IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Richmond Division

DRIVERDO, LLC, ***d/b/a*** **DRAIVER,**

Plaintiff,

v. **Civil Action No. 3:23cv265**

SOCIAL AUTO TRANSPORT, INC., ***d/b/a*** **HOPDRIVE,**

Defendant.

MEMORANDUM OPINION

This matter comes before the Court on Defendant Social Auto Transport, Inc., d/b/a HopDrive's ("HopDrive") Motion to Dismiss (the "Motion"). (ECF No. 28.)[1] Plaintiff DriverDo LLC, d/b/a Draiver ("Draiver") responded in opposition to the Motion, (ECF No. 31), and HopDrive replied, (ECF No. 33).

The matter is ripe for disposition. The Court dispenses with oral argument because the materials before it adequately present the facts and legal contentions, and argument would not aid the decisional process.

For the reasons stated below, the Court will grant the Motion to Dismiss. (ECF No. 28.)

[1] The Court employs the pagination assigned by the CM/ECF docketing system.

I. Factual and Procedural Background

A. Factual Background[2]

This lawsuit arises from HopDrive's alleged infringement of Draiver's patented technology, which is generally directed to scheduling trips and allocating drivers to move vehicles from one location to another.

1. The Parties

Draiver "was founded in 2013" and describes itself as the "innovation and commercial leader in on-demand vehicle transport." (ECF No. 26 ¶¶ 6, 8.) Draiver offers an "AI-driven logistics platform . . . [to] help[] its customers save money by delivering vehicles faster and safer." (ECF No. 26 ¶ 7.) Draiver's technology "provides dealerships, vehicle service centers, fleet owners, rental agencies, [Original Equipment Manufacturers][,] and others with the ability to connect with top-rated drivers to move vehicles as affordably, quickly, and safely as possible." (ECF No. 26 ¶ 7.)

HopDrive likewise offers a "vehicle delivery system" through "(1) HopDrive's website, [including] through the Move Planner interface in the Dealer Portal, and (2) HopDrive Apps including . . . the Social Auto Transport app featuring the Driver Portal (collectively, 'the Accused Products')."[3] (ECF No. 26 ¶ 16.) HopDrive "never reached out to Draiver to license or

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[2] In considering the Motion to Dismiss, (ECF No. 28), the Court assumes the well-pleaded factual allegations in the Amended Complaint to be true and views them in the light most favorable to the Plaintiff. *Mylan Labs., Inc. v. Matkari*, 7 F.3d 1130, 1134 (4th Cir. 1993); *see also Republican Party of N.C. v. Martin*, 980 F.2d 943, 952 (4th Cir. 1992).

[3] "For avoidance of doubt, the Accused Products include these, and any other websites and apps, past or present, that include the features discussed in this Complaint and th[e] attached Exhibits." (ECF No. 26 ¶ 16.)

purchase any of Draiver's Asserted Patents" and continues to "compete against Draiver in the market." (ECF No. 26 ¶ 17.)

2. The Asserted Patents

Draiver asserts infringement of seven of its patents: U.S. Patent Nos: 10,518,720 (the "'720 Patent"), 10,787,133 patent (the "'133 Patent"), 10,800,354 (the "'354 Patent"), 10,304,027 (the "'027 Patent"), 11,100,451 (the "'451 Patent"), 11,562,316 (the "'316 Patent"), and 11,694,151 (the "'151 Patent"). (ECF No. 26, at 1.) Each of these seven patents contains multiple claims, only some of which are at issue in this litigation.[4]

These seven patents fall into two patent families, which the Court refers to as: (1) the "Trip Scheduling Patents," consisting of the '027, '451, '316, and '151 Patents, and (2) the "Driver Allocation Patents," consisting of the '720, '133, and '354 Patents.

a. The Trip Scheduling Patents (the '027, '451, '316, and '151 Patents)[5]

The Trip Scheduling Patents relate generally to "scheduling trip[s] to transport vehicles from a pick-up location to a drop-off location." (ECF No. 26-7 ("'027 Patent"), Abstract.)[6] According to the Trip Scheduling Patents, human-organized vehicle transport was inefficient because "the driver must be transported to the pickup location and from the drop-off location,

[4] Draiver asserts infringement of "at least": claim 1 of the '720 Patent, (ECF No. 26 ¶ 71); claims 1, 4, 6–8, and 11–14 of the '133 Patent, (ECF No. 26 ¶ 79); claims 1–3, 6–8, 10–15, and 18–19 of the '354 Patent, (ECF No. 26 ¶ 87); claims 1–5 and 12–15 of the '027 Patent, (ECF No. 26 ¶ 95); claim 1 of the '451 Patent, (ECF No. 26 ¶ 102); claims 1, 7, and 8 of the '316 Patent, (ECF No. 26 ¶ 110); and claim 1 of the '151 Patent, (ECF No. 26 ¶ 118).

[5] "The '151 [P]atent is a continuation of the '316 [P]atent" which "is a continuation of the '451 [Patent] which is a continuation of the '027 [P]atent." (ECF No. 26 ¶¶ 59, 39.)

[6] The Trip Scheduling Patents share substantially the same specification, so citations are made to the '027 Patent for convenience.

typically by a second driver in a chase car," doubling the total distance traveled. ('027 Patent, at 1:37–42.) The Trip Scheduling Patents propose "automatically schedul[ing] drivers for trips between locations so as to minimize the distance, drivers, and time needed to minimize the overhead costs." ('027 Patent, at 1:46–49.)

The Trip Scheduling Patents further claim assigning drivers a "task", such as repairing a dent at a shop, to complete during the trip. ('027 Patent, Abstract & at 11:5–21, 12:5–38.) The Trip Scheduling Patents do not describe, or claim *how*, this automatic scheduling or task assignment is to occur, and indeed purport to encompass many different methods of assignment, including by a human. (*See* '027 Patent, at 11:16–17 ("In other embodiments, arbitrary tasks may be specified by the user creating the trip.").)

b. The Driver Allocation Patents (the '720, '133, and '354 Patents)

The Driver Allocation Patents relate generally to "allocating drivers to procure targets" and then "transport[ing] [those targets] to a desired drop-off destination." (ECF No. 26-1 (the "'720 Patent"), Abstract.)[7] According to the Driver Allocation Patents, "[e]xisting processes of transporting vehicles . . . are slow, inefficient, difficult to manage, and costly", as well as "prone to problems caused by . . . loss of paperwork such as gate passes, vehicle condition reports, and payment receipts by drivers." ('720 Patent, at 1:43–48.) The Driver Allocation Patents allege that vehicle location tracking and instant communication was "not possible because the communication is carried [out] by phone." ('720 Patent, at 1:48–52.) In addition, the Driver

[7] The Driver Allocation Patents share substantially the same specification, so citations are made to the '720 Patent for convenience.

Allocation Patents explain that the existing process is "costly for the requestors and drivers alike because":

> (1) the requestors spend a lot of time in managing the system such as but not limited to giving directions to each driver separately, VIN and [g]ate [p]ass information, and special instructions, making phone calls back and forth[;]
>
> (2) of thefts by unscrupulous drivers and others[,] e.g.[,] stolen headrest, missing books, keys, [and] drive shift knobs[;]
>
> (3) drivers do not drive on clock but bill for more hours[;]
>
> (4) third[-]party companies are paid for their services as a middle man[;]
>
> (5) accurate delivery time cannot be determined[;]
>
> (6) drivers are not paid for any lost receipt[;] and
>
> (7) of [the] inability to enforce driver accountability during vehicle transporting.

('720 Patent, at 2:1–13.)

The Driver Allocation Patents propose to solve these problems through an "automated" system that uses internet access and GPS to track drivers in "real time" and that allows users to request trips—and drivers to accept them—through an app. ('720 Patent, Abstract & at 3:43–4:2.)

B. Procedural History

On April 20, 2023, Draiver filed a Complaint against HopDrive, alleging infringement of six of its patents. (ECF No. 1, at 1.) On July 14, 2023, after requesting and receiving an extension of time to respond to the Complaint in order to explore settlement, (ECF Nos. 16–17), HopDrive filed a Motion to Dismiss pursuant to Federal Rule of Civil Procedure 12(b)(6). (ECF No. 24.)

On July 28, 2023, Draiver filed an Amended Complaint alleging infringement of seven of its patents.[8] (ECF No. 26); *see* Fed. R. Civ. P. 15(a).[9] On August 4, 2023, the Court denied as moot HopDrive's initial Motion to Dismiss, (ECF No. 24), and directed HopDrive to respond to Draiver's Amended Complaint by no later than August 18, 2023. (ECF No. 27, at 1.)

On August 18, 2023, HopDrive filed the present Motion to Dismiss. (ECF No. 28.) Draiver responded in opposition, (ECF No. 31), and HopDrive replied, (ECF No. 33). Accordingly, the matter is ripe for disposition. For the reasons that follow, the Court will grant HopDrive's Motion. (ECF No. 28.)

II. Standards of Review

A. Rule 12(b)(6)

Under Rule 12(b)(6), a defendant may move to dismiss a claim for failure to state a claim upon which relief can be granted. Fed. R. Civ. P. 12(b)(6). Application of Rule 12(b)(6) in patent cases is a procedural question and is therefore governed by the law of the regional circuits. *Polymer Indus. Prods. Co. v. Bridgestone/Firestone, Inc.*, 347 F.3d 935, 937 (Fed. Cir. 2003).

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[8] In the Amended Complaint, Draiver added infringement of the '151 Patent. (*Cf.* ECF No. 1, at 1; ECF No. 26, at 1.)

[9] Rule 15 states, in pertinent part:

> (a) AMENDMENTS BEFORE TRIAL.
>
> > (1) *Amending as a Matter of Course*. A party may amend its pleading once as a matter of course no later than:
> >
> > * * *
> >
> > (B) if the pleading is one to which a responsive pleading is required, 21 days after service of a responsive pleading or 21 days after service of a motion under Rule 12(b), (e), or (f), whichever is earlier.

Fed. R. Civ. P. 15(a).

"A motion to dismiss under Rule 12(b)(6) tests the sufficiency of a complaint; importantly, it does not resolve contests surrounding the facts, the merits of a claim, or the applicability of defenses." *Republican Party of N.C. v. Martin*, 980 F.2d 943, 952 (4th Cir. 1992) (citing 5A Charles A. Wright & Arthur R. Miller, *Federal Practice and Procedure* § 1356 (1990)). To survive Rule 12(b)(6) scrutiny, a complaint must contain sufficient factual information to "state a claim to relief that is plausible on its fact." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007); *see also* Fed. R. Civ. P. 8(a)(2) ("A pleading that states a claim for relief must contain . . . a short and plain statement of the claim showing that the pleader is entitled to relief."). Mere labels and conclusions declaring that the plaintiff is entitled to relief are not enough. *Twombly*, 550 U.S. at 555. Thus, "naked assertions of wrongdoing necessitate some factual enhancement within the complaint to cross the line between possibility and plausibility of entitlement to relief." *Francis v. Giacomelli*, 588 F.3d 186, 193 (4th Cir. 2009) (quoting *Twombly*, 550 U.S. at 557) (internal quotation marks omitted).

A complaint achieves facial plausibility when the facts contained therein support a reasonable inference that the defendant is liable for the misconduct alleged. *Twombly*, 550 U.S. at 556; *see also Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). This analysis is context-specific and requires "the reviewing court to draw on its judicial experience and common sense." *Francis*, 588 F.3d at 193 (citation omitted). The court must assume all well-pleaded factual allegations to be true and determine whether, viewed in the light most favorable to the plaintiff, they "plausibly give rise to an entitlement to relief." *Iqbal*, 556 U.S. at 679; *see also Kensington Volunteer Fire Dep't, Inc. v. Montgomery Cnty., Md.*, 684 F.3d 462, 467 (4th Cir. 2012) (concluding that the court in deciding a Rule 12(b)(6) motion to dismiss "'must accept as true all of the factual allegations contained in the complaint' and 'draw all reasonable inferences in favor

of the plaintiff.'" (quoting *E.I. du Pont de Nemours & Co. v. Kolon Indus., Inc.*, 637 F.3d 435, 440 (4th Cir. 2011))). This principle applies only to factual allegations, however, and "a court considering a motion to dismiss can choose to begin by identifying pleadings that, because they are no more than conclusions, are not entitled to the assumption of truth." *Iqbal*, 556 U.S. at 679.

B. Patent Eligibility Under 35 U.S.C. § 101: the *Alice* Test

Courts have recognized that "a 'plausible claim for relief in a patent infringement case necessarily requires a valid patent. [Without one,] there can be no infringement.'" *Va. Innovation Scis. Inc. v. Amazon.com, Inc. ("VIS")*, 227 F. Supp. 3d 582, 591 (E.D. Va. 2017) (quotation omitted) (citing *In re Bilski*, 545 F.3d 943 951 (Fed. Cir. 2008), *aff'd sub nom. Bilski v. Kappos*, 561 U.S. 593 (2010)). "Patent eligibility under 35 U.S.C. § 101 is a question of law." *VIS*, 227 F. Supp. 3d at 590 (citing *OIP Techs. Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir. 2015)).

"Section 101 of the Patent Act defines the subject matter eligible for patent protection." *Alice Corp. Pty. v. CLS Bank Int'l ("Alice")*, 573 U.S. 208, 216 (2014). 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 long held that there are several important exceptions to this provision; that is, '[l]aws of nature, natural phenomena, and abstract ideas are not patentable.'" *Peschke Map Techs. LLC v. Rouse Properties Inc. ("Peschke")*, 168 F. Supp. 3d 881, 886 (E.D. Va. 2016) (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc. ("Mayo")*, 566 U.S. 66, 70

(2012))). However, because laws of nature, natural phenomena, and abstract ideas comprise "the basic tools of scientific and technological work," the Supreme Court has also expressed concern that these exceptions would "swallow all of patent law." *Alice*, 573 U.S. at 216–17 (internal quotation marks and citations omitted).

In *Mayo*, the Supreme Court "set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice*, 573 U.S. at 217 (citing *Mayo*, 566 U.S. 66). *Alice* clarified that "[u]nder this framework, the § 101 eligibility inquiry proceeds in two steps." *VIS*, 227 F. Supp. 3d at 591 (citing *Alice*, 573 U.S. at 217). "First, a court must 'determine whether the claims at issue are directed to a patent-ineligible concept.'" *Peschke*, 168 F. Supp. 3d at 886–87 (quoting *Alice*, 573 U.S. at 217). Second, "[i]f the patent is directed at a law of nature, natural phenomena, or abstract idea, the court must consider whether the claims contain an 'inventive concept' that 'transform[s] the nature of the claim' into patent-eligible subject matter." *Peschke*, 168 F. Supp. 3d at 886–87 (quoting *Mayo*, 566 U.S. at 78–79). "If the claims do not sufficiently narrow the scope of the patent by providing this 'inventive concept,' then the patent is rendered ineligible." *VIS*, 227 F. Supp. 3d at 591 (quoting *Alice*, 573 U.S. at 217–18). This test is commonly referred to as "the *Alice* test," and its steps as "the *Alice* steps." *See, e.g., Coop. Ent., Inc. v. Kollective Tech., Inc.*, 50 F.4th 127, 131 (Fed. Cir. 2022); *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1007 (Fed. Cir. 2018); *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016).

