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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
SAN JOSE DIVISION

UNILOC USA INC, et al.,  
Plaintiffs,  
v.  
LG ELECTRONICS USA INC, et al.,  
Defendants.

Case No. 18-CV-06738-LHK  
**AMENDED ORDER GRANTING  
MOTION TO DISMISS**  
Re: Dkt. No. 86

This order supersedes ECF No. 107, which has been vacated.

Plaintiffs Uniloc USA Inc., Uniloc Luxembourg S.A., and Uniloc 2017 LLC filed a patent infringement suit against Defendants LG Electronics USA Inc., LG Electronics Inc., and LG Electronics MobileComm USA, Inc. Plaintiffs allege that Defendants infringe claims of U.S. Patent No. 6,993,049 (“the ’049 Patent”). Before the Court is Defendants’ motion to dismiss, which contends that the ’049 Patent fails to recite patent-eligible subject matter under 35 U.S.C. § 101. ECF No. 86 (“Mot.”). Having considered the submissions of the parties, the relevant law, and the record in this case, the Court finds the ’049 Patent invalid under § 101 and GRANTS Defendants’ motion to dismiss the second amended complaint.

**I. BACKGROUND**

**A. Factual Background**

**1. The Parties and Technology at Issue**

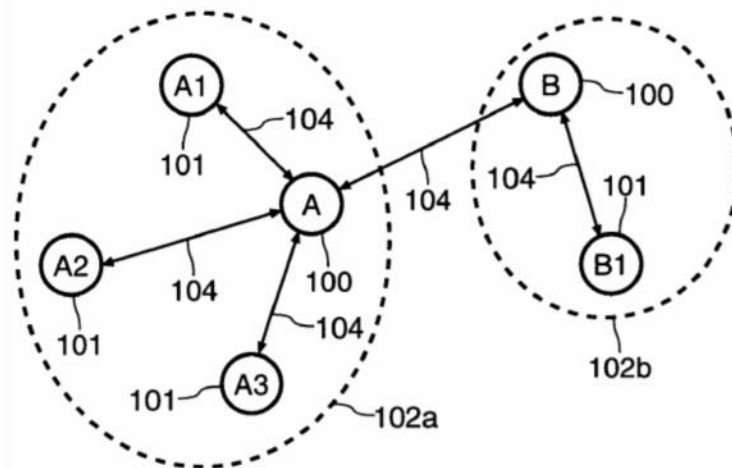
Plaintiff Uniloc USA Inc. is a Texas corporation. ECF No. 77 (second amended complaint, or “SAC”) at ¶ 1. Plaintiff Uniloc Luxembourg S.A. is a Luxembourg public limited liability company. *Id.* at ¶ 2. Plaintiff Uniloc 2017 LLC is a Delaware limited liability company. *Id.* at ¶ 3.

Defendant LG Electronics USA Inc. is a Delaware corporation with a place of business in Fort Worth, Texas. *Id.* at ¶ 4. Defendant LG Electronics Inc. is a Korean corporation with its principal place of business in Seoul, Korea. *Id.* at ¶ 6. Defendant LG Electronics Mobilecomm USA, Inc. is a California corporation with a place of business in San Diego, California. *Id.* at ¶ 5. Defendants are alleged to import, use, offer for sale, and sell “electronic devices that utilize Bluetooth Low Energy version 4.0 and above (“Bluetooth”).” *Id.* at ¶ 11. Plaintiffs accuse more than 100 of Defendants’ products of infringing the ’049 Patent. *Id.* The Court next summarizes the ’049 Patent.

**2. The ’049 Patent**

The ’049 Patent is titled “Communication System.” ’049 Patent at front page. It was filed on June 7, 2001 and was issued on January 31, 2006.

The claims of the ’049 are purportedly directed to an improvement on standard Bluetooth technology. The Court first explains standard Bluetooth technology, then the purported improvement over standard Bluetooth technology.



**FIG. 1**



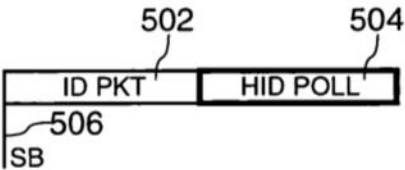
1           Figure 1 depicts a standard Bluetooth network configuration. A “host device,” such as a  
 2 “portable PC and a cellular phone” can contain a Bluetooth “station.” *Id.* at 3:30-38. As depicted  
 3 in Figure 1, various stations contained in various host devices (items 100 and 101) can  
 4 communicate wirelessly with one another across communication channels (items 104). Each  
 5 station belongs to an “ad hoc” network called a “piconet” (items 102a and 102b). *Id.* at 1:20-22,  
 6 3:36-38. Each piconet contains a “master” station (items 100) that initiates and controls  
 7 communications with up to 7 other stations known as “slaves.” *Id.* at 3:44-48, 4:48-58. In Figure  
 8 1, the slaves are depicted as items 101. *Id.* at 3:44-46. “In general[,] the networking components  
 9 (i.e. the Bluetooth chip for a Bluetooth network) of all stations [items] 100, 101 will be  
 10 implemented identically.” *Id.* at 3:38-41. Communications between master and slave stations  
 11 occur via the exchange of data “packets” over a wireless channel. *Id.* at 5:19-20.

12           The application of Bluetooth technology most relevant to the ’049 Patent is “the  
 13 connection of controller devices to host systems.” *Id.* at 1:27-28. As described above, a host can  
 14 be a computer or a cellphone. *Id.* at 3:30-38. A “controller device, also known as a  
 15 Human/machine Interface Device (HID), is an input device such as a keyboard, mouse, games  
 16 controller, graphics pad or the like.” *Id.* at 1:28-31. “Setting up a link requires a HID to join, as a  
 17 slave, the piconet including the host system (which will typically act as the piconet master, i.e. a  
 18 base station). Joining the piconet requires two sets of procedures, namely ‘inquiry’ and ‘page.’” *Id.*  
 19 at 1:52-55. “Inquiry allows a would-be slave to find a base station and issue a request to join the  
 20 piconet. Page allows a base station to invite slaves of its choice to join the net.” *Id.* at 1:56-58.

21           “When a Bluetooth unit wants to discover other Bluetooth devices, it enters a so-called  
 22 inquiry substate. In this mode, it issues an inquiry message . . . .” *Id.* at 4:23-25. In other words, a  
 23 master in an inquiry substate issues inquiry messages when looking to discover other Bluetooth  
 24 slaves. The inquiry message is repeatedly sent over multiple wireless frequencies. *Id.* at 4:28-34.  
 25 The entire process of sending an inquiry message over multiple frequencies is divided into  
 26 timeslots. *Id.* Each timeslot is dedicated to a specific task undertaken by the master in inquiry  
 27 mode. Assume the master is at timeslot 2. During timeslot 2, the master *sends* 2 inquiry messages,

1 each inquiry message over a different frequency. *Id.* During the subsequent timeslot, timeslot 3,  
2 the master then *listens* for any replies to its inquiry messages on the two wireless frequencies over  
3 which the master sent the 2 inquiry messages in timeslot 2. *Id.*

4 In conventional Bluetooth technology, a slave HID can “enter a ‘park’ mode and cease  
5 active communications” with the master. *Id.* at 1:43-47. “A slave has to be polled before it can  
6 submit a request to leave park mode and become active.” *Id.* at 1:47-49. “In particular, for a HID  
7 to sign on to the piconet automatically when the host system is turned on it will either have to be  
8 regularly waking up to look for Bluetooth inquiry bursts, thereby consuming power, or it will need  
9 to be manually woken up by the user.” *Id.* at 1:66-2:3. The purported improvement over this  
10 standard process of signing on to the piconet is reflected in Figure 5.



**FIG. 5**

15 As shown in Figure 5, the standard inquiry messages (item 502) issued by the master have  
16 an extra field (item 504) “appended to them, capable of carrying a HID [(Human/machine  
17 Interface Device)] poll message. The extended field [item] 504 may carry a header that signifies a  
18 HID poll to distinguish it from other applications of extended field information . . .” *Id.* at 4:60-  
19 64; 5:19-20. Thus, the Patent’s alleged novelty lies in “piggy-back[ing]” the extra field (item 504)  
20 onto a standard “inquiry message[ (item 502)] issued by the master.” *Id.* at 4:15-20. Adding the  
21 extra field (item 504) provides HID’s “with a rapid response time without the need for a  
22 permanently active communication link” to the master. *Id.* at abstract.

23 Plaintiffs assert that Defendants have infringed “claims of the ’049 Patent.” Defendants’  
24 motion to dismiss focuses on claim 2.<sup>1</sup> Claim 2 recites:

25  
26  
27 <sup>1</sup> Plaintiffs have not identified any representative claims of the ’049 Patent. As discussed below,  
28 the Court finds claim 2 to be representative of the ’049 Patent.



1           2. A primary station for use in a communications system comprising at least one secondary  
2 station, wherein means are provided for broadcasting a series of inquiry messages, each in the  
3 form of a plurality of predetermined data fields arranged according to a first communications  
4 protocol, and for adding to each inquiry message prior to transmission an additional data field for  
5 polling at least one secondary station.”

6 *Id.* at 7:42-49.

