



NYU | LAW

# MOOT COURT BOARD

Eurasia Bicycle Corp.,  
Petitioner,

-against-

Oceania Manufacturing, Inc.,  
Respondent.

Record

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### **QUESTION PRESENTED**

What role should the specification of a patent play in determining whether said patent is “directed to” patent-ineligible subject matter pursuant to 35 U.S.C. § 101?

In the  
**United States Court of Appeals**  
FOR THE FEDERAL CIRCUIT

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MARCH TERM 2024  
No. 24-151-cv

**OCEANIA MANUFACTURING, INC.,**

*Plaintiff-Appellant,*

v.

**EURASIA BICYCLE CORP.,**

*Defendant-Appellee.*

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ON APPEAL FROM THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF AIRSTRIp ONE

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ARGUED: NOVEMBER 13, 2023  
DECIDED: MARCH 19, 2024

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Before: AARONSON, JONES, AND RUTHERFORD, *Circuit Judges*.

Opinion for the Court filed by *Circuit Judge* Rutherford. Dissent filed by *Circuit Judge* Aaronson.

Rutherford, *Circuit Judge*:

Oceania Manufacturing, Inc. (“Oceania”) sued Eurasia Bicycle Corp. (“Eurasia”) for patent infringement. In this suit, Oceania has asserted one patent related to methods of manufacturing bicycle brakes: U.S. Patent No. 1,111,984 (“the ’984 patent”). After a bench trial, the United States District Court for the District of Airstrip One held all claims of the ’984 patent ineligible under 35 U.S.C. § 101. For the reasons below, we **REVERSE**.

## **BACKGROUND**

### **I. Oceania's Patent on Methods of Manufacturing Bicycle Brakes**

Oceania is a bicycle manufacturing company located in the state of Airstrip One. One of Oceania's employees, Winston Smith, developed a novel method of manufacture for a bicycle brake in the course of his employment. After Mr. Smith reported this innovation to his superiors, Oceania's General Counsel filed a patent for the method, which was ultimately issued as U.S. Patent No. 1,111,984 ("the '984 patent") and was set to expire in 2033. Claim 1 of the '984 patent is agreed upon by both parties to be representative of the other claims of the patent and reads as follows:

A method for manufacturing an arm assembly of a brake system, the brake system further including an arm member and a brake cord and at least one angled bracket, the brake cord being arranged to transmit tension between the arm member and the angled bracket, the method comprising:

providing an arm member and a brake cord;

tuning an angle for at least one angled bracket; and

attaching the brake cord around the at least one angled bracket;

wherein the at least one angled bracket is tuned to generate tension through the brake cord to the arm member when the brake system is activated.

'984 Patent.

The specification of the '984 patent expands further on the methods for tuning the angle of a bracket, some of which the parties agree are well known in the art. Many of these methods are quite complicated, involving extensive computer modeling and experimentation. For instance, the specification describes the use of adjustable weights to alter the tension in the cord to iteratively optimize the angle at which the bracket is positioned. According to the specification, this optimized bracket angle makes the brake significantly more sensitive, allowing for tighter control than brakes in the prior art. The specification also contains information about brackets in the prior art, describes common materials used in their manufacture such as aluminum, and elaborates on the properties of each common material that make them desirable for manufacturing brakes. The specification then lists uncommon materials that also share these properties and could potentially be used to manufacture brakes through the method of the '984 patent.

## **II. Eurasia’s Alleged Infringement of Oceania’s Patent**

Oceania’s bicycle manufacturing business remained mostly unchanged after the issuance of the patent, despite incorporating the patented brakes into the design. Seeing that Oceania’s share of the bicycle market had not been affected by their innovation, Oceania’s executives deliberated over whether to license their design to other manufacturers. Ultimately, they decided against doing so, due to a lack of interest from other manufacturers indicating that Oceania would not make enough money from licensing to offset the costs of negotiating such agreements.