"Preemption is the touchstone of the § 101 inquiry." *VIS*, 227 F. Supp. 3d at 595. "At both stages of the [*Alice*] test, the goal is to determine whether the claimed invention is so extensive as to 'monopoliz[e] [the basic tools of scientific and technological work] through the

grant of a patent [that] might tend to impede innovation more than it would tend to promote it[.]" *Id.* (quoting *Alice*, 573 U.S. at 216 (quoting *Mayo*, 566 U.S. at 71)).

In *Virginia Innovation Sciences, Inc.*, the court articulated the delicate balance that courts must strike in applying the patent eligibility framework:

> Articulating the scope of a patent's subject matter is not a precise science. Courts must be careful not to overgeneralize claims because, "if carried to its extreme, [it would make] all inventions un-patentable because all inventions can be reduced to underlying principles of nature." On the other hand, the judicial inquiry should endeavor to root out creative "drafting effort[s] designed to monopolize the [abstract idea]."

227 F. Supp. 3d at 592 (citations omitted).

III. Analysis

In its Motion to Dismiss, HopDrive argues that the Court should dismiss the Amended Complaint "because all [of] the asserted claims of the seven asserted patents are directed to patent-ineligible abstract ideas in violation of 35 U.S.C. § 101." (ECF No. 29, at 6.) HopDrive asserts that "[t]he seven asserted patents all relate to coordinating drivers to move a car from one location to another," which is "a common and well-known process in the automobile business." (ECF No. 29, at 6.) HopDrive states that "[t]he patents only purport to automate this manual process on a conventional computer using unspecified programming"—which is "not patentable." (ECF No. 29, at 6–7.) According to HopDrive, the challenged claims "recite only nonspecific steps to perform the abstract ideas of scheduling a trip with a task or allocating a driver, but on a computer." (ECF No. 29, at 15.) HopDrive alleges that the challenged claims "recite performing a method of organizing human activity—vehicle transportation—on a generic computer." (ECF No. 29, at 15.)

As to the Trip Scheduling Patents in particular, HopDrive argues that the "claims recite nothing more than using conventional computers or smartphones to perform the functional, high-

level steps of scheduling" a trip with a task to be performed on the way. (ECF No. 29, at 7.) HopDrive asserts that "claims directed to automating existing methods of organizing human activity . . . are not eligible for patent protection." (ECF No. 29, at 7 (citing *Weisner v. Google LLC*, 51 F.4th 1073, 1083 (Fed. Cir. 2022) ("Automation or digitization of a conventional method of organizing human activity . . . does not bring the claims out of the realm of abstractness.")).) Further, HopDrive states that "the claims do not recite technology that is even arguably new or inventive that could save them from ineligibility." (ECF No. 29, at 7 (emphases removed).)

As to the Driver Allocation Patents in particular, HopDrive contends that the "claims merely recite using a general-purpose computer to perform conventional steps for allocating the driver: receiving a trip request, assigning a driver, and tracking the driver on the way." (ECF No. 29, at 7.) HopDrive asserts that these, too, are "unpatentable steps for organizing human activity, and the claims recite no technology that could save them from ineligibility." (ECF No. 29, at 7 (emphases removed).)

In opposition, Draiver first argues that HopDrive's Motion "is premature because . . . [t]he [Amended] Complaint provides factual allegations regarding the inventiveness of the technology in the Asserted Patents, as well as allegations showing the claim elements, alone and in combination, are not well-understood, routine, or conventional." (ECF No. 31, at 11.) Second, Draiver proffers that claim construction should precede § 101 analysis because "the parties[] dispute the basic character of the challenged claims." (ECF No. 31, at 13.) Third, Draiver maintains that "HopDrive fail[ed] to meet its high burden to show invalidity" where "[t]he Asserted Patents are presumed valid." (ECF No. 31, at 14.) Finally, Draiver states that the Motion "fails on the merits" both as to the Trip Scheduling Patents, (ECF No. 31, at 15–22),

and as to the Driver Allocation Patents, (ECF No. 31, at 22–27). Specifically, Draiver asserts that "HopDrive fails to correctly identify representative claims," (ECF No. 31, at 15, 22), that "the claims are directed to patent[-]eligible subject matter," (ECF No. 31, at 16, 22), and that "the claims recite inventive concepts," (ECF No. 31, at 21, 26).

The Court first concludes that the Motion to Dismiss is not premature because Draiver proffers no *factual* allegations regarding inventiveness or whether the claim elements are well-understood, routine, or conventional. Second, claim construction need not precede the § 101 analysis because Draiver failed to assert a competing construction or articulate how such construction would alter the § 101 analysis, and because "the 'basic character of the claimed subject matter is readily ascertainable from the face of the patent.'" *See Va. Innovation Scis. Inc. v. Amazon.com, Inc. ("VIS")*, 227 F. Supp. 3d 582, 590 (E.D. Va. 2017) (citations omitted). Third, the Court evaluates the eligibility of the challenged patent claims pursuant to the *Alice* test. At *Alice* Step One, both the Trip Scheduling Patents and the Driver Allocation Patents are directed to abstract ideas. At *Alice* Step Two, neither patent family supplies an inventive concept. Accordingly, all asserted patent claims are ineligible for patent protection under § 101.

A. The Motion to Dismiss is Not Premature

Draiver first argues that resolution on a 12(b)(6) motion is "premature because the well-pled factual allegations in Draiver's [Amended] Complaint prevent the Court from resolving patent eligibility in HopDrive's favor at this stage." (ECF No. 31, at 11.) Specifically, Draiver asserts that its Amended Complaint "provides factual allegations regarding the inventiveness of the technology in the Asserted Patents, as well as allegations showing the claim elements, alone and in combination, are not well-understood, routine, or conventional." (ECF No. 31, at 11.)

In reply, HopDrive notes that "Draiver pointedly fails to quote its allegations, let alone explain how they would preclude an *Alice* analysis on the pleadings." (ECF No. 33, at 6.) HopDrive states that Draiver offers "only [] boilerplate allegation[s] insisting without support that the claims survive *Alice* Step [Two]" and that the "paragraphs that Draiver cites in bulk without quoting are similarly conclusory." (ECF No. 33, at 7.)

The Court cannot deem the Motion to Dismiss premature because Draiver's conclusory legal assertions are not entitled to a presumption of truth and, contrary to Draiver's assertions, Draiver makes no factual allegations regarding inventiveness or whether the claim elements, alone or in combination, were well-understood, routine, or conventional.

1. Legal Standard: No Presumption of Truth for Legal Assertions

In ruling on a Rule 12(b)(6) Motion to Dismiss, courts need not accept *all* allegations as true. *See, e.g.*, *Yu v. Apple, Inc.*, 1 F.4th 1040, 1046 (Fed. Cir. 2021) ("Here, the district court . . . concluded that the claims were directed to patent-ineligible subject matter, *despite Yu's allegations to the contrary*. This is not error." (emphasis added)). Courts may reject "attempt[s] to manufacture a factual question" that in actuality "provide no more than a series of legal conclusion[s] about the § 101 analysis." *Dropbox, Inc. v. Synchronoss Techs., Inc.*, 815 F. App'x 529, 538 (Fed. Cir. 2020) (discarding plaintiff's allegations "that each of the patents solves given technological problems" where plaintiff "never provide[d] more support than a conclusory statement that 'the inventions described and claimed . . . solved these problems,' improved the art, 'represented a significant advance over existing approaches[,] and were not well-known, routine, or conventional") (citing *Papasan v. Allain*, 478 U.S. 265, 268 (1986) (on a motion to dismiss, courts "must take all the factual allegations in the complaint as true" but "are not bound to accept as true a legal conclusion couched as a factual allegation")).

2. Draiver's Conclusory Legal Assertions Are Not Entitled to a Presumption of Truth, and Draiver Makes No Specific Factual Assertions That Would Preclude Resolution on a Rule 12(b)(6) Motion to Dismiss

Much of Draiver's purported support for its assertions that resolution is premature comes in the form of bare legal conclusion that the Court need not credit. For example, Draiver asserts that "[t]he [Amended] Complaint plausibly states [that] the Asserted Patents 'provide technological solutions to technological problems associated with vehicle transportation' and the systems previously used to provide vehicle transportation." (*See* ECF No. 31, at 11.) Draiver lists certain features that it claims "were not well-understood, routine, or conventional", either individually or in ordered combination: "vehicle status reports", "intermediate location selection", "interfaces", and "licensing features", as well as "various combinations of these features, including specific combinations of interfaces." (ECF No. 31, at 11–12.) However, beyond parroting the required language and listing these elements, Draiver offers no explanation of the novelty of these features. Accordingly, these assertions are not entitled to the assumption of truth "because they are no more than conclusions." *See Ashcroft v. Iqbal*, 556 U.S. 662, 679 (2009).

For instance, this case is readily distinguishable from *Aatrix Software, Inc. v. Green Shades Software, Inc. ("Aatrix")*, in which the Federal Circuit vacated a district court's grant of a motion to dismiss pursuant to § 101 after determining that "concrete allegations" in the second amended complaint "precluded the [district] court's conclusion that the claimed data file [wa]s a well[-]understood and routine component and function of a computer." 882 F.3d 1121, 1128–30 (Fed. Cir. 2018) (internal quotation marks omitted). The *Aatrix* patents were "directed to systems and methods for designing, creating, and importing data into a viewable form on a computer so that a user can manipulate the form data and create viewable forms and reports." *Id.*

at 1123. In vacating the dismissal, the Federal Circuit observed that "[t]here are *concrete allegations* in the second amended complaint that individual elements and the claimed combination are not well-understood, routine, or conventional activity" and "*concrete allegations* regarding the claimed combination's improvement to the functioning of the computer." *Id.* at 1128 (emphases added). Specifically, the second amended complaint explained that the "prior art . . . allowed data to be extracted only from widely available databases with published database schemes, not [from] proprietary data structures." *Id.* at 1127. The patent "improve[d] interoperability with third-party software" because it "import[ed] data from third-party applications into a viewable electronic form." *Id.* at 1129. The second amended complaint also specifically alleged that the patented invention "increased the efficiencies of computers processing tax forms", "saved storage space", and "reduce[d] the risk of 'thrashing.'" *Id.* at 1127. "In light of the[se] allegations . . . , the district court could not conclude at the Rule 12(b)(6) stage that the claimed elements were well-understood, routine, or conventional." *Id.* at 1129.

This case likewise differs from *Cooperative Entertainment, Inc. v. Kollective Technology, Inc.*, despite Draiver proffering it as analogous to the case at bar. 50 F.4th 127 (Fed. Cir. 2022). In *Coop. Ent., Inc.*, the challenged claims "recite[d] a specific type of content-sharing network and delineate[d] both the network's structure and function." *Id.* at 131. The complaint raised specific factual allegations explaining why particular features of the claim were not abstract. *Id.* at 132. For example, the complaint noted that "the prior art 'failed to disclose . . . the multiplicity of peer nodes of the dynamic peer-to-peer network consum[ing] the same content within a predetermined time'" and the claim's "structure of sharing 'common video content iteratively [] in segments throughout the [] network' . . . 'reversed the flow of distributed digital

content' compared to the prior art and solved capacity problems related to content sharing." *Id.* The Federal Circuit concluded that "the district court should have denied the motion to dismiss because Cooperative's allegations in the complaint . . . create[d] a plausible factual issue regarding the inventiveness of [the claim]." *Id.* at 133 (citing *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1370 (Fed. Cir. 2018)).

Here, by contrast, the Amended Complaint contains only conclusory and boilerplate assertions that the features it lists "were not well-understood, routine, or conventional" and contains nothing akin to the "concrete allegations" relied on in *Aatrix* or the "plausible factual allegations" present in *Cooperative Entertainment, Inc.* *See* 882 F.3d at 1127–29; 50 F.4th at 136. The Court declines to credit Draiver's "attempt[s] to manufacture a factual question" that "provide no more than a series of legal conclusion[s] about the § 101 analysis." *See Dropbox, Inc.*, 815 F. App'x at 538. After disregarding these legal conclusions, the Court finds no factual allegations in the Amended Complaint that would preclude resolution at the Rule 12(b)(6) stage. *See Aatrix*, 882 F.3d at 1129; *Coop. Ent., Inc.*, 50 F.4th at 133. The Motion to Dismiss is not premature.

B. Claim Construction Need Not Precede the § 101 Analysis in This Case

Draiver next alleges that because "the parties[] dispute the basic character of the challenged claims," claim construction must precede resolution of the § 101 challenge. (ECF No. 31, at 13–14.) HopDrive counters that "to the extent Draiver contends that the Court must construe claims before entertaining a § 101 challenge, Draiver must both (1) allege specific constructions; and (2) demonstrate how those constructions would render the claims patentable." (ECF No. 33, at 9 (collecting cases).)

Because Draiver has failed to allege any specific competing construction or articulate how any such construction would alter the § 101 analysis, and because "the 'basic character of the claimed subject matter is readily ascertainable from the face of the patent,'" claim construction need not precede the § 101 analysis in this case. *See VIS*, 227 F. Supp. 3d at 590 (citations omitted).

1. Legal Standard: Sequencing of Eligibility Determination and Claim Construction

"Patent eligibility under 35 U.S.C. § 101 is a question of law." *VIS*, 227 F. Supp. 3d at 590, 599 (citing *OIP Techs. Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir. 2015)) (contrasting the eligibility determination under § 101 as a question of law with the obviousness determination under § 103 as a "mixed question of law and fact"). "Although the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter, claim construction is not an inviolable prerequisite to a validity determination under § 101." *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1349 (Fed. Cir. 2014). "Addressing . . . § 101 at the outset not only conserves scarce judicial resources and spares litigants the staggering costs associated with discovery and protracted claim construction litigation, it also works to stem the tide of vexatious suits brought by the owners of vague and overbroad business method patents."[10] *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1364 (Fed. Cir. 2015) (Mayer, J., concurring).

"While the ultimate determination of eligibility under § 101 is a question of law, like many legal questions, there can be subsidiary fact questions which must be resolved en route to the ultimate legal determination." *Aatrix*, 882 F.3d at 1128. Accordingly, "'it will ordinarily be

[10] The Court does not find that this challenge falls under the category of cases described in *OIP Techs., Inc.* *See* 788 F.3d at 1364 (Mayer, J., concurring).

desirable—and often necessary—to resolve claim construction disputes prior to a § 101 analysis.'" *Peschke Map Techs. LLC v. Rouse Properties Inc. ("Peschke")*, 168 F. Supp. 3d 881, 884 (E.D. Va. 2016) (quoting *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.) ("Bancorp")*, 687 F.3d 1266, 1273 (Fed. Cir. 2012)). However, "[t]he Federal Circuit has made clear that there is no 'bright line rule requiring district courts to construe claims before determining subject matter eligibility.'" *Id.* (quoting *Ultramercial, LLC v. Hulu, LLC*, 657 F.3d 1323, 1325 (Fed. Cir. 2011), *cert. granted, judgment vacated sub nom. WildTangent, Inc. v. Ultramercial, LLC*, 566 U.S. 1007 (2012)).