7           **B. Procedural History**

8           On March 9, 2018, Plaintiffs Uniloc USA, Inc. and Uniloc Luxembourg, S.A.,<sup>2</sup> initiated  
9 suit against Defendants in the Northern District of Texas. ECF No. 1. On July 2, 2018, Plaintiffs  
10 Uniloc USA, Inc. and Uniloc Luxembourg, S.A. filed a first amended complaint. ECF No. 30. On  
11 July 26, 2018, Defendants moved to transfer the case to the Northern District of California. ECF  
12 No. 35. On November 5, 2018, Defendants’ motion to transfer the case to the Northern District of  
13 California was granted, ECF No. 45, and on November 6, 2018, the case was transferred to the  
14 Northern District of California, ECF No. 46.

15           On November 20, 2018, pursuant to Patent Local Rule 2-1, Defendants filed a notice of  
16 pendency of other action involving the same patent. ECF No. 61. Defendants disclosed that the  
17 ’049 Patent is being asserted in another case before this Court in *Uniloc USA, Inc. v. Logitech, Inc.*,  
18 Case No. 18-CV-1304-LHK. *Id.* As a result, the instant action was reassigned to this Court on  
19 November 21, 2018.

20           On January 23, 2019, Plaintiffs filed a second amended complaint. ECF No. 77. On  
21 February 6, 2019, Defendants filed the instant motion to dismiss. ECF No. 86 (“Mot.”). On  
22 February 27, 2019, Plaintiffs filed an opposition. ECF No. 95 (“Opp.”).<sup>3</sup> On March 13, 2019,  
23 Defendants filed a reply. ECF No. 99 (“Reply”).

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25 \_\_\_\_\_  
26 <sup>2</sup> Uniloc 2017 LLC, a Plaintiff in the second amended complaint, was not listed as a Plaintiff in  
the original complaint or the first amended complaint.

27 <sup>3</sup> Plaintiffs’ opposition appears to be a near-exact copy of an opposition filed in *Uniloc 2017 LLC*  
*v. LG Electronics U.S.A., Inc. et al.*, Case No. 18-CV-03071-N, ECF No. 24, in the United States  
28 District Court for the Northern District of Texas, which involved a different patent.





1 However, the Federal Circuit has identified that there are certain factual questions underlying the  
 2 § 101 analysis. *See Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368-69 (Fed. Cir. 2018). Accordingly,  
 3 a district court may resolve the issue of patent eligibility under § 101 by way of a motion to  
 4 dismiss. *See, e.g., Secured Mail Sols. LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 912 (Fed. Cir.  
 5 2017) (affirming determination of ineligibility made on 12(b)(6) motion); *Content Extraction &*  
 6 *Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1345 (Fed. Cir. 2014)  
 7 (same).

8 Although claim construction is often desirable, and may sometimes be necessary, to  
 9 resolve whether a patent claim is directed to patent-eligible subject matter, the Federal Circuit has  
 10 explained that “claim construction is not an inviolable prerequisite to a validity determination  
 11 under § 101.” *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266,  
 12 1273 (Fed. Cir. 2012). Where the court has a “full understanding of the basic character of the  
 13 claimed subject matter,” the question of patent eligibility may properly be resolved on the  
 14 pleadings. *Content Extraction*, 776 F.3d at 1349; *see also Genetic Techs. Ltd. v. Bristol-Myers*  
 15 *Squibb Co.*, 72 F. Supp. 3d 521, 539 (D. Del. 2014), *aff’d sub nom. Genetic Techs. Ltd. v. Merial*  
 16 *L.L.C.*, 818 F.3d 1369 (Fed. Cir. 2016).

17 **C. Substantive Legal Standards Applicable Under 35 U.S.C. § 101**

18 **1. Patent-Eligible Subject Matter Under 35 U.S.C. § 101**

19 Section 101 of Title 35 of the United States Code “defines the subject matter that may be  
 20 patented under the Patent Act.” *Bilski v. Kappos*, 561 U.S. 593, 601 (2010). Under § 101, the  
 21 scope of patentable subject matter encompasses “any new and useful process, machine,  
 22 manufacture, or composition of matter, or any new and useful improvement thereof.” *Id.* (quoting  
 23 35 U.S.C. § 101). These categories are broad, but they are not limitless. Section 101 “contains an  
 24 important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not  
 25 patentable.” *Alice*, 573 U.S. at 216 (citation omitted). These three categories of subject matter are  
 26 excepted from patent-eligibility because “they are the basic tools of scientific and technological  
 27 work,” which are “free to all men and reserved exclusively to none.” *Mayo Collaborative Servs. v.*

1 *Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012) (citations omitted). The U.S. Supreme Court has  
2 explained that allowing patent claims for such purported inventions would “tend to impede  
3 innovation more than it would tend to promote it,” thereby thwarting the primary object of the  
4 patent laws. *Id.* However, the U.S. Supreme Court has also cautioned that “[a]t some level, all  
5 inventions embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract  
6 ideas.” *Alice*, 573 U.S. at 217 (alteration, internal quotation marks, and citation omitted).  
7 Accordingly, courts must “tread carefully in construing this exclusionary principle lest it swallow  
8 all of patent law.” *Id.*

9 In *Alice*, the leading case on patent-eligible subject matter under § 101, the U.S. Supreme  
10 Court refined the “framework for distinguishing patents that claim laws of nature, natural  
11 phenomena, and abstract ideas from those that claim patent-eligible applications of those  
12 concepts” originally set forth in *Mayo*, 566 U.S. at 77. *Alice*, 573 U.S. at 217. This analysis,  
13 generally known as the “*Alice*” framework, proceeds in two steps as follows:

14 First, we determine whether the claims at issue are directed to one of those patent-  
15 ineligible concepts. If so, we then ask, “[w]hat else is there in the claims before  
16 us?” To answer that question, we consider the elements of each claim both  
17 individually and “as an ordered combination” to determine whether the additional  
18 elements “transform the nature of the claim” into a patent-eligible application. We  
19 have described step two of this analysis as a search for an “‘inventive concept’”—  
20 *i.e.*, an element or combination of elements that is “sufficient to ensure that the  
21 patent in practice amounts to significantly more than a patent upon the [ineligible  
22 concept] itself.”

23 *Id.* at 217-18 (alterations in original) (citations omitted); *see also In re TLI Commc’ns LLC Patent*  
24 *Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (describing “the now familiar two-part test described by  
25 the [U.S.] Supreme Court in *Alice*”).

## 26 **2. *Alice* Step One—Identification of Claims Directed to an Abstract Idea**

27 Neither the U.S. Supreme Court nor the Federal Circuit has set forth a bright-line test  
28 separating abstract ideas from concepts that are sufficiently concrete so as to require no further  
inquiry under the first step of the *Alice* framework. *See, e.g., Alice*, 573 U.S. at 221 (noting that  
“[the U.S. Supreme Court] need not labor to delimit the precise contours of the ‘abstract ideas’



1 category in this case”); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir.  
2 2014) (observing that the U.S. Supreme Court did not “delimit the precise contours of the ‘abstract  
3 ideas’ category” in *Alice* (citation omitted)). As a result, in evaluating whether particular claims  
4 are directed to patent-ineligible abstract ideas, courts have generally begun by “compar[ing]  
5 claims at issue to those claims already found to be directed to an abstract idea in previous cases.”  
6 *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016).

7 Two of the U.S. Supreme Court’s leading cases concerning the “abstract idea” exception  
8 involved claims held to be abstract because they were drawn to longstanding, fundamental  
9 economic practices. *See Alice*, 573 U.S. at 219 (claims “drawn to the concept of intermediated  
10 settlement, *i.e.*, the use of a third party to mitigate settlement risk” were directed to a patent-  
11 ineligible abstract idea); *Bilski*, 561 U.S. at 611-12 (claims drawn to “the basic concept of  
12 hedging, or protecting against risk” were directed to a patent-ineligible abstract idea because  
13 “[h]edging is a fundamental economic practice long prevalent in our system of commerce and  
14 taught in any introductory finance class” (citation omitted)).

15 Similarly, the U.S. Supreme Court has recognized that information itself is intangible. *See*  
16 *Microsoft Corp. v. AT & T Corp.*, 550 U.S. 437, 451 n.12 (2007). Accordingly, the Federal Circuit  
17 has generally found claims abstract where they are directed to some combination of acquiring  
18 information, analyzing information, and/or displaying the results of that analysis. *See*  
19 *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1094-95 (Fed. Cir. 2016) (claims  
20 “directed to collecting and analyzing information to detect misuse and notifying a user when  
21 misuse is detected” were drawn to a patent-ineligible abstract idea); *Elec. Power Grp., LLC v.*  
22 *Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (claims directed to an abstract idea because  
23 “[t]he advance they purport to make is a process of gathering and analyzing information of a  
24 specified content, then displaying the results, and not any particular assertedly inventive  
25 technology for performing those functions”); *In re TLI Commc’ns LLC*, 823 F.3d at 611 (claims  
26 were “directed to the abstract idea of classifying and storing digital images in an organized  
27 manner”); *see also Elec. Power Grp.*, 830 F.3d at 1353-54 (collecting cases).

