

**IN THE UNITED STATES DISTRICT COURT FOR THE
EASTERN DISTRICT OF VIRGINIA
Alexandria Division**

DIALECT, LLC,)	
Plaintiff,)	
)	
v.)	Case No. 1:23-cv-581
)	
AMAZON.COM, INC., et al.,)	
Defendants.)	

MEMORANDUM OPINION

Plaintiff Dialect, LLC brings this lawsuit against Defendants Amazon.com, Inc., and Amazon Web Services, Inc. (together, “Amazon”) and asserts that Amazon infringed seven of Dialect’s patents.¹ Amazon has moved to dismiss Dialect’s amended complaint with respect to six of the seven patents, arguing that the claims at issue in those patents are void because they are directed to patent-ineligible subject matter.² See 35 U.S.C. § 101; *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208 (2014). Amazon’s motion has been briefed and argued, and it is therefore ripe for disposition. For the reasons that follow, Amazon’s motion will be granted in part and deferred in part. Application of the *Alice* two-step test makes clear that Claim 1 of the ’845 Patent is invalid as directed to patent-ineligible subject matter. Accordingly, Count V of the amended complaint

1 Dialect’s amended complaint pleads seven counts of infringement. Count I asserts Claim 1 of U.S. Patent No. 7,693,720 (the “’720 Patent”) (Dkt. 1-2); Count II asserts Claim 5 of U.S. Patent No. 8,015,006 (the “’006 Patent”) (Dkt. 1-3); Count III asserts Claim 14 of U.S. Patent No. 8,140,327 (the “’327 Patent”) (Dkt. 1-4); Count IV asserts Claim 19 of U.S. Patent No. 8,195,468 (the “’468 Patent”) (Dkt. 1-5); Count V asserts Claim 1 of U.S. Patent No. 9,031,845 (the “’845 Patent”) (Dkt. 1-6); Count VI asserts Claim 13 of U.S. Patent No. 9,263,039 (the “’039 Patent”) (Dkt. 1-7); and Count VII asserts Claim 1 of U.S. Patent No. 9,495,957 (the “’957 Patent”) (Dkt. 1-8).

2 Specifically, Amazon’s motion argues that Counts I, II, IV, V, VI, and VII of Dialect’s amended complaint must be dismissed. Amazon’s motion does not contend that the ’327 Patent is invalid.

must be dismissed. The remainder of Amazon’s Section 101 challenges to the claims asserted in the ’720, ’006, ’468, ’039, and ’957 Patents are deferred until further proceedings, including discovery and claim construction, which may inform the *Alice* analysis of those claims.³

I.

At the outset, it is appropriate to describe the ’845 Patent itself. According to Dialect’s amended complaint, the invention disclosed in the ’845 Patent was originally developed by Voice-Box Technologies, a company founded in 2001 that became an early mover and notable player in the field of natural language processing. Am. Compl. ¶¶ 1, 20–25. At some later date, the ’845 Patent was assigned to Dialect.

The ’845 Patent was applied for on February 12, 2010, allowed on January 5, 2015, and issued on May 12, 2015. ’845 Patent at 1 (Dkt. 1-6); ’845 Patent Allowance at 1 (Dkt. 35-8). The ’845 Patent is a continuation of the ’720 Patent, which was applied for in 2003. ’720 Patent at 1. Like the ’720 Patent, the ’845 Patent is titled “Mobile Systems and Methods for Responding to Natural Language Speech Utterance” and discloses “a fully integrated environment allowing mobile users to ask natural language questions or give natural language commands.” ’845 Patent at 1; *id.* at col. 1, *ll.* 16–25.

Claim 1 of the ’845 Patent, the only claim asserted in Count V, is directed to a vehicle-mounted system of physical processors programmed to process natural speech. In full, Claim 1 of the ’845 Patent reads as follows:

“A mobile system for processing natural language utterances, comprising:”

³ See *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1311 (Fed. Cir. 2016) (“claim construction is helpful” at *Alice* Step One); *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1126–27 (Fed. Cir. 2018) (“factual disputes” can preclude dismissal at *Alice* Step Two).

