, 1043 (Fed. Cir. 2021). Because the Parties did not provide any specific argument on the '620 and '108 Patents, I will only address the invalidity of Claim 1 of the '822 Patent and the claims of which it is representative.

### **1. Abstract idea**

To determine abstractness under *Alice's* first step, courts ask "what the patent asserts to be the focus of the claimed advance over the prior art." *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1292 (Fed Cir. 2020) (citations omitted). Courts "must focus on the language of the [a]sserted [c]laims themselves ... considered in the light of the specification." *Id.* (same). The Federal Circuit has cautioned not to overgeneralize claims by analyzing them at "a high level of abstraction" that is "untethered from the language of the claims," lest "the exceptions to § 101 swallow the rule." *Id.* at 1293 (same). However, "mere recitation of concrete, tangible components is insufficient to confer patent eligibility to an otherwise abstract idea." *WhitServe LLC v. Donuts Inc.*, 390 F. Supp. 3d 571, 578 (D. Del. 2019), *aff'd*, 809 F. App'x 929 (Fed. Cir. 2020); *see also Alice*, 573 U.S. at 223 ("The mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.").

Claim 1 of the '822 Patent is directed to the idea of targeted marketing. *See* '822 Patent 1:7-10 ("[T]he present disclosure relates to an online platform for managing geolocation and time based advertising and methods for managing and/or delivering



location and time based advertisements.”). The recited steps of associating content with a geolocation, receiving two location indications from a mobile computing device, comparing the locations to determine the course of travel, and transmitting content when conditions are met is nothing more than “the gathering of information about one’s intended market and attempting to customize the information then provided.” *See Bridge & Post, Inc. v. Verizon Commc’ns, Inc.*, 319 F.Supp.3d 818, 824-25 (E.D. Va. 2018) (defining targeted marketing), *aff’d* 778 F. App’x 882 (Fed. Cir. 2019). It is a modern implementation of the targeted marketing that newspapers, billboards, and radio stations have done for decades. *See Intellectual Ventures I LLC v. Capital One*, 792 F.3d 1363, 1369-70 (Fed. Cir. 2015). The remaining limitations providing an interface and administrative controls recite generic computer devices or functions to enable the targeted marketing, but they do not change that the claim is directed to targeted marketing.

The Federal Circuit has held that targeted marketing is an abstract idea. *See Bridge & Post, Inc. v. Verizon Commc’ns, Inc.*, 778 F. App’x 882, 887 (Fed. Cir. 2019); *Intellectual Ventures I*, 792 F.3d at 1369-70. Though not precedential, I find *Bridge & Post* persuasive given the factual parallels to this case. In that case, the Federal Circuit held that a claimed method of tagging a user’s network activity with user information was directed to the abstract idea of using persistent identifiers to implement targeted marketing. *See* 778 F. App’x at 886-87. BoardActive tries to distinguish this case from *Bridge & Post*, but without success. First, BoardActive argues that the claimed method in *Bridge & Post* was broader

than Claim 1. But that doesn't matter because the Federal Circuit did not cite the breadth of the claim as a reason for invalidating it. *See id.* at 887-88. Second, although BoardActive describes its invention as "vastly different" from delivering content based on network activity information (D.I. 16 at 12), I don't see that difference. Both practice targeted marketing; different inputs just determine the targeting. Third, there's nothing novel about using the course of travel (as compared to the persistent identifiers in *Bridge & Post*). In fact, it's been happening for decades. Wall Drug does it along the highway in South Dakota, and destination advertisements have long been in airplane travel magazines, just to name two non-digital examples. And I am not convinced that advertisement based on "course of travel" is distinguishable from advertisement based on "location." As BoardActive states, "the delivered content corresponds to the user's predicted *location*." (D.I. 16 at 11.) (emphasis added)

BoardActive asserts that its patents are not abstract because they are directed to "new and improved tracking and content-delivery systems and methods." (*Id.* at 9.) But Claim 1 uses generic computer functionality to implement the idea of targeted marketing. It does not improve computer technology itself like the patent in *Data Engine Techs. LLC v. Google LLC*, to which BoardActive compares itself. *See* 906 F.3d 999, 1007-08 (Fed. Cir. 2018). Claim 1 does not provide *any* tangible technological invention. The claims, figures, and descriptions recite only generic beacons, mobile computing devices, and interfaces. The Federal Circuit has held other patents that just recite generic computer components

like a “telephone unit” or a “server” invalid because those components do not add an inventive concept to an otherwise abstract idea. *See In re TLI Communications LLC Patent Litigation*, 823 F.3d 607, 614 (Fed. Cir. 2016); *see also Wireless Discovery LLC v. eHarmony, Inc.*, C.A. No. 22-480-GBW, 2023 WL 1778656, at \* 3 (D. Del. Mar. 16, 2023). Nor does BoardActive offer a new arrangement of these generic devices to improve upon existing technology. Equipping signage with a beacon radio transmitter configured to interact with oncoming traffic is not new. Traffic meters and electronic bridge tolls have been doing it for a long time.