For example, "there is no claim construction dispute relevant to eligibility [where the court] can fully understand the basic character of the claims without claim construction." *Reese v. Sprint Nextel Corp.*, 774 F. App'x 656, 660 (Fed. Cir. 2019); *see also VIS*, 227 F. Supp. 3d at 590 ("[W]hen the 'basic character of the claimed subject matter is readily ascertainable from the face of the patent,' courts may determine patent-eligibility at the motion to dismiss phase." (citing *Internet Patents Corp. v. Gen. Auto. Ins. Servs., Inc.*, 29 F. Supp. 3d 1264, 1268 (N.D. Cal. 2013), *aff'd sub nom. Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343 (Fed. Cir. 2015); *Fairwarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089 (Fed. Cir. 2016)). "No formal claim construction [is] required [where] the asserted claims disclose[] no more than 'an abstract idea garnished with accessories' and there [is] no 'reasonable construction that [c]ould bring [them] within patentable subject matter." *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 719 (Fed. Cir. 2014) (Mayer, J., concurring) (last alteration in original).

Further, a litigant who "fail[s] to request claim construction [before the district court]" and "fail[s] to explain how a different construction of any claim term would lead to a different result" has waived such arguments. *WhitServe LLC v. Dropbox, Inc.*, 854 F. App'x 367, 373

(Fed. Cir. 2021) (citing *Abbott Labs. v. Syntron Bioresearch, Inc.*, 334 F.3d 1343, 1357 (Fed. Cir. 2003) (determining that a litigant who "d[oes] not urge a particular claim construction of the disputed language before the district court[] . . . waive[s] the right to do so on appeal")). In sum, to assert a claim construction dispute, a party must submit a competing construction or at least articulate why a differing construction would impact the analysis, rather than simply claiming in a conclusory fashion that the other party has misconstrued a particular claim.

2. Draiver Fails to Propose a Competing Claim Construction or Explain How a Different Construction Would Alter the § 101 Analysis, and the Basic Character of the Claimed Subject Matter Is Ascertainable on the Face of the Patent

Draiver asserts that "HopDrive is construing [certain terms] very broadly and not in a manner consistent with the specification." (ECF No. 31, at 13.) However, Draiver does not offer any proposed alternative construction for any claim, let alone explain how any such construction would alter the § 101 analysis. Draiver's discussion of the parties' disagreement as to the interpretation of the patent families' overall character, (*see* ECF No. 31, at 13–14), is inapt, as it does not identify any particular claim for which the parties urge differing constructions. Although Draiver asserts that HopDrive's constructions are "[in]consistent with the specification[s]," (ECF No. 31, at 13), Draiver does not offer any competing constructions for any claims nor does it describe how some undefined alternative claim construction, for some unspecified subset of the claims, would "lead to a different result" in the § 101 analysis. *See WhitServe LLC*, 854 F. App'x at 373.

As to the Trip Scheduling Patents ('027, '451, '316, and '151), Draiver states that "the [Amended] Complaint explains how the claimed interfaces, with specific prescribed functionalities, provide meaning to the claims and set them apart from any abstract idea or functional claiming." (ECF No. 31, at 13.) This vague and conclusory statement actually

concerns the § 101 analysis rather than claim construction because it urges that the interfaces and their functionalities satisfy *Alice* Step One (i.e., whether the patent is directed to a patent-ineligible concept such as an abstract idea).[11]

As to the Driver Allocation Patents ('720, '133, and '354), Draiver argues that "HopDrive broadly construes 'allocating a driver for a trip,' while overlooking the vehicle status report, real-time location update, and by-the-trip insurance features." (ECF No. 31, at 14.) This statement again misunderstands the claim construction inquiry. Draiver does not assert that HopDrive has incorrectly construed "allocating a driver for a trip," but instead appears to argue that, in focusing only on "allocating a driver for a trip," HopDrive has characterized the focus of the claims too broadly—a debate that is, again, appropriate in the context of the *Alice* Step One analysis but irrelevant to claim construction.

Even if Draiver had articulated a competing claim construction or explain how one would alter the § 101 analysis—which it did not—the basic character of the claimed subject matter can be readily ascertained from the face of the patents. *See VIS*, 227 F. Supp. 3d at 590 (citing *Internet Patents Corp.*, 29 F. Supp. 3d at 1268). As to the Trip Scheduling Patents, the claimed subject matter relates to "scheduling a trip to transport vehicles from a pick-up location to a drop-off location." ('027 Patent, Abstract.) As to the Driver Allocation Patents, the claimed subject matter relates to "allocating drivers to procure targets, such as automobiles", and "then transport[ing] [the targets] to a desired drop-off destination." ('720 Patent, Abstract.) These subject matters are not in themselves highly technical, and the claims contain no unfamiliar terms or obscure technological jargon. Accordingly, the Court can glean "a full understanding of the basic character of the claimed subject matter" from the language of the patents themselves

[11] The Court analyzes the patents pursuant to the *Alice* test in Part III.C, *infra*.

such that claim construction is not necessary before determining the eligibility of the claimed patents. *See Content Extraction & Transmission LLC*, 776 F.3d at 1349.

C. Patent Eligibility Inquiry Under § 101

Having determined that the Motion to Dismiss is not premature and that claim construction need not precede the § 101 analysis, the Court next assesses the patents' eligibility under § 101. The Court's analysis proceeds in four steps.

First, the Court notes that the patent examiner's evaluation is not dispositive. Second, the Court identifies representative claims for each of the patent families. Third, the Court concludes that the claims of both patent families are directed to abstract ideas. The Trip Scheduling Patents are directed to the abstract idea of scheduling a trip, possibly including a task to be performed along the way. The Driver Allocation Patents are directed to the abstract idea of allocating a driver and a license for a trip. Fourth, the Court concludes that nothing in the challenged claims provides an inventive concept because the claims merely implement the abstract ideas identified above, relying on generic technological components without either improving those technological components or specifying the mechanism by which the patent purports to achieve the abstract idea. Accordingly, all challenged claims in both the Trip Scheduling Patents and the Driver Allocations Patents are ineligible for patent protection.[12]

1. The Patent Examiner's § 101 Evaluation Is Not Dispositive

The '027, '451, and '151 Patents all were "initially rejected under 35 U.S.C. § 101", but, "[a]fter a comprehensive evaluation," the patent examiner withdrew all § 101 rejections of these patents. (ECF No. 26 ¶¶ 39, 59.) Draiver acknowledges that "the patent examiner's

[12] Of course, the Court does not decide whether certain claims not challenged in this action, ('027 Patent, cl. 8; '720 Patent, cls. 2–7, 9–11, 13–20; '133 Patent, cls. 2–3, 5, 9–10, 15–20), are patent eligible. (*See* ECF No. 29, at 9, 12 (identifying challenged patent claims).)

consideration of § 101 is not dispositive." (ECF No. 31, at 14.) Nevertheless, Draiver states that because the United States Patent and Trademark Office ("USPTO") "already examined" whether some of the patents satisfied § 101 before issuing the patent, "[t]he Asserted Patents are presumed valid, and it is HopDrive's burden to prove by clear and convincing evidence that they are invalid under § 101." (ECF No. 31, at 14 (citing *Cellspin Soft Inc. v. Fitbit, Inc. ("Cellspin")*, 927 F.3d 1306, 1319 (Fed. Cir. 2019)).) HopDrive responds by noting that "courts, including this one, routinely find claims to be ineligible where the examiner considered § 101." (ECF No. 33, at 10 (collecting cases).)

Draiver properly articulates the review this Court must undertake: evaluating whether HopDrive has demonstrated, by clear and convincing evidence, that the patents—which are presumed valid—are ineligible. *See Cellspin*, 927 F.3d at 1319 (identifying the presumptive validity of "patents granted by the [USPTO]" but noting that "an alleged infringer may . . . challenge [a patent's] validity" by offering clear and convincing evidence that "the patent does not satisfy the[] prerequisites" for issuance of a patent (internal quotation marks omitted)).

But as HopDrive observes, numerous district courts across the country have found claims ineligible even where a patent examiner had previously considered § 101 and found the claims eligible. *See, e.g.*, *Cleveland Clinic Found. v. True Health Diagnostics, LLC*, No. 1:17-cv-198 (LMB/IDD), 2017 WL 3381976, at *3, *10 (E.D. Va. Aug. 4, 2017) (finding patent ineligible even though patentee successfully overcame § 101 rejection during prosecution); *Reputation.com, Inc. v. Birdeye, Inc.*, No. 21-129-LPS-CJB, 2022 WL 609161, at *6 (D. Del. Jan. 31, 2022) (rejecting patentee's argument that claims were eligible because examiner withdrew § 101 objection); *Fitbit Inc. v. AliphCom*, No. 16-cv-00118-BLF, 2017 WL 819235, at *2, *8, *22 (N.D. Cal. Mar. 2, 2017) (finding certain claims patent-ineligible despite the fact that

the patent overcame an initial § 101 rejection by the patent examiner); *Bytemark, Inc. v. Masabi, Ltd.*, No. 2:16-cv-00543-JRG-RSP, 2018 WL 7272023, at *4–5, *9 (E.D. Tex. Nov. 25, 2018), *report and recommendation adopted*, 2019 WL 7882728 (E.D. Tex. Feb. 7, 2019), *aff'd*, 792 F. App'x 952 (Fed. Cir. 2020) ("[T]he claims at one time may have passed the § 101 filter. But under the law as it stands today, the asserted claims are not patent-eligible."). Accordingly, the Court proceeds with its analysis on the understanding that the patent examiner's evaluation is not dispositive and that HopDrive must demonstrate by clear and convincing evidence that the patents are invalid.

2. Legal Standard: Representative Claims

"The Court need not specifically address each asserted claim. Where the claims are 'substantially similar and linked to the same abstract idea,' analyzing a representative claim is sufficient." *CalAmp Wireless Networks Corp. v. ORBCOMM, Inc.*, 233 F. Supp. 3d 509, 512 n.1 (E.D. Va. 2017) (quoting *Content Extraction & Transmission LLC*, 776 F.3d at 1348). "Courts may treat a claim as representative . . . if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim or if the parties agree to treat a claim as representative." *Berkheimer v. HP, Inc.*, 881 F.3d at 1365; *Fast 101 Pty Ltd. v. CitiGroup Inc.*, 834 F. App'x 591, 592 (Fed. Cir. 2020) (affirming quoting *Berkheimer* for this proposition); *Trinity Info Media, LLC v. Covalent, Inc.*, 72 F.4th 1355, 1358 n.2 (Fed. Cir. 2023) (same). Where one party objects to the representativeness of a claim, courts reject objections that do not explain how the *Alice* analysis would differ from that of the representative claim. *See, e.g., Street Spirit IP LLC v. Meta Platforms, Inc.*, No. 23-879, -- F. Supp. 3d --, 2023 WL 4869594, at *3 (N.D. Cal. July 31, 2023) ("Because [plaintiff] has failed to demonstrate, let alone discuss, the distinctive significance of other claim limitations, it has

'forfeited its ability to argue that other claims are separately patent eligible.'"); *Int'l Bus. Machs. Corp. v. Zynga Inc. ("IBM")*, 642 F. Supp. 3d 481, 496 (D. Del. 2022) ("[Plaintiff] vaguely criticizes [defendant's] argument that claim 1 is representative, but, other than dependent claim 2, [plaintiff] fails to provide meaningful arguments as to the distinctive significance of [the remaining] claims . . . . Thus, [plaintiff] waives its representativeness argument for claims not analyzed separately."). The Supreme Court has explained that "the form of the claims should not trump basic issues of patentability." *Bancorp*, 687 F.3d at 1277 (citing *Parker v. Flook*, 437 U.S. 584, 593 (1978)) (stating that "the format of [] various method, system, and media claims . . . d[oes] not change the patent eligibility analysis under § 101" and gleaning "no material difference" between method and media claims where they cite "the same seven steps . . . word for word" (citations and internal quotation marks omitted)).

Accordingly, the representativeness analysis may be unavoidably tied up with the *Alice* analysis in the sense that an objector must argue that focuses or claim limitations not found in the representative claim have "distinctive significance" under the *Alice* test. To avoid repetition of this overlapping inquiry, the Court simply documents its conclusions regarding representativeness in a less detailed fashion in this Part. The accompanying substantive analysis of the dependent claims' lack of "distinctive significance" follows.

3. The Trip Scheduling Patents: Claim 1 of the '027 Patent is Representative of All Challenged Claims

"This motion challenges the eligibility of [C]laims 1–7 and 9–16 of the '027 [P]atent; [C]laims 1–7 of the '451 [P]atent; [C]laims 1–20 of the '316 [P]atent; and [C]laims 1–20 of the[ ]'151 [P]atent (the '[c]hallenged Trip Scheduling Claims')." (ECF No. 29, at 9.)[13]

[13] The challenged Trip Scheduling Patent Claims are reproduced in Appendix A for ease of reference.

Here, the parties do not agree on a representative claim. (*See* ECF No. 31, at 15.) HopDrive suggests that Claim 1 of the '027 Patent is representative because, "[b]eyond the limitations of the underlying independent claims, each dependent claim recites only additional logistical requirements." (ECF No. 29, at 15, 21.) Draiver argues that HopDrive has failed to "correctly identify representative claims." (ECF No. 31, at 15.)

As an initial matter, Draiver waived its representativeness argument because it did not articulate any "meaningful argument for the distinctive significance of any claim limitations not found in the representative claim." *See Berkheimer*, 881 F.3d at 1365; *IBM*, 642 F. Supp. 3d at 496. Stating that Hopdrive failed to "correctly identify representative claims", without offering an alternative and explaining how the *Alice* analysis would differ, insufficiently challenges an opponent's designation of a claim as representative.

Nonetheless, the Court independently examined the challenged Trip Scheduling Patent Claims and finds it proper to treat Claim 1 of the '027 Patent as representative of all of the challenged Trip Scheduling Patent Claims.

Claim 1 of the '027 Patent recites:

> One or more non-transitory computer-readable media storing computer-executable instructions that, when executed by a processor, perform a method of displaying an interface for a trip-scheduling system, the method comprising the steps of:
>
> > [D]isplaying a location selection page operable to receive input of a plurality of locations from a user via a map interface;
> >
> > [D]isplaying a vehicle selection page operable to receive input of an indication of a vehicle to be transported;
> >
> > [D]isplaying a task selection screen operable to receive an indication of a task to be performed by the driver for the vehicle;
> >
> > [D]isplaying a trip overview page operable to receive a selection of a pick-up location for the vehicle from the plurality of locations, a task location

> for the task for the vehicle from the plurality of locations, and a drop-off location for the vehicle from the plurality of locations;
>
> [D]etermining a driver from a pool of available drivers to drive the vehicle from the pick-up location to the drop-off location; and
>
> [U]pdating the trip overview page to reflect the driver driving the vehicle from the pick-up location to the drop-off location.