- (a) “one or more physical processors at a vehicle that are programmed to execute one or more computer program instructions which, when executed, cause the one or more physical processors to:”
- (1) “receive a natural language utterance associated with a user;”
 - (2) “perform speech recognition on the natural language utterance;”
 - (3) “parse and interpret the speech recognized natural language utterance;”
 - (4) “determine a domain and a context that are associated with the parsed and interpreted natural language utterances;”
 - (5) “formulate a command or query based on the domain and the context;”
 - (6) “determine whether the command or query is to be executed on-board or off-board the vehicle;”
 - (7) “execute the command or query at the vehicle in response to a determination that the command or query is to be executed on-board the vehicle; and”
 - (8) “invoke a device that communicates wirelessly over a wide area network to process the command or query such that the command or query is executed off-board the vehicle in response to a determination that the command or query is to be executed off-board the vehicle.”

’845 Patent at col. 32, *ll.* 30–57.

Summarized and stated simply, Claim 1 is directed to a set of prior art physical processors that, when activated, perform the following tasks:

1. Receive a spoken message, “perform speech recognition” on the message, and “parse and interpret” the result, ’845 Patent at col. 32, *ll.* 36–41;
2. Use that parsed and interpreted message to choose a piece of software to address the message (*i.e.*, “a domain and a context”), *id.* at *ll.* 42–44;
3. Translate the parsed and interpreted message into a form the selected sub-processor can understand (*i.e.*, “formulate a command or query” based on the domain and context), *id.* at *ll.* 45–46;
4. Determine whether the thus-formulated command or query is to be executed on or off-board the vehicle (*i.e.*, retrieve the location of the sub-processor receiving the message), *id.* at *ll.* 47–48; and, depending on the result,
5. Either (i) execute the command or query at the vehicle or (ii) send the command or query to the appropriate destination off-board the vehicle using a wireless wide area network. *Id.* at *ll.* 49–57.

Significantly, Claim 1 does not claim any specific hardware, software, or instrumentality. Instead Claim 1 recites achieving a function using only prior art devices. Nor does Claim 1 claim any specific algorithm; rather, Claim 1 simply claims that “one or more physical processors ... programmed to execute one or more computer program instructions” can be arranged to achieve the desired result. ’845 Patent at col. 32, *ll.* 31–32. The claimed method or “system,” in short, is defined only in terms of what task it performs. *Id.* at *l.* 30. Moreover, no element of Claim 1 is alleged to be novel in and of itself; Claim 1 calls solely for the use of prior art black-box software that is more specifically described nowhere in the ’845 Patent.

II.

Given the foregoing description of Claim 1, analysis proceeds next to considering patent eligibility under 35 U.S.C. § 101, which is “a question of law that may involve underlying questions of fact” and is often—though not always—well-suited to disposition pursuant to a motion to dismiss. *PersonalWeb Techs. LLC v. Google LLC*, 8 F.4th 1310, 1314 (Fed. Cir. 2021). In this patent dispute, substantive questions of patent law are governed by Federal Circuit precedent and procedural questions are governed by Fourth Circuit precedent. *Rentrop v. Spectranetics Corp.*, 550 F.3d 1112, 1118 (Fed. Cir. 2008). In the Fourth Circuit, a district court deciding a motion to dismiss “must view the facts alleged in the light most favorable to the plaintiff” but “need not accept legal conclusions couched as facts or unwarranted inferences, unreasonable conclusions, or arguments.” *United States ex rel. Taylor v. Boyko*, 39 F.4th 177, 189 (4th Cir. 2022) (cleaned up).

Section 101 of the Patent Act permits an inventor to obtain a patent on “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101. This statutory language has long been understood to contain “an important implicit exception.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70

(2012). *Alice* marks the Supreme Court’s latest application of this implicit exception. There, the Supreme Court reaffirmed more than a century and a half of caselaw holding that “abstract ideas ... are not patentable.” *Alice*, 573 U.S. at 216 (internal quotation marks omitted); see *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 174–75 (1852).⁴

Alice instructs district courts to apply that doctrine in two steps. Step One requires a court to “determine whether the claims at issue are directed to [an abstract idea].” *Alice*, 573 U.S. at 217. At Step One, “the claims [must be] considered in their entirety to determine ... their character as a whole.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016); see also *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (looking to the “focus of the asserted claims”). The claims may not be described at too “high a level of abstraction and untethered from the language of the claims.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016). As the Supreme Court has repeatedly cautioned, too loose an approach to Step One “could eviscerate patent law” because “all inventions at some level embody ... abstract ideas.” *Mayo*, 566 U.S. at 71.

