

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

CG TECHNOLOGY DEVELOPMENT,  
LLC,

Plaintiff,

v.

WILLIAM HILL U.S. HOLDCO, INC. and  
BRANDYWINE BOOKMAKING LLC,

Defendants.

No. 18-cv-533-RGA

MEMORANDUM ORDER

Presently before the Court is Defendants' motion to dismiss. (D.I. 37). I have reviewed the parties' briefing. (D.I. 38, 39, 48). For the following reasons, Defendants' motion is **DENIED-IN-PART** and **GRANTED-IN-PART**.

**I. BACKGROUND**

On April 10, 2018, Plaintiff, a Nevada corporation based in Las Vegas, filed this action asserting infringement of U.S. Patent Nos. 9,240,098 ("the '098 patent"), 9,269,224 ("the '224 patent"), and 9,076,305 ("the '305 patent") relating to sports gambling. (D.I. 1). Defendants, a Delaware corporation based in Las Vegas,<sup>1</sup> moved to dismiss for failure to state a claim under Federal Rule of Civil Procedure 12(b)(6), on the basis that the '305 patent claims are invalid under 35 U.S.C. § 101. (D.I. 16). I dismissed the complaint in an oral order "for failure to state a claim inasmuch as its allegations treat the two remaining defendants as one entity without

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<sup>1</sup> One might ask why Delaware is the appropriate venue to resolve disputes over sports gambling between two Las Vegas-based corporations. But the parties have not asked.

providing any plausible basis for the assertion,” and gave leave to file an amended complaint. (D.I. 33). Plaintiff filed a first amended complaint (“FAC”), which added a claim for infringement of U.S. Patent No. 10,096,207 (“the ’207 patent”). (D.I. 35). Defendants now move to dismiss the FAC pursuant to Rule 12(b)(6), again on the basis that the ’305 patent claims are invalid under § 101, as well as for failure to state a claim of pre-suit willful infringement or pre-suit induced infringement. (D.I. 37, 38).

## **II. LEGAL STANDARD**

### **A. Rule 12(b)(6)**

When reviewing a motion to dismiss pursuant to Rule 12(b)(6), the Court must accept the complaint’s factual allegations as true. *See Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555–56 (2007). Rule 8(a) requires “a short and plain statement of the claim showing that the pleader is entitled to relief.” *Id.* at 555. The factual allegations do not have to be detailed, but they must provide more than labels, conclusions, or a “formulaic recitation” of the claim elements. *Id.* (“Factual allegations must be enough to raise a right to relief above the speculative level . . . on the assumption that all the allegations in the complaint are true (even if doubtful in fact).”). Moreover, there must be sufficient factual matter to state a facially plausible claim to relief. *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). The facial plausibility standard is satisfied when the complaint’s factual content “allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Id.* (“Where a complaint pleads facts that are merely consistent with a defendant’s liability, it stops short of the line between possibility and plausibility of entitlement to relief.” (internal quotation marks omitted)).

## B. Section 101

Section 101 of the Patent Act defines patent-eligible subject matter. It provides: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. The Supreme Court has recognized an implicit exception for three categories of subject matter not eligible for patentability—laws of nature, natural phenomena, and abstract ideas. *Alice Corp. Pty. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014). The purpose of these carve outs is to protect the “basic tools of scientific and technological work.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012). “[A] process is not unpatentable simply because it contains a law of nature or a mathematical algorithm,” as “an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” *Id.* at 1293–94 (internal quotation marks and emphasis omitted). In order “to transform an unpatentable law of nature into a patent-eligible application of such a law, one must do more than simply state the law of nature while adding the words ‘apply it.’” *Id.* at 1294 (emphasis omitted).

In *Alice*, the Supreme Court reaffirmed the framework laid out in *Mayo* “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” 134 S. Ct. at 2355. First, a court must determine whether the claims are directed to a patent-ineligible concept. *Id.* If the answer is yes, the court must look to “the elements of the claim both individually and as an ‘ordered combination’” to see if there is an “‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more

than a patent upon the [ineligible concept] itself.” *Id.* “A claim that recites an abstract idea must include ‘additional features’ to ensure that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].” *Id.* at 2357. Further, “the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment.” *Id.* at 2358 (quoting *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010)). Thus, “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Id.* For this second step, the machine-or-transformation test can be a “useful clue,” although it is not determinative. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014).