('027 Patent, cl. 1.)

This examination of the claims revealed that each of the challenged claims of the '027, '451, and '316 Patents is either substantially similar to Claim 1 of the '027 Patent or is a dependent claim that adds only peripheral features or functionalities which do not alter the § 101 analysis. Although differences in phrasing or form exist across the independent claims, the challenged Trip Scheduling Patent Claims recite the same set of steps with slight variation, and at the same level of specificity or generality. They do not affect the *Alice* analysis at Step One because all are directed to the same abstract idea. (*Cf.* '027 Patent, cls. 1, 13; (ECF No. 26-9 (the "'451 Patent"), cl. 1; (ECF No. 26-11 (the "'316 Patent"), cls. 1, 8, 15; (ECF No. 26-13 (the "'151 Patent"), cls. 1, 9, 17.) Some of the challenged dependent claims require or permit the user to input more information, such as additional locations, vehicles, drivers, or other trip parameters. Other dependent claims provide for automatic payment, driver surveys, real-time, turn-by-turn navigation, or automation of certain processes. However, these additions do not materially alter the analysis in *Alice* Step Two because none provide an inventive concept.

Claim 1 of the '151 Patent recites:

> A method of allocating a driver in a trip-scheduling system accessed via an application program interface, the method comprising:

> [R]eceiving, from a user, a user input at a first user interface; and
>
> [A]ccessing, via the application program interface and based on the user input, a data store comprising computer-executable instructions that, when executed by at least one processor, perform:
>
> > [C]ausing display of a second user interface comprising:
> >
> > [A] vehicle selection page operable to receive, from the user, an input indicative of a vehicle for transport; and
> >
> > [A] trip overview and tracking page operable to receive a selection of a pick-up location and a drop-off location;
>
> [D]etermining a trip by analyzing the pick-up location and the drop-off location; and
>
> [D]ynamically updating the trip overview and tracking page to reflect the driver travelling from the pick-up location to the drop-off location, based on a driver location provided by a driver GPS device associated with the driver.

('151 Patent, cl. 1.)

Although the wording of the '151 Patent claims differs more dramatically from Claim 1 of the '027 Patent than the other independent claims discussed above, the independent claims of the '151 Patent cover the same basic steps as Claim 1 of the '027 Patent, *i.e.*, causing the display of a "vehicle selection page" and a "trip overview and tracking page", determining a trip route, and "dynamically updating" the trip overview and tracking page. (*Cf.* '027 Patent, cl. 1; '151 Patent, cls. 1, 9, 17.) The main difference is that, rather than reciting the display of the requisite user interfaces, the independent claims of the '151 Patent recite methods of creating and updating those interfaces. (*Cf.* '027 Patent, cl. 1; '151 Patent, cls. 1, 9, 17.) This difference in emphasis lacks any "distinctive significance" as compared to the representative claim, so the Court treats Claim 1 of the '027 Patent as representative of the challenged claims of the '151 Patent. *See Berkheimer*, 881 F.3d at 1365; *IBM*, 642 F. Supp. 3d at 496.

4. The Driver Allocation Patents: Claim 1 of the '720 Patent is Representative of All Challenged Claims

"This motion challenges the eligibility of [C]laims 1, 8, [and] 12 of the '720 [P]atent; [C]laims 1, 4, 6–8, and 11–14 of the '133 [P]atent; and [C]laims 1–20 of the '354 [P]atent (the '[c]hallenged Driver Allocation Claims')." (ECF No. 29, at 12.)[14]

HopDrive asserts that Claim 1 of the '720 Patent is representative of the challenged Driver Allocation Patent Claims. (ECF No. 29, at 23.)

Draiver challenges this designation, charging that "HopDrive does not account for the meaningful differences in the focus and language of the claims in each patent of the [Driver Allocation Patent] [f]amily." (ECF No. 31, at 22 (citing *Weisner*, 51 F.4th at 1084).) Draiver acknowledges that "Claims 1 and 8 of the '133 [P]atent are similar [to Claim 1 of the '720 Patent], but the claimed licensing information is driver-specific and owner-specific respectively." (ECF No. 31, at 23.) Draiver distinguishes the '354 Patent because, "[u]nlike the '720 and '133 [P]atents, the focus of [C]laim 1 of the '354 [P]atent is on an improved method of vehicle delivery that divides functionalities between a server running an internet service and a mobile device running a mobile device application." (ECF No. 31, at 24.) Draiver asserts that the '354 Patent claims "'reflect deliberate choices about which equipment plays which part in the overall system.'" (ECF No. 31, at 24 (quoting *Vehicle IP, LLC v. AT&T Mobility LLC*, No. 09-1007-LPS, 2016 WL 5662004, at *5 (D. Del. Sept. 29, 2016)).)

Draiver again fails to explain how this distinction is "meaningful" for the purpose of representativeness, stating in a conclusory manner only that "[t]his and other meaningful distinctions are *plainly apparent* in the language of the claims." (*See* ECF No. 31, at 22

[14] The challenged Driver Allocation Patent Claims are reproduced in Appendix B for ease of reference.

(emphasis added).) Moreover, HopDrive "explained that the independent claims of the Driver Allocation Patents are directed to the same subject matter, . . . [and] why the dependent claims fare no better." (ECF No. 33, at 19 (citing ECF No. 29, at 24–25, 27–28).)

In light of Draiver's specific objection to the representativeness of Claim 1 of the '720 Patent as to the '354 Patent claims, the Court has independently reviewed the challenged Driver Allocation Patent Claims and concludes that Claim 1 of the '720 Patent is representative of all of the challenged Driver Allocation Patent Claims. Fatal to Draiver's claim of "deliberate choices" in the '354 Patent is the unavoidable fact that the distinctions the '354 Patent purports to draw between the internet service and the mobile device application are entirely conventional. (*See* ECF No. 31, at 24 (quoting *Vehicle IP, LLC*, 2016 WL 5662004, at *5).) The server plays the "central role . . . in facilitating between the driver (with a mobile device) and the user (who requested vehicle delivery), including vehicle status reports and real-time location updates." (ECF No. 31, at 24.)

"[M]ere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology." *Int'l Bus. Machs. Corp. v. Zillow Grp., Inc.*, 50 F.4th 1371, 1378 (Fed. Cir. 2022) (citations omitted). The '354 Patent does not purport to invent servers, mobile devices, or any novel method of communication between the two, and the specification confirms that these components are wholly generic. (*See* ECF No. 26-5 (the "'354 Patent"), at 6:1–2; 6:36–37.) Further, a number of app-based services in existence today communicate with drivers via their mobile devices and offer some version of status reports and real-time location updates: Lyft, DoorDash, Postmates, and Instacart, to name a few. The proliferation of these features belies Draiver's claims of their distinctiveness. There is nothing in a "server play[ing] the 'central role'" that surpasses the generic use of a server, and Draiver does

not articulate any improvement to servers or mobile devices or the interaction between the two. *See Zillow Grp., Inc.*, 50 F.4th at 1378.

Thus, the Court overrules Draiver's objections to the representativeness of Claim 1 of the '720 Patent and treats Claim 1 of the '720 Patent as representative of all of the challenged Driver Allocation Patent Claims.

Claim 1 of the '720 Patent recites:

A method for managing drivers of vehicles, comprising:

> [R]eceiv[ing] a request, submitted by a user, to drive a vehicle on a trip from a first location to a second location;
>
> [A]utomatically generating a trip request for the trip, said trip request including a driver for the vehicle;
>
> [W]herein automatically generating the trip request includes requesting licensing information specific to the trip,
>
> [W]herein the licensing information specific to the trip allows temporary licensure for the vehicle during the trip from the first location to the second location,
>
> [W]herein the licensing information specific to the trip expires after the trip from the first location to the second location;
>
> [A]utomatically dispatching the driver for the trip,
>
> [W]herein automatically dispatching the driver includes sending, to the driver, the trip request and the licensing information specific to the trip.

('720 Patent, cl. 1.)

Because the challenged claims of the '720, '133, and '354 Patents either substantially mirror Claim 1 of the '720 Patent or state dependent claims that do not add an inventive concept that alters the § 101 analysis, the Court treats Claim 1 of the '720 Patent as representative of all challenged claims of the Driver Allocation Patents.

5. Legal Standard: *Alice* Step One

"The abstract ideas category embodies the longstanding rule that an idea of itself is not patentable." *Alice Corp. Pty. v. CLS Bank Int'l ("Alice")*, 573 U.S. 208, 218 (2014) (citations and quotations omitted). "[T]he first-stage inquiry [] look[s] at the 'focus' of the claims, their 'character as a whole.'" *Elec. Power Grp., LLC v. Alstom S.A. ("Elec. Power")*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (citations omitted). Among things deemed to be abstract ideas are "mathematical algorithms", "longstanding commercial practices," "fundamental economic practice[s]", and other "well-understood, routine conventional activit[ies]." *DDR Holding, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256–57, 1265 (Fed. Cir. 2014) (further citations omitted); *Bilski v. Kappos*, 561 U.S. 593, 611 (2010); *OIP Techs., Inc.*, 788 F.3d at 1363; *Mayo Collaborative Servs. v. Prometheus Labs., Inc. ("Mayo")*, 566 U.S. 66, 79 (2012).

"In addressing the first step of the [§] 101 inquiry, as applied to a computer-implemented invention, it is often helpful to ask whether the claims are directed to 'an improvement in the functioning of a computer,' or merely 'adding conventional computer components to well-known business practices.'" *Affinity Labs of Tex., LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1270 (Fed. Cir. 2016) (quoting *Enfish, LLC v. Microsoft Corp. ("Enfish")*, 822 F.3d 1327, 1338 (Fed. Cir. 2016)). This is so because "tying an abstract idea to a general[-]purpose computer or to the Internet, without more, is generally insufficient to make an abstract idea patentable." *In re TLI Communications LLC Patent Litigation ("In re TLI")*, 87 F. Supp. 3d 773, 784 (E.D. Va. 2015), *aff'd*, 823 F.3d 607 (Fed. Cir. 2016) (citing *Ultramercial, Inc.*, 772 F.3d at 715–17). "Distilled to a principle, . . . when claims are laid out in purely functional language and use conventional technology in a typical manner, they are not patent eligible." *VIS*, 227 F. Supp. 3d at 595 (citing *In re TLI Communications LLC Patent Litigation*, 823 F.3d 607 (Fed. Cir. 2016)). Indeed, "even

'very detailed software implementation guidelines' in the patent specifications will not save systems claims that 'only contained generalized software components arranged to implement an abstract concept on a computer.'" *VIS*, 227 F. Supp. 3d at 594 (quoting *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013)). Courts in this district have observed that "[t]he invalidation of purely functional claims is a consistent theme in the Federal Circuit's recent § 101 jurisprudence." *Id.* at 595.

6. The Trip Scheduling Patents Are Directed to an Abstract Idea

At *Alice* Step One, HopDrive argues that "[t]he [c]hallenged Trip Scheduling Claims are directed to the abstract idea of scheduling a trip, possibly with a task to be performed along the way" and "simply recite the high-level steps for performing that abstract idea on an unspecified computer." (ECF No. 29, at 15; ECF No. 33, at 12.) HopDrive asserts that the patents "recite[] only displaying nondescript pages to collect information from a user, processing that information to choose a driver, and then indicating the results to the user." (ECF No. 29, at 16; ECF No. 33, at 12.) HopDrive states that "[t]he [c]hallenged Trip Scheduling Claims exhibit at least three hallmarks of ineligibility": (1) "the claims are directed at a method of organizing human activity—i.e., trip scheduling for vehicle transportation—and performing the basic organizational steps on a generic computer"; (2) "the [c]hallenged Trip Scheduling Claims recite nothing more than the basic, abstract idea of trip scheduling with a task on the way by collecting information from a human, analyzing it to determine a driver, and displaying the information about the location of the driver"; and (3) "the claims merely recite, in functional language, the steps for performing the abstract idea of trip scheduling including a task . . . , [b]ut nothing in the claims recites *how* to accomplish those steps." (ECF No. 29, at 17–19 (emphasis removed).)

In response, Draiver first alleges that HopDrive "does what the Federal Circuit has repeatedly cautioned against: it describes the claims [] at too high a level of abstraction and is 'untethered from the language of the claims[.]'" (ECF No. 31, at 16 (quoting *Enfish*, 822 F.3d at 1337) (citing *Diamond v. Diehr*, 450 U.S. 175, 189 n.12 (1981)).)[15] Draiver avers that the claims are "directed towards specific sets of user interfaces and computer instructions that provide particular ways of requesting and presenting vehicle transportation and tracking information to overcome longstanding technical limitations in existing systems." (ECF No. 31, at 16.)[16] Draiver asserts that the "particular manner of displaying interfaces to receive input from a user, . . . [and] present to the user updated information . . . were key in overcoming various limitations in prior systems" such as "loss of paperwork, improperly filled out or untimely vehicle condition

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[15] HopDrive's characterization in fact closely tracks the '027 Patent language. (*Compare* ECF No. 29, at 15 ("The [c]hallenged Trip Scheduling Claims are directed to the abstract idea of *scheduling a trip*, possible with a task to be performed along the way.") (emphasis added), *with* '027 Patent, Abstract ("Media, method and system for *scheduling trips*, and particularly for scheduling a trip to transport vehicles from a pick-up location to a drop-off location.") (emphasis added).)

[16] Draiver presents multiple articulations of the focus of the Trip Scheduling Patents. For example, Draiver elsewhere states that the Trip Scheduling Patents are directed to:

> (1) "improved user interfaces that provide technological improvements to how information is requested and displayed," which it says "is far afield from 'organizing human activity,'" (ECF No. 31, at 19);
>
> (2) "specific inventive improvements to [collecting, analyzing, and/or displaying information] . . . because the claimed interfaces provide technological improvements relating to the request and display of information," (ECF No. 31, at 20); and
>
> (3) "the specific series of screens used to collect and display specific claimed information," (ECF No. 31, at 21).

These variations simply rephrase the assertion above and do not alter the analysis. (*See* ECF No. 31, at 16.)

reports and payment receipts, driver availability, vehicle tracking, and instan[t] driver communication and monitoring." (ECF No. 31, at 17 (citing '720 Patent, at 1:43–52).[17])

Having reviewed the representative claim and the other challenged Trip Scheduling Patent claims, the Court concludes that the Trip Scheduling Patents are directed to an abstract idea. This is true because they deploy wholly generic computer elements in an entirely conventional way, without offering any improvements to the functioning of the computer, and recite purely functional language about how to achieve the abstract idea. The Trip Scheduling Patent Claims do not address a technological problem but instead seek "to minimize the distance, drivers, and time needed to minimize the overhead costs" associated with vehicle transportation." ('027 Patent, at 1:47–49.)

