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UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF CALIFORNIA

Plaintiffs.

SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY; ACE PARKING MANAGEMENT, INC.,

PARK ASSIST, LLC,

Defendants.

Case No.: 3:18-cv-02068-BEN-MDD

ORDER DENYING DEFENDANTS' **MOTIONS TO DISMISS** [Docs. 25, 26]

Pending before the Court are the motions to dismiss filed by Defendants San Diego County Regional Airport Authority and Ace Parking Management, Inc. [Docs. 24, 25.] For the following reasons, the motions are **DENIED**.

T. **BACKGROUND**

This is a patent infringement action. Plaintiff Park Assist develops and sells a camera-based parking guidance system for which it was issued Patent No. 9,594,956 ("the '956 Patent") on March 17, 2017. Park Assist alleges that Defendants San Diego County Regional Airport Authority ("the Airport Authority") and Ace Parking Management, Inc. have infringed and continue to infringe Park Assist's '956 Patent by operating a competitor's parking guidance system at the Terminal 2 Parking Plaza.

The '956 Patent is entitled "Method and System for Managing a Parking Lot Based on Intelligent Imaging." The '956 Patent specification provides context, acknowledging, "The use of different sensor technologies [in a parking lot], such as ultrasonics or image processing is known." Doc. 23-1 at 1:14-16. The specification goes on to provide that known image processing "may determine occupancy of slots and provide the driver with guidance to available spaces either upon entry to the parking lot or by displays strategically located within the lot." *Id.* at 1:16-23.

The '956 Patent's specification identifies various problems from which the prior known parking guidance systems suffer, including "not allow[ing] . . . the opportunity to preferentially charge the customer according to their parking location," not "recogniz[ing] unique aspects of the vehicle, such as . . . license plate," and not "enabl[ing] remote viewing of individual parking spaces, enabling human intervention to correct mistakes, . . . or provid[ing] real-time feedback to improve system accuracy." '956 Patent, 1:24-27, 34-35, 38-41. The '956 Patent's abstract provides that it is directed to solving these problems with an improved method and system for managing a parking lot based on intelligent imaging. *Id*.

The '956 Patent has two claims: independent claim 1 and dependent claim 2. Independent claim 1 requires:

- 1. A method of managing a plurality of parking spaces, comprising:
- (a) monitoring a parking space with an imaging device of an imaging unit;
- (b) detecting, by said imaging unit, occupancy of said parking space;
- (c) assigning said parking space, in which said occupancy was detected, an occupied status, wherein said occupied status is indicated by illuminating a first color of a multicolor indicator collocated with said imaging device, said first color predefined to determine said occupied status;
- (d) obtaining, as a result of said parking space having said occupied status, a single high resolution image of a vehicle

occupying said parking space, said high resolution image obtained by said imaging device;

- (e) storing at least part of said high resolution image on a storage device;
- (f) displaying a thumbnail image of said parking space on a graphic user interface (GUI), said thumbnail image digitally processed from an image electronically communicated to said GUI from said imaging unit;
- (g) deciding whether said occupied status is incorrect, based on a visual review of said thumbnail image on said GUI;
- (h) correcting said occupied status, by inputting computerreadable instructions to a computer terminal of said GUI, if said parking space shown in said thumbnail image is vacant and said computer terminal electronically communicating a command to toggle said multicolor indicator to illuminate a second color, said second color predefined to indicate a vacant status;
- (i) extracting from said high resolution image, by digital image processing, a permit identifier for said vehicle and comparing said permit identifier with at least one parking permit identification stored on said storage to determine a permit status of said parked vehicle; and
- (j) initiating an infringement process for said vehicle having said permit identifier that fails to coincide with at least one of said [sic?] at least one parking permit identification.

Claim 2 depends from claim 1 and narrows it by requiring the use of a self-modifying classification algorithm:

- 2. The method of claim 1, wherein said detecting includes providing machine-readable code of a self-modifying classification algorithm for assigning said respective statuses, the method further comprising:
- (e) said system executing said machine-readable code to modify said classification algorithm in response to said correcting.

II. DISCUSSION

Defendants move to dismiss this lawsuit under Federal Rule of Civil Procedure 12(b)(6), arguing the '956 Patent is invalid under 35 U.S.C. § 101 because its claims are directed to unpatentable abstract ideas. At this early stage of the case, the Court disagrees.

