

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

CARRUM TECHNOLOGIES, LLC,

Plaintiff,

v.

BMW OF NORTH AMERICA, LLC and
BMW MANUFACTURING CO., LLC,

Defendants.

Civil Action No. 1:18-cv-01645-RGA

MEMORANDUM ORDER

Presently before me is Defendants' Motion to Dismiss Under Rule 12(b)(6) for Patent Ineligibility Under 35 U.S.C. § 101. (D.I. 11). The Parties have fully briefed the issue. (D.I. 12, 17, 19). For the reasons set out below, I will deny Defendants' motion.

I. BACKGROUND

Plaintiff filed this suit on October 23, 2018, alleging that Defendants' adaptive cruise control systems infringe U.S. Patent Nos. 7,512,475 ("475 Patent") and 7,925,416 ("416 Patent"). (D.I. 1). The asserted patents' shared specification discloses an adaptive cruise control system that "provides smooth vehicle control in turning situations both by limiting lateral acceleration during the vehicle turn and by eliminating braking for out-of-path targets." ('475 Patent at 2:47-50).

The '475 Patent contains two independent and ten dependent claims that are directed at methods of adjusting driving speed based on measurements from lateral acceleration sensors. Independent claim 1 is exemplary:

A method of controlling a vehicle having an adaptive cruise control system capable of controlling a vehicle speed and obtaining a vehicle lateral acceleration, said method comprising the steps of:

- measuring a lateral acceleration from a lateral acceleration sensor;
- detecting a change in a vehicle lateral acceleration based on a change in the measured lateral acceleration;
- determining when the vehicle is in a turn based on the detected change in the vehicle lateral acceleration; and
- if a vehicle is in a turn, reducing the vehicle speed according to the determination that the vehicle is in the turn and the detected change in the vehicle lateral acceleration.

('475 Patent, claim 1).

The '416 Patent contains two independent and twelve dependent claims that are directed at a method and system for adjusting the speed of a vehicle with an adaptive cruise control system in response to a detected object. The independent claims are exemplary:

A method of controlling a vehicle having an adaptive cruise control system capable of obtaining a vehicle lateral acceleration, said method comprising the steps of:

- determining when the vehicle is in a turn based on a detected change in the vehicle lateral acceleration;
- determining a vehicle path during the turn;
- detecting an object;
- determining whether the object is in the vehicle path during the turn;
- reducing the vehicle speed if the object is determined to be in the vehicle path during the turn; and
- ignoring the object for braking purposes if the object is determined not to be in the vehicle path during the turn.

('416 Patent, claim 1).

A system for use in controlling a vehicle at a vehicle speed, said system including:

- an adaptive cruise control system;

a controller in communication with said adaptive cruise control system and capable of determining when the vehicle is in a turn, said controller operative to reduce the vehicle speed according to a vehicle position in the turn;

at least one lateral acceleration sensor for generating a signal corresponding to a vehicle lateral acceleration, said lateral acceleration sensor in electrical communication with said controller and operative to detect a change in the vehicle lateral acceleration; and

at least one object detection sensor for detecting an object in a vehicle path of the vehicle during the turn, said object detection sensor in electrical communication with said controller, wherein said controller includes control logic operative to determine whether the object is in the vehicle path during the turn and ignoring the object for braking purposes when the object is not determined to be in the vehicle path.

(’416 Patent, claim 10).

II. LEGAL STANDARD

A. 12(b)(6) Motion to Dismiss

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. 35 U.S.C. § 101 Patent Eligible Subject Matter

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 recognizes three categories of subject matter that are not eligible for patents—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 exceptions 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, the court must determine whether the claims are drawn 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.* (alteration in original). “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.*

Patentability under 35 U.S.C. § 101 is a threshold legal issue. *Bilski*, 561 U.S. at 602. Accordingly, the § 101 inquiry is properly raised at the pleadings stage if it is apparent from the face of the patent that the asserted claims are not directed to eligible subject matter. *See Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360 (Fed. Cir. 2017), *cert. denied*, 138 S. Ct. 2621 (2018). In those situations, claim construction is not required to conduct a Section 101 analysis. *Genetic Techs. Ltd. v. Merial LLC.*, 818 F.3d 1369, 1374 (Fed. Cir. 2016) (“[C]laim construction is not an inviolable prerequisite to a validity determination under § 101.”) (brackets in original, internal citations and quotations omitted). Moreover, the Federal Circuit has held that the district 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) (internal quotation marks omitted).

III. DISCUSSION

“First, we determine whether the claims at issue are directed to [an abstract idea].” *Alice*, 134 S. Ct. at 2355. “The ‘abstract ideas’ category embodies ‘the longstanding rule that an idea of itself is not patentable.’” *Id.* (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). “The

Supreme Court has not established a definitive rule to determine what constitutes an ‘abstract idea’ sufficient to satisfy the first step of the *Mayo/Alice* inquiry.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). The Supreme Court has recognized, however, that “fundamental economic practice[s],” *Bilski*, 561 U.S. at 611, “method[s] of organizing human activity,” *Alice*, 134 S. Ct. at 2356, and mathematical algorithms, *Benson*, 409 U.S. at 64, are abstract ideas. In navigating the parameters of such categories, courts have generally sought to “compare claims at issue to those claims already found to be directed to an abstract idea in previous cases.” *Enfish*, 822 F.3d at 1334. “[I]n determining whether the claims are directed to an abstract idea, [the court] must be careful to avoid oversimplifying the claims because ‘[a]t some level, all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.’” *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (alterations in original) (quoting *Alice*, 134 S. Ct. at 2354).

The claims of the ’475 and ’416 Patents are not directed at a patent ineligible concept. Defendants argue that the asserted claims are “directed to the abstract idea of deciding to reduce speed based on perceived physical parameters.” (D.I. 12 at 1). They defend their proposed abstract idea by arguing that the claims are no more than a mental process: “The patents claim mental processes because they claim methods and systems that do exactly what human drivers perform in their minds, without more.” (D.I. 19 at 2-3). In support of their argument that the claims are not more than a mental process, they analogize to the Federal Circuit’s collecting, analyzing, and storing data line of cases. (See D.I. 12 at 10-13).

Defendants’ characterization of the claims is plainly wrong. The claims are directed to a physical system operating in three-dimensional space that, when certain conditions are met, physically impacts the speed of a moving object. Far from an abstract idea, the claims are

directed to a tangible system, or a method of using such a system, with an observable real-world impact. Moreover, the claims are meaningfully limited to implementation of the method with an adaptive cruise control system having lateral acceleration sensors. A method of using a physical system is not a “mental process.” The mere fact that humans have an alternative method of achieving the goals of the claims using sensory perception, mental processing, and physical braking does not foreclose the claims’ patent eligibility.

Thus, I find the claims of the ’416 Patent are not directed at an unpatentable abstract idea. As I find that the ’416 Patent’s claims are not directed at unpatentable subject matter, I need not consider whether the claims contain an inventive concept.

IV. Conclusion

Defendants’ Motion to Dismiss Under Rule 12(b)(6) for Patent Ineligibility Under 35 U.S.C. § 101 (D.I. 11) is **DENIED**.

Entered this 22 day of April 2019.


United States District Judge