

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

CAP-XX, LTD.,

Plaintiff,

v.

Civil Action No. 18-849-CFC

IOXUS, INC.,

Defendant.

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**MEMORANDUM ORDER**

Plaintiff CAP-XX, Ltd. has sued Defendant Ioxus, Inc. for infringement of U.S. Patent Nos. 6,920,034 (the “#034 patent”) and 7,383,600 (the “#600 patent”). Pending before me is Ioxus’s motion for judgment on the pleadings pursuant to Federal Rule of Civil Procedure 12(c). D.I. 33. Ioxus argues that judgment in its favor is warranted because claims 1–5, 9, 12–18, 20–22, 58, and 60–62 of the #034 patent and claims 1, 2, 4, and 6–13 of the #600 patent are invalid under 35 U.S.C. § 101 for failing to claim patentable subject matter.

## **I. BACKGROUND<sup>1</sup>**

The asserted patents are directed to electrochemical dual layer capacitors. D.I. 36 at 1. The disputed claims recite “charge storage devices” with certain physical characteristics, including Figure of Merit (FOM) ranges. A FOM is a universal measurement—developed by Dr. John Miller in 1998—that represents the pulse power capability of electrochemical capacitors. *Id.* at 5–6; D.I. 34 at 4.

## **II. LEGAL STANDARDS**

### **A. Motion for Judgment on the Pleadings**

“The purpose of judgment on the pleadings is to dispose of claims where the material facts are undisputed and judgment can be entered on the competing pleadings and exhibits thereto, and documents incorporated by reference.” *Int'l Bus. Machines Corp. v. Groupon, Inc.*, 289 F. Supp. 3d 596, 600 (D. Del. 2017) (citations omitted). “A motion for judgment on the pleadings should be granted if the movant establishes that there are no material issues of fact, and [the movant] is entitled to judgment as a matter of law.” *Zimmerman v. Corbett*, 873 F.3d 414, 417 (3d Cir. 2017) (internal quotation marks and citations omitted). “In considering a motion for judgment on the pleadings, a court must accept all of the

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<sup>1</sup> When assessing the merits of a Rule 12(c) motion for judgment on the pleadings, I accept as true all factual allegations in the pleadings and view those facts in the light most favorable to the Plaintiff. *See Zimmerman v. Corbett*, 873 F.3d 414, 417–18 (3d Cir. 2017) (citations omitted).

allegations in the pleadings of the party against whom the motion is addressed as true and draw all reasonable inferences in favor of the non-moving party.” *Id.* at 417–18 (citations omitted).

## **B. Patent-Eligible Subject Matter**

Section 101 of the Patent Act defines patent-eligible subject matter. It provides: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101.

There are three judicially-created limitations on the literal words of § 101. The Supreme Court has long held that laws of nature, natural phenomena, and abstract ideas are not patentable subject matter. *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014). These exceptions to patentable subject matter arise from the concern that the monopolization of “the[se] basic tools of scientific and technological work” “might tend to impede innovation more than it would tend to promote it.” *Id.* (internal quotation marks and citations omitted). Abstract ideas include mathematical formulas and calculations. *Gottschalk v. Benson*, 409 U.S. 63, 71–72 (1972).

“[A]n invention is not rendered ineligible for patent [protection] simply because it involves an abstract concept.” *Alice*, 573 U.S. at 217. “Applications of

such concepts to a new and useful end . . . remain eligible for patent protection.”

*Id.* (internal quotation marks, alterations, and citations omitted). But “to transform an unpatentable law of nature [or abstract idea] into a patent-eligible application of such a law [or abstract idea], one must do more than simply state the law of nature [or abstract idea] while adding the words ‘apply it.’” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72 (2012) (emphasis removed).

In *Alice*, the Supreme Court made clear that the framework laid out in *Mayo* for determining if a patent claims eligible subject matter involves two steps. The court must first determine whether the patent’s claims are drawn to a patent-ineligible concept—i.e., are the claims directed to a law of nature, natural phenomenon, or abstract idea? *Alice*, 573 U.S. at 217. If the answer to this question is no, then the patent is not invalid for teaching ineligible subject matter. If the answer to this question is yes, then the court must proceed to step two, where it considers “the elements of each claim both individually and as an ordered combination” to determine if there is 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 (alteration in original) (internal quotations and citations omitted).<sup>2</sup> A

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<sup>2</sup> The Court in *Alice* literally said that this two-step framework is “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” 573

claim recites an inventive concept “when the claim limitations involve more than performance of well-understood, routine, and conventional activities previously known to the industry.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1367 (Fed. Cir. 2018), *cert. denied*, 2020 WL 129532 (U.S. Jan. 13, 2020) (internal quotation marks, alterations, and citations omitted).

### **III. DISCUSSION**

Ioxus argues that the disputed claims (1) fail the first prong of *Alice* because they are directed to an abstract idea—the result of Dr. Miller’s FOM calculation, which is a mathematical formula; and (2) “fail the second prong of *Alice*” because they do not “recite an inventive concept—they instead claim a result [of a mathematical formula] without specifying how to achieve that result.” D.I. 34 at 2.

