No. 20-891

IN THE

Supreme Court of the United States

AMERICAN AXLE & MANUFACTURING, INC.,

Petitioner,

v.

NEAPCO HOLDINGS LLC AND
NEAPCO DRIVELINES LLC,

Respondents.

On Petition for a Writ of Certiorari
to the United States Court of Appeals
for the Federal Circuit

BRIEF IN OPPOSITION

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QUESTION PRESENTED

Claim 22 of the '911 patent recites "tuning a mass and stiffness of a liner" to adjust its natural frequency. But American Axle did not discover the centuries-old law of physics, known as Hooke's law, relating an object's mass, stiffness and frequency. Rather, American Axle seeks to preempt its use in the design of automotive propshafts.

Just as Hooke's law is not patentable, "neither is a process reciting" it without "additional features that provide practical assurance that the process is more than a drafting effort designed to monopolize the law of nature itself." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.,* 566 U.S. 66, 77 (2012). Claim 22 has no such additional features. As the lower courts correctly held, (i) the remaining method steps are conventional, and (ii) reciting a "desired result" without the means of achieving it does not recite an invention. All that remains is a suggestion to an "engineer [to] consider [a] law of nature [Hooke's law] when designing propshaft liners to attenuate driveline vibrations." Pet. App. 143a (internal citation omitted).

The question presented is:

Whether the Federal Circuit's straightforward application of *Alice/Mayo's* two-part framework is correct where the claims contain: (i) a natural relationship, (ii) conventional activity, and (iii) a desired result with no means of achieving it.

RULES 24(B) AND 29.6 STATEMENT

All parties are identified in the caption of this brief. Respondent Neapco Drivelines LLC is a wholly owned subsidiary of Neapco Holdings LLC. Neapco Holdings LLC is a wholly owned subsidiary of Wanxiang Automotive Components, LLC.

No publicly held company owns 10% or more of the stock of either respondent.

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INTRODUCTION

In a series of decisions, culminating with *Alice Corp. v. CLS Bank International*, 573 U.S. 208 (2014), this Court established a two-part framework for assessing whether a patent claim recites patent-eligible subject matter under 35 U.S.C. §101. American Axle's petition contends that the result has been "chaos." Pet. 33. "Lower courts," it argues, "have struggled to apply the Court's two-step framework." Pet. 6. "The entire patent system is desperate for the Court's guidance[.]" Pet. 4.

But "chaos" is not the reality. In fact, the opposite is true: the Federal Circuit has affirmed Section 101 decisions at a 91% clip since *Alice*, and in nearly half those cases, the result was so unremarkable it did not justify a written opinion. *Alice* is working exactly as intended.

American Axle petitions for guidance in determining whether a claim is directed to patent-ineligible subject matter under step one of *Alice*. But what American Axle seeks—a universal, easy-to-apply decisional mechanism—would not clarify *Alice*, it would discard it. Building on 150 years of precedent, *Alice* set forth a flexible, context-driven approach that eschews rigid rules. It envisioned continued development under "the classic common law methodology." *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016); Pet. App. 168a ("[T]he application of law to fact in the Section 101 context has always been a case by case judgment.") (Chen, J., concurring in *en banc* denial).

This "context-driven analysis," Pet App. 168a, is necessary because of the infinite complexity of the patent system, covering millions of patents and individual claims across a wide spectrum of scientific and engineering fields in newly-emerging and future technologies. There will be, by definition, hard cases. But because of the common-law approach, difficult cases are necessarily narrow in scope and limited to their specific facts. Disagreement over a

difficult boundary case overlooks that the system now works well and predictably in run-of-the-mill cases. And as to the edge cases, Judge Chen was right to quote Judge Learned Hand: "Nobody has ever been able to fix that boundary, and nobody ever can." Pet. App. 168a (Chen, J., concurring).

Indeed, it is telling that while American Axle and most amici ask the Court to provide some elusive "clarity," none makes any proposal for doing so. Nor does American Axle identify competing views about how to "fix" the *Alice* framework. American Axle's true grievance is not with the standard, but with how that standard was applied to the particular facts of this case.

The fact-bound nature of the narrow ruling below is evident from the Federal Circuit's decision to hold only half of American Axle's asserted claims patent-ineligible as directed to a natural law. Pet. App. 153a (Dyk, J., concurring); Pet. App. 169a (Chen, J., concurring). That the decision below turned on the specific wording of the specific claims at issue means this case is not about *all* "mechanical" and "industrial" patents. Instead, it is about a small set of poorly-drafted, overbroad claims designed to monopolize a fundamental building block in the engineer's toolkit.

As Judge Dyk explained, "[t]he inventors here may well have invented a specific means of achieving the claimed result, but they chose not to include such means in the claims we hold ineligible." Pet. App. 154a (Dyk, J., concurring). Accordingly, this decision applies solely to "claims, such as claim 8 in *O'Reilly* [*v. Morse*, 56 U.S. (15 How.) 62 (1853)], that claim only a result … and disclose nothing more than a natural law … to achieve that result." *Id.* 157a. "[C]laims that describe how the objective … is to be achieved are [and always have been] patent" eligible. *Id.*

The petition should be denied.

STATEMENT OF THE CASE

I. The '911 Patent Invention Is "Tuning" An Object, *i.e.,* Adjusting Its Mass And/Or Stiffness To Change Its Natural Frequency

The '911 patent concerns propshafts, a component in an automotive driveline prone to unwanted vibration during operation. C.A.J.A.30. This vibration occurs in three dimensions (or modes): bending, torsion, and shell. *Id.,* 1:41-44. The problem was well known, and those skilled in the art had long employed various devices and methods to dampen a propshaft's vibration. *Id.*, 1:38-2:38. These ranged from simple weights to cardboard liners. *Id.* Many such devices and methods were the subject of prior art patents. *Id.*

According to the '911 inventors, these prior solutions were unsatisfactory because each was designed only to dampen a single mode of vibration. *Id.*, 2:34-38. They thus proposed an improvement: using a single device to dampen two or more modes of vibration. *Id.*, 2:41-43. The inventors started with a cardboard liner of the type conventionally used in automotive propshafts to dampen shell mode vibration. C.A.J.A.32, 6:49-59. And they described their invention as "tuning" that liner so that it could also attenuate another vibration mode simultaneously. C.A.J.A.33, 7:31-8:43.