A. Legal Standards

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Section 101 of the Patent Act provides that "[w]hoever invents or discovers any new and useful process . . . or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The term "process" "includes a new use of a known process, machine, manufacture, composition of matter, or material." 35 U.S.C. § 100(b). Patent protection, however, does not extend to patent ineligible concepts of laws of nature, natural phenomena, and abstract ideas, which are "building blocks of human ingenuity." Alice Corp. Party Ltd. v. CLS Bank, Int'l, 573 U.S. 208, 217 (2014). Accordingly, the Court must "distinguish between patents that claim the building blocks of human ingenuity and those that integrate the building blocks into something more, thereby transforming them into a patent-eligible invention." Id. at 217 (internal quotation marks and citations omitted). To do so, the Supreme Court has outlined a two-step process. See id. First, the Court must determine whether the claims at issue are "directed to" a patent ineligible concept. Id. If so, the Court must next determine whether additional elements of the claim, both individually and as an ordered combination, produce an "inventive concept" by "transform[ing] the nature of the claim into patent-eligible application." Id. If, however, the Court finds during the first step that the claims are directed to a patent-eligible concept, the claims satisfy § 101, and the Court need not proceed to the second step. Visual Memory LLC v. NVIDIA Corp., 867 F.3d 1253, 1262 (Fed. Cir. 2017).

The Court may resolve patent eligibility under § 101 on a motion to dismiss where "there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018). "[P]lausible factual allegations may preclude dismissing a case under § 101 where, for example nothing on the record refutes those allegations as a matter of law or justifies dismissal under Rule 12(b)(6)." *Id.* (internal quotation marks omitted).

B. Alice Step One

In the first *Alice* step, the Court determines "whether the claims at issue are directed to a patent-ineligible concept," *e.g.*, an abstract idea. *Alice*, 573 U.S. at 218. In doing so, 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." *TLI Communs. LLC v. AV Auto., LLC*, 823 F.3d 607, 611 (Fed. Cir. 2016) (quoting *Alice*, 573 U.S. at 217)). Thus, "[t]he inquiry often is whether the claims are directed to 'a specific means or method' for improving technology or whether they are simply directed to an abstract end-result." *RecogniCorp, LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322, 1326 (Fed. Cir. 2017). In other words, the Court looks to the "focus" of the claims and their "character as a whole." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).

Defendants contend the '956 Patent's claims fail at step one because they are "directed to the abstract concept of processing information, namely information derived from images of parking spaces." Doc. 25-1 at 16. In support, Defendants argue that Claim 1 merely covers the gathering of information ("detecting, by said imaging unit," "obtaining . . . a single high-resolution image," and "extracting from said high resolution image . . . a permit identifier"); analyzing of information ("assigning . . . an occupied status," "deciding whether said occupied status is incorrect," and "comparing said permit identifier"); and displaying, or transmitting, of the results ("illuminating a first color of a multicolor indicator," "displaying a thumbnail image," and "initiating infringement process"). '956 Patent at 22:30-23:4.

From a bird's-eye view, Defendants are correct that the '956 Patent's claims involve the unpatentable idea of gathering and processing information. Importantly, however, the fact that claims *involve* an abstract idea does not mean they are *directed to* an abstract idea. *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1050 (Fed. Cir. 2016) ("[I]t is not enough to merely identify a patent-ineligible concept underlying the claim; we must determine whether the patent-ineligible concept is what the claim is 'directed to.'"). The

Court declines to evaluate the '956 Patent claims in the general manner proposed by Defendants. See, e.g., Thales Visionix Inc. v. United States, 850 F.3d 1343, 1347 (Fed. Cir. 2017) ("We must therefore ensure at step one that we articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful."). Instead, the Court considers whether the claims and their "character as a whole," considered in light of the specification, are "drawn to the concept of" an abstract idea. See Alice, 573 U.S. at 219; Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335 (Fed. Cir. 2016).

As Park Assist correctly argues, the '956 Patent's claims are not abstract because they are directed to specific improvements to known parking guidance systems. First, the specification discloses several problems with prior art parking guidance systems, including that they only "provide the driver with guidance to available spaces either upon entry to the parking lot or by displays strategically located within the lot," that they do "not allow the parking lot proprietor the opportunity to preferentially charge the customer according to their parking location within the parking lot," and that they do "not enable remote viewing of individual parking spaces, enabling human intervention to correct mistakes . . . or provide real-time feedback to improve system accuracy." '956 Patent at 1:13-44. The claims, read in light of the specification, purport to solve these problems by providing technical improvements through an improved "parking lot management system that relies on intelligent processing of images." '956 Patent at 1:8-21.

