

UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA

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REGENTS OF THE UNIVERSITY OF  
MINNESOTA,

Civil No. 14-4666 (JRT/TNL)

Plaintiff,

v.

**MEMORANDUM OPINION AND ORDER  
DENYING DEFENDANT'S MOTION FOR  
JUDGMENT ON THE PLEADINGS**

AT&T MOBILITY LLC,

Defendant,

ERICSSON, INC., and NOKIA OF  
AMERICA CORP.,

Intervenor-Defendants.

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Francisco, CA 94105; Yeepay Audrey Yang, **GIBSON, DUNN & CRUTCHER LLP**, 2001 Ross Avenue, Suite 2100, Dallas, TX 75201, for Defendant AT&T Mobility LLC.

Nearly one year after the dispositive motion deadline, Defendant AT&T Mobility, LLC (“AT&T”) filed a motion for judgment on the pleadings. After trying its hand at summary judgment, AT&T now sets forth another theory: Regents of the University of Minnesota’s (“Regents”) ’768 patent is invalid because it is directed to an abstract idea and lacks an inventive concept. Because AT&T’s motion is procedurally improper and would fail on the merits in any event, the Court will deny AT&T’s Motion for Judgment on the Pleadings.

#### **BACKGROUND**

The factual background of this case has been discussed at length in the Court’s prior orders, so the Court will describe only the facts necessary to assess AT&T’s motion. *See generally Regents of the Univ. of Minn. v. AT&T Mobility LLC (Regents Claim Constr.)*, No. 14-4666, 2022 WL 3142322 (D. Minn. Aug. 5, 2022); *Regents of the Univ. of Minn. v. AT&T Mobility LLC (Regents Summ. J.)*, No. 14-4666, 2024 WL 758541 (D. Minn. Feb. 23, 2024). This motion targets the ’768 patent, on which Regents base Count One of their Amended Complaint. (*See Am. Compl.* ¶¶ 31–36, Jan. 30, 2015, Docket No. 25.)

The ’768 patent “provide[s] for particular methods to be utilized within certain portions of” a data transmission system “which are intended to help with the speed and reliability of wireless communication.” *Regents Claim Constr.*, 2022 WL 3142322, at \*2.

The specification describes the problem of “fading” in wireless mobile communications, which is interference that may be mitigated by error control coding and diversity. (Decl. Benjamin Hershkowitz (“Hershkowitz Decl.”) Supp. Mot. J. on the Pleadings ¶ 2, Ex. 1 at 13 (“768 Patent”), May 20, 2024, Docket No. 751.) The patent describes techniques that “combine error-control [] coding and complex field linear precoding with small size precoders to improve diversity gain and, as a result, system performance.” (*Id.*) The parties focus on Claim 13, which the Court will treat as representative for the purpose of deciding this motion. The claim describes:

A system comprising:

a transmitter that includes:

- an error-control coder that applies an error correction code to produce an encoded data stream of information-bearing symbols;
- a bit interleaver to produce an interleaved data stream 15 in which neighboring data bits of the encoded data stream are positioned to be mapped to different constellation symbols selected from a constellation having a finite alphabet;
- a mapping unit to map the neighboring data bits of the 20 encoded data stream to the different constellation symbols; a precoder that linearly precodes the constellation symbols over a complex field without restriction to an alphabet size of the constellation to produce a joint 25 coded-precoded data stream;
- a symbol interleaver to process the precoded data stream to produce permuted blocks of precoded symbols;
- a modulator to output a waveform from the permuted 30 blocks of precoded symbols; and

a receiver that receives the waveform from the transmitter via a wireless communication channel, and demodulates the waveform to produce estimated data.

(*Id.* at 19.)

AT&T filed its Motion for Judgment on the Pleadings on May 20, 2024, notwithstanding the dispositive motions deadline of June 1, 2023. (13<sup>th</sup> Am. Pretrial Scheduling Order (“Scheduling Order”) at 13, July 3, 2024, Docket No. 777; Mot. for J. on the Pleadings, Docket No. 748.) At the dispositive motion deadline, the Defendants filed three separate summary judgment motions, with extended word limits, covering numerous theories and lines of attack. (See Order, May 22, 2023, Docket No. 501; Defs.’ Mot. Summ. J., June 1, 2023, Docket No. 543; Defs.’ Mot. Summ. J., June 1, 2023, Docket No. 580; Defs.’ Mot. Summ. J., June 1, 2023, Docket No. 586.) The Court denied the motions and set trial for December 2, 2024. *Regents Summ. J.*, 2024 WL 758541, at \*18; (Scheduling Order at 3–4, 6, 14.)