Tuning, according to the '911 patent, is adjusting an object's "natural frequency" so that it "correspond[s]" to the frequency at which a particular mode of vibration occurs. *Id.*, 7:44-46. An object's natural frequency, in turn, is a function of its mass and stiffness, a 17th-century law of nature discovered by physicist Sir Robert Hooke and known as Hooke's law. C.A.J.A.1757 (Sun Tr. 92:15-93:2), C.A.J.A.1759 (Sun Tr. 98:14-22); *see also* C.A.J.A.1751 (Sun Tr. 66:22-67:7). Thus, to "tune" a liner according to the '911 patent is to apply Hooke's law: adjust the liner's natural frequency by changing its mass and/or stiffness.

Apart from that, however, the '911 patent does not tell anyone *how* to tune a cardboard liner to attenuate more than one vibration mode. It merely states that tuning is done by controlling the "mass and stiffness" of the liner (as Hooke's law commands). *E.g.*, C.A.J.A.33, 7:31-39. Elsewhere, it refers to tuning as controlling any number of "various characteristics of the liner" that will ultimately affect mass and stiffness, and therefore frequency. *Id.*, 7:60-8:2.

The patent acknowledges "it may not be possible to exactly tune the liner 204 to the two or more relevant frequencies associated with a given propshaft assembly[.]" *Id.*, 8:24-27. Accordingly, the patent says that a liner is "considered to be tuned" so long as it is "effective in attenuating vibration at the relevant frequency." *Id.*, 8:28-34.

Like the specification, the claims contain no guidance about how to "tune" a liner to achieve the desired result of reducing two or more modes of vibration, apart from adjusting the characteristics governed by Hooke's law. Independent claim 22 recites:

> 22. A method for manufacturing a shaft assembly of a driveline system, the driveline system further including a first driveline component and a second driveline component, the shaft assembly being adapted to transmit torque between the first driveline component and the second driveline component, the method comprising:
>
> providing a hollow shaft member;
>
> tuning a mass and a stiffness of at least one liner; and
>
> inserting the at least one liner into the shaft member;
>
> wherein the at least one liner is a tuned resistive absorber for attenuating shell mode

> vibrations and wherein the at least one liner is a tuned reactive absorber for attenuating bending mode vibrations.

C.A.J.A.35.

Independent claim 1 is similar to claim 22, but certain limitations are worded differently. C.A.J.A.34. Unlike claim 22, claim 1 recites "tuning" without reference to "mass and stiffness." *Id.* And in contrast to claim 22, which recites "inserting the at least one liner into the shaft member," claim 1 recites "positioning the at least one liner within the shaft member[.]"

During discovery, the experts and inventors testified that tuning an object—*i.e.*, adjusting its mass or stiffness to change its natural frequency—was "basic physics." C.A.J.A.1757 (Sun Tr. 92:15-93:2). They also testified that the claimed "tuning" is accomplished entirely by altering a liner's mass and/or stiffness:

> Q. Do you recall how [the liner] was going to be tuned?
>
> A. Stiffness and mass.
>
> Q. Why stiffness and mass?
>
> A. Because that's how you tune the liners.
>
> Q. That's how you tune any damper, right?
>
> A. Pretty much, yeah.

C.A.J.A.1759 (Sun Tr. 98:17-22); *see also* C.A.J.A.1751 (Sun Tr. 66:22-67:7). Likewise, American Axle's engineering manager testified that for liners, "the natural frequency is strictly a function of stiffness and mass[.]" C.A.J.A.2547 (Steyer Tr. 20:20-21:5, 18:1-7); *see also* C.A.J.A.4986 (Voight Tr. 65:2-12) ("[I]f you recall, the frequency [of a liner] is the square root of k over m, so when you change … the mass, you change the frequency.").

American Axle's expert testified that "tuning involves controlling the characteristics (e.g. mass and

stiffness) of the liner through, for example, its *design, manufacturing, and installation* to reduce vibration at a relevant frequency." C.A.J.A.169, ¶ 65 (emphasis added); ¶ 64 ("[T]he specification further describes how a liner is tuned, i.e., by controlling its characteristics … These characteristics include mass and stiffness.").

In an exchange with the district court, American Axle itself acknowledged that it was claiming any "liner that achieves these results"—a "tuned" liner—without any regard to how that result was achieved. C.A.J.A.699 (Hearing Tr. 58:19-25); *see also* C.A.J.A.3462-63, 6107-09 (reaffirming that broad reading at summary judgment).

II. The Lower Courts Found American Axle's Claims Ineligible Under Longstanding Section 101 Jurisprudence

A. The District Court Held All The Asserted Claims Ineligible at Summary Judgment

Chief Judge Stark of the District of Delaware has had more patent cases over the past five years than perhaps any other judge in the country. He held all the asserted claims of the '911 patent ineligible under Section 101, correctly reciting and faithfully applying this Court's two-part *Alice* framework.

At step one, the district court found the asserted claims "as a whole are directed to laws of nature: Hooke's law and friction damping." Pet. App. 137a. It observed that "[t]here is no dispute that adjusting the mass and stiffness of the liner will change the amount of damping of a certain frequency." *Id.* 138a. As a result, "the Asserted Claims do not disclose a method of manufacturing a propshaft; instead, considered as a whole, they are directed to the mere application of Hooke's law[.]" *Id.* 139a. The court remarked that the claims "fail to instruct *how* to design the tuned liners or manufacture the driveline system to attenuate vibrations." *Id.* (original emphasis).

At step two, the district court found no inventive concept. It found, "as the '911 patent itself explains, the method of manufacturing a shaft assembly of a driveline system by inserting a liner into the propshaft was well-known in the prior art." *Id.* 142a. Beyond this conventional activity, the claims merely directed one to "appl[y] Hooke's law" by controlling the liner's mass and stiffness to reach a desired frequency. *Id.* 143a. The court concluded: "Since Hooke's law governs the relationship between mass, stiffness, and frequency, the 'tuning' claim limitation does nothing more than suggest that a noise, vibration, and harshness ("NVH") engineer … consider the law of nature when designing propshaft liners to attenuate driveline vibrations." *Id.*

As to the final "wherein" clause of the claims, the court found it merely stated "the result that is achieved from performing the method rather than an active step in the method." *Id.* 144a.

The district court summed up: "the Asserted Claims simply instruct one to apply Hooke's law to achieve the desired result of attenuating certain vibration modes and frequencies. They provide no particular means of how to craft the liner and propshaft in order to do so." *Id.* 145a. Thus, they "are nothing more than applying a law of nature to a conventional method to achieve an abstract solution to a problem." *Id.* 146a.