Eurasia is the domestic subsidiary of Eastasia Bicycle Co., a foreign-owned manufacturing corporation that had not previously engaged in business in Airstrip One. In 2022, Eurasia began competing with Oceania in the bicycle manufacturing market in Airstrip One. After examining some of Eurasia’s newer bicycle designs, Oceania determined that Eurasia’s brakes were manufactured domestically using the method of the ’984 patent.

## **III. The District Court’s Invalidation of the ’984 Patent Under 35 U.S.C. § 101**

Oceania brought a patent infringement case against Eurasia in the United States District Court for the District of Airstrip One. In response, Eurasia invoked a patent invalidity defense, claiming that the ’984 patent was invalid as it involved patent-ineligible material in violation of 35 U.S.C. § 101, and moved for summary judgment. As this challenge to the validity of the patent was made solely on § 101 grounds, the district court did not consider the statutory requirements of novelty or non-obviousness under §§ 102 and 103.

The district court followed the two-step analytical framework to determine § 101 eligibility developed by the Supreme Court in *Mayo Collaborative Servs. v. Prometheus Lab’ys, Inc.*, 566 U.S. 66 (2012), and *Alice Corp. Prop. Ltd. v. CLS Bank Int’l*, 573 U.S. 208 (2014) (together “*Mayo/Alice*”).

At the first step of the analysis, the district court determined that the ’984 patent was directed to a natural law, specifically the relation between angle and tension in a cord. This determination was made by examining the focus of the claims of the patent. Oceania contended that Mr. Smith invented an improved method of tuning, to which the patent claims are directed. While the district court did agree that the specification of the ’984 patent did include such improved methods, they maintained that these methods were not included in the language of the claims, when considered as a whole.

In doing so, the district court relied on our previous ruling in *American Axle & Mfg., Inc. v. Neapco Holdings LLC* that the *Mayo/Alice* framework focused on “the

claims, not the specification, to determine section 101 eligibility.” 967 F.3d 1285, 1293 (Fed. Cir. 2019). In particular, this holding was based on the Supreme Court’s ruling in *Mayo* that only referenced the claims of a patent and did not mention the specification. *See Mayo*, 566 U.S. at 72 (“We must determine whether the claimed processes have transformed these unpatentable natural laws into patent-eligible applications of those laws.”); *see also Alice*, 573 U.S. at 221 (“[W]e must examine the elements of the claim to determine whether it contains an inventive concept.”) (internal quotation marks omitted).

After finishing the first step of the analysis, the district court moved to the second step, determining that the ’984 patent did not contain sufficient transformation from the ineligible concept to render the claims patentable. *See Alice*, 573 U.S. at 217–18. The court held that there was no instruction in the claim beyond simply applying the natural laws of tension to the bracket.

Having determined that the ’984 patent failed both steps of the *Mayo/Alice* framework, the district court granted summary judgment in favor of Eurasia and held the claims of the ’984 patent invalid under 35 U.S.C. § 101.

## **DISCUSSION**

Oceania appeals the district court’s decision. We have jurisdiction over this appeal under 28 U.S.C. § 1295(a)(1). Summary judgment is appropriate where “there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” *Am. Axle*, 967 F.3d at 1291 (quoting Fed. R. Civ. P. 56(a)). Patent eligibility under § 101 is a question of law and is reviewed de novo. *BRCA1- & BRCA2-Based Hereditary Cancer Test Patent Litig. v. Ambry Genetics Corp.*, 774 F.3d 755, 759 (Fed. Cir. 2014). Construction of a patent claim is a question of law, but may depend on findings of fact, which are reviewed for clear error. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 326–27 (2015).

Section 101 of the Patent Act provides that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof” may have patent-eligible subject matter. 35 U.S.C. § 101. The Supreme Court has long held that § 101 excludes laws of nature, natural phenomena, and abstract ideas from being patent eligible. *E.g.*, *Diamond v. Diehr*, 450 U.S. 175, 185 (1981); *Bilski v. Kappos*, 561 U.S. 593, 601 (2010); *see also Le Roy v. Tatham*, 55 U.S. 156, 175 (1852) (“A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.”). This is because each of these categories are “manifestations of . . . nature, free to all men and reserved exclusively to none.” *Diehr*, 450 U.S. at 185 (quoting *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)).