¹ For purposes of the § 101 analysis, neither party contends that claim construction is necessary to understand the improvements identified by Park Assist—the GUI, correcting algorithm, and collocated imaging/indicator structure. See Doc. 36 at 3:23-24; Doc. 25-1 at 16:25-28; see also, e.g., Bancorp Servs., LLC v. Sun Life Assurance Co. of Canada (U.S.), 687 F.3d 1266, 1273-73 (Fed. Cir. 2012) ("[C]laim construction is not an inviolable prerequisite to a validity determination under § 101."). Because the Court agrees and finds claim construction would not assist the Court in resolving the § 101 challenge, it proceeds to Alice step one. See also, e.g., CMG Financial Servs., Inc. v. Pacific Trust Bank, F.S.B., 50 F. Supp. 3d 1306, 1313 (C.D. Cal. 2014), aff'd, 616 F. App'x 420 (Fed. Cir. 2015) (finding the "[p]atent's eleven Claims [we]re sufficiently straightforward that claim construction [wa]s not necessary to understand their content").

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For example, the claims and specification disclose technological improvements to the graphic user interface ("GUI"), which improve the accuracy of the cameras detecting and determining whether a parking space is occupied:

- (1) an improved GUI providing thumbnail images and occupancy status indicators of individual spaces for identification and correction of occupancy detection errors (id. at Claim 1(f)-(h); 16:9-17:32) and
- (2) a self-modifying correction algorithm to improve occupancy detection (*id.* at Claim 1(g)-(h) and Claim 2; 11:49-12:43; 16:25-17:54).

Figures 7 and 8, identified by the patent specification, show "web page user interfaces" that provide an improved arrangement of thumbnail images and occupancy indications to "tun[e]... the automatic detection algorithm." *Id.* at 7:15-16, Figs. 7-8. Claim 1 requires that the user decide whether the camera's determination of an occupied status is incorrect, and if incorrect, the user then corrects the occupied status. That correction enables the parking guidance system to adapt and learn from past errors so that the accuracy of the camera-based system improves. *Id.* at 6:1-5 ("In response to the corrections by the human operator, the classification system modifies the classification algorithm to be more accurate."). In so doing, Claim 1's improved GUI elements enhance the computer technology further disclosed in dependent Claim 2 by adding an improved occupancy detection algorithm.

The specification teaches that the prior art did *not* enable the remote viewing of parking spaces to allow human intervention to then correct mistakes and provide real-time feedback, thereby improving the system's accuracy. *Id.*at 1:37-41. Thus, the specification confirms that the claims disclose an improved system by allowing the parking guidance system to do things it could not do before—adapt and improve camera accuracy by using past detection error information. *See, e.g., Finjan, Inc. v. Blue Coat Systems, Inc.*, 879 F.3d 1299 (Fed. Cir. 2018) (holding claims directed to a behavior-based virus scanning method directed to patent eligible subject matter because they "employ[] a new kind of file that enables a computer security system to do things it could not do before," including

"accumulat[ing] and utiliz[ing] newly available, behavior-based information about potential threats").

These improvements are similar to those found patentable by the Federal Circuit in Core v. LG Electronics, Inc., 880 F.3d 1356 (Fed. Cir. 2018). There, much like Park Assist's improved GUI, the patent's claims were "directed to an improved user interface for computing devices." Id. at 1362. Although acknowledging that "the generic idea of summarizing information certainly existed prior to the invention," the Federal Circuit held the claims were not directed to an abstract idea because they "disclose[d] a specific manner of displaying a limited set of information to the user, rather than using conventional user interface methods to display a generic index on a computer." Id. As a result, the Core court held the claims were patentable because they were "directed to a particular manner of summarizing and presenting information in electronic devices . . . resulting in an improved user interface for electronic devices." Id. Likewise, here, Park Assist's patent discloses a particular manner of presenting parking occupancy information via its GUI—through an improved arrangement of thumbnail images and occupancy indications used for "tuning . . . the automatic detection algorithm."