B. The Federal Circuit Affirmed Only on Certain Claims

Initially, the Federal Circuit affirmed the district court's judgment that all asserted claims are ineligible over the opinion of a dissenting judge. Pet. App. 84a. American Axle sought rehearing, arguing that the panel did not "precise[ly]" identify the law of nature to which the claims are directed. Pet. App. 204a. It also argued that the panel "disregard[ed] facts" and that its application of Section 101 "swallow[ed] the enablement requirement of Section 112." *Id.*

In response, the Federal Circuit modified its opinion to take account of American Axle's argument that the original decision did not precisely identify the relevant natural law. Pet. App. 1a. And in so doing, it distinguished between the potential patent-eligibility of two sets of claims, affirming on claims 22-36, but vacating and remanding on claims 1-21. *Id.* 25a-26a. It left to the district court to consider whether the latter claims are ineligible under the abstract-idea exception to Section 101. *Id.* 26a-28a.

At step one, the court looked to the "focus of the claimed advance" and found claims 22-36 "directed to" a law of nature: Hooke's law. *Id.* 10a-13a. The claims, the court found, do "not identify the particular tuned liners or the improved method of tuning the liners to achieve the claimed result." *Id.* 13a (quotations omitted). Instead, they confer "patent coverage if the attenuation goal is achieved by one skilled in the art using any method." *Id.* And because "[c]laiming a result that involves application of a natural law without limiting the claim to particular methods of achieving the result runs headlong into the very problem repeatedly identified by the Supreme Court in its cases shaping eligibility analysis," claims 22-36 were "directed to" a natural law at step one. *Id.* 17a (citing cases).

The court also considered important technical admissions from American Axle's witnesses, including that tuning the liner is accomplished strictly by adjusting its mass and stiffness. *Id.* 13a-14a. And it noted American Axle's appellate argument that "methods for determining natural frequencies and damping are well known in the art," including "testing for natural frequencies and damping of propshafts by performing experimental modal analysis." *Id.* 15a (quoting AAM Op. Br. 8-11).

The court noted the fundamental problem with the '911 patent: it claimed "neither established processes nor 'improved' processes for implementing the underlying

natural laws." *Id.* 15a-16a. So while American Axle had argued that "the process of tuning a liner may involve extensive computer modelling … and experimental modal analysis," *id.*, it did not disclose, much less claim, any such process. The patent merely lists a "nonexclusive list of variables that can be altered to change the frequencies exhibited by the liner and a solitary example of a tuned liner (though not the process by which that liner was tuned)." *Id.* 27a n.12. The claims thus "simply instruct[] the reader to tune the liner to achieve a claimed result," by reference to a natural law, "without limitation to particular ways to do so." *Id.* 23a.

At step two, the court found nothing in claims 22-36 "qualifies as an 'inventive concept' to transform [them] into patent eligible matter." *Id.* Instead, "[t]he real inventive work lies in figuring out how to design a liner to damp two different vibration modes simultaneously, and no such inventive work is recited … The remaining steps of claim 22 … amount to no more than conventional pre-and post-solution activity." *Id.* 24a.

The court reached a different result, however, on claims 1-21. "While it is true that both claims require 'tuning,' claim 1 is more general" than claim 22 in that the "characteristics" of the liner that can be tuned "include variables other than mass and stiffness." *Id.* 26a-27a. "In addition, claim 1, unlike claim 22, has an additional limitation of 'positioning the at least one liner.'" *Id.*

Accordingly, the court found it "cannot conclude that [claim 1] is merely directed to Hooke's law." *Id.* 28a. It thus "vacate[d] the judgment as to claim 1 and its dependent claims and remand[ed] the case for the district court to address" whether those claims are ineligible under the abstract-idea exception to §101. *Id.*

The full court also denied American Axle's request for *en banc* rehearing. Pet. App. 150a. Six judges concurred in the denial, and six dissented. *Id.* Five of the dissenting judges wrote or signed on to opinions expressing

concern with the outcome on the merits; Judge Lourie dissented without indicating his views on the merits. *Id.*

REASONS TO DENY THE PETITION

I. This Case Does Not Present Any Important Issue Under Section 101 That Requires Clarification

A. The Federal Circuit Ruling Is Fact-Bound and Narrow

Review of this case will not resolve uncertainty in Section 101 jurisprudence because, as the decision below observes, the ruling is limited to "the narrow circumstances of this case." Pet. App. 28a.

As Judge Chen pointed out, "[t]he narrow scope of the majority's holding is illustrated by the differences in the outcomes between claims 1 and 22." Pet. App. 169a (Chen, J., concurring). The finding below turned on just minor disparities in the wording of claims 1-21, found not ineligible, and claims 22-36, found ineligible. Claims 1-21, unlike claims 22-36, included the limitation "positioning the at least one liner," and "omitted any reference to mass and stiffness." *Id.* That alone was enough for the Court to find the claims beyond the natural law exception and thus potentially eligible.

Claims 22-36, by contrast, "instruct only the use of mass and stiffness to match relevant frequencies to tune a propshaft liner so that the liner, when used, will produce certain results (reducing two modes of vibration from the propshaft)." Pet. App. 153a (Dyk, J., concurring). They do not "recite the process and machinery necessary to produce the desired [results] … but merely invoke[] the natural law that defines the relation between stiffness, mass, and vibration frequency." *Id.* "Because claim 22 contains no further identification of specific means for achieving those results … it is ineligible under a long line of cases

beginning at about the time of *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 14 L.Ed. 601 (1853)[.]" *Id.*

This case thus turns on the patentee's decision to draft incredibly broad claims, unbounded by the particular "process and machinery necessary to produce the desired effect[.]" *Id.* The Federal Circuit plainly acknowledged that American Axle could have, but chose not to, claim "specific novel computer or experimental processes" for tuning a liner to reduce two modes of vibration. Pet. App. 16a. American Axle also could have, but did not, claim the characteristics of a mechanical apparatus that serves to attenuate more than one mode of vibration in a propshaft. Instead, American Axle's claim 22 recites a *process* for achieving a *desired result* by reference solely to the *natural law* that governs tuning an object by adjusting its mass and stiffness.

The holding is thus "limited to the situation where a patent claim on its face and as construed clearly invokes a natural law, and nothing else, to accomplish a desired result." Pet. App. 29a.

On top of that, this case is also unique in the evidence supporting the ruling. "Both parties' witnesses agreed that Hooke's law relates an object's frequency of vibration to its mass and stiffness," "neither party disputes the claim construction given to the [tuning limitation]," and there was no "conflict in evidence about what 'mass' or 'stiffness' means to the relevant skilled artisan." Pet. App. 158a (Dyk, J., concurring).