The Court rejects Draiver's conclusory assertion that "the claims . . . provide technological improvements to how information is requested and displayed." (ECF No. 31, at 19.) The challenged Trip Scheduling Patents are not technological *solutions* because they deploy wholly generic computer elements—here, "interfaces", "pages", and a "processor"—in an entirely conventional way. *Compare Intell. Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1368, 1370 (Fed. Cir. 2015) ("[T]he interactive interface limitation is a generic

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[17] Draiver acknowledges that these problems are "discussed in the specification of the '720 [P]atent rather than in the '027 [P]atent [f]amily specifications." (ECF No. 31, at 17 n.2). It nonetheless asserts that "these problems . . . were likewise addressed by . . . the '027 Patent [f]amily." (ECF No. 31, at 17 n.2.)

However, "to determine patent eligibility under § 101, 'the important inquiry . . . is to look to the claim,' as it is the claims", rather than the specifications, "that have a preclusive effect." *See Intell. Ventures I LLC v. Capital One Fin. Corp.*, 127 F. Supp. 3d 506, 512–13 (D. Md. 2015), *aff'd*, 850 F.3d 1332 (Fed. Cir. 2017) (quoting *Accenture Global Servs.*, GmbH, 728 F.3d at 1345) (citations omitted). Thus, the inclusion of these problems in the specification of the Driver Allocation Patents has no preclusive effect on the claims of the Trip Scheduling Patents. *See id.*

computer element" and "[i]nstructing one to 'apply' an abstract idea and reciting no more than generic computer elements performing generic computer tasks does not make an abstract idea patent-eligible" (citing *Alice*, 134 S. Ct. at 2359–60)), *with Enfish*, 822 F.3d at 1330, 1337 (finding that the claims at issue, reciting a "self-referential" table in lieu of the traditional "relational model," "function[ed] differently than conventional database structures" and thus was not an abstract idea). Receiving input, analyzing data, and then displaying the output is a conventional use of technology and is "a patent-ineligible abstract idea." *SmarTEN LLC v. Samsung Elecs. Am., Inc.*, 316 F. Supp. 3d 913, 922 (E.D. Va. 2018). Although Draiver alleges that the "trip overview and tracking page was revolutionary over prior systems," (ECF No. 31, at 19), it describes the benefits only as "mak[ing] it easier to choose intermediate locations that are convenient to one of the trip's endpoints or to the route the driver will take", (ECF No. 26 ¶ 24). This conclusory statement does not explain any mechanism by which, or *how*, the claimed interface "makes it easier." Such purely functional language is insufficient to render a claim non-abstract. *See VIS*, 227 F. Supp. 3d at 595.

For example, Draiver states that the '027 Patent claims "a map interface that makes it easy for the user to specify the relevant locations for the trip in a novel way not contemplated by the prior art", but beyond these conclusory assertions, it does not elaborate on *how* exactly the claimed map interface eases location selection. (*See* ECF No. 31, at 18.) The Court can identify no such mechanism in the patent language, either. The '027 Patent specification mentions only that traditional vehicle transportation was inefficient in terms of time and money because it required a "second driver in a chase car," but it does not identify any *technological* hurdles in the prior art. (*See* '027 Patent, at 1:32–49.) The '027 Patent claims recite "receiv[ing] input of a plurality of locations from a user via a map interface," but this high-level functionality is a run-

of-the-mill feature of many map interfaces in regular use today, such as Google Maps, Apple Maps, Waze, and others. (*See* '027 Patent, cl. 1; *see also* '027 Patent, Fig. 6 (Appendix A, at 3) (depicting a driver interface in accordance with embodiments of the invention).) Draiver cannot (and does not) purport to invent this functionality, nor do the patents articulate any technical improvement to it. The Trip Scheduling Patents instead seek to apply this conventional technology to achieve the abstract goal of efficient trip scheduling, including intermediate tasks.

The patents in this case are thus unlike those at issue in *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc. ("Core Wireless")*, 880 F.3d 1356 (Fed. Cir. 2018). There, the challenged claims sought to solve a problem with user interfaces on small-screen devices wherein "small screens 'tend[ed] to need data and functionality divided into many layers or views'" which had previously "required users to drill down through many layers to get to desired data or functionality." *Id.* at 1363. The claims "require[d] 'an application summary that can be reached directly from the menu'" and "further require[d] the application summary window [to] list a limited set of data." *Id.* at 1362. The Federal Circuit found, at *Alice* Step One, that these claims were "directed to an improved user interface for computing devices" because they were "directed to a particular manner of summarizing and presenting information in electronic devices . . . [and] 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.* at 1362–63.

Here, by contrast, the Trip Scheduling Patents recite numerous "pages" with no restrictions or limitations as to how they receive or present information. *See id.* Further, whereas the *Core Wireless* claims overcame *technological* problems associated with small-screen devices, the Trip Scheduling Patents purport to use generic technology, without

improving it, to supply efficiency gains associated with digitizing *any* process, such as preventing the "loss of paperwork" or "instant communication with and monitoring and control of drivers." ('720 Patent, at 1:43–52); *see Core Wireless*, 880 F.3d at 1362–63; *see also Affinity Labs*, 838 F.3d at 1270 (distinguishing whether claims were directed to improving computer functionality or merely adding conventional computer components to a well-known business practice).

This case likewise differs from *Trading Techs. Int'l, Inc. v. CQG, Inc.*, 675 F. App'x 1001 (Fed. Cir. 2017). There, the challenged patent sought to solve a specific problem with prior stock trading user interfaces by providing a faster interface to avoid "miss[ing] the price because the market moved before the order was entered and executed." *Id.* at 1002. "[T]he challenged patents [did] not simply claim displaying information on a graphical user interface" but instead "requir[ed] a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface's structure that is addressed to and resolves a specifically identified problem in the prior state of the art." *Id.* at 1004. The claims recited a specific arrangement of specific structures in the user interface, such as graphical axes, display regions, and display indicators, to minimize the time required to execute a trade. *Id.* at 1003–04. The Federal Circuit concluded that "[f]or Section 101 purposes, the claimed subject matter is directed to a specific improvement to the way computers operate." *Id.* at 1006 (citation and internal quotation marks omitted). The Federal Circuit accordingly affirmed the district court's finding that these claims were patent eligible. *Id.* at 1002, 1004, 1006.

Here, by contrast, the claims recite only that the pages must be "operable to receive input" of different types, such as "a plurality of locations . . . via a map interface"; "an indication of a vehicle to be transported"; "an indication of a task to be performed"; "a pick-up location

. . . , a task location . . . , and a drop-off location." (*See* '027 Patent, cl. 1.) These recitations do not specify a particular arrangement of any specific structures, as the stock trading interfaces in *Trading Techs. Int'l* did, and indeed the Trip Scheduling Patents' specification repeatedly proclaims that "the description itself is not intended to limit the scope of the claims." *See* 675 F. App'x at 1004; ('027 Patent, at 4:5–6; 4:23–24; 2:44–47.) Further, the interfaces claimed here, unlike those in *Trading Techs. Int'l*, do not resolve a specifically identified technological problem, such as missing a market price because the prior interfaces were too slow. *See* 675 F. App'x at 1002, 1004. Finally, unlike *Trading Techs. In'l*, the claims here are not "directed to a specific improvement to the way computers operate" but rather seek to leverage conventional technology as-it-is to improve vehicle transportation trip scheduling generally. *See id.* at 1006 (citations omitted).

The Trip Scheduling Patents also are not directed to a technological *problem*. *Cf. DDR Holdings, LLC*, 773 F.3d at 1248–49, 1257 (affirming validity of patent that created hybrid website to solve the Internet-specific problem of losing site visitors when they clicked a hyperlink on host webpage, noting that "the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks"); *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1007–08 (Fed. Cir. 2018) (finding that a patent "directed to a specific method for navigating through three-dimensional electronic spreadsheets" provided "a specific solution to then-existing technological problems *in computers and prior art electronic spreadsheets*" (emphasis added)). The Trip Scheduling Patents claim: "a method of displaying an interface for a trip-scheduling system"; "[a] computer-implemented method of scheduling a trip"; and "a method of allocating a driver [or drivers] in a trip-scheduling system." (*See* '027 Patent, cls. 1, 13; '451 Patent, cl. 1; '316 Patent, cls. 1, 8, 15;

'151 Patent, cls. 1, 9, 17.) All but the first of these is facially directed towards trip scheduling and allocating drivers within the trip-scheduling system, not towards improving the way information is requested and displayed on a technological device or computer component. And although Draiver declares that "moving away from traditional interfaces to the improved interface structures" overcomes these problems, (ECF No. 31, at 18), Draiver does not explain what "traditional interfaces" lacked or what the alleged improvements entail. Tellingly, *any* automated or digitized system would address the cited limitation of inefficiencies in coordinating vehicle transportation, and Draiver does not articulate what makes its claimed interfaces or processes special. (*See* '027 Patent, at 1:32–49.)

In sum, the Trip Scheduling Patents are directed to the abstract idea of "scheduling a trip . . . to transport vehicles from a pick-up location to a drop-off location," possibly including an intermediate task or tasks along the way. (*See* '027 Patent, Abstract.) The Court rejects Draiver's efforts to "character[ize] [the claims] as a whole" as focused on improving interfaces when the patent itself utilizes "purely functional language" and "conventional technology" to solve non-computer problems related to inefficiencies in existing vehicle transportation systems. *See Elec. Power*, 830 F.3d at 1353 (citations omitted); *In re TLI*, 87 F. Supp. 3d at 783; *VIS*, 227 F. Supp. 3d at 595; *Affinity Labs of Tex., LLC*, 838 F.3d at 1270.

For the reasons articulated above, the Court concludes that the Trip Scheduling Patents are directed to the abstract idea of scheduling a trip to transport vehicles from a pick-up location to a drop-off location, possibly with an intermediate task or tasks along the way.

7. The Driver Allocation Patent Claims Are Directed to an Abstract Idea

HopDrive asserts that "[t]he Driver Allocation Patents are also directed to an abstract concept" because their "focus . . . based upon their character as a whole[,] is allocating a driver

for a trip." (ECF No. 29, at 23 (citing *Elec. Power*, 830 F.3d at 1353).) HopDrive alleges that "[t]his claim language merely recites high-level, functional steps for performing driver allocation: receiving a request . . . , assigning a driver and licensing information, and dispatching the driver with the licensing information." (ECF No. 29, at 24.) HopDrive asserts three "hallmarks of abstraction": (1) "[t]he claims recite the same process that a human dispatcher would necessarily perform", so they improperly "claim a method of organizing human activity"; (2) "the claimed idea of driver allocation can be performed in the human mind, perhaps aided by pen and paper"; and (3) the claims "recite, in functional language, the steps for performing the abstract idea of allocating a driver and a license for the trip" but "do not recite *how* to accomplish those steps." (ECF No. 29, at 25–26.)

Draiver states that HopDrive "again oversimplifies the claims and fails to account for the specific requirements of the claims." (ECF No. 31, at 22–23 (citing *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016)).) According to Draiver, "[t]he focus of [C]laim 1 of the '720 [P]atent is not on allocating drivers, but rather on an improved method of transporting vehicles to a desired destination through generating and communicating driver assignments with trip-specific licensing information." (ECF No. 31, at 23.)[18] Draiver

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[18] As with the Trip Scheduling Patents, Draiver presents multiple articulations of the focus of the Driver Allocation Patents. For example, Draiver elsewhere states that the Driver Allocation Patents are directed to:

> (1) simplifying the process of transporting vehicles by including the steps of automatically requesting trip[-]specific licensing information . . . and communicating the insurance information in a specific way, i.e., alongside a trip request to the driver, (ECF No. 31, at 23);
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> (2) an improved method of transporting vehicles to a desired destination through generating and communicating driver assignments with trip-specific licensing information, (ECF No. 31, at 25); and

asserts that "[t]he patent specification provides further details on how this is accomplished." (ECF No. 31, at 26 (citing '720 Patent, at Figs. 3B, 3C, 13:9–14:12).)

Having reviewed the representative claim and the other challenged Driver Allocation Patent claims, the Court concludes that the Driver Allocation Patents are directed to an abstract idea. This is true because they are directed to a method of organizing human activity. Even adopting Draiver's articulated focus of the '720 and '133 Patents, "transporting vehicles to a desired destination through generating and communicating driver assignments" nonetheless constitutes a "method of organizing human activity." (*See* ECF No. 31, at 23, 25.) Indeed, a simple mapping of Draiver's own description of the focus reveals that the Driver Allocation Patents focus on "generating and communicating . . . assignments (i.e., organizing) to "driver[s]" (i.e., humans) who are "transporting vehicles to a desired destination" (i.e., performing an activity). (*See* ECF No. 31, at 23.)

Draiver states that the '354 Patent focuses "on an improved method of vehicle delivery that divides functionalities between a server running an internet service and a mobile device running a mobile device application." (ECF No. 31, at 24.) This does not change the Court's conclusion as to abstractness because, as discussed in Part III.C.4, *supra*, the claims merely recite generic technology used in a conventional way and offer no improvements to that

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> (3) a system wherein after a request for a trip is made, the system 'automatically generat[][es] a trip request' which includes 'requesting licensing information specific to the trip' that 'allows temporary licensure for the vehicle during the trip from the first location to the second location' and that further 'expires after the trip' and that is also sent to the driver in addition to the trip request, (ECF No. 31, at 26).

These variations simply rephrase the assertion above and do not alter the analysis. (*See* ECF No. 31, at 23.)

underlying technology. *See VIS*, 227 F. Supp. 3d at 595 (citing *In re TLI Communications LLC Patent Litigation*, 823 F.3d 607 (Fed. Cir. 2016)).

Contrary to Draiver's assertion, this case is not analogous to *Vehicle IP, LLC*, 2016 WL 5662004. In that case, the Federal Circuit had previously described the claims at issue as "directed to improving vehicle navigation systems through more efficient distribution of navigation functions between a remote dispatch and a mobile unit located at the vehicle." *Id.* at *5 (quoting *Vehicle IP, LLC v. AT&T Mobility, LLC*, 594 F. App'x 636, 638 (Fed. Cir. 2014)). Whereas the *Vehicle IP, LLC* claims improved the technological system itself through "more efficient distribution of navigation functions" and "the use of specialized equipment," *see id.*, here the challenged Driver Allocation Patent Claims do not improve an existing technological system or use specialized equipment but rather improve a non-technological (or not-necessarily technological) system of driver allocation through the deployment of generic technology used in a conventional way.

This case more closely tracks *FairWarning IP*, 839 F.3d at 1094. There, the challenged patents were directed to a computerized "method of detecting improper access of a patient's protected health information" that involved "generating a rule for monitoring audit log data" based on certain cues, applying the rule to the data to determine whether improper access had occurred, recording a "hit if the event has occurred," and providing notification of the event. *Id.* at 1092. The Federal Circuit held that these claims were directed to an abstract idea because the claimed rules reflected "the same questions" that "humans in analogous situations detecting fraud have asked for decades, if not centuries." *Id.* at 1095. As here, the claims in *FairWarning IP* required a computer, and "it [wa]s this incorporation of a computer, *not* the claimed rule, that purportedly improve[d] the existing technological process by allowing the automation of further

tasks," and "the speed increase [came] from the capabilities of a general-purpose computer, rather than [from] the patented method itself." *Id.* (internal quotation marks omitted) (emphasis in original) (alterations omitted).

