

No.

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**In the Supreme Court of the United States**

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DAVID A. TROPP,

*Petitioner,*

v.

TRAVEL SENTRY, INC., BRIGGS & RILEY TRAVELWARE  
LLC, DELSEY LUGGAGE INC., L.C. INDUSTRIES, LLC,  
OUTPAC DESIGNS INC., TRAVELPRO INTERNATIONAL  
INC., VICTORINOX SWISS ARMY, INC., WORDLOCK, INC.,

*Respondents.*

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

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**PETITION FOR A WRIT OF CERTIORARI**

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**QUESTION PRESENTED**

Inventor David Tropp owns and practices two patents that disclose a solution to the problem of screening all passenger luggage for flights originating in the United States, following the September 11 attacks. Through a series of specific claimed steps, his patents describe a method of providing consumers with special dual-access luggage locks that a screening entity would access in accordance with a special procedure and corresponding key controlled by the luggage screening entity, all while allowing the luggage to remain locked following screening. The question presented is:

Whether the claims at issue in Tropp's patents reciting physical rather than computer-processing steps are patent-eligible under 35 U.S.C. § 101, as interpreted in *Alice Corporation Pty v. CLS Bank International*, 573 U.S. 208 (2014).

**PARTIES TO THE PROCEEDING AND  
CORPORATE DISCLOSURE STATEMENT**

Petitioner is David A. Tropp, a natural person.

Respondents are Travel Sentry, Inc., Briggs & Riley Travelware LLC, Delsey Luggage, Inc., L.C. Industries, LLC, Outpac Designs, Inc., TravelPro International Inc., Victorinox Swiss Army, Inc., and Wordlock, Inc.

**RELATED PROCEEDINGS**

There are no pending proceedings directly related to this case.

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**PETITION FOR A WRIT OF CERTIORARI**

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Petitioner David A. Tropp respectfully petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Federal Circuit in this case.

**OPINIONS BELOW**

The opinion of the court of appeals (Pet. App. 1a-5a) is not published in the Federal Reporter but is available at 2022 WL 443202. The opinion of the district court (Pet. App. 6a-29a) is published at *Travel Sentry, Inc. v. Tropp*, 527 F. Supp. 256 (E.D.N.Y. 2021).

## JURISDICTION

The judgment of the court of appeals was entered on February 14, 2022. On April 28, 2022, the Court extended the time within which to file any petition for a writ of certiorari to June 14, 2022. On June 6, 2022, the Court further extended the time to file any petition for a writ of certiorari to July 5, 2022. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

### STATUTORY PROVISION INVOLVED

35 U.S.C. § 101 provides:

#### **Inventions Patentable**

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.

### INTRODUCTION

The only issue in this case is whether two of petitioner David Tropp’s method patents are patent-eligible under 35 U.S.C. § 101. The Federal Circuit held that they are not because they are directed to an “abstract idea”—even though the patents recite a series of steps involving a physical process that uses a physical apparatus, and even though record evidence showed innovation over the prior art. In so holding, the court of appeals employed the two-step patent-eligibility framework in *Alice Corporation Pty. v. CLS Bank International*, 573 U.S. 208, 216 (2014), to invalidate patents far different from the kind that this Court has said fall within the category of judicially created exceptions to patent eligibility. There is a

pressing need of obvious national importance for this Court’s intervention, both to revisit the *Alice* two-step framework and to provide much-needed guidance on the scope of the judicially created exceptions to 35 U.S.C. § 101.

## STATEMENT

### A. Patent eligibility

The Patent Act defines the subject matter eligible for patent protection as “any new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. This Court has recognized three “implicit exception[s]” to Section 101: “laws of nature, natural phenomena, and abstract ideas.” *Alice Corp. Pty. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (internal quotation marks omitted). An invention that claims a law of nature, physical phenomenon, or abstract idea, without more, is not eligible for patent protection, while an invention that “integrate[s]” one of those “into something more” may be patent-eligible. *Id.* at 217 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 73 (2012)).