Practical reality bears out the ruling's narrow reach. Since it issued, the decision below has made no perceivable shift in the law. At the time of this brief, the modified panel decision is eight months old. Yet Neapco could identify only three cases citing the modified panel decision—hardly a sea change.[1] And there is no lower court decision citing

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[1] *Abbott Labs. v. Grifols Diagnostic Solutions Inc.*, No. 19-C-6587, 2020 WL 7042891 (N.D. Ill. Dec. 1, 2020); *SmileDirectClub,*

to it as controlling authority establishing a new proposition beyond the existing state of the law. American Axle has cited none.

B. *Alice* Step Two Further Cabins The Analysis To The Specific Claims At Issue

American Axle and many of the amici focus on whether the lower courts erred in finding the claims directed to a natural law at step one of the *Alice* test. But this ignores step two, which plainly allows claims directed to a natural law to be patent eligible so long as they recite an inventive concept. If claims 22-36 did recite a patentable *application* of Hooke's law under step two, they would not be ineligible, even though they are directed to a natural law at step one. Divorcing step one from step two, as the Petition does, wrongly suggests that the decision below has far-reaching consequences. But step two requires a limitation-by-limitation and word-by-word analysis of each individual claim, ensuring that every Section 101 ruling will be necessarily limited to its particular facts and circumstances.

Step two also provides insurance against errors at step one. Much of the disagreement at step one is whether the claims need to recite the natural law *by name* or *by formula*, and whether the natural law needs to be the only thing recited in the claims. But even if the lower courts liberally apply step one, step two prevents Section 101 from standing in the way of claims that recite a true *application* of a natural law.

As this Court noted in *Mayo*, "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." 566 U.S. at 71. Step two already ensures that inventive applications of natural laws are patent-eligible. And American Axle is

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LLC v. Candid Care Co., No. 20-0583, 2020 WL 7190797 (D. Del. Dec. 7, 2020); *Vineyard Investigations v. E. & J. Gallo Winery*, No. 1:19-cv-01482, 2021 WL 22497 (E.D. Cal. Jan. 4, 2021).

only able to suggest the sky is falling because of its misleadingly exclusive focus on *Alice*'s first step.

American Axle ignores step two because there is no inventive concept. Liners had been used in propshafts to attenuate vibration for decades. And even if "the desired results are an advance" as American Axle argued, merely reciting them is not an inventive application. Pet. App. 24a. "The real inventive work lies in figuring out how to design a liner to damp two different vibration modes simultaneously, and no such inventive work is recited in claim 22." *Id.*

C. There is No Isolated Legal Question That This Court Could Helpfully Decide In This Case

American Axle asks this Court to devise "the appropriate standard for determining whether a patent claim is 'directed to' a patent-ineligible concept" under *Alice* step one. Pet. i. But nothing about this case makes it suited to answer that question.

Asking this Court vaguely to formulate the "appropriate standard" would be unhelpful in almost any setting. But it is doubly unhelpful here, where the Court has already decided four cases setting forth the legal standard and additional context. *See Bilski v. Kappos*, 561 U.S. 593 (2010); *Mayo*, 566 U.S. 66 (2012); *Ass'n for Molecular Pathology v. Myriad Genetics*, 133 U.S. 2107 (2013); *Alice*, 573 U.S. 208 (2014). The petition does not identify any concrete way to improve on the standard already articulated by the Court. Nor does it identify competing proposals percolating in the lower courts. Instead, it seeks a "back to the drawing board" approach that is inconsistent with how this Court approaches certiorari jurisdiction.

This Court has recently and consistently denied petitions seeking additional guidance on Section 101, even where those petitions presented more concrete, narrow,

and isolated Section 101 issues. *E.g.*, *Sequenom, Inc. v. Ariosa Diagnostics, Inc.*, No. 15-1182; *Athena Diagnostics Inc. v. Mayo Collaborative Servs., LLC*, No. 19-430; *HP Inc. v. Berkheimer*, No. 18-415. For example, *Ariosa* presented the more compelling question of how to treat a groundbreaking discovery of a natural law made by the patentee, and whether Section 101 serves to promote innovation or inhibit it under those circumstances.

This case is different. "In contrast to a number of other natural law cases, [American Axle] does not even claim to have discovered a previously unknown natural law." Pet. App. 13a. Nor did it discover the use of a liner in a propshaft to reduce vibration—indeed, the '911 Patent explicitly directs the reader to start with a prior art liner. C.A.J.A.32, 6:49-59. The result, then, is that American Axle sought to obtain the broadest claims possible by reciting the use of known propshaft liners with reference to the *known* natural law an engineer must consider when trying to dampen vibration. There is no reason for the Court to grant certiorari in a case like this over the candidate cases it has oft and recently denied.

D. The Real Concern With Section 101 Is How It Is Being Applied To Software And Life Sciences Patents

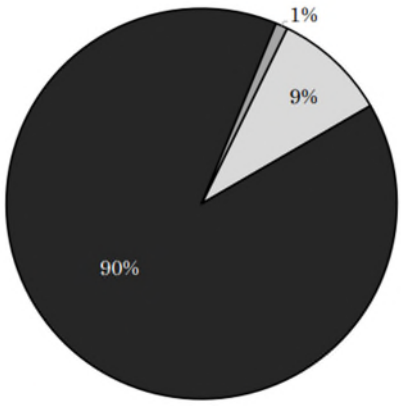
Even if the Court did take another Section 101 case, this is not the one.

According to a recent study of patent eligibility decisions between 2014-2019, *90%* of post-*Alice* decisions were in the software/ IT industry, and involve the "abstract idea" exception to patent eligibility. Mark A. Lemley & Samantha Zyontz, *Does Alice Target Patent Trolls?*, J. Empirical Legal Stud. (forthcoming 2021) (manuscript 21-22).[2] And *9%* were in the biotech/ life sciences industry, of which most apply the "natural law" exception to patent

[2] Available at https://bit.ly/31DomFY.

eligibility." *Id.* Only *1%* involved the catch-all category of other industries—like American Axle's patent here. *Id.*

Figure 5: Patent eligibility decisions by industry



NOTES: Figure 5 shows the percentage of last post-*Alice* 101 decisions in district court and the Federal Circuit per case in each industry category; N = 808 Decisions. Categories are mutually exclusive, so each decision is represented once.

Id.

Thus, even if this Court wanted to provide guidance to the lower courts, the right vehicle would be one of the 99% of cases: either a case involving an "abstract idea," or one involving a "natural law" discovered by the patentee, which arises almost exclusively in patents for life sciences.

E. This Case Presents the Relevant Question Poorly Because The Claims are Invalid Under Other Statutory Provisions

Because of the sheer breadth of the claims, there is no serious dispute among the lower court judges (or even many of the amici) that the claims are invalid under *some* statutory provision.