## DISCUSSION

### I. STANDARD OF REVIEW

The Court applies Eighth Circuit law to procedural issues, while Federal Circuit precedent controls matters of substantive patent law. See *In re Spalding Sports Worldwide, Inc.*, 203 F.3d 800, 803 (Fed. Cir. 2000).

The Court analyzes a Rule 12(c) motion for judgment on the pleadings under the same standard as a motion to dismiss under Federal Rule of Civil Procedure 12(b)(6). *Ashley Cnty., Ark. v. Pfizer, Inc.*, 552 F.3d 659, 665 (8<sup>th</sup> Cir. 2009). Thus, the Court must

determine whether the Complaint states a “claim to relief that is plausible on its face.” *Braden v. Wal-Mart Stores, Inc.*, 588 F.3d 585, 594 (8<sup>th</sup> Cir. 2009) (quoting *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009)). The Court construes the Complaint in the light most favorable to the plaintiff, drawing all reasonable inferences in the plaintiff’s favor. *Ashley Cnty.*, 552 F.3d at 665. Although the Court accepts the Complaint’s factual allegations as true, it is “not bound to accept as true a legal conclusion couched as a factual allegation,” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007) (quoting *Papasan v. Allain*, 478 U.S. 265, 286 (1986)), or mere “labels and conclusions or a formulaic recitation of the elements of a cause of action,” *Iqbal*, 556 U.S. at 678 (quotation omitted). Instead, “[a] claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Id.* Courts may resolve questions of patent ineligibility as a matter of law. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 712–13 (Fed. Cir. 2014).

The Court may consider the allegations in the Complaint as well as “those materials that are necessarily embraced by the pleadings.” *Schriener v. Quicken Loans, Inc.*, 774 F.3d 442, 444 (8<sup>th</sup> Cir. 2014). The Court may also consider matters of public record and exhibits attached to the pleadings, so long as those documents do not conflict with the Complaint. *Porous Media Corp. v. Pall Corp.*, 186 F.3d 1077, 1079 (8<sup>th</sup> Cir. 1999).

## II. ANALYSIS

The Court will deny AT&T's motion for two independent reasons. First, its motion is untimely. Second, Regents' patent is eligible because it passes step one of the *Mayo* test.

### A. Timeliness

AT&T argues that, in deciding whether to allow a 12(c) challenge at this late stage, the Court should consider only whether the motion was filed "early enough not to delay trial." *See* Fed. R. Civ. P. 12(c). But AT&T has shown neither good cause nor received the Court's consent to file a dispositive motion after the deadline. *See* Fed. R. Civ. P. 6(b), 16(b)(4). And AT&T's approach would force the Court to depart from the rule that "parties must take . . . not only their best shot[,] but all of their shots," at each stage of litigation. *Cf. Ridenour v. Boehringer Ingelheim Pharms., Inc.*, 679 F.3d 1062, 1067 (8<sup>th</sup> Cir. 2012) (internal quotations omitted).

Consider the materials AT&T asks the Court to rely on for this motion: prior orders, items in the record of the case (**including exhibits attached to prior motions**), the patent's file history and prior art references, public records, and more. (*See* Def.'s Mem. Supp. Mot. for J. on the Pleadings at 13, May 20, 2024, Docket No. 754.) According to AT&T, all the materials it entered into the record in support of claim construction and summary judgment are now fair game for its 12(c) motion. (*See, e.g.*, Hershkowitz Decl. ¶ 15, Ex. 14 (claim construction expert report).) To adopt AT&T's view, however, would make word limits and filing deadlines purely academic. Have a fringe idea that does not merit a

mention in the 18,000 words for summary judgment? Simply attach the necessary materials as exhibits to the summary judgment motion and take a stab under Rule 12(c) later. Fail to exhaust every argument before the Court's dispositive deadline? Same answer—try again later. That cannot be the purpose of Rule 12(c).