“[F]actual disputes about whether an aspect of the claims is inventive may preclude dismissal at the pleadings stage.” *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1318 (Fed. Cir. 2019). While not “any allegation about inventiveness, wholly divorced from the claims or the specification, defeats a motion to dismiss, plausible and specific factual allegations that aspects of the claims are inventive are sufficient. As long as what makes the claims inventive is recited by the claims, the specification need not expressly list all the reasons why this claimed structure is unconventional.” *Id.* at 1317.

“Whether a claim is drawn to patent-eligible subject matter under § 101 is an issue of law,” and “is a matter of both claim construction and statutory construction.” *In re Bilski*, 545 F.3d 943, 951 (Fed. Cir. 2008), *aff’d sub nom. Bilski v. Kappos*, 561 U.S. 593 (2010). “Claim construction is a question of law.” *In re Nuijten*, 500 F.3d 1346, 1352 (Fed. Cir. 2007).

A court is not required to individually address claims not asserted or identified by the non-moving party, so long as the court identifies a representative claim and “all 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) (quotation marks omitted).

### III. PATENT-ELIGIBLE SUBJECT MATTER

The '305 patent relates to systems and methods for betting on a sporting event. Claims 1, 19, 20 and 22 are independent claims.

#### A. Representative Claim

Defendant argues that claim 1 is representative. (D.I. 38 at 2). Plaintiff does not dispute that claim 1 is representative for independent claims 20 and 22. (*See* D.I. 39 at 15-16). For the following reasons, I find all the asserted claims “substantially similar” to claim 1 and thus treat claim 1 as representative. *See Content Extraction*, 776 F.3d at 1348.

Claim 1 provides:

1. A method, comprising:

receiving by at least one processor state information of a live event in substantially real time, in which the live event comprises a sporting event played by human players according to predetermined rules that are used to determine at least one winner of the sporting event;

after a start of the sporting event, determining by the at least one processor a plurality of possible future states of the sporting event based on the state information, the possible future states occurring before an end of the sporting event;

after a start of the sporting event, creating by the processor a first betting market for betting on at least one of the plurality of possible future states, in which the plurality of users comprises a first user, and in which the act of creating a first betting market comprises:

determining by the processor a probability for each of the plurality of possible future states based on probability information, in which the act of determining a probability comprises determining a probability for at least one of the plurality of possible future states based on probability information and reliability information associated with the probability information;

based at least in part on the probabilities, determining by the processor odds for betting on at least one of the plurality of possible future states; and

causing information about the plurality of possible future states and the odds to be displayed to the plurality of users;

after creating the first betting market, receiving by the processor from a first of a plurality of users a first bet comprising a selection of one of the plurality of possible future states;

after receiving the first bet, closing by the processor the first betting market;

sending from the at least one processor an instruction signal to close the first betting market;

determining by the at least one processor that the possible future state selected by the first user has occurred; and

causing, by the at least one processor, a payout to be paid to the first user based on the first bet and the act of determining that the possible future state selected by the first user has occurred.

'305 patent at 43:40-44:17.

Plaintiff argues that Defendants have failed to show that dependent claims 2-18 and 21 relate to the same alleged abstract idea as claim 1. (D.I. 39 at 15). Claims 2-18 depend from claim 1 and are each a slight variation on the method in claim 1. '305 patent at 44:18-46:11. Claim 21 depends from claim 20 and is a slight variation on the apparatus in claim 20. *Id.* at 48:6-13. Again, Plaintiff does not dispute that claim 1 is representative of claim 20. Thus, I find claims 2-18 and 21 “substantially similar” to claim 1.

Plaintiff also argues that claim 1 is not representative of independent claim 19, which is an “apparatus” and recites elements not found in claim 1 such as “a touch-sensitive display device,” “a user input device,” “a processor operably connected to the display,” “determin[ing] an initial state,” “transmit[ting] a live video of the live event in real time to a touch-sensitive display device,” and “display[ing] a betting menu overlap.” (D.I. 39 at 15). I do not think any of the recited elements creates a meaningful difference between claims 1 and 19. The focus of claim 19 is the same wagering system described in claim 1. The additional input, processing,

and display elements are merely generic computing elements used to implement the claim 1 method with an apparatus. Therefore, I find claim 19 “substantially similar” to claim 1.

### **B. Alice Step One**

Defendants argue that the ’305 patent claims are directed to the abstract idea of “managing a betting market during a live sporting event.” (D.I. 38 at 6-9). Plaintiff argues that Defendants oversimplify the claims and that, instead, they are directed at solving a technical problem in computer technology. (D.I. 39 at 11-15).