For example, during oral argument at the Federal Circuit, Judge Moore, the dissenting judge, observed:[3]

> See my problem with this isn't that these claims are broad. They're broad, I grant you – they're broad. I don't love the kind of broad claiming that I see here. My problem with this is trying to fit it within the umbrella of 101 as opposed to letting you slap it down with 103 or 112.

Judge Moore made the same point in her written dissent to the original panel opinion. *See* Pet. App. 111a, 123a-125a (Moore, J., dissenting). And in her dissent to the revised panel opinion, she took issue with the alleged "blended 101/112 analysis." *See* Pet. App. 37a-38a, 62a-67a (Moore, J., dissenting).

Even certain amici in this case concede that American Axle's claims would be invalid under Section 112. *See, e.g.*, Brief of Profs. J. Lefstin & P. Menell at 3 ("The claims of the patent in suit present a conventional problem of compliance with the statutory patentability requirements of §112[.]"). Other amici, despite seeking guidance from this Court generally on Section 101, declined to take a position as to the validity of American Axle's claims. *See, e.g.*, Brief of New York Intellectual Property Law Association at 3; Brief of Biotechnology Innovation Organization at 2; Corrected Brief of Sen. Thom Tillis, Hon. Paul R. Michel, & Hon. David J. Kappos at 3. That silence speaks volumes about these poorly-drafted claims.

Thus, the real issue is the appropriateness of using Section 101 to invalidate overbroad claims when they are also likely invalid under Section 112.

But this Court has already considered this question and put it to rest. In *Bilski*, the Court confirmed that the

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[3] https://bit.ly/3dksQqB, beginning at 20:25.

"§101 eligibility inquiry" is "a threshold test," and that claims surviving a Section 101 challenge must still also "satisfy" the other statutory requirements, including Sections 102, 103, and 112. 561 U.S. at 602. In *Mayo*, the Court again addressed and rejected the assertion that Section 101 should give way to the other statutory provisions. It acknowledged that "the §101 patent-eligibility inquiry" and other statutory patentability requirements "might sometimes overlap." *Mayo*, 566 U.S. at 90. That is plainly true where, as here, claims are written in overbroad, results-oriented terms without reciting the "means for achieving" those results. But despite the overlap between the validity requirements, all of which require an analysis of the scope of the claims as written, the Court in *Mayo* refused "to shift the patent-eligibility inquiry entirely to these later sections[.]" *Id.* There is no reason to revisit this settled principle.

Thus, because the question truly presented is whether these facially-overbroad claims are invalid under Section 101 or Section 112, this Court's review is unnecessary. And worse, this type of purely methodological dispute has the serious risk of scrambling judicial intuitions with a poorly isolated patentability question. That is true particularly in a case like this where the district court did not reach the Section 112 invalidity question or any other of Neapco's invalidity defenses.

II. There is No Section 101 Emergency Requiring This Court's Intervention

A. Section 101 is Applied Consistently and Predictably in the Overwhelming Number of Cases

American Axle insists that "the entire patent system is calling for guidance" on Section 101, describing the "state of the law" as "inconsistent and chaotic." Pet. 27. The dissenting judge below asserted that the lower courts and Federal Circuit have "struggled to consistently apply"

Section 101, resulting in "a panel-dependent body of law." Pet. App. 78a. This Court is told Section 101 is a "litigation gamble." Pet. 29 (quoting Pet. App. 183a).

An empirical review of cases involving Section 101, however, does not reveal chaos. To the contrary, the affirmance rate in Section 101 cases is as high, if not higher, than other areas of patent law.

In a paper published this month by Stanford Law Professor Mark Lemley and Research Fellow Samantha Zyontz, the authors evaluated how the Court's *Alice* decision has been used by lower courts five years in. *See* Lemley & Zyontz, *supra* note 2, at 21-22. As part of their research, the authors "hand-coded [] every district court decision and subsequent appeals to the Federal Circuit involving patentable subject matter." *Id.* at 2.

The authors found that "[t]he Federal Circuit affirmed 91% of the 162 decisions it issued in patent eligibility cases." *Id.* at 28 n.80; *see also id.*, 16, Table 3. Of these, "more than half (52.5% = 85/162)" were decided without opinion under Federal Circuit Rule 36, meaning that the Section 101 issue presented was so unremarkable it did not justify written explanation on appeal. *Id.* at 28; *id.* at 16, Table 3. Because so many of these affirmances were without opinion, "just reading court decisions [(like the opinions in this case)] gives a distorted picture of what the Federal Circuit is doing." *Id.* at 28. Other reviews have independently reached nearly the same affirmance rate in §101 cases. *See* Robert R. Sachs, Alice: *Benevolent Despot or Tyrant? Analyzing Five Years of Case Law Since* Alice v. CLS Bank*: Part I*, IP Watchdog (Aug. 29, 2019) (noting that "the Federal Circuit affirms … 89% of lower court decisions invalidating patents" and showing overall affirmance rate for Section 101 appeals (in Figure 6) of 88.4% (138/156)).[4]

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[4] https://bit.ly/3rFtT9u

The affirmance rate for Section 101 cases is actually *higher* than the average Federal Circuit affirmance rates, which hovered between 75-80% for the years 2017-2020. *See* Dan Bagatell, Law360, *Fed. Cir. Patent Decisions: An Empirical Review*, 2017-2020, at 2 (75% in 2017)[5]; (75% in 2018)[6]; (77% in 2019)[7]; (79% in 2020)[8]; *see also* J. Jonas Anderson & Peter S. Menell, *Informal Deference: A Historical, Empirical, and Normative Analysis of Patent Claim Construction*, 108 Nw. U. L. Rev. 1, 42 (2013) ("Historically, the Federal Circuit has reversed around 20% of appealed issues.").

These numbers confirm that the Federal Circuit is not significantly more split on Section 101 issues than it is on all the other patent law issues it decides. That difficult cases sometimes arise at the margins and sometimes raise strong passions for certain judges leading to separate opinions does not mean that the entire system is broken or in need of judicial reform.

To the extent the dissent and amici take issue with the Section 101 standard in these 90%+ of cases, it is not because of a dispute over the predictability or clarity of Section 101; it is a dispute about whether the judicial exceptions to patentability should exist at all. Several Federal Circuit judges have expressed disagreement with *Alice*, suggesting it goes too far, even when they agreed in how it should be applied. In a concurring opinion in *Athena Diagnostics, Inc. v. Mayo Collaborative Servs.*, 927 F.3d 1333, 1335-36 (Fed. Cir. 2019), for example, Judge Lourie noted that if writing "on a clean slate," he would narrow the exceptions to patent eligibility. In his view, "[t]he laws of anticipation, obviousness, indefiniteness, and written

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[5] https://bit.ly/3sRMGzO

[6] https://bit.ly/3wduZNj

[7] https://bit.ly/3sF372l

[8] https://bit.ly/3u4wLhU

description provide other filters to determine what is patentable." *Id.* at 1335; *see also Ariosa*, 788 F.3d at 1381 (Linn, J., concurring) ("But for the sweeping language in the Supreme Court's *Mayo* opinion, I see no reason, in policy or statute, why this breakthrough invention should be deemed patent ineligible.").