Despite this guidance, neither the Supreme Court nor the Federal Circuit has ever “de-limit[ed] the precise contours of the ‘abstract ideas’ category.” *Mayo*, 566 U.S. at 221; see *Elec. Power Grp.*, 830 F.3d at 1354.⁵ Because “there is no ... single, succinct, usable definition” of the

4 Like abstract ideas, “[l]aws of nature” and “natural phenomena” are also not patentable. *Alice*, 573 U.S. at 216. However, those two categories are not at issue in this case.

5 One Federal Circuit judge has gone so far as to call the concept “a definitional morass” that is impossible to clarify “except through the use of equally abstract terms.” *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1350 (Fed. Cir. 2018) (Plager, J., concurring in part and dissenting in part). Another has noted that “great uncertainty yet remains” at *Alice* Step One. *Smart Sys. Innovations, LLC v. Chi. Trans. Auth.*, 873 F.3d 1364, 1378 (Fed. Cir. 2017) (Linn, J., dissenting in part and concurring in part). Indeed, the Solicitor General herself has noted that recent Section 101 cases have repeatedly “fractured the Federal Circuit” and recommended that the Supreme Court step in to clarify the law. Brief for the United States as Amicus Curiae, *Am. Axle & Mfg., Inc. v. NeapCo Holds. LLC*, No. 20-891, 2022 WL 1670811, at *19, 22 (U.S.

term “abstract idea,” district and appellate courts apply “the classic common law methodology” by “examin[ing] earlier cases in which a similar or parallel descriptive nature can be seen.” *Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016).

Step Two of the *Alice* Section 101 analysis requires a court to “consider the elements of [the] claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78–79). In other words, Step Two is a “search for an inventive concept ... sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible [abstract idea] itself.” *Id.* (cleaned up). Because “[t]he abstract idea itself cannot supply the inventive concept,” Step Two requires setting aside every claim element directed to the abstract idea. *Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1378, 1385 (Fed. Cir. 2019). Allegations “that aspects of the claims are inventive,” if “plausible and specific,” suffice to preclude dismissal, *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1317 (Fed. Cir. 2019), provided that those allegations of inventiveness show that the claim elements in question rise above what is “well-understood, routine, and conventional to a skilled artisan in the relevant field.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).⁶

III.

It is next appropriate to discuss what light the Federal Circuit’s construction of *Alice* sheds on the written description of Claim 1 of the ’845 Patent. At *Alice* Step One, Federal Circuit

May 24, 2022), *cert. denied*, 142 S. Ct. 2902 (2022). Until such clarification is provided, Federal Circuit precedent must be applied as it stands.

6 Dialect insists that patent invalidity must be proven by clear and convincing evidence. Pltf’s Mem. at 4. Although this is true with respect to questions of fact—such as obviousness or novelty—for the reasons stated below, Dialect has not plausibly pleaded any facts relating to the existence of an inventive concept that would require proof by clear and convincing evidence.

precedent must be examined for illustrative examples of abstract ideas. As a general matter, claims directed to “a result” rather than “a way of achieving [that result]” are directed to abstract ideas at Step One. *SAP Am., Inc., v. InvestPic, LLC*, 898 F.3d 1161, 1167–68 (Fed. Cir. 2018) (collecting cases). The following examples of claims found abstract at *Alice* Step One confirm the foregoing understanding:

- Claims directed to “a process ... for which computers are invoked merely as a tool,” as contrasted with claims directed to a non-abstract “improvement to computer functionality.” *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1258 (Fed. Cir. 2017) (quoting *Enfish*, 822 F.3d at 1336).
- Claims reciting “mental processes” such as collecting data, analyzing or comprehending it, and then reporting the results. *PersonalWeb*, 8 F.4th at 1316; *Elec. Power Grp.*, 830 F.3d at 1353; *In re Killian*, 45 F.4th 1373, 1380 (Fed. Cir. 2022).
- Claims that recite “result-based functional language” and “generic processes” without disclosing “a specific means or method.” *Two-Way Media Ltd. v. Comcast Cable Commc 'ns, LLC*, 874 F.3d 1329, 1337–38 (Fed. Cir. 2017).