However, the Court recognized that these exceptions could invalidate most patents, as all inventions utilize natural principles at some level. *See Mayo*, 566 U.S. at 71. As such, patents that contained laws of nature or abstract ideas risked becoming patent ineligible if they were applications of such principles. *Id.*; *see also Diehr*, 450 U.S. at 187.

The Court's solution to limit the extent of these exceptions was the two-step *Mayo/Alice* framework. The first step of the test is to determine whether the claims at issue are "directed" to a patent-ineligible concept, such as laws of nature, natural phenomena, or abstract ideas. *Alice*, 573 U.S. at 218. If the patent is directed to ineligible subject matter, the court moves to the second step and determines if the limitations of the claim, considered individually and as an ordered combination, have an "inventive concept," sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself." *Mayo*, 566 U.S. at 72–73 (quoting *Parker v. Flook*, 437 U.S. 584, 594 (1978)). The Court maintained that its concern about allowing ineligible subject matters to be claimed was that this practice would preclude other innovators from using the underlying ideas for other innovations. *See Alice*, 573 U.S. at 217.

Oceania argues that the asserted claims are patent-eligible under § 101 at the first step of the *Mayo/Alice* framework. Oceania contends that the district court erred in holding that the asserted claims are directed towards a law of nature, specifically by not considering the specification of the patent in its analysis.

Eurasia responds that the asserted claims are ineligible under § 101 because they are directed to a natural law relating tension to the angle of a cord, and that the claims only add that the tension is in a cord attached to a bracket, which adds nothing inventive. Eurasia contends that the asserted claims are indistinguishable from those held invalid in *American Axle*. 967 F.3d at 1304 (invalidating a patent claiming a method of manufacture for a driveshaft assembly of an automobile).

Just as the district court did, we apply the *Mayo/Alice* two-step test laid out by the Supreme Court to determine whether a patent involves eligible subject matter.

We begin with the first step of the *Mayo/Alice* inquiry. Our review of the representative claim shows that it is not "directed to" a natural law, contrary to the ruling by the district court.

To determine if the '984 patent is directed towards an ineligible subject matter, we must conduct a careful reading of the claim language in relation to the particular natural phenomenon. *See Mayo*, 566 U.S. at 72–73 (examining patent claims for the process of administering thiopurine drugs for treatment of autoimmune diseases in relation to the concentration of thiopurine metabolites in the blood of patients). Unlike the district court, however, we do not hold that the precedent set in *American*

*Axle* means that we ignore the specification at this step. Rather, we follow our precedent that construction of the language of a claim is done in light of the specification. *See, e.g., Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 381 F.3d 1371, 1381–82 (Fed. Cir. 2004); *see also Kinik Co. v. Int’l Trade Comm’n*, 362 F.3d 1359, 1365 (Fed. Cir. 2004) (“The words of patent claims have the meaning and scope with which they are used in the specification and the prosecution history.”); *Grain Processing Corp. v. Am. Maize Prods. Co.*, 840 F.2d 902, 908 (Fed. Cir. 1988) (“All claims must be construed in light of the specification and the prosecution history.”). We have also applied this method of claim construction to step one of the *Mayo/Alice* framework. *See, e.g., Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016).

Turning to the language in the representative claim, we find that it is directed towards a specific concrete solution to a problem: attaching a bracket to a cord to regulate tension in a bicycle brake. Considering the claim language in light of the specification, we can see that the relation between the problem and solution is not one dictated by the natural laws regarding tension, but rather the result of computer modelling and experimentation. Overall, the patent claim is for an industrial method of manufacture of a physical mechanism, which is a concept that courts have held as “the type[] which ha[s] historically been eligible to receive the protection of our patent laws.” *Am. Axle*, 967 F.3d at 1305–06 (Moore, J., dissenting) (quoting *Diehr*, 450 U.S. at 184). Thus, the claims of the ’984 patent pass the first step of the *Mayo/Alice* framework.