Despite his views, however, Judge Lourie disagreed with "amici and others" that "have complained that our eligibility precedent is confused," stating: "our cases are consistent." *Athena*, 927 F.3d at 1336. Judge Lourie is right: disagreement with the wisdom of this Court's Section 101 jurisprudence does not mean applying the *Alice* two-part test is unworkable.

B. The *Alice* Standard is Flexible, Which is a Benefit, Not Indicative of Chaos

American Axle's vague request for clarity on step one of *Alice* overlooks the consensus in the lower courts regarding how to determine whether a claim is "directed to" a patent-ineligible exception.

For example, in *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759 (Fed. Cir. 2019)—a case with a narrow, discrete question presented and yet still rejected for certiorari by this Court—the Federal Circuit outlined the guideposts governing the "directed-to" inquiry. It began by recognizing that "at some level, all inventions embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Id.* at 765 (cleaned up). "Thus, at step one, 'it is not enough to merely identify a patent-ineligible concept underlying the claim; we must determine whether that patent-ineligible concept is what the claim is 'directed to.'" *Id.* "In this first step, we consider the claims 'in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.'" *Id.*

The *ChargePoint* court then described "various tools" used "to analyze whether a claim is 'directed to'

ineligible subject matter." *Id.* at 766. Most importantly, it is the "claim language" that must be analyzed to identify the "focus" of the claims. "The breadth with which [a] claim is written" is one indication that a claim may be directed to ineligible subject matter. *Id.* at 769. The specification also "illuminate[s]" the analysis in several ways. *Id.* at 767. The specification must be consulted to construe the claims. *Id.* Also, the specification can help "understand 'the problem facing the inventor' and ultimately, what the patent describes as the invention." *Id.*

The "directed-to" inquiry thus requires detailed, individual analysis on a patent-by-patent and claim-by-claim basis. It must be flexible enough to apply to the infinite complexity of the underlying subject matter: millions of patent claims over countless fields in emerging, state-of-the art, and yet unknown technologies.

Accordingly, no rigid bright-line standard has ever been proposed, and none exists. *Amdocs*, 841 F.3d at 1294 (explaining "there is no such single, succinct, usable definition or test"). In fact, because the patent eligibility question arises in a variety of diverse, complex and emerging technology areas, a bright-line test would prove to be *more* unworkable than the current system. What has instead emerged is "the classic common law methodology for creating law when a single governing definitional context is not available." *Id.* As this common law matures, it approaches an equilibrium and provides reliable guidance for future cases. To be sure, there will always be difficult cases at the margins, and there may well be disagreement over the individual results in individual cases. But that is not chaos. It is exactly the common law approach that this Court prescribed in *Alice* and *Mayo*.

In his concurrence from *en banc* denial, Judge Chen described this common-law approach to deciding Section 101 issues. He explained that "the application of law to fact in the section 101 context has always been a case by case judgment." Pet. App. 168a (Chen, J., concurring). He

compared the difficulties with bright-line rules in the patent-eligibility context with the "similarly difficult problem in copyright law of distinguishing between idea and expression: 'Nobody has ever been able to fix that boundary, and nobody ever can.'" *Id.* (quoting *Nichols v. Universal Pictures Corp.*, 45 F.2d 119, 121 (2d Cir. 1930)). He concluded by saying: "[a]ssessing claim validity under section 101 is difficult work and our court over a series of many decisions in recent years has attempted to extract principles articulated in Supreme Court opinions, both old and new. Differences of opinion within our court on how to apply those principles to a particular case inevitably arise from time to time, given the inherently imprecise nature of the legal framework." *Id.* at 173a.

This Court is all too familiar with the problem of using rigid rules to govern the complexities of the patent system. In other areas of patent law, including claim construction and obviousness, this Court's decisions have repeatedly eschewed the Federal Circuit's attempts to impose bright-line rules. *See, e.g.*, *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007) (holding that it was error for the Federal Circuit to "transform[] the general principle into a rigid rule that limits the obviousness inquiry"); *eBay Inc. v MercExchange, L.L.C.*, 547 U.S. 388, 390 (2006) (rejecting the Federal Circuit's "general rule that courts will issue permanent injunctions against patent infringement").

Here too, what is most useful for further developing this law is not additional guidance from this Court, but rather continued application of the standard by lower courts on a case-by-case basis. *See, e.g., Enfish LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334-35 (Fed. Cir. 2016) ("[B]oth this court and the Supreme Court have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases. '[The Court] need not labor to delimit the precise contours of the 'abstract ideas' category in this case.'")

(quoting *Alice*, 134 S.Ct. at 2357); *Amdocs*, 841 F.3d at 1294.

Because Section 101 jurisprudence relies on the common law approach, it has become more stable and predictable, not less. The Court should let the process continue uninterrupted.

C. Rewriting The *Alice* Standard Would Upend Established Law and Create More Uncertainty

Despite disagreements at the margins, the *Alice* framework is working and improving with age. A robust body of law now exists to guide lower courts and the Patent Office in making patent-eligibility determinations. Joseph Matal, former Acting Solicitor and Acting Director of the U.S. Patent Office, arrived at the same conclusion in his recent analysis of the state of Section 101:

> The Federal Circuit has now issued over 100 precedential opinions applying the *Alice/Mayo* patent eligibility test. Many cases address the same issues, and a close analysis of them reveals emerging standards and an evolving taxonomy of what is and is not eligible for patenting. While common law, case-by-case adjudication inevitably produces a few outlying decisions, especially in the early years after a change in the law, the volume of Federal Circuit case law is now large enough that it is becoming apparent where the eligibility lines fall.

Joseph Matal, *The Three Types of Abstract Ideas*, 30 Fed. Cir. Bar J. 87, 88 (2021).[9]

The Patent Office's examination procedures are also stabilizing around the *Alice* framework. Following *Alice*, the Patent Office began issuing formal "guidance" to its

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[9] https://bit.ly/3wgpYU6

patent examiners on how to apply Section 101 during examination of pending claims. *See* Manual of Patent Examination Procedure, Revision 10.2019, §§ 2103-2106.07(c) (revised June 2020).[10] According to the Director, those "guidance documents aim to improve the clarity, consistency, and predictability of actions across the USPTO."[11] Not surprisingly, the guidance is based on a comprehensive analysis of lower court decisions across different technologies and under different scenarios.