The ’305 patent describes the claimed invention as methods and systems “for managing a wagering system.” ’305 patent at 1:31-32. Claim 1 comprises (1) receiving “state information of a live event in substantially real time,” (2) creating a betting market for possible future states, (3) determining probabilities for each of those future states, (4) receiving bets, (5) closing the betting market, and (6) resolving bets. *See id.* at 43:41-44:17. “In various exemplary embodiments, . . . possible future states of the event and their associated probabilities (e.g., and odds) may be determined based on the state information, historical information, and current in-game information.” *Id.* at 1:32-48.

The specification explains that similar wagering systems were traditionally run by human operators:

Traditional gambling systems enable users to bet on the outcome of a game, e.g., which team will win, and by how much. Gaming operators try to determine accurate probabilities for each game outcome (e.g., win, loss, and point-spread) so that they can offer competitive odds to potential bettors who may bet on each outcome. The probabilities (and odds) are typically determined prior to the start of the game based on information existing prior to the game[.]

. . . .

[S]ome gaming operators allow users to bet on performance parameters within a game, such as whether a particular player will strike out in a particular at-bat in a baseball game. The betting market is typically opened manually

immediately prior to the in-game event, and the odds are often determined manually “on the fly.”

....

Gaming operators can face many challenges in offering bets on these types of in-game events as compared to typical “market price” bets on the winner of a game. It takes time and labor to identify a potential in-game betting market (e.g., a market for betting on the outcome of a specific at-bat), determine accurate probabilities and odds for each outcome, offer the odds to bettors, take bets, determine an outcome, and then pay the winners. Because traditional systems require many of these actions to be performed manually “on the fly,” limited manpower effectively limits the number and extent of in-game wager opportunities a gaming operator can offer. Bets on an in-game event often require a calculation of probabilities and odds in a very short time frame. It can be more difficult to calculate an accurate probability of an in-game outcome when new relevant information becomes available during the game, such as an injury to a quarterback.

’305 patent at 12:65-13:6, 13:41-46, 13:54-14:2. The claimed invention improves upon the prior art by avoiding problems due to “limited manpower” and human error in the “calculation of probabilities and odds in a very short time frame.” In other words, the benefit of the claimed invention is that it automates the preexisting betting system. *See* ’305 patent at 14:6-43.

“[M]ere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology. In those cases, ‘the focus of the claims is not on such an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.’” *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016)).

Defendants argue that the claimed invention merely automates preexisting betting activity and thus is directed to an abstract idea. I agree. The specification makes clear that all components of the claimed invention—receiving information of a live event, determining probabilities based on that information and information existing prior to the event, creating a



betting market, receiving bets, closing the betting market, and resolving bets—was previously done by human gaming operators. The specification also states, “It will be readily apparent to one of ordinary skill in the art that the various processes described herein may be implemented by, e.g., appropriately programed general purpose computers . . . .” ’305 patent at 7:39-42.

Programming a general purpose computer to permit automation of previously manual activities is not a patentable improvement on computer technology. *See Credit Acceptance*, 859 F.3d at 1055.

Plaintiff argues that the claimed invention goes beyond automating preexisting betting activity by solving “specific technical problems related to reliability and trustworthiness of information at high speeds” “using improved technical solutions rooted in computer technology.” (D.I. 39 at 14). Specifically, Plaintiff asserts, “Receiving large amounts of statistical data from a variety of different systems and sources, in real time, creates a challenge for both analyzing the data as well as ensuring that it is trustworthy and reliable.” (*Id.*). Plaintiff then cites to several portions of the specification, without explanation, as examples of solving these “technical problems.” (*Id.*).

Plaintiff does not even identify a “specific technical problem” let alone explain how the ’305 patent addresses that problem. Plaintiff focuses on the claimed invention’s improvements in speed. However, the specification makes clear that the issues with speed in the prior art stemmed from having a human, as opposed to computer, operator. ’305 patent at 13:54-14:2. A generic computer is capable of receiving and analyzing “large amounts of statistical data” with sufficient speed to practice the claimed invention. *See id.* at 7:39-42. As for “ensuring that [data] is trustworthy and reliable,” Plaintiff fails to explain how that translates to a technical problem or relates to the claimed invention. Nor is it clear from the plain language of the

specification how the cited portions support Plaintiff's argument. *See* '305 patent at 19:9-59, 20:22-44, 21:26-49, Figs. 1-3.