## **2. Inventive concept**

After identifying a claim as directed to an abstract idea, a court “must examine the elements of the claim to determine whether it contains an inventive concept sufficient to transform the claimed abstract idea [sic] into a patent-eligible application.” *Genetic Technologies Ltd. v. Merial LLC*, 818 F.3d 1369, 1376 (Fed. Cir. 2016). Whether a claim supplies an inventive concept that renders a claim significantly more than an abstract idea to which it is directed is a question of law, although “subsidiary fact questions” might inform it. *Aatrix Software*, 882 F.3d at 1128.

The proper prior art comparison to determine the inventiveness of BoardActive’s patents is other forms of digital advertising, not billboards. BoardActive uses standard digital advertising techniques and applies them to the context of billboard advertisements, but the billboards just serve as a proxy for any other location sensor in a

digital advertising environment. While it is possible that some consumers will see the advertisement on the billboard before receiving the content that BoardActive would deliver, a substantial number of people will not. For example, if you were sleeping in the car as your significant other drove by BoardActive's beacons billboards, you would not see the billboard advertisements, but your device would meet the delivery criteria for transmission of content. When you woke up and looked at your device, you would receive the content. For your purposes, the content would be digital advertising untethered from a billboard. The same would be true for a driver whose eyes were on the road (where they should be) rather than on the nearby billboards. And the same also applies for a passenger whose eyes are on her phone (or maybe even a book), rather than billboards. BoardActive's arguments that Claim 1 of the '822 Patent advances over the prior art by overcoming (a) "visibility" problems of existing billboards; (b) "analytical information" problems that prevent interactivity and obtaining information on the "reach" and "effectiveness" of advertisements; and (c) "memory" problems stemming from the end-users' need to remember advertisement specifics (D.I. 16 at 10), are "advancements" over billboards, not digital advertising. They therefore miss the point because the focus on advancements is from the wrong baseline. Nothing that BoardActive claims changes, let alone advances, digital advertising.

Neither is there a factual issue as to the Claim's inventiveness that precludes my decision at this stage of litigation. BoardActive points to the assertions in its complaint

that “at that time [prior to the patents] there was no way to interactively connect a brand or creative to a consumer in real-time” to create an issue of fact. (D.I. 16 at 17) (quoting D.I. 1 ¶ 8.) But BoardActive doesn’t explain how that can be the case, given that on April 10, 2017, digital advertising had been “interactively connect[ing] a brand or creative to a consumer in real-time” for a long time. Therefore, I do not credit these unsupported, implausible assertions.

The Patent Office’s eligibility determinations also don’t bind me. *See Quad Envtl. Technologies Corp. v. Union Sanitary Dist.*, 946 F.2d 870, 876 (Fed. Cir. 1991). I disagree with the Office’s determination of eligibility upon which BoardActive relies. The generic memory storage and processing unit that the Office identified as “technical elements” are the kind of generic computer components that cannot save a claim from abstraction. *See In re TLI Communications LLC Patent Litigation*, 823 F.3d at 614. And the determination of “course of travel” is a generic computer calculation in response to two geolocation indicators that is not inventive. *See Content Extraction*, 776 F.3d at 1349.

BoardActive’s other arguments that Claim 1 claims are inventive fall aside based on my conclusion that the Claim is directed to an abstract idea. The claim does not advance any new technology. And targeted marketing based on course of travel and/or location has been practiced for decades. There is no “inventive concept sufficient to transform the claimed abstract idea [sic] into a patent-eligible application.” *See Genetic Technologies Ltd.*, 818 F.3d at 1376.

### **C. Leave To Amend**

It's not clear to me that BoardActive could plausibly amend facts that would overcome this decision. But I can't say that for sure, and the Federal Circuit has noted that amendments can add factual detail that might save a seemingly unpatentable claim. *See Aatrix Software*, 882 F.3d at 1126. So, if BoardActive has more to say that might bear on my patentability determination, I'll give it a chance to file an amended pleading. But it shouldn't do so just to keep claims alive that otherwise can't survive.

### **IV. CONCLUSION**

BoardActive, Foursquare, and others remain free to dream of a day when we all stop short to see the billboard advertisements available to us. For now, they can all keep trying to improve their technology because BoardActive's claims under the '882, '621, and '380 Patents are not valid. I will therefore grant Foursquare's motion to dismiss in part. An appropriate Order follows.

**BY THE COURT:**

*/s/ Joshua D. Wolson*

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HON. JOSHUA D. WOLSON

March 21, 2023