These cases, when applied to Claim 1 of the '845 Patent, point persuasively to the conclusion that Claim 1 is directed to an abstract idea. Claim 1 is plainly result-oriented; it is directed to any arrangement of programs and processors that accomplishes Claim 1's stated goal. Indeed, the '845 Patent expressly claims “the required functionality” “[r]egardless of the method of deployment.” '845 Patent at col. 20, *ll.* 2–3. Moreover, Claim 1 monopolizes that required functionality using exclusively generic, prior-art components. The Supreme Court has found such claims and specifications abstract for nearly as long as patent eligibility doctrine has existed. *See, e.g., O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 113, 120 (1853) (invalidating a claim where “it matters not by what process or machinery the result is accomplished.”); *see also Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1343 (Fed. Cir. 2018) (collecting cases reaffirming *O'Reilly*). Ultimately, the process disclosed in Claim 1—understanding language using context, determining whether an on- or off-board processor is to handle that language, and then using that processor to

execute the language—is no less abstract than “collection of information, comprehen[sion of its] meaning . . . , and indication of the results,” an idea that the Federal Circuit has repeatedly found to fail *Alice* Step One. *In re Killian*, 45 F.4th at 1380; *see also FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093 (Fed. Cir. 2016); *Elec. Power Grp.*, 830 F.3d at 1353 (collecting cases); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (“data collection, recognition, and storage”); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (“receiving copyrighted media, selecting an ad, . . . [and] displaying the ad”). In sum, Claim 1 of the ’845 Patent is directed to the abstract idea of using context to execute a spoken request. *See* Defs’ Mem. at 16 (Dkt. 38).

Dialect objects to the conclusion that Claim 1 of the ’845 Patent is directed to an abstract idea; instead, Dialect insists that Claim 1 is directed to a “specific improvement to vehicle-based systems.” Pltf’s Mem. at 16 (Dkt. 42). Specifically, Dialect argues that the ’845 Patent is not directed to an abstract idea because it “recites a system that formulates a command or query based on a domain and context . . . [and] recites determining whether that command or query is to be executed on-board or off-board the vehicle.” *Id.* at 15–16. Dialect’s argument must be rejected because it inappropriately considers Claim 1’s elements in isolation from one another. In contrast, the Federal Circuit’s *Alice* Step One precedents require that a claim be assessed “‘in [its] entirety’” to determine its “focus.” *Two-Way Media*, 874 F.3d at 1337 (quoting *Internet Pats. Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). Because Dialect does not provide the holistic analysis that Federal Circuit precedent requires, Dialect’s objections are inapposite and unpersuasive. In short, Claim 1 fails *Alice* Step One, and Dialect provides no persuasive reason to conclude otherwise.

Claim 1 does not fare any better at *Alice* Step Two because it does not disclose, claim, or reflect any inventive concept. The Federal Circuit has consistently held that “a claimed invention’s use of the ineligible concept to which it is directed cannot supply [an] inventive concept” at *Alice* Step Two. *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018); see *Trading Techs.*, 921 F.3d at 1385 (same). Thus, the abstract idea itself cannot provide the inventiveness *Alice* Step Two requires. Given this, only one aspect of Claim 1 remains that is not directed to the abstract idea of using context to respond to a spoken request. That portion of the claim recites “determining whether [the] command or query is to be executed on-board or off-board the vehicle,” and then executing it. Pltf’s Mem. at 15–16; ’845 Patent at col. 32, ll. 47–57. There is nothing inventive about this elementary concept; it constitutes a bare command to achieve a result. Indeed, as Dialect acknowledges, prior art systems also “determine[d] whether [language] processing should be performed on-board or off-board the vehicle.” Pltf’s Mem. at 16. Importantly, Dialect pleads no facts that would demonstrate this conclusory step is not “well-understood, routine, and conventional to a skilled artisan in the relevant field.” See *Berkheimer*, 881 F.3d at 1368. Hence, Claim 1 does not survive *Alice* Step Two.