This Court has developed a two-step test for distinguishing between patents that claim only laws of nature, natural phenomena, and abstract ideas, and patents that claim patent-eligible applications of those concepts. First, a court determines “whether the claims at issue are directed to [a] patent-ineligible concept.” *Alice*, 573 U.S. at 217. If they are, the court searches for an “inventive concept” by asking, “[W]hat else is there in the claims before us?” *Ibid.* (internal quotation marks omitted). In answering that second question, the court considers “the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional

elements ‘transform the nature of the claim’ into a patent-eligible application.” *Ibid.* (quoting *Mayo*, 566 U.S. at 73).

### **B. The patents at issue**

The two patents at issue here both concern a physical process for screening luggage without breaking locks. Following the September 11 attacks, Congress mandated that the newly created Transportation Security Administration (TSA) inspect all checked airline luggage for flights originating in the United States. C.A. App. 2789. In announcing the new policy, TSA advised travelers to leave their checked luggage unlocked and warned that its agents would cut locks if necessary to complete the inspection. *Travel Sentry, Inc. v. Tropp*, 497 F. App’x 958, 959 (Fed. Cir. 2012).

Petitioner devised a method that accommodates TSA’s need to inspect luggage, while simultaneously providing passengers a means to lock their checked bags and keep them locked after screening. That method employs new “special locks”—locks that can be opened by their owner but also by a matching master key given to screening agents, with physical features on the locks including an identification structure that signals to the screeners that they can open the special locks with that corresponding master key controlled by the luggage screening entity in an agreed screening process. C.A. App. 23-32, 33-43.<sup>1</sup>

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<sup>1</sup> Petitioner first conceived of his invention in December 2002, after reviewing TSA’s announcement of the upcoming screening mandate and recognizing the serious problems it would cause to have millions of bags left unlocked or with broken locks. C.A. App. 1694. Petitioner documented those problems and his solution in an invention journal, in which he identified the

To secure his inventions, Tropp applied for and obtained U.S. patents. Pet. App. 8a. Among those are U.S. Patent No. 7,021,537 (issued Apr. 4, 2006) and U.S. Patent No. 7,036,728 (issued May 2, 2006)—the two at issue in this case. Those patents disclose an improved method of screening airline luggage using a special dual-access lock and an identification structure. *Id.* at 10a-12a. The patents describe a method of providing consumers with dual-access luggage locks that a screening entity would access in accordance with a special procedure and a corresponding key controlled by the luggage screening entity. *Ibid.*; see also C.A. App. 29 at Claim 1; C.A. App. 40 at Claim 1. The locks are marked with an “identification structure,” which signals to the screening entity that it holds a master key to that lock, and would subject the lock to the special procedure. Pet. App. 10a-12a; C.A. App. 29 at Claim 1; C.A. App. 40 at Claim 1. Acting pursuant to agreed process, the screening entity uses the master key to open the special locks, inspect the luggage, and re-lock them. Pet. App. 10a-12a; C.A. App. 29 at Claim 1; C.A. App. 40 at Claim 1.<sup>2</sup> The Patent & Trademark Office

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security and privacy concerns associated with TSA’s plan to clip passengers’ locks as well as the likely downturn in lock sales that would result from such a process, and identified the solution he would later patent. *Ibid.*

<sup>2</sup> Soon after Tropp filed his patent application, TSA notified Tropp that the agency would recognize the Safe Skies master key and lock system. *Travel Sentry*, 497 F. App’x at 960. TSA and Safe Skies entered into a memorandum of understanding. Under the terms of that agreement, Safe Skies provides TSA personnel with training materials to recognize Safe Skies locks and a master key to open and re-lock those locks; TSA agrees, “whenever practicable,” to use the master key to open luggage locked with Safe Skies locks. *See, e.g., id.* at 961.

twice confirmed the patentability of the patent claims in reexamination. C.A. App. 2741-48.