Therefore, I find all the asserted claims directed to the abstract idea of managing a betting market during a live sporting event.

### **C. *Alice* Step Two**

Plaintiff argues that the asserted claims have the inventive concept of obtaining “accurate and reliable probabilities, in real time, for betting markets of future events after the start of the game or event.” (D.I. 39 at 16; D.I. 35 ¶ 60). That is allegedly done through a “reliability algorithm,” which “automatically evaluates information from various sources and determines the reliability of the sources of information, in real time, to increase the accuracy of the final probability.” (D.I. 39 at 16; D.I. 35 ¶¶ 61-62). In other words, Plaintiff argues that the “reliability algorithm” is an inventive concept sufficient to make the claims patent-eligible.

“Reliability algorithm” is not a claim term. In fact, the asserted claims do not disclose any “algorithm.” Rather, they describe determining a probability with a processor based on “probability information” and “reliability information.” *E.g.*, '305 patent at 43:58-64 (claim 1). Plaintiff argues that “reliability information” requires claim construction. (*See* D.I. 39 at 7-8). Plaintiff suggests that it be construed to mean “an algorithmic metric for probability information based on one or more weighted factors.” (*Id.* at 8).

The FAC contains no specific factual allegations relating to the role of “reliability information” or how a “reliability algorithm” would function. The FAC merely states:

[A] principal object and advantage of the claimed networked system addresses the technical problem of accurately determining probabilities for events occurring in real time using a large amount of information obtained from disparate sources. One way the claimed networked system solves this technical problem is by using complex algorithms to automatically manipulate and evaluate information obtained at a networking system connected to various

sources of information. For example, the algorithm can automatically determine the probabilities of in-game events in real time based on the information. *Another way the claimed networked system solves this technical problem is by automatically determining the reliability of the sources of information, in real time, to increase the accuracy of the final determined probability.* The claimed networked system involves tangible components and complex data processing operations that are necessarily rooted in computer technology and improve the functionality of the computer itself.

(D.I. 35 ¶ 62 (emphasis added)).

The specification provides slightly more detail. The specification describes a “probability module,” which “may determine probabilities based on various sources of information,” wherein “the different sources of information may be accorded different weights in a probability algorithm.” ’305 patent at 20:41-44. The weighting determination may be based on a “trust score.” Trust scores may be determined based on a source’s “track record for a particular type of information” (*id.* at 21:31-36), volume of bets (*id.* at 21:64-22:1), or reputation (*id.* at 21:45-48, 22:1-5 (a “source providing lines to professional gamblers” may be accorded a higher trust score while “general sources such as facebook and twitter” may be accorded lower trust scores)).

Defendants argue that Plaintiff’s allegations are wholly unsupported by the patent as the specification does not “disclose anything that could conceivably be considered a ‘complex algorithm’ or teach a novel ‘networked system connected to various sources of information.’” (D.I. 38 at 13). Defendants conflate §§ 101 and 112. The specification clearly describes a “probability module,” which applies an algorithm to calculate a “trust score” corresponding to the reliability of a source. Therefore, there is some support for Plaintiff’s allegations based on the “reliability algorithm.” Whether the specification sufficiently describes or enables such an algorithm is a separate issue beyond the scope of § 101. *See Blackbird Tech LLC v. Niantic, Inc.*, 2018 WL 5630452, at \*3 (D. Del. Oct. 31, 2018).

The inventive concept analysis depends on the meaning of “reliability information.” Since “reliability algorithm” is not a claim term, it can only serve as an inventive concept if it is considered part of the claimed invention via “reliability information.” Therefore, I will not complete the § 101 analysis until I construe “reliability information.” Defendants’ motion to dismiss based on § 101 is denied.

#### **IV. PRE-SUIT WILLFUL AND INDUCED INFRINGEMENT**

Defendants argue that Plaintiff has failed to state a claim for pre-suit willful or induced infringement because Plaintiff has failed to plausibly allege pre-suit knowledge of the asserted patents or alleged patent infringement. (D.I. 38 at 19-20).