1           However, the determination of whether other types of computer-implemented claims are  
2 abstract has proven more “elusive.” *See, e.g., Internet Patents Corp. v. Active Network, Inc.*, 790  
3 F.3d 1343, 1345 (Fed. Cir. 2015) (“[P]recision has been elusive in defining an all-purpose  
4 boundary between the abstract and the concrete[.]”). As a result, in addition to comparing “claims  
5 at issue to those claims already found to be directed to an abstract idea in previous cases,” courts  
6 considering computer-implemented inventions have taken varied approaches to determining  
7 whether particular claims are directed to an abstract idea. *Enfish*, 822 F.3d at 1334.

8           For example, courts have considered whether the claims “purport to improve the  
9 functioning of the computer itself,” *Alice*, 573 U.S. at 225, which may suggest that the claims are  
10 not abstract, or instead whether “computers are invoked merely as a tool” to carry out an abstract  
11 process, *Enfish*, 822 F.3d at 1336; *see also id.* at 1335 (“[S]ome improvements in computer-  
12 related technology when appropriately claimed are undoubtedly not abstract, such as a chip  
13 architecture, an LED display, and the like. Nor do we think that claims directed to software, as  
14 opposed to hardware, are inherently abstract[.]”). The Federal Circuit has followed this approach  
15 to find claims patent-eligible in several cases. *See Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d  
16 1253, 1259–60 (Fed. Cir. 2017) (claims directed to an improved memory system were not abstract  
17 because they “focus[ed] on a ‘specific asserted improvement in computer capabilities’—the use of  
18 programmable operational characteristics that are configurable based on the type of processor”  
19 (quoting *Enfish*, 822 F.3d at 1336)); *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d  
20 1299, 1314 (Fed. Cir. 2016) (claims directed to automating part of a preexisting method for 3-D  
21 facial expression animation were not abstract because they “focused on a specific asserted  
22 improvement in computer animation, i.e., the automatic use of rules of a particular type”); *Enfish*,  
23 822 F.3d at 1335–36 (claims directed to a specific type of self-referential table in a computer  
24 database were not abstract because they focused “on the specific asserted improvement in  
25 computer capabilities (i.e., the self-referential table for a computer database)”).

26           Similarly, the Federal Circuit has found that claims directed to a “new and useful  
27 technique” for performing a particular task were not abstract. *See Thales Visionix Inc. v. United*



1 *States*, 850 F.3d 1343, 1349 (Fed. Cir. 2017) (holding that “claims directed to a new and useful  
2 technique for using sensors to more efficiently track an object on a moving platform” were not  
3 abstract); *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1048, 1050 (Fed. Cir. 2016)  
4 (holding that claims directed to “a new and useful laboratory technique for preserving  
5 hepatocytes,” a type of liver cell, were not abstract); *see also Diamond v. Diehr*, 450 U.S. 175,  
6 187 (1981) (holding that claims for a method to cure rubber that employed a formula to calculate  
7 the optimal cure time were not abstract).

8 Another helpful tool used by courts in the abstract idea inquiry is consideration of whether  
9 the claims have an analogy to the brick-and-mortar world, such that they cover a “fundamental . . .  
10 practice long prevalent in our system.” *Alice*, 573 U.S. at 219; *see, e.g., Intellectual Ventures I*  
11 *LLC v. Symantec Corp.*, 838 F.3d 1307, 1317 (Fed. Cir. 2016) (finding an email processing  
12 software program to be abstract through comparison to a “brick-and-mortar” post office);  
13 *Intellectual Ventures I LLC v. Symantec Corp.*, 100 F. Supp. 3d 371, 383 (D. Del. 2015) (“Another  
14 helpful way of assessing whether the claims of the patent are directed to an abstract idea is to  
15 consider if all of the steps of the claim could be performed by human beings in a non-  
16 computerized ‘brick and mortar’ context.” (citing *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350,  
17 1353 (Fed. Cir. 2014))).

18 Courts will also (or alternatively, as the facts require) consider a related question of  
19 whether the claims are, in essence, directed to a mental process or a process that could be done  
20 with pencil and paper. *See Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1147 (Fed.  
21 Cir. 2016) (claims for translating a functional description of a logic circuit into a hardware  
22 component description of the logic circuit were patent-ineligible because the “method can be  
23 performed mentally or with pencil and paper”); *CyberSource Corp. v. Retail Decisions, Inc.*, 654  
24 F.3d 1366, 1372 (Fed. Cir. 2011) (claim for verifying the validity of a credit card transaction over  
25 the Internet was patent-ineligible because the “steps can be performed in the human mind, or by a  
26 human using a pen and paper”); *see also, e.g., Mortg. Grader, Inc. v. First Choice Loan Servs.*  
27 *Inc.*, 811 F.3d 1314, 1324 (Fed. Cir. 2016) (claims for computer-implemented system to enable

1 borrowers to shop for loan packages anonymously were abstract where “[t]he series of steps  
2 covered by the asserted claims . . . could all be performed by humans without a computer”).<sup>4</sup>

3       Regardless of the particular analysis that is best suited to the specific facts at issue in a  
4 case, however, the Federal Circuit has emphasized that “the first step of the [*Alice*] inquiry is a  
5 meaningful one, i.e., . . . a substantial class of claims are *not* directed to a patent-ineligible  
6 concept.” *Enfish*, 822 F.3d at 1335. The court’s task is thus not to determine whether claims  
7 merely involve an abstract idea at some level, *see id.*, but rather to examine the claims “in their  
8 entirety to ascertain whether their character as a whole is directed to excluded subject matter,”  
9 *Internet Patents*, 790 F.3d at 1346.

10       **3. *Alice* Step Two—Evaluation of Abstract Claims for an Inventive Concept**

11       A claim drawn to an abstract idea is not necessarily invalid if the claim’s limitations—  
12 considered individually or as an ordered combination—serve to “transform the claims into a  
13 patent-eligible application.” *Content Extraction*, 776 F.3d at 1348. Thus, the second step of the  
14 *Alice* analysis (the search for an “inventive concept”) asks whether the claim contains an element  
15 or combination of elements that “ensure[s] that the patent in practice amounts to significantly  
16 more than a patent upon the [abstract idea] itself.” 573 U.S. at 218 (citation omitted).

17       The U.S. Supreme Court has made clear that transforming an abstract idea to a patent-  
18 eligible application of the idea requires more than simply reciting the idea followed by “apply it.”  
19 *Id.* at 221 (quoting *Mayo*, 566 U.S. at 72). In that regard, the Federal Circuit has repeatedly held  
20 that “[f]or the role of a computer in a computer-implemented invention to be deemed meaningful  
21 in the context of this analysis, it must involve more than performance of ‘well-understood, routine,  
22 [and] conventional activities previously known to the industry.’” *Content Extraction*, 776 F.3d at  
23 1347-48 (alteration in original) (quoting *Alice*, 134573 U.S. at 225); *see also Mortg. Grader*, 811

24 \_\_\_\_\_  
25 <sup>4</sup> One court has noted that, like all tools of analysis, the “pencil and paper” analogy must not be  
26 unthinkingly applied. *See Cal. Inst. of Tech. v. Hughes Commc’ns Inc.*, 59 F. Supp. 3d 974, 995  
27 (C.D. Cal. 2014) (viewing pencil-and-paper test as a “stand-in for another concern: that humans  
28 engaged in the same activity long before the invention of computers,” and concluding that test was  
unhelpful where “error correction codes were not conventional activity that humans engaged in  
before computers”).



1 F.3d at 1324-25 (holding that “generic computer components such as an ‘interface,’ ‘network,’  
2 and ‘database’ . . . do not satisfy the inventive concept requirement”); *Bancorp Servs.*, 687 F.3d at  
3 1278 (“To salvage an otherwise patent-ineligible process, a computer must be integral to the  
4 claimed invention, facilitating the process in a way that a person making calculations or  
5 computations could not.”).

6 Likewise, “[i]t is well-settled that mere recitation of concrete, tangible components is  
7 insufficient to confer patent eligibility to an otherwise abstract idea” where those components  
8 simply perform their “well-understood, routine, conventional” functions. *In re TLI Commc ’ns*  
9 *LLC*, 823 F.3d at 613 (citation omitted); *see also id.* (ruling that “telephone unit,” “server,” “image  
10 analysis unit,” and “control unit” limitations were insufficient to satisfy *Alice* step two where  
11 claims were drawn to abstract idea of classifying and storing digital images in an organized  
12 manner). “The question of whether a claim element or combination of elements is well-  
13 understood, routine and conventional to a skilled artisan in the relevant field is a question of fact”  
14 that “must be proven by clear and convincing evidence.” *Berkheimer*, 881 F.3d at 1368. This  
15 inquiry “goes beyond what was simply known in the prior art.” *Id.* at 1369.

16 In addition, the U.S. Supreme Court explained in *Bilski* that “limiting an abstract idea to  
17 one field of use or adding token postsolution components [does] not make the concept patentable.”  
18 561 U.S. at 612 (citing *Parker v. Flook*, 437 U.S. 584 (1978)); *see also Alice*, 573 U.S. at 222  
19 (same). The Federal Circuit has similarly stated that attempts “to limit the use of the abstract idea  
20 to a particular technological environment” are insufficient to render an abstract idea patent-  
21 eligible. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014) (internal quotation  
22 marks and citation omitted); *see also Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792  
23 F.3d 1363, 1366 (Fed. Cir. 2015) (“An abstract idea does not become nonabstract by limiting the  
24 invention to a particular field of use or technological environment, such as the Internet.”).