AT&T points to instances when courts have allowed 12(c) motions late in litigation. *See, e.g., King v. Akima Glob. Servs.*, 775 F. App'x 617, 620 n.1 (11<sup>th</sup> Cir. 2019); *Jaeger v. Howmedica Osteonics Corp.*, No. 15-164, 2016 WL 520985, at \*5–6 (N.D. Cal. Feb. 10, 2016). Although those courts exercised their discretion and considered untimely motions, that does not obligate the Court to consider a 12(c) motion filed nearly a year after the dispositive motion deadline. *Compare id., with Riggins v. Walter*, 279 F.3d 422, 427–28 (7<sup>th</sup> Cir. 1995) (“Rule 12(c) does not restrict the court’s discretion under Rule 16(b). . . . [A] Rule 12(c) motion may be brought after the dispositive motions deadline if the moving party complies with the requirements of Rule 16(b) *and* if it will not delay trial.”) (emphasis in original), *and Pesce v. City of Des Moines*, 433 F. Supp. 3d 1113, 1117 (S.D. Iowa 2020) (requiring a showing of good cause for Rule 12(c) motion filed after dispositive motion deadline).<sup>1</sup> Because AT&T presents nothing more than a bare

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<sup>1</sup> *See also Earthworkz Enters. Inc. v. USIC Locating Servs., LLC*, No. 21-603, 2023 WL 9184146, at \*2 (W.D. Mo. Dec. 7, 2023) (good cause required for untimely 12(c) motion); *Frontczak v. City of Detroit*, No. 18-13781, 22021 WL 1736954, at \*2–3 (E.D. Mich. May 3, 2021) (same); *Sidney v. Equifax Info. Servs, LLC*, No. 20-3604, 2021 WL 7708525, at \*1 (N.D. Ga. Apr. 9, 2021), *report and recommendation adopted*, 2021 WL 7708527 (N.D. Ga. May 3, 2021) (12(c) motion untimely when filed after deadline set by local rules and case scheduling order); *cf. Ready Transp., Inc. v. AAR Mfg., Inc.*, 627 F.3d 402, 404 (9<sup>th</sup> Cir. 2010) (courts have inherent power to

assertion that its untimely dispositive motion will not delay trial, the Court will deny its Motion for Judgment on the Pleadings.

## **B. Merits**

While the procedural issue alone is sufficient to deny AT&T's motion, it also fails on the merits. The claims in the '768 patent are eligible for protection because they are directed to solving a discrete problem in wireless mobile communications.

### **1. Mayo Test**

Section 101 of the Patent Act governs eligibility, stating “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. The Supreme Court has long recognized an implicit exception to § 101, however: “laws of nature, natural phenomena, and abstract ideas are not patentable.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (cleaned up). These exceptions are meant to avoid “tying up the future use of the[] building blocks of human ingenuity.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (internal quotation marks omitted). At the same time, the Supreme Court has cautioned against construing these exceptions so broadly that they “swallow all of patent law.” *Id.* at 217.

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control their dockets to “achieve the orderly and expeditious disposition of cases”) (internal quotation omitted).



In *Mayo*, the Supreme Court established a two-step process for determining whether a patent is eligible under § 101. *Id.* First, courts must determine “whether the claims at issue are directed to one of those patent-ineligible concepts” such as abstract ideas. *Id.* In answering that question, courts look to the elements of each claim both individually and in “‘an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 78–79). If the claims are directed at a patent-ineligible concept, step two directs courts to “search for an inventive concept—i.e., an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” *Id.* at 217–18 (cleaned up). The two steps are interconnected. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).

## **2. *Mayo* Step One**

In a step one inquiry, the Court must consider claims in their entirety and in the context of the specification. *See Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015); *Stormborn Techs., LLC v. Topcon Positioning Sys., Inc.*, 444 F. Supp. 3d 1119, 1124 (N.D. Cal. 2020). Courts should not oversimplify claims by ignoring limitations or applying too high of a level of abstraction. *See McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016).

If recited without additional limitations, mathematical formulas and algorithms are not patent eligible. See *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014). Nor is it enough to limit the use of an ineligible formula to a specific technology. See *Diamond v. Diehr*, 450 U.S. 175, 191–92 (1981). However, an invention is not ineligible just because it relies on a mathematical algorithm. *Digitech*, 758 F.3d at 1350. Claims to mathematical processes are eligible when implemented “in a structure or process which, when considered as a whole, is performing a function which the patent laws were designed to protect.” *Diehr*, 450 U.S. at 192.