Here, too, the patents recite performing the same functions that "humans in analogous situations" coordinating vehicle transportation trip scheduling "have asked for decades": allocating drivers for trips to transport vehicles from one location to another and attempting to do so as efficiently as possible. *See id.* As in *FairWarning IP*, although the Driver Allocation Patents purport to perform this activity using generic technology such as "pages", "mobile devices", and "processors", "it is this incorporation of a computer . . . that purportedly improves" the existing process, and "the speed increase comes from the capabilities of a general-purpose computer, rather than the patented method itself." *See id.* Just as the patents in *FairWarning IP* were directed to an abstract idea, so too are the challenged Driver Allocation Patents.

As with the Trip Scheduling Patents, the Court looks to the language of the Driver Allocation Patents to discern their focus and character. The '720 Patent Abstract presents "[a] system and method for allocating drivers to procure targets, such as automobiles" that "are then transported to a desired drop-off destination" via an "automated" system that "is powered by an internet based mobile application" and "designed to find, organize, and manage drivers and all aspects of the trip on a real[-]time basis and reduce the cost of the existing system." ('720 Patent, Abstract.) Although the '720 and '133 Patent claims include "requesting licensing information specific to the trip" that "allows temporary licensure for the vehicle" and that further "expires after the trip", the '354 Patent claims omit those features, suggesting that they are not the "'character as a whole' or the *focus* of the claims." (*See* '720 Patent, cl. 1; (ECF No. 26-3 (the "'354 Patent"), cl. 1); *See VIS*, 227 F. Supp. 3d at 592 (emphasis in original) (citations

omitted). The specification, also identical between the '720 and '354 Patents, discusses the insurance problems of the prior art, but does so alongside other prior-art challenges such as "loss of paperwork . . . , [t]imely availability of drivers, tracking of vehicles . . . instant communication with and monitoring and control of drivers", and cost drivers including management time, "theft[]", billing, expense, and payment issues, the need for third-party middlemen, and the "inability to enforce driver accountability." ('720 Patent, at 1:35–3:38.) The '720 Patent concludes by stating that "[w]hat is desired is . . . a system that will be more efficient, easier to customize, faster, easier to manage, and less costly." ('720 Patent, at 3:20–22.) While it describes trip-specific insurance as a mechanism for achieving this goal, it also describes "trip customization" and "assign[ing] and manag[ing]" the drivers themselves. ('720 Patent, at 1:30–31, 3:5–18.) For these reasons, the trip-specific insurance cannot be the focus of the claims considering their character as a whole.

For the reasons above, the Court concludes that the Driver Allocation Patents are directed to the abstract idea of efficiently allocating drivers to transport vehicles using automation.

8. Legal Standard: *Alice* Step Two

If the Court finds, as here, that the patent claims an abstract idea, step two of the *Alice* test asks whether the patent contains "'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.'" *Peschke*, 168 F. Supp. 3d at 889 (quoting *Alice*, 573 U.S. at 217–18 (citations and brackets omitted)). "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.* (quoting *Alice*, 573 U.S. at 221) (internal quotation marks omitted) (alterations in original). "To qualify as an inventive concept, the claims 'must do more than simply sta[t]e the

[abstract idea] while adding the words 'apply it.'" *Id.* (quoting *Mayo*, 566 U.S. at 72) (second alteration in original). Further, the inventive additional features "must be more than 'well-understood, routine, conventional activity.'" *Id.* (quoting *MicroStrategy Inc. v. Apttus Corp.*, 118 F. Supp. 3d 888, 893 (E.D. Va. 2015)); *see also Content Extraction & Transmission LLC*, 776 F.3d at 1348 (the recitation of "well-understood, routine, and conventional activities" does not supply an inventive concept). "[A]ppending conventional steps, specified at a high level of generality, [is] not *enough* to supply an inventive concept." *Alice*, 573 U.S. at 222 (emphasis in original) (citation and internal quotation marks omitted); *see also Intellectual Ventures I LLC*, 792 F.3d at 1367 ("A simple instruction to apply an abstract idea on a computer is not enough.") (citing *Alice*, 573 U.S. at 223); *Affinity Labs of Tex.*, 838 F.3d at 1271–72 ("[N]either the claim nor the specification reveals any concrete way of employing a customized user interface," so the patent "d[id] not embody an 'inventive concept'"). Similarly, "the fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter." *Bancorp*, 687 F.3d at 1278.

9. The Challenged Trip Scheduling Patent Claims Recite No Inventive Concept

HopDrive alleges that "other than the abstract concept of scheduling a trip with a task to be performed on the way, [the challenged Trip Scheduling Patent Claims] recite nothing beyond generic computer elements" such as "nondescript 'pages' supplied by a 'computer-readable media,' a 'processor,' [and] a 'graphical user interface.'" (ECF No. 29, at 19–20 (emphasis removed).)

Draiver first responds by alleging that "[t]he [Amended] Complaint has concrete allegations that individual elements and the claimed combination are not well-understood, routine, or conventional activity." (ECF No. 31, at 21 (citing ECF No. 26 ¶¶ 22, 25, 30, 34).)

It does not. The paragraphs Draiver references in support of this declaration make only conclusory assertions with no factual allegations at all. (*See, e.g.*, ECF No. 26 ¶¶ 22, 25, 30, 34.)[19] The conclusory nature of Draiver's assertions and a discussion of relevant caselaw is discussed in detail in Part III.A.2, *supra*.

Draiver next complains that "nothing in the specification describes the claimed interfaces or their functionalities as conventional" or "describes the combination of claimed interfaces . . . as generic or akin to traditional, manual vehicle transportation systems." (ECF No. 31, at 22.) That is not the standard. The inquiry is not whether the patent expressly confesses its own conventionality—that would make for an eligibility test that would be easy to draft around by simply avoiding an outright declaration of one's own patent as generic. *See Peschke*, 168 F.

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[19] For example, Paragraph 22 of the Amended Complaint states, in full:

> Prior to Draiver's innovations, timely and accurate vehicle status reports were a constant source of frustration. The patented systems and methods that Draiver pioneered provide a technological solution for this industry headache not well-understood, routine, or conventional.

(ECF No. 26 ¶ 22.) Paragraph 25 reads, in full:

> The interfaces claimed and described by Draiver's patents were not routine, well-understood, or conventional, and they allowed Draiver to solve technological problems associated with task allocation in a novel way. These technological solutions—namely, specific structured interfaces with prescribed functionalities—therefore represent a concrete improvement over traditional prior art solutions.

(ECF No. 26 ¶ 25.) Paragraphs 30 and 34 are similarly conclusory. (*See* ECF No. 26 ¶¶ 30, 34.)

While the Court must assume all factual allegations in the Amended Complaint to be true at this stage of the proceedings, the Court need not accept bare conclusory allegations that merely parrot the legal standard. *Dropbox, Inc. v. Synchronoss Techs., Inc.*, 815 F. App'x 529, 538 (Fed. Cir. 2020) (courts may reject "attempt[s] to manufacture a factual question" that in actuality "provide no more than a series of legal conclusion[s] about the § 101 analysis") (citing *Papasan v. Allain*, 478 U.S. at 268 (when considering a motion to dismiss, courts "must take all the factual allegations in the complaint as true", but "are not bound to accept as true a legal conclusion couched as a factual allegation")).

Supp. 3d at 889 ("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]." (quoting *Alice*, 573 U.S. at 221)); *see also Elec. Power*, 830 F.3d at 1352 (invalidating claims reciting specific interfaces for collecting and displaying data even though specifications did not admit conventionality). In contrast, the specifications repeatedly disclaim any requirement that the "pages" include *any* specific features, thus reinforcing the intended generic nature of the interfaces. (*See* '027 Patent, 4:5–6; 4:23–24; 2:44–47; 3:5–6.)

Finally, Draiver takes issue with HopDrive's characterization of the claims as reciting "logistical" problems, details, requirements, and limitations. (ECF No. 31, at 18 (citing ECF No. 29, at 3, 6, 12, 16, 22, 23).) The Court does not see HopDrive as suggesting this is "some sort of test for patent eligibility" and agrees with Draiver that "[i]t is not." (*See* ECF No. 31, at 18.) Instead, the Court understands HopDrive's emphasis of the logistical nature of the claims as rebutting Draiver's assertion that the problems and claimed solutions are technical in nature.

Having addressed these preliminary arguments, the Court next evaluates the dependent claim features recited in the Trip Scheduling Patents and concludes that none provide an "inventive concept" sufficient to satisfy *Alice* Step Two. Having reviewed the representative claim and all of the challenged Trip Scheduling Patent claims, the Court concludes that the Trip Scheduling Patents do not recite any inventive concepts. Many of the dependent claims list accessory features that do not remove the patents from the realm of abstract ideas because they are themselves purely functional in nature and do not explain how to achieve the desired results.

First, certain claims do not supply an inventive concept because they recite existing conventional technologies used in a conventional way. Courts have consistently held that the use of conventional technological components to implement an abstract idea does not provide an

inventive concept where the patents do not purport to invent or improve upon those components. *See, e.g., Elec. Power*, 830 F.3d at 1356 (patents that claimed abstract idea of "real time" collection, analysis, and display using "conventional, generic technology" did not supply an inventive concept); *SmarTEN LLC*, 316 F. Supp. 3d at 924 (patent directed to an abstract idea was ineligible because, "all of [the claimed] sources of information are conventional, and many mobile computing devices already contain the requisite GPS, digital camera, and pedometer capabilities"); *In re Jobin*, 811 F. App'x 633, 637 (Fed. Cir. 2020) (claim "directed to the collection, organization, grouping, and storage of data using techniques such as . . . a survey" lacked inventive concept where the claim "[did] not impose any meaningful limit on the method of [data] collection"). The Trip Scheduling Patents include several such claims, including "real-time, turn-by-turn navigation" and GPS location tracking, ('451 Patent, cls. 2–3; '316 Patent, cls. 2–3, 9–11, 17–18; '151 Patent, cls. 3, 11–12, 19), "real-time two-way communication between the user and driver", (*see* '151 Patent, cl. 7), administering a survey, ('027 Patent, cls. 10–11), automatic driver payment, ('027 Patent, cl. 9; '151 Patent, cls. 8, 16, 20), and displaying user interfaces on a website or mobile device, (*see* '151 Patent, cls. 2, 10). These limitations recite nothing more than "the use of computers as a tool" to achieve an abstract idea. *See Sanderling Mgmt. Ltd. v. Snap Inc.*, 65 F.4th 698, 703 (Fed. Cir. 2023). Each of these claimed technologies is "conventional" and is used in its conventional way, providing no inventive concept.

Second, other features do not supply an inventive concept because they articulate well-understood, routine, conventional activities. Additional features that supply an inventive concept "must be more than 'well-understood, routine, conventional activity.'" *Peschke*, 168 F. Supp. 3d at 889 (quoting *Microstrategy Inc.*, 118 F. Supp. 3d at 893). Certain challenged Trip Scheduling Patent Claims recite features that are no more than "well-understood, routine, conventional

activity": for example, allowing a user to select a driver; choosing a driver based on the driver's availability, qualifications, or payment bid; and providing temporary licensing. (*See* '027 Patent, cls. 7, 9–12; '451 Patent, cls. 4–7; '316 Patent, cls. 4–5, 12; '151 Patent, cls. 6, 8, 14, 16, 20.)

Third, there is no inventive concept in features that recite the abstract idea to which the claim is directed, even where the idea is recited multiple times. *See BSG Tech LLC v. Buyseasons, Inc. ("BSG Tech")*, 899 F.3d 1281, 1290 (Fed. Cir. 2018) ("[T]he ineligible concept to which [a claim] is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept."). Several of the claims provide for just such repetition of the concept to which the Trip Scheduling Patents are themselves directed. For example, "a plurality of vehicles", "a plurality of drivers", "a plurality of [pick-up, drop-off, or task] locations", or "a plurality of tasks", ('027 Patent, cls. 2–4, 13–15; '316 Patent, cls. 9–11, 14, 17–20), does not differ from a single instance of each of these elements and fails to provide an inventive concept. "[O]ptimizing" the route to minimize time or drivers without any detail on how to achieve that optimization, ('316 Patent, cls. 16, 20; '151 Patent, cls. 17–18), or declaring "by-the-trip insurance" with no implementation details, ('027 Patent, cls. 5–6, 16; '151 Patent, cl. 15), likewise recite an abstract idea using purely functional language and fail to supply an inventive concept.

Finally, no ordered combination of elements supplies an inventive concept. "[F]or the 'ordered combination' language to apply, each component of the combination must be specific (though not necessarily novel), and the result must be innovative in its own right." *VIS*, 227 F. Supp. 3d at 603 (citing *Mayo*, 566 U.S. at 81–82). As previously discussed, Draiver lists certain features that it asserts "were not well-understood, routine, or conventional", either individually or in ordered combination: "vehicle status reports", "intermediate location selection",

"interfaces", and "licensing features", and "various combinations of these features, including specific combinations of interfaces." (ECF No. 31, at 11–12.) Draiver offers no explanation of how its "particular arrangement" of pages might provide "a specific, discrete implementation of the abstract idea" of "scheduling a trip . . . to transport vehicles from a pick-up location to a drop-off location," possibly including an intermediate task or tasks along the way. *See Bascom*, 827 F.3d at 1350; ('027 Patent, Abstract). Other dependent claims recite disjointed, accessory features but do not claim that the order of these features offers any specific improvement over the prior art. *See VIS*, 227 F. Supp. 3d at 603 ("[F]or the 'ordered combination' language to apply, . . . the result must be innovative in its own right."). Accordingly, the combination of these non-specific components constitutes nothing more than the sum of its parts and does not recite an inventive concept through their ordered combination. *See id.*

10. The Challenged Driver Allocation Patent Claims Do Not Recite an Inventive Concept

HopDrive asserts that the challenged Driver Allocation Patent Claims likewise "recite only the functional steps for [the] abstract idea, i.e.: (1) receiving a request to transport a vehicle . . . ; (2) generating a 'trip request' with [that] information . . . ; and (3) allocating and dispatching a driver." (ECF No. 29, at 26 (citing *BSG Tech*, 899 F.3d at 1290 ("[T]he ineligible concept to which [a claim] is directed cannot supply the inventive concept that renders the invention 'significantly more' than that eligible concept.")).)

HopDrive first states that "the most specific technological environments" recited "are a 'server' and a 'processor' . . . [and] neither constitutes an inventive concept." (ECF No. 29, at 27.) Second, HopDrive observes that the remaining dependent claims fail to add an inventive concept because they constitute "additional logistical limitations." (ECF No. 29, at 28 (citing *Bascom*, 827 F.3d at 1349; '133 Patent, cls. 4, 12; '354 Patent, cls. 4, 7, 13–14, 20).) Third,

HopDrive maintains that the dependent claims "adding tasks to be performed during or after the trip" are abstract for the reasons addressed in the discussion of the Trip Scheduling Patents, *supra*. (ECF No. 29, at 28.) Fourth, HopDrive claims that the dependent claim providing that "the trip request is submitted using a 'mobile communications device'" offers nothing more than "the recitation of existing mobile devices[, which] does not provide an inventive concept." (ECF No. 29, at 28 (citing '720 Patent, cl. 12; *Elec. Power*, 830 F.3d at 1356).)