25 In addition, a “non-conventional and non-generic arrangement of known, conventional  
26 pieces” can amount to an inventive concept. *BASCOM Glob. Internet Servs., Inc. v. AT&T*  
27 *Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016). For example, in *BASCOM*, the Federal

1 Circuit addressed a claim for Internet content filtering performed at “a specific location, remote  
2 from the end-users, with customizable filtering features specific to each end user.” *Id.* Because this  
3 “specific location” was different from the location where Internet content filtering was  
4 traditionally performed, the Federal Circuit concluded this was a “non-conventional and non-  
5 generic arrangement of known, conventional pieces” that provided an inventive concept. *Id.* As  
6 another example, in *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, the Federal Circuit held that  
7 claims relating to solutions for managing accounting and billing data over large, disparate  
8 networks recited an inventive concept because they contained “specific enhancing limitation[s]  
9 that necessarily incorporate[d] the invention’s distributed architecture.” 841 F.3d 1288, 1301 (Fed.  
10 Cir. 2016), *cert. denied*, 138 S. Ct. 469 (Nov. 27, 2017). The use of a “distributed architecture,”  
11 which stored accounting data information near the source of the information in the disparate  
12 networks, transformed the claims into patentable subject matter. *Id.*

#### 13 4. Preemption

14 In addition to these principles, courts sometimes find it helpful to assess claims against the  
15 policy rationale for § 101. The U.S. Supreme Court has recognized that the “concern that  
16 undergirds [the] § 101 jurisprudence” is preemption. *Alice*, 573 U.S. at 223. Thus, courts have  
17 readily concluded that a claim is not patent-eligible when the claim is so abstract that it preempts  
18 “use of [the claimed] approach in all fields” and “would effectively grant a monopoly over an  
19 abstract idea.” *Bilski*, 561 U.S. at 612. However, the inverse is not true: “[w]hile preemption may  
20 signal patent ineligible subject matter, the absence of complete preemption does not demonstrate  
21 patent eligibility.” *FairWarning*, 839 F.3d at 1098 (alteration in original) (citation omitted).

### 22 III. DISCUSSION

23 Defendants’ motion to dismiss contends that the claims of the ’049 Patent fall within the  
24 patent-ineligible “abstract ideas” exception to § 101. The Court applies the *Alice* framework  
25 described above to the ’049 Patent. However, the Court need not individually analyze every claim  
26 if certain claims are representative. *See generally Alice*, 573 U.S. at 224-27 (finding claims to be  
27 patent-ineligible based on analysis of one representative claim). Here, the parties do not agree on



1 any representative claims. Nevertheless, in the absence of agreed-upon representative claims, the  
2 Court need not analyze each and every claim of the patent. *Content Extraction*, 776 F.3d at 1348.  
3 A district court may conduct its own analysis and determine which claim or claims are  
4 representative if “all the claims are substantially similar and linked to the same . . . idea.” *Id.*  
5 (internal quotation marks omitted).

6 First, the Court discusses the representative claims of the ’049 Patent, then turns to the  
7 substantive *Alice* analysis of the ’049 Patent. Lastly, the Court discusses whether a Rule 12 motion  
8 may properly address issues under 35 U.S.C. § 101.

9 **A. Representative Claim of the ’049 Patent**

10 The Court finds that claim 2 is representative of the ’049 Patent. Claim 2 encapsulates the  
11 other claims in the ’049 Patent, which are “substantially similar” and “linked to the same . . .  
12 idea,” per the *Content Extraction* court. 776 F.3d at 1348. The Federal Circuit has also held that if  
13 the claims “contain only minor differences in terminology but require performance of the same  
14 basic process, . . . they should rise or fall together.” *Smart Sys. Innovations, LLC v. Chicago*  
15 *Transit Auth.*, 873 F.3d 1364, 1368 n.7 (Fed. Cir. 2017).

16 Claim 2 discloses (1) a primary station with means for broadcasting inquiry messages in  
17 the form of a plurality of predetermined data fields, and (2) adding to each inquiry message an  
18 additional data field for polling at least one secondary station. ’049 Patent at 7:42-49.

19 The remaining independent claims (claims 1, 8, and 11) are directed to concepts that are  
20 substantially similar to and require performance of the same idea as claim 2, per the *Content*  
21 *Extraction* and *Smart Systems Innovations* courts.

22 Claim 1, like claim 2, discloses broadcasting “a series of inquiry messages” and a “means  
23 for adding to an inquiry message . . . an additional data field for polling at least one secondary  
24 station.” *Id.* at 7:29-41. Thus, claim 1 requires the performance of the same basic process as claim  
25 2, namely, broadcasting inquiry messages and then adding an additional polling data field to the  
26 inquiry messages. Likewise, claim 8 discloses the receipt of an inquiry message with “an  
27 additional data field for polling at least one secondary station.” *Id.* at 8:21-22. Therefore, claim 1

1 requires the performance of the same basic process as claim 8 because claims 1 and 8 both claim  
 2 appending an additional polling data field on an inquiry message. Moreover, claim 11 also claims  
 3 “adding to an inquiry message . . . an additional data field for polling at least one secondary  
 4 station.” For the same reasons stated above, claims 1 and 11 perform the same basic process of  
 5 adding an additional polling field onto an inquiry message.

6 Plaintiffs argue that claims 1 and 8 through 12 cannot be represented by claim 2 because  
 7 claims 1 and 8 through 12 include the limitation: “means are provided for determining when an  
 8 additional data field has been added . . . for determining whether [a secondary station] has been  
 9 polled from the additional data field and for responding to a poll when it has data for  
 10 transmission.” *See, e.g., id.* at 8:23-27; *Opp.* at 5. This purported distinction can be simplified to  
 11 requiring *additional* polling data. *See, e.g., ’049 Patent* at 7:37-40 (“[D]etermining when an  
 12 *additional data field* has been added . . . [and] determining whether [a secondary station] has been  
 13 polled from the *additional data field*.” (emphasis added)). This “additional polling” limitation  
 14 found in claims 1 and 8 through 12 is a distinction without a difference from claim 2’s polling  
 15 limitation. Claim 2’s polling limitation already captures the additional polling in claims 1 and 8  
 16 through 12 because claim 2 already provides for adding additional polling data to the inquiry  
 17 message. *See, e.g., id.* at 7:43-48 (“[M]eans are provided . . . for adding to each inquiry message  
 18 prior to transmission an *additional data field* for polling.” (emphasis added)). Thus, the polling  
 19 disclosed in claim 2 performs the same basic process as the polling in claims 1 and 8 through 12.  
 20 There is nothing in the claim language of claims 1 and 8 through 12 that sets apart the type of  
 21 additional polling that happens in claim 2 from the *additional* polling in claims 1 and 8 through  
 22 12. Therefore, pursuant to the *Smart Systems Innovations* court, claim 2 can be representative of  
 23 claims 1 and 8 through 12.

24 In sum, claim 2 is representative of the ’049 Patent. Below, the Court conducts the *Alice*  
 25 analysis for claim 2 of the ’049 Patent.

26 **B. *Alice* Step One for Claim 2 of the ’049 Patent—Whether the Claim is Directed to**  
 27 **an Abstract Idea**



1 Defendants argue that (1) the claim is directed to generalized steps to be performed on a  
2 computer using conventional computer activity; (2) the '049 Patent automates a process that can  
3 be performed manually; (3) the Patent uses conventional Bluetooth technology to more frequently  
4 perform the conventional activity of polling; and (4) analogous cases have found similar ideas to  
5 be abstract. Mot. at 12-16. Plaintiffs respond by arguing that (1) the claimed advance provided  
6 benefits not found in the prior art; (2) the Federal Circuit would not regard the claimed advance as  
7 an abstract idea; and (3) the United States Patent and Trademark Office ("USPTO") would not  
8 regard the claimed advance as an abstract idea. Opp. at 7-14. The Court agrees with Defendants.

9 Step one of the *Alice* framework directs the Court to assess "whether the claims at issue are  
10 directed to [an abstract idea]." *Alice*, 573 U.S. at 218. The step one inquiry "applies a stage-one  
11 filter to claims, considered in light of the specification, based on whether 'their character as a  
12 whole is directed to excluded subject matter.'" *Enfish*, 822 F.3d at 1335 (citation omitted). Thus,  
13 the Court conducts its step one inquiry by first identifying what the "character as a whole" of  
14 claim 2 of the '049 Patent is "directed to," and then discussing whether this is an abstract idea. In  
15 distilling the character of a claim, the Court is careful not to express the claim's focus at an unduly  
16 "high level of abstraction . . . untethered from the language of the claims," but rather at a level  
17 consonant with the level of generality or abstraction expressed in the claims themselves. *Enfish*,  
18 822 F.3d at 1337; *see also Thales Visionix*, 850 F.3d at 1347 ("We must therefore ensure at step  
19 one that we articulate what the claims are directed to with enough specificity to ensure the step  
20 one inquiry is meaningful.").