The '956 Patent's collocated imaging devices and multicolor indicators are another example of an improvement to prior art, including by "enabling preferential pricing for parking based on location within the parking lot." *Id.* at 2:7-9. The imaging/indicator structure is claimed as a "multicolor indicator collocated with [an] imaging device." '956 Patent at 22:37-43. The specification teaches that the structure may be mounted on a parking facility's ceiling and uses an imaging device to detect occupancy status coupled with an LED indicator to mark spaces red or green for occupied or unoccupied. *Id.* at 7:61-8:41, Figs. 2 and 3. Each imaging/indicator structure includes: "high intensity red, green and blue LED indicators 48 with diffuser, two high resolution, high sensitivity CMOS multi-megapixel digital cameras 50, one or more 400 MHz ARM 9 processor . . . serial ports . . . [and] optional . . . (License Plate Recognition) software." *Id.* at 8:30-40. The specification further provides that "each camera unit 16 can monitor one or more parking

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spaces 15, either on opposing sides of the camera unit 16 or in side by side parking bays . . . [such that] a single system of the present invention can monitor and control up to one million individual parking spaces 15." *Id.* at 8:22-26. There is no disclosure or suggestion in the specification indicating that the claimed imaging/indicator structure is conventional, well-known, or off-the-shelf.

The described improvements to prior art parking guidance systems—the improved GUI, correcting algorithm, and collocated imaging/indicator structure—adequately demonstrate that the '956 Patent's claims are patent-eligible under step one of *Alice*. *See also*, *e.g.*, *Enfish*, *LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016) (holding claims reciting a self-referential table for a computer database were not abstract because they focused on "an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity"); *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1349 (Fed. Cir. 2017) (holding claims reciting an improved method of using inertial sensors to determine position and orientation of an object on a moving platform were not directed to an abstract idea because although the system used conventional sensors, the claims specified a particular configuration of the sensors and a particular method of using the raw data that eliminated many complications inherent in conventional methods).

Defendants' authorities do not require a different conclusion. For example, although Defendants characterize the '956 Patent's claims as "incredibly similar" to those in *Open Parking, LLC v. ParkMe, Inc.*, 2016 WL 3547957 (W.D. Pa. June 30, 2016), *aff'd*, 683 F. App'x 932 (Fed. Cir. 2017), that case is distinguishable. Like Park Assist's patent, the patents in *Open Parking* concerned a parking guidance system. In sharp contrast to Park Assist's claims, however, the *Open Parking* claims merely took a parking space's detected occupancy condition and broadcast it wirelessly to a commuter's smartphone. *Id.* at *7. Thus, unlike the '956 Patent, the *Open Parking* patents did not teach how the detection of the occupancy condition could be *improved*. Rather, the claims were directed to an abstract idea because they simply transmitted real time data "about open parking spaces [that] has

long been broadcast to drivers who cannot actually see the open spaces," e.g., via displays on the outside indicating if spots are vacant. *Id.* at *8; *cf. Enfish*, 822 F.3d at 1338-39 (holding software patent claims satisfy *Alice* step one when they are "directed to a specific implementation of a solution to a problem in the software arts," such as an improvement in a computer's functioning). Had the *Open Parking* court, instead, upheld the patents' validity, the general process of using the internet to send parking-related information to a wireless device likely would have been preempted. *See Bilski v. Kappos*, 561 U.S. 593, 611-12 (2010) ("[U]pholding the patent would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea.").

Although Defendants are correct that the 956 Patent's claims concern the underlying abstract concept of information processing, that argument overgeneralizes the claims, rather than considering their "character as a whole." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). Here, considering the claims' character as a whole, in light of the specification, the claims are directed to improving known parking guidance technology through an *improved* parking guidance system, comprised of components including a novel GUI, a self-modifying classification algorithm that allows the parking system to adapt and learn from past errors to improve detection accuracy, and a collocated imaging/indicator structure. Accordingly, because the '956 Patent's claims are directed to "a specific means or method" for improving parking guidance system technology, rather than simply directed to an abstract end-result, the claims pass muster under step one of *Alice*. The Court "need not proceed to step two" of the *Alice* test, as it finds the '956 Patent's claims are not directed to an abstract idea. *Thales Visionix*, 850 F.3d at 1349. Thus, the motions to dismiss are **DENIED**.

IT IS SO ORDERED.

Date: August 2019

HOM. ROGER T. BENYTEZ United States District Judge