Thus, Section 101 is now approaching stability across the entire spectrum of patent protection: from the Patent Office's decision to issue patent claims, to the lower courts' decisions in the enforcement of such claims. Patents issued in the last eight years have all issued under the *Alice* framework. Likewise, patents issued before *Alice* continue to expire. Section 101 invalidation rates should thus continue to go down.

Stare decisis is important in the law, but particularly so in patent law. As Judge Newman correctly points out, "unpredicta[bility]" over patent rights may "have a serious effect on the innovation incentive in all fields of technology." Pet. App. 174a (Newman, J., dissenting). That, however, is a reason for maintaining the status quo and for allowing the common-law to develop unimpeded. It is not a reason for upending the system and writing new standards on a clean slate.

D. Congress is the Correct Forum for the Relief Petitioner and Amici Seek

American Axle and many of the amici argue that the exceptions to Section 101 are negatively affecting innovation and investment in emerging technologies in this country. This is, of course, an ironic complaint in a case about applying a law of physics discovered centuries ago to

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[10] https://bit.ly/3cDXH2n

[11] https://bit.ly/3cAgBqF

the 150-year old field of making automotive propshafts. But what these policy arguments demonstrate is that the appropriate venue for these concerns is not a court that decides particular cases and controversies as they arise, but rather a policymaker that lays down new laws to govern the problems it foresees in the future. In the legislature, the innovation concern can be fairly weighed against the preemption concern "that patent law not inhibit further discovery by improperly tying up the future use of these building blocks of human ingenuity." *Alice*, 573 U.S. at 216 (internal quotation marks omitted).

And it has. In the summer of 2019, the Senate Subcommittee on Intellectual Property held multiple hearings and solicited public comments on the current Section 101 standard, debating whether the standard should be loosened, the judicial exceptions eliminated, or whether other changes were appropriate.[12] Indeed, that legislative record reflects why this Court is not the correct forum for the overhaul of Section 101 law that petitioners and amici seek. The Committee heard testimony from both sides of the debate, while considering the public policy impact of a change to patent-eligibility on consumer welfare. *See, e.g.*, Questions for the Record for Charles Duan, R Street Institute[13], at 1-2. Congress is far better suited to make the nuanced policy decision that any Section 101 reform presents.

To that end, several of the amici in this case have, elsewhere, acknowledged that Congress is the correct forum for any 101 changes. *See, e.g.*, Questions for the Record for David J. Kappos[14] ("I agree with Judges Lourie and Newman. Section 101 requires a Congressional fix.");

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[12] *See, e.g.*, https://bit.ly/3mgDqDa

[13] https://bit.ly/3fzB4Of

[14] https://bit.ly/2PmQUBc at PDF p. 4.

Questions for the Record for Paul R. Michel[15] ("Section 101 chaos surely needs a Congressional fix."); March 5, 2021 Letter From Bipartisan Group of Senators, including Senator Tillis[16] ("It is past time that Congress act to address [patent eligibility]").

Alice is now well-accepted doctrine, making it "part of the statutory scheme, subject (just like the rest [of the statutory scheme]) to congressional change." *Kimble v. Marvel Entm't, LLC*, 576 U.S. 446, 456 (2015). If policy concerns mandate change, the ball is squarely in Congress's court.

III. The Decision Below Correctly Found the Claims Ineligible Under *Alice*, *Mayo*, and Historical Cases Dating Back to *O'Reilly*

American Axle's petition largely, if not entirely, ignores the actual limitations of the relevant claims. *See* Pet. 8-9. But as the district court held, and the Federal Circuit affirmed, claims 22-36 are ineligible under a straightforward application of the *Alice* two-part test and, even without *Alice*, are ineligible under a long line of binding precedent dating back to the 1850s.

Putting aside the preamble, which American Axle argued below is not a substantive limitation, claim 22 contains only three method steps and the desired result achieved by applying those steps:

> [*method step 1*] providing a hollow shaft member;
>
> [*method step 2*] tuning a mass and a stiffness of at least one liner; and
>
> [*method step 3*] inserting the at least one liner into the shaft member;

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[15] https://bit.ly/3fvGmug at PDF p. 4.

[16] https://bit.ly/31Ob1el at 1.

> [*desired result*] wherein the at least one liner is a tuned resistive absorber for attenuating shell mode vibrations and wherein the at least one liner is a tuned reactive absorber for attenuating bending mode vibrations.

C.A.J.A.35.

Because it was beyond dispute that liners had been used as inserts to dampen vibration in automotive propshafts for decades, there was never an assertion that method steps 1 and 3 were anything more than conventional, known activity.

That leaves the "tuning" step and the "desired result." The district court construed "tuning" to mean "controlling the mass and stiffness of at least one liner to configure the liner to match [a] relevant frequency or frequencies." Pet. App. 7a-8a (quoting C.A.J.A.1047). "Thus, claim 22 requires use of a natural law of relating frequency to mass and stiffness—i.e., Hooke's law." *Id.* 13a. Indeed, American Axle "does not dispute that Hooke's law mathematically relates the mass and/or stiffness of an object to the frequency with which that object oscillates (vibrates)." *Id.*

Accordingly, claim 22 simply "defines a goal" and tells practitioners to reach it by using an (already known) laws of physics. "The claim on its face does not identify the 'particular [tuned] liners' or the 'improved method' of tuning the liners to achieve the claimed result." *Id.* That is, "Claim 22 confers patent coverage if the attenuation goal is achieved by one skilled in the art using any method" whatsoever, including "trial and error." *Id.*

Because it could point to nothing in the claims, American Axle argued below that it actually invented "sophisticated FEA [finite element analysis] models" to carry out the "tuning." Pet. App. 16a. But the Federal Circuit correctly rejected reliance on these "unclaimed features," pointing out that "neither the specifics of any

novel computer modelling, nor the specifics of any experimental modal analysis are included as limitations in claim 22." *Id.*

If "specific novel computer or experimental processes" for truly *applying* Hooke's law to achieve a novel liner were in American Axle's claims, "[t]his case would be significantly different[.]" *Id.* "But they are not." *Id.* Other than reciting a natural relationship, the claims contain no "physical structure or steps for achieving the claimed result." *Id.* "The focus of the claimed advance here is simply the concept of achieving that result, by whatever structure or steps happen to work." *Id.*

"Claiming a result that involves application of a natural law without limiting the claim to particular methods of achieving the result runs headlong into the very problem repeatedly identified by the Supreme Court in its cases shaping eligibility analysis." Pet. App. 17a (citing cases). This Court "has long held that claims that state a goal without a solution are patent ineligible." *Id.* As the Federal Circuit observed, "[b]oth claim 8 in *O'Reilly* [held patent-ineligible] and claim 22 here recite a natural law (electromagnetism in *O'Reilly* and Hooke's law here) and a result to be achieved (printing characters at a distance in *O'Reilly* and producing a liner to dampen specific vibrations)." Pet. App. 20a. "Thus, claim 22, like claim 8 in *O'Reilly*, is directed to a natural law because it clearly invokes a natural law, and nothing more, to accomplish a desired result." Pet. App. 21a.