21 The Court finds that the character as a whole of the '049 Patent is directed to the abstract  
22 idea of additional polling in a wireless communication system. Even the text of the '049 Patent  
23 supports the conclusion that the character as a whole of the Patent is directed to the "general  
24 invention concept of polling . . . via a broadcast channel used as part of the inquiry procedure."  
25 '049 Patent at 3:24-29. Moreover, the Patent is "applicable to a range of other communication  
26 systems." *Id.* at 1:6-8. In plain language, claim 2 discloses: (1) a primary station with means for  
27 broadcasting inquiry messages in the form of a plurality of predetermined data fields, and (2)



1 adding to each inquiry message an additional data field for polling at least one secondary station.  
2 '049 Patent at 7:42-49. The Court finds claim 2 abstract on the following 3 bases. First, claim 2  
3 discloses only generic features of its hardware and software components as well as routine  
4 functions. Second, analogous cases have held that similar claims are abstract. Third, there are  
5 long-standing practices analogous to the claimed invention.

6 **1. Claim 2 Discloses Routine Functions and Generic Hardware and Software**  
7 **Components**

8 The Federal Circuit has recognized that “[g]eneralized steps to be performed on a  
9 computer using conventional computer activity are abstract.” *RecogniCorp, LLC v. Nintendo Co.,*  
10 *Ltd.*, 855 F.3d 1322, 1326 (Fed. Cir. 2017) (internal quotation marks omitted). For instance, the  
11 Federal Circuit found that a patent claim for taking digital images using a telephone, storing the  
12 images, then transmitting the images to a server which receives the images failed step one of *Alice*.  
13 *TLI Comm’cns*, 823 F.3d at 610, 612. In explaining why the patent claim failed step one of *Alice*,  
14 the *TLI* court wrote:

15 Contrary to TLI’s arguments on appeal, the claims here are not  
16 directed to a specific improvement to computer functionality. Rather,  
17 they are directed to the use of conventional or generic technology in  
18 a nascent but well-known environment . . . . The specification does  
19 not describe a new telephone, a new server, or a new physical  
20 combination of the two. The specification fails to provide any  
21 technical details for the tangible components, but instead  
22 predominantly describes the system and methods in purely functional  
23 terms. For example, the “telephone unit” of the claims is described as  
24 having “the standard features of a telephone unit” . . . . Likewise, the  
25 server is described simply in terms of performing generic computer  
26 functions such as storing, receiving, and extracting data.

27 *Id.* In essence, the *TLI* court found that because the *TLI* patent failed to provide technical details  
28 for the components, but instead described the system and methods “in purely functional terms,”  
functions that were generic to a computer, the *TLI* patent claim failed step one of *Alice*. *Id.*

Here, claim 2 is akin to the *TLI* patent claim. Claim 2 describes the purported invention in  
broad, generic, functional terms but fails to identify *how* those ends are achieved, with the  
specification being no clearer. Moreover, claim 2 is not directed to a specific improvement to  
conventional or generic Bluetooth technology. For instance, the mechanism claimed in the Patent



1 is sending inquiry messages containing a polling data field, '049 Patent at 4:15-20, and the Patent  
2 admits that the claimed “mechanism is entirely compatible with *conventional* Bluetooth systems,”  
3 *id.* at 4:19-20 (emphasis added).

4 First, there is no question that the primary and secondary stations disclosed in claim 2 are  
5 generic, conventional computing devices. According to the specification, the “present invention  
6 relates to a communication system and further relates to primary and secondary stations for use in  
7 such a system.” *Id.* at 1:3-5. A primary station, as disclosed in the abstract, is a master station in a  
8 piconet. *Id.* at abstract, Fig. 1. A secondary station, as disclosed in the abstract, is the same as a  
9 slave station in a piconet. *Id.* As the specification explicitly admits, communication stations in a  
10 prototypical Bluetooth network “form ad-hoc networks which are known as piconets, each  
11 comprising a master station and up to seven slave stations. All stations are identical and capable of  
12 acting as master or slave as required.” *Id.* at 1:19-24. The specification describes potential slave  
13 stations as “Human/machine Interface Device[s] (HID) . . . such as a keyboard, mouse, games  
14 controller, graphics pad or the like.” *Id.* at 1:29-31. Nowhere in the Patent does the patentee  
15 describe a specialized keyboard, mouse, games controller, or graphics pad that performs any  
16 operation beyond that of their ordinary use in technology. Thus, a primary or secondary station  
17 merely consists of a generic computing device.

18 Moreover, claim 2 discloses that a generic computing device has means for broadcasting  
19 inquiry messages in the form of a plurality of predetermined data fields. It is conventional under  
20 Bluetooth protocols that the generic computing slave station has the means of joining a piconet  
21 through “[i]nquiry[, which] allows a would-be slave to find a base station and issue a request to  
22 join the piconet.” *Id.* at 1:56-57; *see also id.* at 4:11-13 (“The Bluetooth inquiry procedure allows  
23 a would-be slave 101 to find a base station and issue a request to join its piconet”).

24 Communications between stations occur via the exchange of data “packets” over a wireless  
25 channel. *Id.* at 5:19-20. The specification explains that when “a Bluetooth unit wants to discover  
26 other Bluetooth devices, it enters a so-called inquiry substate.” *Id.* at 4:23-25. It is during this  
27 standard Bluetooth inquiry substate that the primary station “issues an inquiry message containing

1 a General Inquiry Access Code (GIAC) or a number of optional Dedicated Inquiry Access Codes  
 2 (DIAC).” *Id.* at 4:25. Thus, the inquiry message comprises data fields—the General Inquiry  
 3 Access Code or Dedicated Inquiry Access Codes—which the Patent does not claim to have  
 4 invented. *Id.* Additionally, Defendants argue, and the Plaintiffs and the Patent concede, that the  
 5 Patent did not invent the process of broadcasting inquiry messages, or the inquiry messages  
 6 themselves. *See id.* at 3:30-31 (“A basic Bluetooth network configuration is illustrated in FIG.  
 7 1.”); *id.* at 5:12-14 (“The presence of the extra data field 504 means that the . . . space  
 8 *conventionally allowed* at the end of a Bluetooth inquiry packet is reduced.” (emphasis added)); *id.*  
 9 at 5:19-20 (“The *standard* inquiry packet is an ID packet . . . of length 68 bits.” (emphasis  
 10 added)); *Opp.* at 4 (“The patent described . . . a Bluetooth ad hoc network, circa 2000 . . . . In that  
 11 network, a host device (*master*) broadcasts an *inquiry message* every 10 ms then listens for a reply  
 12 from a nearly portable device (*slave*), such as an HID . . . .” (emphasis in original)); *id.* at 6  
 13 (“Existing Bluetooth ‘inquiry’ messaging involved entering ‘inquiry scan’ and ‘inquiry response’  
 14 states at various predetermined times with the goal of establishing a ‘piconet’ between a primary  
 15 station and secondary stations.”). In any event, the Federal Circuit has held that “receiv[ing] and  
 16 send[ing] information over a network is not even arguably inventive.” *buySAFE*, 765 F.3d at 1355.

17 Thus, a primary station with means for broadcasting inquiry messages in the form of a  
 18 plurality of predetermined data fields consists of a generic computing device (i.e., primary station)  
 19 that performs a generic, well-known function (i.e., broadcasting inquiry messages in the form of a  
 20 plurality of predetermined data fields).

21 The crux of the ’049 Patent’s purported improvement over prior art Bluetooth devices lies  
 22 in the second part of claim 2: adding to each inquiry message an additional data field for polling at  
 23 least one secondary station. In other words, the Patent “recognized that it is possible to piggy-back  
 24 a broadcast channel on the inquiry messages issued by the master 100. The broadcast channel can  
 25 be used to poll HIDs at regular intervals.” ’049 Patent at 4:15-18. However, “piggy-backing”  
 26 polling data onto a conventional inquiry message is abstract. Per claim 2, “means are provided for  
 27 broadcasting a series of [conventional] inquiry messages, each in the form of a plurality of



1 predetermined data fields.” *Id.* at 7:43-45. The process of “piggy-backing” polling data onto a  
2 conventional inquiry message is therefore a conventional concept because in claim 2, the data  
3 inquiry message is already comprised of “a plurality of predetermined data fields.” *Id.* Adding an  
4 *additional* data field for polling a secondary station is no different than what is already claimed—a  
5 plurality of data fields that comprise the inquiry message. After all, it is “no less abstract to refer to  
6 two [data] packets as it is to refer to one, and a new idea is equally capable of abstraction as an old  
7 one.” *Intellectual Ventures II LLC v. JP Morgan Chase & Co.*, 2015 WL 1941331, at \*9  
8 (S.D.N.Y. Apr. 28, 2015). In addition, the Patent specification admits that “the *general invention*  
9 *concept* of polling HIDs via a broadcast channel used as part of the inquiry procedure is not  
10 restricted to Bluetooth devices and is applicable to other communications arrangements.” ’049  
11 Patent at 3:24-28 (emphasis added); *see also id.* at 3:22-24 (“In the following description we  
12 consider particularly a system which utilises [sic] Bluetooth protocols for communication of  
13 messages between stations.”). Moreover, Plaintiffs admit in their opposition that interoperability  
14 with conventional Bluetooth functionality was maintained by “‘appending’ to the inquiry message  
15 format *instead of changing [the inquiry message format] from the ground up.*” Opp. at 6 (emphasis  
16 added).