Draiver counters that the '720 Patent family "recite[s] inventive concepts both individually and in combination that further confirm the claims are outside the realm of abstract ideas," but identifies only "vehicle status reports and real-time location updates" as examples. (ECF No. 31, at 26.) Draiver notes that "HopDrive provides no evidence regarding the purportedly generic or conventional nature of any of the claim elements." (ECF No. 31, at 26.)

Having reviewed the representative claim and all of the challenged Driver Allocation Patent claims, the Court concludes that the Driver Allocation Patent claims do not recite an inventive concept. The '354 Patent is the only Driver Allocation Patent that claims "vehicle status reports" and "real-time location updates." (*See* ECF No. 33, at 25.) Draiver therefore identifies no alleged inventive concept in the '720 and '133 Patents. To the extent necessary, the Court finds that the concept of submitting "the request . . . using a mobile communications device of the user" does not provide an inventive concept because it recites conventional technology used in a conventional way as discussed in Part III.C.9, *supra*. (*See* '720 Patent, cl. 12.)

Further, the concepts of vehicle status reports and real-time location updates are insufficient to confer eligibility on the '354 Patent. Regarding the status reports, as discussed in Part III.C.9, *supra*, the Federal Circuit has "repeatedly held claims 'directed to collection of

information, comprehending the meaning of that collected information, and indication of the results, all on a generic computer network operating in its normal, expected manner' to be abstract." *See Zillow Grp., Inc.*, 50 F.4th at 1378 (citations omitted). The information included in the status report—a photo of the vehicle, an odometer reading, and trip expenses—meet the same fate. (*See* '354 Patent, cls. 2–3, 5, 9; '133 Patent, cls. 6–7, 11, 13–14.) As to real-time location updates, "the improved speed or efficiency inherent [in] applying the abstract idea on a computer [does not] provide a sufficient inventive concept." *See Intell. Ventures I LLC*, 792 F.3d at 1367. Moreover, as discussed in Part III.C.9, *supra*, the use of existing GPS technology does not provide an inventive concept. Real-time location updates using GPS technology are already possible and widely available on most smartphones, and Draiver does not claim to have invented or improved upon this existing technology.

Nor do any other dependent claims of the '354 Patent alter the analysis, as previously discussed in Part III.C.9, *supra*. Automatic driver payments, (*see* '354 Patent, cls. 5, 9), constitute conventional use of existing technology. Verifying a driver's information or coordinating a multi-driver team, (*see* '354 Patent, cls. 4, 7, 13–14), are "well-known, routine, and conventional activit[ies]." Claiming a plurality of vehicles or drivers, (*see* '354 Patent, cls. 6, 20), is not inventive for the reasons discussed *supra*.

IV. Conclusion

The challenged claims are directed to patent-ineligible abstract ideas in violation of 35 U.S.C. § 101. The patents all relate to coordinating drivers to move a car from one location to another, which is a well-known process in the automobile business and a decades-old method of organizing human activity. The patents' purported invention is to automate this manual process on a conventional computer using unspecified programming, without identifying the mechanisms

by which to realize that outcome. This is not patentable. The challenged claims recite only nonspecific steps to perform the abstract ideas of scheduling a trip with a task or allocating a driver, but on a computer. Nothing in the dependent claims or their ordered combination that changes the analysis, as the claims "disclose[] no more than 'an abstract idea garnished with accessories.'" *See Ultramercial, Inc*, 772 F.3d at 719 (Mayer, J., concurring).

In addition, the Court expresses its concern that "the claimed invention is so extensive as to 'monopoliz[e]'" the abstract ideas of scheduling a trip and allocating drivers for vehicle transportation, with the result that the patent "might tend to impede innovation more than it would tend to promote it[.]" *See VIS*, 227 F. Supp. 3d at 595 (quoting *Alice*, 573 U.S. at 216 (quoting *Mayo*, 566 U.S. at 71.)). The challenged patent claims do not recite any specific limitations that would cabin their reach, and as a result all other app-based trip scheduling or driver allocation software solutions risk preemption.

For the reasons articulated above, the Court will grant HopDrive's Motion to Dismiss. (ECF No. 28.)

An appropriate Order shall issue.

Date: 03/29/2024
Richmond, Virginia

/s/
M. Hannah Lauck
United States District Judge

Appendix A
Challenged Claims of the Trip Scheduling Patents

'027 Patent: Trip Scheduling System

1. One or more non-transitory computer-readable media storing computer-executable instructions that, when executed by a processor, perform a method of displaying an interface for a trip-scheduling system, the method comprising the steps of:

displaying a location selection page operable to receive input of a plurality of locations from a user via a map interface;

displaying a vehicle selection page operable to receive input of an indication of a vehicle to be transported;

displaying a task selection screen operable to receive an indication of a task to be performed by the driver for the vehicle;

displaying a trip overview page operable to receive a selection of a pick-up location for the vehicle from the plurality of locations, a task location for the task for the vehicle from the plurality of locations, and a drop-off location for the vehicle from the plurality of locations;

determining a driver from a pool of available drivers to drive the vehicle from the pick-up location to the drop-off location; and

updating the trip overview page to reflect the driver driving the vehicle from the pick-up location to the drop-off location.

2. The computer-readable media of claim **1**, wherein the user uses the vehicle selection screen to provide a plurality of indications indicating a plurality of vehicles to be transported.

3. The computer readable media of claim **2**, wherein a first vehicle of the plurality of vehicles and a second vehicle of the plurality of vehicles have respectively a first pick-up location and a second pick-up location, and wherein the first pick-up location is distinct from the second pick-up location.

4. The computer readable media of claim **2**, wherein a first vehicle of the plurality of vehicles and a second vehicle of the plurality of vehicles have respectively a first drop-off location and a second drop-off location, and wherein the first drop-off location is distinct from the second pick-up location.

5. The computer-readable media of claim **1**, wherein the method further comprises the step of obtaining by-the-trip insurance from an insurance provider for transporting the vehicle from the pick-up location to the drop-off location.

6. The computer-readable media of claim **5**, wherein the step of obtaining by-the-trip insurance further comprises the step of determining an insurance provider of a plurality of insurance provider[s] to provide the by-the-trip insurance.

7. The computer-readable media of claim **1**, wherein the method further comprises the step of obtaining a temporary license plate number for the vehicle useable while the vehicle is being transported from the pick-up location to the drop-off location.

9. The computer-readable media of claim **1**, wherein the method further comprises the step of automatically transmitting a payment to the driver[']s account when the vehicle is delivered to the drop-off location.

10. The computer-readable media of claim **1**, wherein the method further comprises the step of presenting, to the driver, a survey regarding the vehicle after the vehicle has been delivered to the drop-off location.

11. The computer-readable media of claim **10**, wherein the survey is presented to the driver based on the driver's demographics.

12. The computer-readable media of claim **1**, wherein the driver is determined based on a selection by the user.

13. A computer-implemented method of scheduling a trip, via a graphical user interface, comprising the steps of:

displaying a selection page operable to receive input of a plurality of locations from a user;

displaying a vehicle selection page operable to receive input of an indication of a vehicle to be transported;

receiving an indication of a first vehicle to be transported from a first pick-up location to a first drop-off location of the plurality of locations to a first drop-off location of the plurality of locations via a first intermediate task location where a first task for the first vehicle is to be performed;

receiving an indication of a second vehicle to be transported from a second pick-up location of the plurality of locations to a second drop-off location of the plurality of locations via a second intermediate task location where a second task for the second vehicle is to be performed;

determining a first driver to transport the first vehicle from the first pick-up location to the first drop-off location via the first task location;

determining a second driver to transport the second vehicle from the second pick-up location to the second drop-off location via the second task location;

displaying a trip overview page including the first pickup location, the first drop-off location, the first driver, the second pick-up location, the second drop-off location, and the second driver.

14. The method of claim **13**, wherein the first vehicle is transported to the first drop-off location while the second vehicle is being transported to the second drop-off location.

15. The method of claim **13**, wherein the first pick-up location is distinct from the second pick-up location and the first drop-off location is distinct from the second drop-off location.

16. The method of claim **13**, further comprising the steps of:

obtaining a first by the trip insurance policy for transporting the first vehicle to the first drop-off location; and

obtaining a second by-the-trip insurance policy for transporting the second vehicle to the second drop-off location; and

wherein the first by-the-trip insurance policy and the second by-the-trip insurance policy are obtained from distinct insurance providers.

FIG. **6** depicts a driver interface in accordance with embodiments of the invention.

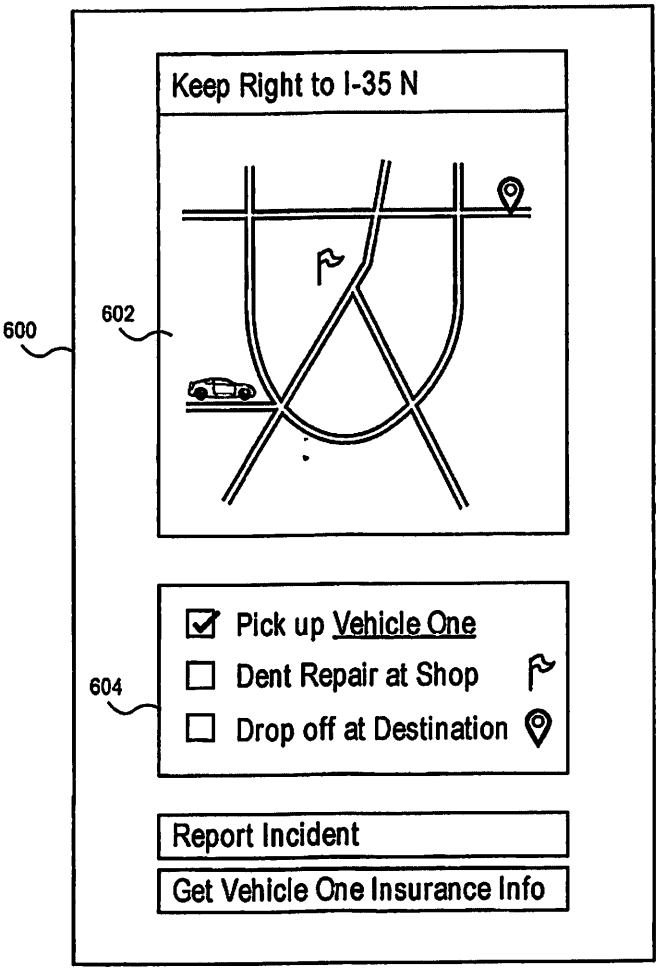

FIG. 6

'451 Patent: Trip Scheduling System

1. One or more non-transitory computer-readable media storing computer-executable instructions that, when executed by a processor, perform a method of displaying an interface for a trip-scheduling system, the method comprising the steps of:

displaying a location selection page operable to receive input of a plurality of locations from a user via a map interface;

displaying a task selection screen operable to receive an indication of a task to be performed by the driver for the vehicle;

displaying a trip overview page operable to receive a selection of a pick-up location for the vehicle from the plurality of locations and a drop-off location for the vehicle from the plurality of locations;

automatically determining a driver from a pool of available drivers to drive the vehicle from the pick-up location to the drop-off location;

automatically generating a trip from the pick-up location to the drop-off location,

wherein the step of automatically generating a trip from the pick-up location to the drop-off location includes automatically determining a task location for performing the task from a plurality of available task locations; and

dynamically updating the trip overview page in real-time and based on a GPS location provided by a smartphone of the driver to reflect the driver driving the vehicle from the pick-up location to the drop-off location.

2. The media of claim **1**, wherein the method further comprises the step of providing real-time, turn-by-turn navigation for the driver from the pick-up location to the drop-off location via the task location.

3. The media of claim **2**, wherein the automatically generated trip is automatically updated after it has been generated to include an additional location on the trip, and wherein the turn-by-turn navigation is updated on-the-fly to reflect the additional location.

4. The media of claim **1**, wherein the driver is determined based in part on a type of driver's license needed to drive the vehicle.

5. The media of claim **1**, wherein the driver is determined based in part on an acceptance of a bid offered to the driver to complete the trip.

6. The media of claim **1**, wherein the driver is determined based in part on a bid submitted by the driver to complete the trip.

7. The media of claim **1**, wherein the trip is updated after the trip has been automatically generated based in a change in the availability of a potential driver.

'316 Patent: Trip Scheduling System

1. One or more non-transitory computer-readable media storing computer-executable instructions that, when executed by at least one processor, perform a method of allocating a driver in a trip-scheduling system, the method comprising the steps of:

displaying a vehicle selection page operable to receive, from a user, an input indicative of a vehicle for transport;

displaying a trip overview and tracking page operable to receive a selection of a pick-up location and a drop-off location;

displaying a task selection screen operable to receive an indication of a task to be performed by the driver for the vehicle;

determining a trip by analyzing the trip pick-up location, the trip drop-off location, and the task to minimize trip time; and

dynamically updating the trip overview and tracking page to reflect the driver travelling from the pick-up location to the drop-off location.

2. The media of claim **1**, the method further comprising the step of displaying, by the trip overview and tracking page, real-time, turn-by-turn navigation for the driver from the pick-up location to the drop-off location via a task location associated with the task

3. The media of claim **2**, wherein the trip includes a plurality of tasks with a corresponding plurality of task locations, and further comprising the steps of:

updating the trip en route to reflect an updated order for the plurality of tasks; and

displaying, by the trip overview and tracking page, updated real-time turn-by-turn navigation for the driver en route to reflect the updated order for the plurality of tasks,

wherein the updated order minimizes time and resources to complete the trip.

4. The media of claim **1**, wherein the driver is selected based in part on a bid submitted by the driver to complete the trip.

5. The media of claim **4**, the method further comprising the step of offering, to a plurality of potential drivers, the bid to complete the trip based on the trip.

6. The media of claim **1**, wherein the vehicle is a bike from a bike share and is to be transported via truck from the pick-up location to the drop-off location;

7. The media of claim **1**, the method further comprising the steps of:

receiving, by the task selection screen, an administrative task to be completed by the driver; and

displaying, by the trip overview and tracking page, an administrative task location associated with the administrative task.

8. A method of allocating a driver in a trip-scheduling system, the method comprising the steps of:

displaying a vehicle selection page operable to receive, from the user, an input indicative of a vehicle for transport;

displaying a trip overview and tracking page operable to receive, from a user, a selection of a pick-up location and a drop-off location, and operable to receive a completion time for the vehicle to arrive at the drop-off location;

displaying a task selection screen operable to receive, from the user, an indication of a task to be performed by a driver of the vehicle;

determining a trip by analyzing the trip pick-up location, the trip drop-off location, and the task to minimize trip time; and

dynamically updating the trip overview and tracking page to reflect the driver travelling from the pick-up location to the drop-off location via a task location.