The crux of Plaintiff’s allegations is the relationship between Joseph Asher, the CEO of both Defendant corporations, and Plaintiff. (D.I. 35 ¶ 13). Plaintiff alleges that, from 2004 to 2007,<sup>2</sup> Mr. Asher served as Managing Director and Vice President of Plaintiff’s parent company, CG Technology, L.P. (*Id.* ¶¶ 26, 32). While there, Mr. Asher was allegedly “intimately involved in developing CG Technology, L.P.’s patent portfolio and is the named inventor on multiple mobile gaming patents assigned to Plaintiff’s affiliates.” (*Id.* ¶ 28). Thus, Plaintiff alleges, upon information and belief,

[B]ased on Joseph Asher’s intimate knowledge of Plaintiff’s patent portfolio, his position with Plaintiff’s affiliated companies before starting his competing business, and his involvement with the mobile-gaming-based technology pioneered by Plaintiff and Plaintiff’s affiliated companies, [Defendants] had knowledge of the [asserted patents] since at the time each issued from the Patent Office prior to the filing of this lawsuit, and at least by the filing of this lawsuit.

(*Id.* ¶ 117).

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<sup>2</sup> The ’305 patent was filed in 2012, the ’098 and ’224 patents were filed in 2013, and the ’207 patent was filed in 2016.

After leaving CG Technology, L.P. in 2007, Mr. Asher allegedly started Defendant Brandywine Bookmaking LLC as a competing business “using the concepts owned by Plaintiff’s affiliates.” (*Id.* ¶ 32). In 2011, Defendant William Hill U.S. Holdco’s parent company purchased Brandywine Bookmaking LLC. (*Id.* ¶¶ 34-35). Plaintiff alleges that the same parent company also purchased a third party, American Wagering, Inc., which shares corporate officers and a principal place of business with Defendants. American Wagering, Inc. is allegedly the assignee of U.S. Patent No. 9,875,608 (“the ’608 patent”). (*Id.* ¶¶ 34-37). The ’608 patent cites to the ’224, ’098, and ’207 patents in its prosecution history. (*Id.* ¶¶ 38-39). Thus, Plaintiff alleges, upon information and belief,

[Defendants] had knowledge of the ’224 patent since at least August 5, 2016, the ’098 patent since October 5, 2016, and the ’207 patent since October 5, 2016, when those patents were referenced in the prosecution of a patent owned by an affiliated company with the same principal place of business and overlapping corporate management.<sup>3</sup>

(*Id.* ¶ 118).

Regarding induced infringement, Plaintiff alleges that Defendants induced acts by third parties such as customers, developers, operators, and other agents “by designing their sports betting platform . . . such that it infringes at least one of the [asserted patents] and by purposefully directing through instructions, promoting through advertising and marketing, encouraging through promotions, and otherwise causing the use of its sports betting platform by [such] third parties.” (*Id.* ¶ 43).

Regarding willful infringement, Plaintiff alleges that “despite [Defendants] knowledge of and investigation into Plaintiff’s patent portfolio, including, [the asserted patents],” Defendants chose not to obtain a patent license and “continued making, using, testing, importing into the

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<sup>3</sup> The ’207 patent did not issue until October 2018. The application was filed in January 2016. Thus, it is possible that the prosecution history referenced the ’207 patent application, but not the final issued patent.

United States, offering for sale or selling the infringing products.” (*Id.* ¶¶ 119-120). Thus, “Defendants subjectively knew . . . that they infringed the asserted claims of the [asserted patents] before the filing of this lawsuit.” (*Id.* ¶ 121).


Plaintiff has failed to sufficiently plead pre-suit knowledge of patent infringement. It is plausible, based on Mr. Asher’s history with CG Technology, L.P., the relationship between Defendants and American Wagering, Inc., and the connection between American Wagering, Inc.’s ’608 patent and the asserted patents, that Defendants had pre-suit knowledge of all the asserted patents. The only alleged basis for knowledge of infringement, however, is Mr. Asher’s involvement with CG Technology, L.P.’s patent portfolio from 2004 to 2007. The earliest of the asserted patents was filed in 2012. Thus, any knowledge that Mr. Asher may have gleaned from CG Technology, L.P.’s patent portfolio was at least five years old when the asserted patents were filed. It is not plausible that, based on stale knowledge of unrelated patents, Mr. Asher knew Defendants’ accused products were infringing.

Therefore, Plaintiff has failed to state a claim for pre-suit willful or induced infringement.

## V. CONCLUSION

For the foregoing reasons, Defendants’ motion to dismiss (D.I. 37) is **DENIED-IN-PART** and **GRANTED-IN-PART**. The motion is **DENIED** with respect to patent-ineligibility under § 101 and **GRANTED** with respect to pre-suit willful infringement and pre-suit induced infringement.

IT IS SO ORDERED this 28 day of August 2019.

  
United States District Judge