17 Furthermore, adding an additional data field for polling is no different than what the Court  
18 has already determined to be conventional computing activity, namely, sending an inquiry  
19 message comprising a “plurality of predetermined data fields.” *Id.* at 7:43-45. In other words,  
20 adding an additional polling data field to the data fields already present in the inquiry message is a  
21 more specific form of a generic implementation of the inquiry message. Under Federal Circuit  
22 law, “a claim is not patent eligible merely because it applies an abstract idea in a narrow way.”  
23 *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1287 (Fed. Cir. 2018). Also, the addition of an  
24 additional data field for polling to each inquiry message is similar to a concept found abstract in  
25 *Digitech Image Techs., LLC v. Elecs. For Imaging, Inc.*, 785 F.3d 1344 (Fed. Cir. 2014). In  
26 *Digitech*, the claim recited “a process of taking two data sets and combining them into a single  
27 data set . . . . The two data sets are generated by taking existing information . . . and organizing

1 this information in a new form. The above claim thus recites an ineligible abstract process of  
 2 gathering and combining data that does not require input from a physical device.” *Id.* at 1351.  
 3 Here, existing data in the form of a plurality of data fields that comprise the inquiry message is  
 4 combined with another data set—the additional data field for polling secondary stations—thus  
 5 organizing the inquiry message in a new form that contains the polling data. This is also done  
 6 without input from a physical device, like the *Digitech* claim.

7 Furthermore, these inquiry messages and polling data are transmitted and received with  
 8 conventional Bluetooth hardware. ’049 Patent at 3:30-31 (“A basic Bluetooth network  
 9 configuration is illustrated in FIG. 1.”); *id.* at 3:57-4:10; *id.* at 4:19-20 (“[T]he mechanism is  
 10 entirely compatible with conventional Bluetooth systems”). As the Federal Circuit has held,  
 11 “[c]laims directed to generalized steps to be performed on a computer using conventional  
 12 computer activity are not patent eligible.” *Two-Way Media Ltd. v. Comcast Cable Commc’ns,*  
 13 *LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017).

14 **2. Analogous Cases Have Found that Similar Claims are Abstract**

15 Based on comparisons of the claim at issue “to those claims already found to be directed to  
 16 an abstract idea in previous cases,” *Enfish*, 822 F.3d at 1334, this Court concludes that adding to  
 17 each inquiry message an additional data field for polling at least one secondary station is an  
 18 abstract idea. This analysis alone can be “sufficient” for a finding of abstractness. *Id.* For instance,  
 19 in *Two-Way Media*, the claim in question was directed to “first processing the data, then routing it,  
 20 [and] controlling it.” 874 F.3d at 1339. Like the ’049 Patent, this was done in the context of  
 21 “transmitting message packets over a communications network.” *Id.* at 1334. Here, claim 2  
 22 discloses a similar structure to the *Two-Way Media* claim. Data is *processed* by preparing a  
 23 “plurality of predetermined data fields” that comprise a series of inquiry messages. The data (i.e.,  
 24 inquiry messages) are then *routed* to secondary stations while being *controlled* by introducing the  
 25 polling data fields to the inquiry messages. The *Two-Way Media* court invalidated the claim in  
 26 question because the claim did “not sufficiently describe how to achieve these results in a non-  
 27 abstract way.” *Id.* at 1337. Specifically, the *Two-Way Media* claim was abstract because “the claim



1 refers to certain data ‘complying with the specifications of a network communication protocol’  
 2 and the data being routed in response to one or more signals from a user, without specifying the  
 3 rules forming the communication protocol or specifying parameters for the user signals.” *Id.* at  
 4 1339. Here, claim 2 similarly lacks detail as to any of the rules or parameters that govern the  
 5 additional polling data field. ’049 Patent at 7:42-49 (“[M]eans are provided . . . for adding to each  
 6 inquiry message prior to transmission an additional data field for polling at least one secondary  
 7 station.”); *see also Elec. Power Grp.*, 830 F.3d at 1356 (“Indeed, the essentially result-focused  
 8 functional character of claim language has been a frequent feature of claims held ineligible under  
 9 § 101.”); *Clarilogic, Inc. v. FormFree Holdings Corp.*, 681 Fed. App’x 950, 954 (Fed. Cir. 2017)  
 10 (“But a method for collection, analysis, and generation of information reports, *where the claims*  
 11 *are not limited to how the collected information is analyzed or reformed*, is the height of  
 12 abstraction.” (emphasis added)).

13 Furthermore, claim 2 can also be analogized to the claims found in *Compression Tech.*  
 14 *Sols. LLC v. EMC Corp.*, 2013 WL 2368039 (N.D. Cal. May 29, 2013), *aff’d*, 557 Fed. App’x  
 15 1001 (Fed. Cir. 2014). The *Compression Technology* claims “cover taking an input broken into  
 16 packets, parsing the input by some unspecified criteria, and then outputting the input as packets of  
 17 equal or larger sizes.” *Id.* at \*7. The *Compression Technology* court construed “information  
 18 streams” and “packets” to refer to digital data. *Id.* at \*3. Here, claim 2’s inquiry messages are  
 19 broken into packets repeatedly sent over successive timeslots, as described in the specification.  
 20 ’049 Patent at 4:31-34 (“The [generic inquiry] message is sent twice on two frequencies in even  
 21 timeslots with the following, odd timeslots used to listen for replies on the two corresponding  
 22 inquiry response hopping frequencies.”). The inquiry messages are then parsed into “groups or  
 23 packets of information” by adding the polling data field to the inquiry message. 2013 WL  
 24 2368039, at \*1. The inquiry messages appended with the polling data field are the output. The  
 25 *Compression Technology* court found the claim to be abstract because the patent “can be  
 26 performed as mental processes; it is more abstract than other patents the Federal Circuit has found  
 27 impermissibly abstract; and it is so broad that it would inappropriately limit future innovation.” *Id.*

1 at \*5.

2 In addition, claim 2 can be analogized to the claim found in *3G Licensing, S.A. v.*  
 3 *Blackberry Ltd.*, 302 F. Supp. 3d 640 (D. Del. 2018). In *3G Licensing*, the claim was directed to  
 4 “generating supplementary data to check for errors in data during [wireless] transmission” by  
 5 “var[ying] the original data to create supplementary data.” *Id.* at 646. Here, the original data (i.e.,  
 6 the inquiry message sent by the primary station) is *varied* by adding the polling data field to create  
 7 supplementary data (i.e., the polling data field appended to the inquiry message). The *3G*  
 8 *Licensing* court found the concept to be abstract because it merely reordered data and generated  
 9 additional data. *Id.* at 651. Moreover, the *3G Licensing* court pointed out that the claims in  
 10 question “do not say how data is reordered, how to use reordered data, how to generate additional  
 11 data, how to use additional data, or even that any data is transmitted.” *Id.* Here, as discussed  
 12 above, claim 2 contains only vague functional restrictions. Claim 2 fails to disclose: (1) *how* the  
 13 data is reordered other than claiming that the “additional data field for polling” is “added to each  
 14 inquiry message,” ’049 Patent at 7:46-49; (2) *how* to use the inquiry message appended with the  
 15 additional data field for polling; (3) *how* the additional data field for polling is added to each  
 16 inquiry; (4) *how* the additional data field for polling is generated; and (5) whether any data is  
 17 actually transmitted to the secondary stations. Under Federal Circuit law, “reciting . . . data  
 18 manipulation steps” without meaningful limitations is, at bottom, abstract. *Capital One Fin. Corp.*,  
 19 850 F.3d at 1340.

20 Plaintiffs argue that the claim is more analogous to those in *Enfish*. *Opp.* at 13. In *Enfish*,  
 21 the claims were “specifically directed to a *self-referential* table for a computer database.” 822 F.3d  
 22 at 1337 (emphasis in original). The *Enfish* court found that the claims were non-abstract because  
 23 they were “directed to a specific improvement to computer functionality,” rather than mere  
 24 “generalized steps to be performed on a computer using conventional computer activity.” *Id.* at  
 25 1338. In particular, the claims in *Enfish* involved “a specific type of data structure designed to  
 26 improve the way a computer stores and retrieves data in memory.” *Id.* at 1339. However, *Enfish* is  
 27 inapposite. The *Enfish* claims and specification provided great detail as to how the data structure

28



1 improved “the capability of the [computer] system as a whole.” *Phoenix Licensing, L.L.C. v.*  
 2 *Consumer cellular, Inc.*, 2017 WL 1065938, at \*18 (E.D. Tex. Mar. 8, 2017) (citing *Enfish*, 822  
 3 F.3d at 1336), *report and recommendation adopted* 2017 WL 1177988 (E.D. Tex. Mar. 30, 2017).