9. The method of claim **8**, further comprising the steps of:

allocating a plurality of drivers to transport a plurality of vehicles with a minimum number of drivers to minimize resources; and

displaying, by the trip overview and tracking page, real-time turn-by-turn navigation to the plurality of drivers.

10. The method of claim **9**,

wherein the plurality of drivers comprises a lead driver, and

wherein the lead driver is assigned administrative tasks to complete en route.

11. The method of claim **9**, further comprising the steps of:

adding, en route and by the task selection page, at least one additional task to be performed;

determining an updated trip that minimizes time duration for the trip including [] at least one additional task; and

displaying, by the trip overview and tracking page, real-time turn-by-turn navigation to the plurality of drivers en route based on the updated trip.

12. The method of claim **8**, further comprising the steps of:

offering, to a plurality of potential drivers, a bid to complete the trip based on the trip; and

allocating the trip to the driver based on the bid submitted by the driver.

13. The media of claim **8**, wherein the vehicle is a bike from a bike share and is to be transported via truck from the pick-up location to the drop-off location;

14. The media of claim **8**, further comprising the steps of:

adding, by the vehicle selection page, at least one additional vehicle to the trip;

adding, by the trip overview and tracking page, one or more drop-off locations for [] at least one additional vehicle to be dropped off; and

optimizing an order in which each drop-off location is visited to minimize resources.

15.: One or more non-transitory computer-readable media storing computer-executable instructions that, when executed by a processor, perform a method of allocating drivers in a trip-scheduling system, the method comprising the steps of:

displaying a trip overview and tracking page operable to receive, from a user, a selection of at least one pick-up location, at least one intermediate location, and at least one drop-off location;

displaying a vehicle selection page operable to receive, from the user, an input indicative of a plurality of vehicles for transport;

automatically generating a trip including the at least one pick-up location, the at least one intermediate location, and the at least one drop-off location so as to minimize an amount of the drivers;

automatically determining the drivers for the trip for the plurality of vehicles; and

providing real-time, turn-by-turn navigation for the driver including from the at least one pick-up location to the at least one drop-off location via the at least one intermediate location.

16. The media of claim **15**, wherein the plurality of vehicles is a plurality of bike share vehicles;

17. The media of claim **15**, wherein the method further comprises the steps of:

dynamically updating the trip to remove a vehicle from the plurality of vehicles to be picked up; and

displaying, by the trip overview and tracking page, updated real-time turn-by-turn navigation for the drivers reflecting the updated trip without the removed vehicle.

18. The media of claim **15**, wherein the trip is updated after the trip has been generated based on an addition of a new vehicle to the plurality of vehicles

19. The media of claim **15**, further comprising the step of automatically determining at least one other driver for the new vehicle.

20. The media of claim **15**, where the at least one drop-off location is a plurality of drop-off locations and an order in which each drop-off location of the at least one drop-off location is visited is optimized to minimize resources.

'151 Patent: Trip Scheduling System

1. A method of allocating a driver in a trip-scheduling system, the method comprising the steps of:

receiving, from a user, a user input at a first user interface; and

accessing, via the application program interface and based on the user input, a data store comprising computer-executable instructions that, when executed by at least one processor, perform:

causing display of a second user interface comprising:

a vehicle selection page operable to receive, from the user, an input indicative of a vehicle for transport; and

a trip overview and tracking page operable to receive a selection of a pick-up location and a drop-off location;

determining a trip by analyzing the pick-up location and the drop-off location; and

dynamically updating the trip overview and tracking page to reflect the driver travelling from the pick-up location to the drop-off location, based on a driver location provided by a driver GPS device associated with the driver.

2. The method of claim **1**, wherein the input from the user, is received at a mobile device and a mobile user interface is presented via the mobile device;

3. The method of claim **2**, further comprising:

causing display of, by a mobile trip overview and tracking page of the mobile user interface, real-time, turn-by-turn navigation for the driver from the pick-up location to the drop-off location.

4. The method of claim **3**, further comprising:

receiving, from the user and by a task selection page, an administrative task to be completed by the driver at an administrative task location; and

causing display of, by the trip overview and tracking page and to the user, the administrative task location associated with the administrative task.

5. The method of claim **4**, further comprising:

receiving, from the user and by the task selection page, a plurality of administrative tasks to be completed by the driver;

updating the trip, en route, to reflect the updated order for the plurality of administrative tasks, wherein the updated order minimizes time and resources to complete the trip.

6. The method of claim **1**, further comprising receiving a request from the user for a specific driver via the trip overview and tracking page.

7. The method of claim **6**, further comprising providing real-time two-way communication between the user and the driver.

8. The method of claim **1**, further comprising:

receiving photographs of the vehicle after delivery of the vehicle to the drop-off location, and

transmitting payment to the driver after the vehicle is dropped off.

9. A method of allocating a driver in a trip-scheduling system provided via a mobile device to a user, the method comprising:

causing display of, a user interface comprising:

a vehicle selection page operable to receive, from a user, an input indicative of a vehicle for transport; and

a trip overview and tracking page operable to receive, from the user, a selection of a pick-up location and a drop-off location;

determining a trip by analyzing the trip pick-up location and the trip drop-off location; and

dynamically updating the trip overview and tracking page to reflect the driver travelling from the pick-up location to the drop-off location based on a driver location provided by a driver GPS device associated with the driver.

10. The method of claim **9**, wherein the user interface is accessed via a third-party website by an application program interface.

11. The method of claim **9**, further comprising causing for display, by the trip overview and tracking page, real-time, turn-by-turn navigation for the driver from the pick-up location to the drop-off location.

12. The method of claim **11**, wherein the trip is tracked by GPS and a location of the driver is provided to the user by a user smartphone.

13. The method of claim **9**, further comprising:

receiving, from the user an administrative task to be completed by the driver at an administrative task location; and

causing display of, by the trip overview and tracking page and to the user, the administrative task location associated with the administrative task.

14. The method of claim **9**, wherein the vehicle is a user's vehicle; and further comprising receiving a request from the user for a specific driver via the trip overview and tracking page.

15. The method of claim **14**, further comprising providing by-the-trip insurance for the vehicle during the trip.

16. The method of claim **14**, further comprising:

receiving photographs, from the mobile device, of the vehicle after delivery of the vehicle to the drop-off location, and

transmitting payment to a company associated with the driver after the vehicle is dropped of.

17. One or more non-transitory computer-readable media storing computer-executable instructions that, when executed by a processor, perform a method of allocating drivers in a trip-scheduling system, the method comprising:

causing display of a user interface comprising:

a trip overview and tracking page operable to receive, from a user, a selection of a pick-up location and a drop-off location; and

a vehicle selection page operable to receive, from the user, an input indicative of a vehicle for transport;

automatically generating a trip including the pick-up location and the drop-off location so as to optimize the trip; and

providing real-time, turn-by-turn navigation for the driver from the pick-up location to the drop-off location, based on a driver location provided by a driver GPS device associated with the driver.

18. The media of claim **17**, wherein optimizing is one of minimizing time or minimizing resources.

19. The media of claim **17**,

wherein the vehicle is a user's vehicle; and

wherein the method further comprises presenting a location of the vehicle to the user by the trip overview and track page during the trip.

20. The media of claim **17**, wherein the method further comprises:

receiving photographs, from a driver mobile device, of the vehicle after delivery of the vehicle to the drop-off location, and

transmitting payment to a company associated with the driver after the vehicle is dropped off.

Appendix B
Challenged Claims of the Driver Allocation Patents

'720 Patent: Digital Vehicle Tag and Method of Integration in Vehicle Allocation System

1. A method for managing drivers of vehicles, comprising:

receiv[ing] a request, submitted by a user, to drive a vehicle on a trip from a first location to a second location;

automatically generating a trip request for the trip, said trip request including a driver for the vehicle;

wherein automatically generating the trip request includes requesting licensing information specific to the trip,

wherein the licensing information specific to the trip allows temporary licensure for the vehicle during the trip from the first location to the second location,

wherein the licensing information specific to the trip expires after the trip from the first location to the second location;

automatically dispatching the driver for the trip,

wherein automatically dispatching the driver includes sending, to the driver, the trip request and the licensing information specific to the trip.

8. One or more non-transitory computer-readable media storing computer-executable instructions that, when executed by a processor, perform a method of managing driving of vehicles, the method comprising the steps of:

receiving a request, submitted by a user, to drive a vehicle from a first location to a second location;

automatically generating a driving request for the vehicle,

wherein automatically generating a driving request for the vehicle includes requesting licensing information specific to the trip,

wherein the licensing information specific to the trip allows temporary licensure for the vehicle while being driven from the first location to the second location,

wherein the licensing information specific to the trip expires after the vehicle arrives at the second location;

sending, to the vehicle, the driving request and the licensing information specific to the trip.

12. The media of claim **8**, wherein the request is submitted using a mobile communications device of the user.

'133 Patent: Digital Vehicle Tag and Method of Integration in Vehicle Allocation System

1. A method for managing drivers of vehicles, comprising:
receiving a request, submitted by a user, to drive a vehicle on a trip from a first location to a second location;
automatically generating a trip request for the trip, said trip request including a driver for the vehicle for the trip;
wherein automatically generating the trip request includes determining licensing information specific to the driver for the vehicle for the trip,
automatically dispatching the driver for the trip,
wherein automatically dispatching the driver includes sending, to the driver, the trip request,
wherein automatically dispatching the driver further includes sending the licensing information specific to the driver to a smartphone of the driver.

4. The method of claim **1**, wherein the licensing information specific to the driver indicates operating authority for the driver of the vehicle for the trip

6. The method of claim **1**, [wherein] automatically dispatching the driver further includes transmitting, to the smartphone of the driver, a task list associated with the trip request.

7. The method of claim **6**, wherein the trip request further comprises a route for the vehicle including a pick-up location, at least one location associated with a corresponding task of the task list, and a drop-off location.

8. One or more non-transitory computer-readable media storing computer-executable instructions that, when executed by a processor, perform a method of managing driving of vehicles, the method comprising the steps of:
receiving a request, submitted by a user, to drive a vehicle from a first location to a second location;
automatically generating a trip request for the trip, said trip request including a driver for the vehicle for the trip;
wherein automatically generating the trip request for the trip includes determining licensing information specific to the owner of the vehicle,
automatically dispatching the driver for the trip,
wherein automatically dispatching the driver includes sending, to the driver, the trip request,
wherein automatically dispatching the driver further includes sending the licensing information specific to the owner of the vehicle to a smartphone of the driver for the vehicle for the trip.

11. The method of claim **8**, wherein automatically dispatching the driver further includes sending information specific to the trip to the smartphone of the driver for the vehicle for the trip.

12. The method of claim **8**, wherein the licensing information specific to the owner of the vehicle indicates operating authority for the vehicle for the trip.

13. The method of claim **8**, [wherein] automatically dispatching the driver further includes transmitting, to the smartphone of the driver, a task list associated with the trip request.

14. The method of claim **13**, wherein the trip request further comprises a route for the vehicle including a pick-up location, at least one location associated with a corresponding task of the task list, and a drop-off location.

'354 Patent: Digital Vehicle Tag and Method of Integration in Vehicle Allocation System

1. A system for managing vehicle delivery, comprising:
a server running an internet service for managing drivers, configured to:
receive a request, submitted by a user, to drive a target vehicle on a trip from a first location to a second location;
receive a response from a driver accepting the request to deliver the target vehicle;
present, to the user, a vehicle status report; and
present, to the user, real-time location updates for the vehicle;
a mobile device running a mobile device application configured to:
display, to the driver, the request to deliver the target vehicle;
receive, from the driver[,] the response indicating acceptance of the request to deliver the target vehicle
receive, from the driver, the vehicle status report; and
transmit the real-time location updates for the vehicle to the internet service

2. The system of claim **1**, wherein the vehicle status report includes a photograph of the vehicle captured by a mobile device running the mobile device application.

3. The system of claim **2**, wherein the vehicle status report further includes an odometer reading for the vehicle.

4. The system of claim **1**, wherein the response from the driver indicates a first driver for the target vehicle and a second driver for a chase vehicle.

5. The system of claim **1**, wherein the server is further configured to
receive, from the driver and via the mobile applications device of the driver, expenses incurred in driving the vehicle; and
transferring a payment from the user to the driver

6. The system of claim **1**, wherein the request specifies that the trip further includes delivering an additional vehicle from the second location[] to a third location.

7. The system of claim **1**, wherein the one driver of a pool of drivers registered with the internet service.

8. One or more non-transitory computer-readable media storing computer-executable instructions that, when executed by a processor, perform a method of managing vehicle deliver[y], the method comprising the steps of:
receiving a request, submitted by a user, to drive a target vehicle on a trip beginning and ending [at] a first location;
presenting, to the driver and on a mobile communications device of the driver, the request to deliver the vehicle;

receiving, from the driver and via the mobile communications device of the driver, a response accepting the request to deliver the target vehicle;

receiving, from the driver and via the mobile communications device of the driver, a vehicle status report;

presenting, to the user, the vehicle status report; and

receiving, from the mobile communications device of the driver, real-time location updated for the vehicle as determined by the mobile communications device of the driver; and

presenting, to the user, real-time location updates for the vehicle.

9. The media of claim **8**, wherein the method further comprises the step of

receiving, from the driver and via the mobile communications device of the driver, expenses incurred in driving the vehicle;

presenting, to the user, the expenses incurred, in driving the vehicle for review and approval; and

transferring a payment from the user to the driver upon approval by the user.

10. The media of claim **8**, wherein the trip includes at least one intermediate task location.

11. The media of claim **8**, further comprising the step of presenting, to the user and upon completion of the trip, a trip report.

12. The media of claim **11**, wherein the trip report includes driver tracking data.

13. The media of claim **8**, wherein the driver is one driver of a pool of registered drivers.

14. The method of claim **8**, further comprising the step of verifying the insurance of the driver.

15. A method of managing vehicle delivery, comprising the steps of:

receiving a request, submitted by a user, to drive a target vehicle on a trip to a destination location via an intermediate task location;

presenting, to the driver and on a mobile communications device of the driver, the request to deliver the vehicle;

receiving, from the driver and via the mobile communications device of the driver, a response accepting the request to deliver the target vehicle;

receiving, from the driver and via the mobile communications device of the driver, a vehicle status report

presenting, to the user, the vehicle status report; and

receiving, from the mobile communications device of the driver, real-time location updates for the vehicle as determined by the mobile communications device of the driver; and

presenting, to the user, real-time location updates for the vehicle.

16. The method of claim **15**, wherein the trip is via a plurality of intermediate task locations.

17. The method of claim **16**, further comprising the step of determining an optimal arrangement of the plurality of intermediate task locations for the trip.

18. The method of claim **15**, further comprising the step of presenting, to the user and upon completion of the trip, a trip report.

19. The method of claim **18**, wherein the trip report includes driver tracking data.

20. The method of claim **15**, wherein the response from the driver indicates a plurality of drivers for the trip.