In his concurrence from denial of *en banc* rehearing, Judge Dyk expanded the discussion of this Court's historical patent-eligibility cases, finding that it has never been patentable to claim merely "a result without" "the means for achieving the result". Pet. App. 154a (Dyk, J., concurring). "Allowing the patentability of such broad claims impairs rather than promotes innovation and denies patent protection to real inventors—those who

discover particular ways to achieve the desired result." *Id.* As this Court said in *Diamond v. Diehr*:

> It is for the discovery or invention of some practicable method or means of producing a beneficial result or effect, that a patent is granted, and not for the result or effect itself.

450 U.S. 175, 182 n.7 (1981)

Judge Chen, in his concurrence from denial of en banc rehearing, agreed. *See* Pet. App. 169a-70a (Chen, J., concurring). It has been a "principle that has been part of patent law since at least 1853" that "a claim may be held ineligible if it invokes a natural law to achieve some desired result without reciting any further limitations as to the means for accomplishing that result." *Id.* 163a. And in his view, "claim 22, as drafted and construed, is substantively the same as Mr. Morse's claim 8," leaving no "way to logically distinguish *O'Reilly* in this case." *Id.*

Echoing the panel dissent, American Axle contends that the majority manufactured a new test, the so-called "Nothing More" test. *See* Pet. App. 37a. That is wrong.

The decision below reflects a straightforward application of the *Alice* two-part test. The majority carefully walked through each step of *Alice* and explained why the claims are "directed to" Hooke's Law—a principle of "basic physics"—at step one and lack any inventive concept under step two, because they simply instruct one to take that natural law and "apply it." *E.g.*, Pet. App. 23a, 24a. Key to the majority's analysis were the admissions of American Axle's own witnesses, who admitted that Hooke's law relates the mass, stiffness, and frequency of an object. *E.g.*, Pet. App. 13a-14a.

The dissent casts this search for some patentable *application* of the natural law as a new "Nothing More" test, because the majority here remarked that these claims cover "nothing more" than the natural law. Pet. App. 37a, 28a-29a. But the panel majority's reasoning does not

articulate any "new" Section 101 test. It is wholly consistent with *Alice*, *Mayo*, and the foundational cases upon which *Alice* and *Mayo* stand, including *O'Reilly* and *Flook*. Perhaps *Mayo* captured it best: "to transform an unpatentable law of nature into a patent-eligible application of such a law, one must do *more* than simply state the law of nature while adding the words 'apply it.'" 566 U.S. at 72 (emphasis added). *More* is required to "ensure that the patent in practice amounts to significantly *more* than a patent upon the natural law itself." *Id.* at 73 (emphasis added).

Certain amici contend the decision contradicts *Diamond v. Diehr*. But *Diehr* is perfectly consistent. In this case and in *Diehr*, the claims recited a natural relationship. In contrast to claim 22, however, the claim in *Diehr* required numerous transformative steps: "installing rubber in a press, closing the mold, constantly determining the temperature of the mold, constantly recalculating the appropriate cure time through the use of the formula and a digital computer, and automatically opening the press at the proper time." *Diehr*, 450 U.S. at 187. "The invention involved a new rubber-curing process with a specific and detailed series of steps (one of which included the use of a natural law) that limited the possibility of preempting the natural law itself." Pet. App. 22a. Claim 22 contains no such "specific and detailed steps." Rather, the claim amounts to a mere instruction to "apply" a natural law by any means necessary to achieve a desired result. That has always been patent-ineligible.

IV. Whether the Eligibility Standard Involves Fact Or Legal Questions, The Result Is The Same In This Case On A Developed Record

American Axle's petition also asks whether each step of the patent-eligibility framework should be considered a fact question or a legal question. But this case is not the right vehicle for answering that question because the result is the same either way.

Unlike many Section 101 cases, which are decided at the pleading stage without a developed factual record, this case was decided at summary judgment after full fact and expert discovery. Thus, if anything, this question would better be presented in a case invalidating patent claims at the pleading stage, prior to development of a factual record.

On the record in this case, as the district court found and the Federal Circuit agreed, "[t]here is no dispute that adjusting the mass and stiffness of the liner will change the amount of damping of a certain frequency," and that this natural relationship is simply Hooke's law. Pet. App. 138a. Given the admissions of American Axle's witnesses, no reasonable factfinder could conclude otherwise. Those concessions included that:

- The use of liners in propshafts to dampen vibration was well known. C.A.J.A.30, 2:25-36;
- The relationship between mass, stiffness, and frequency (Hooke's law) is "basic physics." C.A.J.A.1757 (Sun Tr. 92:15-93:2);
- Liners are "tuned" by adjusting their mass and/or stiffness. *Id.*; C.A.J.A.1759 (Sun Tr. 98:14-22); C.A.J.A.1751 (Sun Tr. 66:22-67:7); C.A.J.A.2547 (Steyer Tr. 18:1-7, 20:20-21:5); C.A.J.A.4986 (Voight Tr. 65:2-12); C.A.J.A.3198-3199;
- The patent claims cover a liner "that achieves the [claimed] results," "[e]ven if you didn't try to and didn't know you did it." C.A.J.A.699, 679 (Hearing Tr. 58:19-25, 38:12-24).

Thus, whether a question of law or question of fact, the result is the same at both steps of the *Alice* test.[17]

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[17] In an attempt to drum up a fact dispute, American Axle contends that Neapco admits there are "hotly dispute[d]" questions of fact. *See* Pet. 21. But Neapco said no such thing. Rather, Neapco stated only that it "hotly disputes" American Axle's baseless

In any event, the lower courts did not address whether *Alice* step one presents a fact question. If this Court were to decide the question, it should wait for a case where the argument has been briefed and decided below. This is not the case.

CONCLUSION

The petition should be denied.

March 31, 2021

Respectfully submitted,

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characterization that Neapco copied American Axle's patented invention. *See Am. Axle & Mfg., Inc. v. Neapco Holdings LLC*, 2018-1763, Dkt. 36 at 57 (Fed. Cir. Sept. 21, 2018).