4 Contrastingly, here, the claim language lacks specificity as to the rules or parameters that  
 5 govern the additional polling data field. Moreover, the ’049 Patent specification admits that all  
 6 tangible computing devices found in the Patent are all generic computing devices, upon which the  
 7 ’049 Patent does not purport to improve. *See, e.g.*, ’049 Patent at 1:19-24 (“Communication in a  
 8 Bluetooth network takes place . . . [over] ad-hoc networks which are known as piconets, each  
 9 comprising a master station and up to seven slave stations. All stations are identical and capable of  
 10 acting as master or slave as required.”); *id.* at 1:29-31 (describing generic potential slave stations  
 11 such as a “keyboard, mouse, games controller, graphics pad or the like” without further  
 12 explication); *id.* at 4:19-20 (describing the purported invention as “entirely compatible with  
 13 conventional Bluetooth systems.”); *id.* at 3:30-31 (“A basic Bluetooth network configuration is  
 14 illustrated in FIG. 1.”); *Opp.* at 4 (“The patent described . . . a Bluetooth ad hoc network, circa  
 15 2000 . . . . In that network, a host device (*master*) broadcasts an *inquiry message* every 10 ms then  
 16 listens for a reply from a nearby portable device (*slave*), such as an HID . . . .”). For instance, the  
 17 ’049 Patent does not claim an improved Bluetooth station, but rather, uses existing Bluetooth  
 18 techniques to slightly modify one aspect of the technology—the transmission of an inquiry  
 19 message—in a vague and generic way. ’049 Patent at 3:24-28 (“[T]he general invention concept  
 20 of polling HID’s via a broadcast channel used as part of the inquiry procedure is not restricted to  
 21 Bluetooth devices and is applicable to other communications arrangements.”); *id.* at 5:19  
 22 (referring to broadcasting an inquiry message as “standard”); *id.* at 5:12-14 (referencing the “guard  
 23 space conventionally allowed at the end of a Bluetooth inquiry packet”); *id.* at 7:43-45 (claiming  
 24 the process of broadcasting conventional “inquiry messages, each in the form of a plurality of  
 25 predetermined data fields”).

26 Plaintiffs also assert that the USPTO would not find the ’049 Patent abstract because the  
 27 Patent does not fall within any of the 3 categories the USPTO characterized as abstract ideas:

1 mathematical concepts, certain methods of organizing human activity, and mental processes. 84  
2 Fed. Reg. 50, 52 (Jan. 7, 2019). The portion of the Federal Register to which Plaintiffs cite  
3 expressly states that “[t]his guidance does not constitute substantive rulemaking and does not have  
4 the force and effect of law. *Id.* at 51. Moreover, the United States Supreme Court has held that  
5 interpretations “contained in policy statements, agency manuals, and enforcement guidelines . . .  
6 lack the force of law . . . [and] do not warrant *Chevron*-style deference.” *Christensen v. Harris*  
7 *Cty.*, 529 U.S. 576, 587 (2000).

8 **3. There are Long-Standing Practices Analogous to the Claimed Steps**

9 Claim 2 is also abstract because as the specification discloses, there are long-standing  
10 practices analogous to the claimed steps. Steps that can be performed manually performed by a  
11 human are abstract. *See, e.g., Mortg. Grader*, 811 F.3d at 1324 (claims for computer-implemented  
12 system to enable borrowers to shop for loan packages anonymously were abstract when “[t]he  
13 series of steps covered by the asserted claims . . . could all be performed by humans without a  
14 computer”); *Content Extraction*, 776 F.3d at 1347 (finding claims abstract when “humans have  
15 always performed these functions”).

16 The ’049 Patent discloses that a slave HID can “enter a ‘park’ mode and cease active  
17 communications” with the master. ’049 Patent at 1:43-47. However, the ’049 Patent also discloses  
18 that a user can manually awaken an HID device:

19 In particular, for a HID to sign on to the piconet automatically when  
20 the host system is turned on it will either have to be regularly waking  
21 up to look for Bluetooth inquiry bursts, thereby consuming power, or  
22 it will need to be *manually woken up by the user*.

23 It is therefore more likely that a HID will remain inactive until it is  
24 woken up, either by being *explicitly switched on or by a user*  
25 *attempting some form of input. . . .*

26 It is therefore an object of the invention to address the problem of  
27 providing a responsive link between a HID and a host system which  
28 allows the HID to go to sleep during periods of inactivity.

*Id.* at 1:66-2:21 (emphasis added). Plaintiffs state in their opposition that the ’049 Patent addressed  
“the need to minimize power consumption of battery-powered [HID] devices on an ad hoc









1 acting as master or slave as required.” *Id.* at 1:19-24. The specification describes potential slave  
 2 stations as generic “Human/machine Interface Device[s] (HID) . . . such as a keyboard, mouse,  
 3 games controller, graphics pad or the like.” *Id.* at 1:29-31; *see also* 3:38-41 (“In general[,] the  
 4 networking components (i.e. the Bluetooth chip for a Bluetooth network) of all stations . . . will be  
 5 implemented identically.”); *id.* at 3:30-31 (“A basic Bluetooth network configuration is illustrated  
 6 in FIG. 1.”); *id.* at 4:19-20 (“[T]he mechanism is entirely compatible with conventional Bluetooth  
 7 systems.”). Nowhere in the Patent does the patentee describe a specialized keyboard, mouse,  
 8 games controller, or graphics pad that performs any operation beyond that of their ordinary use in  
 9 technology. The Patent also fails to disclose any specific details about the stations other than  
 10 noting that “FIG. 2 is a block schematic diagram of a *typical* Bluetooth station.” *Id.* at 3:10-11  
 11 (emphasis added). Thus, a primary or secondary station merely consists of a generic computing  
 12 device.

13 Additionally, the Patent did not invent the process of broadcasting inquiry messages, or the  
 14 inquiry messages themselves. *See id.* at 5:12-14 (“The presence of the extra data field 504 means  
 15 that the . . . space *conventionally allowed* at the end of a Bluetooth inquiry packet is reduced.”  
 16 (emphasis added)); *Opp.* at 4 (“The patent described . . . a Bluetooth ad hoc network, circa 2000 . . .  
 17 . . . In that network, a host device (*master*) broadcasts an *inquiry message* every 10 ms then listens  
 18 for a reply from a nearby portable device (*slave*), such as an HID . . . .” (emphasis in original)); *id.*  
 19 at 6 (“Existing Bluetooth ‘inquiry’ messaging involved entering ‘inquiry scan’ and ‘inquiry  
 20 response’ states at various predetermined times with the goal of establishing a ‘piconet’ between a  
 21 primary station and secondary stations.”).

22 Having stripped away the undisputedly “well-understood, routine, conventional activity”  
 23 and computing devices, *Affinity Labs*, 838 F.3d at 1262, all that is left is the abstract idea of  
 24 adding an additional polling data field to the inquiry message. However, even that idea is  
 25 conventional activity. Per claim 2, the data inquiry message is already comprised of “a plurality of  
 26 predetermined data fields.” ’049 Patent at 7:43-45. Adding an *additional* data field for polling a  
 27 secondary station is no different than what is already claimed: a plurality of data fields that

1 comprise the inquiry message. The polling data field would merely be another data field that  
2 comprises the inquiry message. Even the Patent specification admits that “the *general invention*  
3 *concept* of polling HIDs via a broadcast channel used as part of the inquiry procedure is not  
4 restricted to Bluetooth devices and is applicable to other communications arrangements.” *Id.* at  
5 3:24-28 (emphasis added); *see also id.* at 3:22-24 (“In the following description we consider  
6 particularly a system which utilises [sic] Bluetooth protocols for communication of messages  
7 between stations.”).

8 Moreover, if “a claim’s only ‘inventive concept’ is the application of an abstract idea using  
9 conventional and well-understood techniques, the claim has not been transformed into a patent-  
10 eligible application of an abstract idea.” *BSG Tech*, 899 F.3d at 1290-91. As discussed above, the  
11 abstract idea of adding an additional data field for polling and the remaining elements of claim 2  
12 are generic and conventional. Thus, per *BSG Tech*, the generic computer implementation of the  
13 abstract idea is not enough to render claim 2 patentable.

14 Thus, none of claim 2’s elements, assessed individually, provides an inventive concept.  
15 After all, “[i]nstructing one to ‘apply’ an abstract idea and reciting no more than generic computer  
16 elements performing generic computer tasks does not make an abstract idea patent-eligible.”  
17 *Capital One Bank*, 792 F.3d at 1368. Moreover, the ordered combination of these elements also  
18 does not yield an inventive concept. In *BASCOM*, the Federal Circuit held that “an inventive  
19 concept can be found in the non-conventional and non-generic arrangement of known,  
20 conventional pieces.” 827 F.3d at 1350. However, the arrangement of claim 2’s elements are  
21 conventional, per *Two-Way Media*.

22 In *Two-Way Media*, the claim in question was directed to “first processing the data, then  
23 routing it, [and] controlling it.” 874 F.3d at 1339. Like the ’049 Patent, this was done in the  
24 context of “transmitting message packets over a communications network.” *Id.* at 1334. Here,  
25 claim 2 discloses a similar structure to the *Two-Way Media* claim. Data is *processed* by preparing  
26 a “plurality of predetermined data fields” that comprise a series of inquiry messages. The data  
27 (i.e., inquiry messages) are then *routed* to secondary stations while being *controlled* by



1 introducing the polling data fields to the inquiry messages. The *Two-Way Media* court invalidated  
2 the claim in question because the claim did “not sufficiently describe how to achieve these results  
3 in a non-abstract way.” *Id.* The *Two-Way Media* court also called the arrangement of these steps  
4 “conventional.” *Id.* at 1339.