Dialect unconvincingly seeks to resist this conclusion by arguing that Claim 1 discloses “specific improvement[s]” to the art. Pltf’s Mem. at 16. In Dialect’s telling, prior art systems “previously relied solely on keywords to determine whether processing should be performed on-board or off-board the vehicle” rather than using context, as Claim 1 does. *Id.* But Dialect’s argument rests on novelty, not inventiveness, and is therefore unavailing in the *Alice* context. Although there is some overlap between subject-matter eligibility under Section 101 and novelty under Section 102, a claim element that “add[s] nothing of significance” to the underlying abstract idea is, no matter how novel, insufficient to salvage an invalid claim at *Alice* Step Two. *Mayo*, 566 U.S. at

87, 90.⁷ In other words, as the Federal Circuit has held, “[e]ligibility and novelty are separate inquiries” that should not be confused. *Two-Way Media*, 874 F.3d at 1340. Here, the abstract (and hence uninventive) idea of splitting functionality between on- and off-board processors does not become less abstract (or more inventive) when combined with the abstract idea of using context. *NetSoc, LLC v. Match Grp., LLC*, 838 F. App’x 544, 550 (Fed. Cir. 2020) (a claim limitation that “is itself directed to an abstract idea” does not provide an inventive concept); *Alice*, 573 U.S. at 223 (“Stating an abstract idea” while “limiting [its] use ... to a particular technological environment” “is not enough for patent eligibility.”) (cleaned up). Dialect’s contrary argument is unavailing and cannot be credited here.

Finally, Dialect attempts to rescue Claim 1 by asserting inventiveness in an impermissibly conclusory fashion. Specifically, Dialect states that Claim 1’s elements improve the functioning of natural language processing, and Dialect’s amended complaint recites that Claim 1 discloses “a novel configuration of software structures.” Pltf’s Mem. at 15–16; Am. Compl. ¶ 79. But if Claim 1 is a novel or inventive improvement to computer functioning, Dialect does not explain how. The best Dialect can point to is an embodiment of the ’845 Patent where “the main speech processing unit ... and speech unit ... are external to” a Telematics Control Unit. Am. Compl. ¶ 80. That is not enough, as that limitation of the embodiment appears nowhere in Claim 1, and “features that are not claimed are irrelevant” to the *Alice* analysis. *Am. Axle & Mfg., Inc. v. Neapco Holds. LLC*, 967 F.3d 1285, 1293 (Fed. Cir. 2020) (on panel rehearing), *cert. denied*, 142 S. Ct. 2902 (2022). Dialect’s bare recitations of inventiveness are therefore unconvincing and implausible and thus

⁷ For the same reason, Dialect’s quotation of the ’845 Patent’s prosecution history is unavailing. The USPTO’s allowance of the ’845 Patent does not discuss whether any portion of Claim 1 is *inventive*. The allowance merely concludes that certain aspects of Claim 1 are not present in the prior art. That is a novelty inquiry.

cannot be credited. *See Ashcroft v. Iqbal*, 556 U.S. 662, 680–81 (2009) (“conclusory” and “bald” allegations “are not entitled to the assumption of truth” on a motion to dismiss); *Cellspin*, 927 F.3d at 1317 (allegations of inventiveness must be “plausible and specific”). None of Dialect’s statements plausibly identifies an inventive concept that would alter the foregoing analysis.

Put simply, Dialect nowhere explains how or why Claim 1’s conclusory, result-oriented requirements “overc[ome] defects in prior art embodiments” instead of simply modifying the prior art to generate a new—but uninventive—series of abstractions. *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1152 (Fed. Cir. 2016). Claim 1 of the ’845 Patent is therefore devoid of any inventive concept and fails at *Alice* Step Two.⁸

* * *


In summary, Claim 1 of the ’845 Patent, of the six claims challenged by Amazon, fails the *Alice* analysis and is invalid as a matter of law. Count V of Dialect’s amended complaint must, accordingly, be dismissed.

A Section 101 ruling with respect to the remaining patents is deferred pending further proceedings, as claim construction and discovery may helpfully inform the Section 101 analysis. *See supra* note 3 and accompanying text.

⁸ Dialect objects to this line of argument and asserts that *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) held that claims directed to computer processors “programmed to” achieve a result can be patent eligible. Dialect’s argument is unconvincing; the claim at issue in *DDR Holdings* had non-result-oriented limitations. 773 F.3d at 1249 (reciting “a data store ... and ... a computer processor coupled to the data store ... and programmed,” upon occurrence of certain conditions, to deliver a particular result). Thus, the claim at issue in *DDR Holdings* is not analogous to Claim 1 of the ’845 Patent and cannot rescue it from abstractness at *Alice* Step One or Step Two.

An appropriate Order will issue. The Clerk is directed to provide a copy of this Memorandum Opinion to all counsel of record.

Alexandria, Virginia
November 8, 2023



T.S. Ellis, II
Senior United States District Judge