“In cases involving software innovations, [the step one] inquiry often turns on whether the claims focus on specific asserted improvements in computer capabilities or instead on a process or system that qualifies an abstract idea for which computers are invoked merely as a tool.” *Uniloc USA, Inc. v. LG Elecs., USA, Inc.*, 957 F.3d 1303, 1307–08 (Fed. Cir. 2020); *Enfish*, 822 F.3d at 1335–36. Conceptual patents are thus eligible when they apply “specific technological modifications” to “solve a problem or improve the functioning of a known system.” *Huawei Techs. Co. v. T-Mobile US, Inc.*, No. 16-52, 2017 WL 4118383, at \*2 (E.D. Tex. Aug. 29, 2017), *report and recommendation adopted*, 2017 WL 4117897 (E.D. Tex. Sept. 15, 2017).

AT&T alleges Claim 13 recites a series of mathematical processes that are abstract both individually and when combined. Regents counter that Claim 13 involves a detailed system that is directed towards specific improvements in the accuracy and robustness of

cellular transmissions. The Court agrees with Regents. Although Claim 13 may apply mathematical processes, it is directed to specific improvements in wireless technology.

Claim 13 improves wireless communication transmission systems by solving the problem of fading through specific encoding techniques. Just as another university's eligible patent employed the specific technique of irregular repetition to improve encoding, *see Cal Inst. Tech. v. Broadcom Ltd.*, 25 F.4th 976, 988 (Fed. Cir. 2022), Claim 13 employs a transmitter and receiver with specific combinations of coders, interleavers, mapping units, precoders, and modulators, some with defined alphabet sizes (limited and indefinite), to gain diversity, mitigate fading effects, reduce interference, and ultimately, improve wireless mobile communication system performance, ('768 Patent at 13, 19.) Because the '768 patent is "directed to technological improvements resolving specific problems in a wireless communications system . . . [Regents] claim patent-eligible subject matter under § 101." *Evolved Wireless, LLC v. Apple, Inc.*, 221 F. Supp. 3d 485, 494 (D. Del. 2016).<sup>2</sup>

The '768 patent is not ineligible simply because "the claims do not recite the alleged improvement described in the specification of the '768 patent." (Def.'s Reply

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<sup>2</sup> *See also Intellectual Ventures I LLC v. T-Mobile USA, Inc.*, No. 13-1632, 2017 WL 3706495, at \*7–8 (D. Del. Aug. 23, 2017) (finding a claim employing mathematical operation to transmit wireless data accurately and efficiently is patent-eligible); *Huawei*, 2017 WL 4118383, at \*3 (warning against oversimplification and finding claims "directed to a particular technical problem" in wireless communication patent-eligible); *Comcast Cable Commc'ns, LLC v. Sprint Commc'ns Co., LP*, 203 F. Supp. 3d 499, 526–27 (E.D. Pa. 2016) (validating claims that apply an abstract idea to "provide a solution to a problem that is unique to a cellular network").

Supp. J. on the Pleadings at 5, July 2, 2024, Docket No. 774.) “Claims need not articulate the advantages of the claimed combinations to be eligible.” *Uniloc*, 957 F.3d at 1309. Reading the claim limitations as a whole, and in the context of the specification, Claim 13 is directed to concrete improvements in wireless data transmission. And to the extent AT&T alleges Claim 13’s techniques (error control coding, precoding, etc.) were known in the prior art, that would not be grounds to hold the ’768 patent ineligible under step one of the § 101 inquiry. *See Research Corp. Tech., Inc. v. Microsoft Corp.*, 627 F.3d 859, 868 (Fed. Cir. 2010) (“[S]ection 101 eligibility should not become a substitute for a patentability analysis related to prior art, adequate disclosure, or the other conditions and requirements of Title 35.”); *Stormborn*, 444 F. Supp. 3d at 1125.

Because the Court finds the ’768 patent satisfies the first step of the *Mayo* test, it need not proceed to step two. *See Uniloc*, 957 F.3d at 1309.

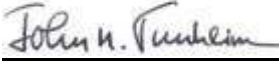
### **CONCLUSION**

The Court will deny AT&T’s motion for judgment on the pleadings because it is untimely and unmeritorious.

**ORDER**

Based on the foregoing, and all the files, records, and proceedings herein, **IT IS HEREBY ORDERED** that Defendant's Motion for Judgment on the Pleadings [Docket No. 748] is **DENIED** and Plaintiff's Letter Requesting the Court Strike Defendant's Motion [Docket No. 755] is **DENIED as moot**.

DATED: August 22, 2024  
at Minneapolis, Minnesota.

  
JOHN R. TUNHEIM  
United States District Judge