5 Even the '049 Patent admits that the ordered combination of the elements is conventional.  
6 For instance, in discussing “communication link[s] supported in a [typical] Bluetooth network,”  
7 '049 Patent at 1:40-41, the Patent reveals that the “slave has to be polled before it can submit a  
8 request to leave park mode and become active,” *id.* at 1:40-49, and that the “[i]nquiry [process]  
9 allows a would-be slave to find a base station and issue a request to join the piconet,” *id.* at 1:54-  
10 57. Also, the transmission of the inquiry message and method of polling a would-be slave is  
11 performed on generic Bluetooth hardware. *See, e.g., id.* at 3:57-4:10, Fig. 2. Thus, the Patent  
12 recites the abstract idea of adding polling data to an inquiry message performed on generic  
13 Bluetooth hardware. The '049 Patent fails to show that arrangement of these elements in claim 2 is  
14 anything but the conventional arrangement of elements in a typical Bluetooth network. *See, e.g.,*  
15 *id.* at Fig. 1; *see also id.* at 3:30-31 (“A basic Bluetooth network configuration is illustrated in  
16 FIG. 1.”). As aforementioned, the inquiry process of a typical Bluetooth network requires sending  
17 out inquiry messages, and it is conventional Bluetooth protocol that a would-be slave has to be  
18 polled before it can become active.

19 Plaintiff’s opposition argues that there are many advantages of the '049 Patent, such as  
20 conserving HID battery power and speeding up the process of connecting to a master. *Opp.* at 4.  
21 The United States Supreme Court has held that “[g]roundbreaking, innovative, or even brilliant  
22 discovery does not by itself satisfy the § 101 inquiry. *Ass’n for Molecular Pathology v. Myriad*  
23 *Genetics, Inc.*, 569 U.S. 576, 591 (2013). In addition, the Federal Circuit has held that “a patent  
24 could not be granted for ‘mere naked discovery.’” *In re Beineke*, 690 F.3d 1344, 1349 (Fed. Cir.  
25 2012). Thus, simply because Plaintiff claims that the '049 Patent has advantages over the prior art  
26 does not render the Patent valid. In light of all the evidence from the '049 Patent that the claimed  
27 elements are generic, and the fact that appending a polling inquiry to an inquiry message fails to

1 lift the Patent out of abstractness, Plaintiff’s attorney arguments explaining why the Patent  
2 features constitute improvements on older technology does not mean that the § 101 inquiry is met.  
3 Furthermore, under Federal Circuit law, the *Alice* inquiry must focus on the *claim language*. *See,*  
4 *e.g., Accenture, 728 F.3d at 1345* (“[T]he important inquiry for a § 101 analysis is to look to the  
5 claim.”); *CMG Fin. Servs., Inc., 50 F. Supp. 3d 1306, 1326* (“None of the elements in these  
6 Claims limit the level of their inherent abstraction.”), *aff’d, 616 Fed. App’x 420* (Fed. Cir. 2015).  
7 “In some cases, when improvements in the specification are *captured in the claims*, whether an  
8 element or combination of elements is well-understood becomes a question of fact.” *Symantec*  
9 *Corp. v. Zscaler, Inc., 2018 WL 3539269, at \*2* (N.D. Cal. July 23, 2018) (citing *Berkheimer, 881*  
10 *F.3d at 1368-69*) (emphasis added). These advantages are not recited in the claim language itself.  
11 Thus, the advantages Plaintiff cites to are irrelevant to the *Alice* inquiry. Therefore, claim 2 of the  
12 ’049 Patent does not contain an inventive concept.

13 As stated above, the Court finds that at *Alice* step one, claim 2 of the ’049 Patent is  
14 directed to an abstract idea. At *Alice* step two, there is no inventive concept sufficient to save the  
15 claim. Thus, the Court concludes that the ’049 Patent is directed to unpatentable subject matter  
16 under § 101. Next, the Court addresses whether a Rule 12 motion is a proper vehicle with which to  
17 address § 101 issues.

18 **D. Whether § 101 Issues may be Properly Addressed in a Rule 12 Motion**

19 Under Federal Circuit law, “[w]hether a claim recites patent eligible subject matter is a  
20 question of law which . . . has in many cases been resolved on motions to dismiss or summary  
21 judgment.” *Berkheimer v. HP Inc., 881 F.3d 1360, 1368* (Fed. Cir. 2018); *see also Secured Mail*  
22 *Sols. LLC., 873 F.3d at 912* (affirming determination of ineligibility made on 12(b)(6) motion).  
23 “As our cases demonstrate, not every § 101 determination contains genuine disputes over the  
24 underlying facts material to the § 101 inquiry.” *Id.*

25 Plaintiffs’ second amended complaint asserts:

26 The ’049 Patent describes problems and shortcomings in the field of  
27 communications between devices in 2000 and describes and claims  
novel and inventive technological improvements and solutions to



1 those problems and shortcomings. The written description of the '049  
2 Patent describes in technical detail each limitation of the claims,  
3 allowing a person of ordinary skill in the art to understand what the  
4 limitation covers and how the combination of claim elements differed  
5 markedly from and improved upon what may have been considered  
6 conventional or generic.

7 ECF No. 77 at ¶ 10. However, there are no *specific* factual allegations or references to the '049  
8 Patent specification—which might disclose that the invention is an improvement over the prior  
9 art—that undergird Plaintiffs' purported fact questions found in Plaintiffs' complaint.

10 In *Uniloc USA, Inc. v. Apple Inc.*, the court found the patent at issue invalid even though  
11 the plaintiff insisted there were factual disputes precluding judgment on the pleadings. 2018 WL  
12 2287675, at \*7 (N.D. Cal. May 18, 2018). The *Uniloc* court rejected plaintiff's contentions that the  
13 claimed invention did not feature "routine and conventional elements like hardware  
14 configurations." *Id.* (internal quotations omitted). The *Uniloc* court reasoned that the plaintiff was  
15 attempting to "manufacture a factual question" by relying on attorney arguments. *Id.* Here, the  
16 situation is analogous to that in *Uniloc*; Plaintiff's attorney arguments in the second amended  
17 complaint do not create a factual dispute precluding disposition of the instant case on a Rule 12  
18 motion.

19 Likewise, the *Cellspin Soft, Inc. v. Fitbit, Inc.* court found that the plaintiff did not create a  
20 factual dispute in a § 101 motion for judgment on the pleadings because the plaintiff "fail[ed] to  
21 identify any portion of the specification which describes the purportedly inventive" concept. 316  
22 F. Supp. 3d 1138, 1154 n.12 (N.D. Cal. 2018). Here, Plaintiff's brief and second amended  
23 complaint have also failed to transform ideas in the '049 Patent—such as the primary and  
24 secondary Bluetooth stations or the inquiry message—into non-generic, inventive concepts. As the  
25 Court found above, all such ideas found in the Patent are generic. Therefore, no factual dispute  
26 exists that would preclude this Court from finding the '049 Patent invalid based on a Rule 12  
27 motion.

28 Furthermore, a genuine dispute of material fact "requires more than labels and  
conclusions." *Twombly*, 550 U.S. at 555. Courts need not "assume the truth of legal conclusions  
merely because they are cast in the form of factual allegations. Therefore, conclusory allegations


1 of law and unwarranted inferences are insufficient to defeat a motion to dismiss.” *Fayer*, 649 F.3d  
2 at 1064 (internal citation and quotation marks omitted); *see also Adams*, 355 F.3d at 1183  
3 (“[C]onclusory allegations of law and unwarranted inferences are insufficient to defeat a motion to  
4 dismiss.”). Here, Plaintiffs’ second amended complaint features nothing but conclusions by, for  
5 instance, calling the ’049 Patent “novel and inventive.” ECF No. 77 at ¶ 10. There is no support  
6 for such a conclusion in Plaintiffs’ second amended complaint. The statement is merely an  
7 unsubstantiated conclusion. Thus, Plaintiffs’ second amended complaint raises no factual disputes  
8 that would preclude this Court from finding the ’049 Patent invalid based on a Rule 12 motion.

9 **IV. CONCLUSION**

10 For the foregoing reasons, the Court finds that the ’049 Patent is directed to unpatentable  
11 subject matter and is thus invalid under 35 U.S.C. § 101. The Court therefore GRANTS  
12 Defendants’ motion to dismiss the ’049 Patent claims and Plaintiffs’ second amended complaint.<sup>5</sup>

13 **IT IS SO ORDERED.**

14  
15 Dated: April 9, 2019

16   
17 \_\_\_\_\_  
18 LUCY H. KOH  
19 United States District Judge

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26 \_\_\_\_\_  
27 <sup>5</sup> Defendants request judicial notice of Exhibit B to their motion to dismiss. As the Court did not  
28 consider Exhibit B in its analysis in the instant order, Defendants’ request for judicial notice is  
DENIED as moot.