As the representative claim of the ’984 patent is not directed towards a law of nature, a natural phenomenon, or an abstract idea, the second step of *Mayo/Alice* does not need to be analyzed. The subject matter of the ’984 patent is eligible under § 101.

## CONCLUSION

For the reasons above, we **REVERSE** the district court’s conclusion regarding patent eligibility under § 101 and **REMAND** for further proceedings consistent with this opinion.

IT IS SO ORDERED.



Aaronson, *Circuit Judge*, dissenting.

I respectfully dissent from the majority opinion. The decision of the district court follows established precedent from this court and should have been affirmed.

The representative claim of the '984 patent is directed towards a law of nature, regardless of what is included in its specification. The Supreme Court's framework requires that "a patent must do more than simply state the law of nature while adding the words 'apply it.'" *Mayo Collaborative Servs. v. Prometheus Lab's, Inc.*, 566 U.S. 66, 72 (2012). Since the creation of this framework, this Court has established a line of precedent that focuses on the claims of the patent, the most significant recent example of which is the decision in *American Axle*. See *Am. Axle & Mfg. v. Neapco Holdings LLC*, 967 F.3d 1285, 1293 (Fed. Cir. 2020) ("[W]e have repeatedly held that features that are not claimed are irrelevant as to step 1 or step 2 of the *Mayo/Alice* analysis."). This Court has held previously that "the level of detail in the specification does not transform a claim reciting only an abstract concept into a patent-eligible system or method." *Accenture Glob. Servs. v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013). By ignoring these precedents in favor of cases relating more generally to claim construction, the majority does a disservice to this Court.

In addition to the precedent set by this Court, there is already unambiguous statutory incorporation of the specification into claim construction. Section 112 of the Patent Act defines the form and uses of the patent specification, and subsection (f) defines a means-plus-function claim, as follows:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts *described in the specification* and equivalents thereof.

35 U.S.C. § 112(f) (emphasis added).

If a patent claim is construed to be a means-plus-function claim, modes of analysis that typically only involve the claim, like literal infringement, consider both the claim and the relevant portions of the specification. See *Caterpillar Inc. v. Deere & Co.*, 224 F.3d 1374, 1379 (Fed. Cir. 2000) (considering information from the specification in the construction of a means-plus-function claim directed to a belted work vehicle). Since Congress has already articulated a specific circumstance where the specification is to be read into the claim, the omission of other types of claims from the portions of the Patent Act describing the specification is deliberate and should not have been ignored by the majority.

The '984 patent claim fails step two of the *Mayo/Alice* analysis because there is not a sufficient transformation from the natural laws regarding tension to render the claim patentable. See *Alice Corp. Prop. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 218 (2014). The patent simply describes the tuning of elements of natural law, namely the angle that the bracket applies to the cord. There is no instruction in the claim beyond simply applying the natural laws regarding tension in a cord to the bracket.

There also remains a question of whether the majority's ruling supports the goals of the Patent Act. The Supreme Court has long held that Congress intended for the Act to protect the fundamental building blocks of inventions from monopoly, which would limit the potential for others to make their own innovative designs. See *Le Roy v. Tatham*, 55 U.S. 156, 175 (1852). While Mr. Smith might have created a novel invention, the way that Oceania has expressed that invention in their claim is overbroad and could prevent others from designing novel inventions simply through its wording.

Therefore, I respectfully dissent.

(ORDER LIST: 595 U.S.)

**CERTIORARI GRANTED**

24-747 Eurasia Bicycle Corp., v. Oceania Manufacturing, Inc.

The petition for a writ of certiorari is granted.  
The parties are directed to address the following  
question:

What role should the specification of a patent play a  
role in determining whether said patent is "directed to"  
patent-ineligible subject matter pursuant to 35 U.S.C.  
§ 101?