#### **A. *Alice* Step One - whether the claims are drawn to patent-ineligible subject matter**

Under *Alice* step one, “the claims are considered in their entirety to ascertain

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U.S. at 217. But as a matter of logic, I do not see how the first step of the *Alice/Mayo* framework can distinguish (or even help to distinguish) patents in terms of these two categories (i.e., the categories of (1) “patents that claim laws of nature, natural phenomena, and abstract ideas” and (2) patents “that claim patent-eligible applications of [laws of nature, natural phenomena, and abstract ideas]”). *Both* categories *by definition* claim laws of nature, natural phenomena, and abstract ideas; and only one of *Alice*’s steps (i.e., the second, “inventive concept” step) could distinguish the two categories. I therefore understand *Alice*’s two-step framework to be the framework by which courts are to distinguish patents that claim eligible subject matter under § 101 from patents that do not claim eligible subject matter under § 101.

whether their character as a whole is directed to excluded subject matter.” *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015).

“[W]hether a claim recites patent eligible subject matter is a question of law which may contain underlying facts.” *Berkheimer*, 881 F.3d at 1368.

After accepting as true CAP-XX’s pleadings and drawing all reasonable inferences in CAP-XX’s favor, I find that Ioxus has not established that no material issues of fact remain as to whether the disputed claims are drawn to an ineligible abstract idea. Ioxus argues that the focus of the disputed claims is the recited FOM ranges. D.I. 34 at 9. But the Complaint and the asserted patents—which are exhibits attached to the Complaint—assert that the disputed claims are directed to charge storage devices, not a mathematical formula for calculating FOM values. The Complaint states that the asserted patents “claim charge storage devices,” D.I. 1 ¶ 8; the patents’ written descriptions state that “the present invention relates to a charge storage device,” #034 patent at 1:11–13; #600 patent at 1:16–17; and the disputed claims expressly recite a “charge storage device comprising” certain physical characteristics, including the FOM ranges, *see, e.g.*, #600 patent at claim 1.

Ioxus argues that the claims merely recite a generic device that results in the claimed FOM values. It asserts that, outside the FOM values, the disputed claims only invoke generic processes and machinery, i.e., “the well-known composition of

a dual layer electrochemical capacitor.” D.I. 34 at 9. But the Complaint and the asserted patents state that the claims cover *novel* charge storage devices, not generic ones. The Complaint asserts that the asserted patents “claim charge storage devices with certain features . . . that were novel and patentable improvements over the existing devices known in that field of technology in December 1998, when the provisional application for the Patents-in-Suit was filed.” D.I. 1 ¶ 8. Also, the disputed claims recite carbon coatings and porous separators that the asserted patents’ written descriptions tout as novel and advantageous: The written descriptions state that the “[p]referred embodiments of the invention make use of thinner carbon coatings to take advantage of [the relationship between the size of the carbon layer and that layer’s impedance] and thereby achieve greater capacitances per unit volume,” #034 patent at 30:64–67; #600 patent at 30:38–41, and that “a thin highly porous separator . . . minimize[s] the length of the current path, and hence the resistance, offered by the electrolyte,” #034 patent at 30:14–16; #600 patent at 29:58–61.

Finally, the disputed claims do not “attempt to monopolize a means of measurement by mathematical formula” as Ioxus argues. D.I. 34 at 2. The claims do not recite a method of calculating an FOM value; they recite charge storage devices with certain FOM values. They do not preempt others from using Dr. Miller’s formula for calculating FOM values.

Material issues of facts thus remain as to whether the disputed claims are directed to an abstract idea.

**B. *Alice* Step Two - whether the claims recite an inventive concept**

Even if the claims were directed to an abstract idea, under *Alice* Step Two, Ioxus has not established that no material issues of fact remain regarding whether the disputed claims contain an inventive concept. Ioxus argues that the claims “do little more than simply state an abstract idea (Dr. Miller’s FOM) while adding the words apply it”; it asserts that, other than the FOM values, the claims only contain “well-understood, routine, and conventional limitations.” D.I. 34 at 11–12. But “[w]hether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination.” *Berkheimer*, 881 F.3d at 1369. And I must construe as true the Complaint and the asserted patents’ statements that the disputed claims cover *novel* charge storage devices—not routine, conventional capacitors that apply an abstract FOM formula.

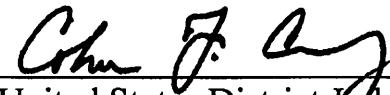
**IV. CONCLUSION**

For the foregoing reasons, I will deny Defendant Ioxus, Inc.’s Rule 12(c) Motion for Judgment on the Pleadings of Invalidity Pursuant to 35 U.S.C. § 101 (D.I. 33).

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Wherefore, in Wilmington, this Second day of March 2020, IT IS HEREBY

ORDERED that Defendant Ioxus, Inc.'s Rule 12(c) Motion for Judgment on the  
Pleadings of Invalidity Pursuant to 35 U.S.C. § 101 (D.I. 33) is DENIED.

  
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United States District Judge