Petitioner is not merely a patent holder; he practices his invention. *E.g.*, *Travel Sentry*, 497 F. App'x at 960. Soon after filing for the two patents at issue, petitioner incorporated Safe Skies, LLC, and began manufacturing and selling locks that could be identified with a red flame logo. *Safe Skies Luggage Locks* (last accessed July 4, 2022), <https://www.safeskieslocks.com/index.php>. He began selling these “Liberty Locks” online, through mail order, as well as to large retailers. *Travel Sentry*, 497 F. App'x at 960. Petitioner’s method has enjoyed tremendous success in the travel industry, quickly becoming the new standard for luggage locks. See, *e.g.*, C.A. App. 2223.<sup>3</sup>

### C. Proceedings below

1. The parties have been litigating this case in the Eastern District of New York for over fifteen years—long before *Alice* impacted 35 U.S.C. § 101 law. Petitioner’s industry rival, Travel Sentry, practices

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<sup>3</sup> Indeed, since 2004, petitioner has sold millions of dollars’ worth of locks throughout the United States and around the world. *E.g.*, C.A. App. 2202. Safe Skies locks are sold either integrated into commercial luggage lines, such as Calvin Klein® and Tommy Hilfiger®, or standalone through dozens of retailers, such as Walgreens, Kmart, Bed Bath and Beyond, and others. *E.g.*, *ibid.* Safe Skies also sells its locks directly to travelers through its website, [www.safeskieslocks.com](http://www.safeskieslocks.com). TSA offers a direct link to the Safe Skies website, explaining that “TSA officers have tools for opening and re-locking baggage with accepted and recognized locks, such as Safe Skies® and Travel Sentry®, reducing the likelihood of damaging the lock or bag if a physical inspection is required.” See TSA, Travel Tips, <https://www.tsa.gov/travel/travel-tips>; see also C.A. App. 1269 (encouraging passengers to “use a TSA-recognized lock and avoid having your lock broken if a physical inspection is required”).

petitioner's special-lock invention on behalf of its luggage manufacturer licensee clients—collectively, respondents in this case. In 2006, Travel Sentry sued Tropp for a declaratory judgment of non-infringement and invalidity of the '537 and '728 patents. See Pet. App. 7a. Tropp counterclaimed for infringement. *Ibid.* In 2008, Tropp brought a separate infringement claim against several of Travel Sentry's licensees. See *ibid.*<sup>4</sup>

Like Safe Skies, Travel Sentry marks locks using an identification structure—a red diamond. C.A. App. 1699. And like Safe Skies, Travel Sentry signed an agreement with the TSA that sets forth a similar joint plan for cooperatively implementing a lock-and-master-key program. *Ibid.* Travel Sentry agreed to provide TSA with sets of keys to open its locks. *Ibid.* And Travel Sentry agreed to provide TSA with screener training materials and instructions for identifying and unlocking Travel Sentry locks. *Ibid.*

Unlike Safe Skies, Travel Sentry does not make and sell locks. C.A. App. 1699. Instead, it licenses its red diamond trademark to various lock manufacturers and distributors who pay Travel Sentry for the privilege of marking their own locks with the logo. C.A. App. 1699-1700.

2. Over a decade after this case was filed, and after several trips to the Federal Circuit and back on other matters,<sup>5</sup> the trial court held Tropp's patents to

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<sup>4</sup> The district court had jurisdiction over petitioner's claims under 28 U.S.C. § 1331 and 1338(a).

<sup>5</sup> See, e.g., *Travel Sentry*, 497 F. App'x at 959-60 (vacating and remanding grant of summary judgment to Travel Sentry on non-infringement); *Travel Sentry, Inc. v. Tropp*, 877 F.3d 1370, 1380 (Fed. Cir. 2017) (again reversing summary judgment for Travel Sentry on non-infringement).

be directed to patent-ineligible abstract subject matter under 35 U.S.C. § 101. See Pet. App. 18a-28a.

The district court considered the following representative claim containing a series of steps:

1. A method of improving airline luggage inspection by a luggage screening entity, comprising:

making available to consumers a special lock having a combination lock portion and a master key lock portion, the master key lock portion for receiving a master key that can open the master key lock portion of this special lock, the special lock designed to be applied to an individual piece of airline luggage, the special lock also having an identification structure associated therewith that matches an identification structure previously provided to the luggage screening entity, which special lock the luggage screening entity has agreed to process in accordance with a special procedure,

marketing the special lock to the consumers in a manner that conveys to the consumers that the special lock will be subjected by the luggage screening entity to the special procedure,

the identification structure signaling to a luggage screener of the luggage screening entity who is screening luggage that the luggage screening entity has agreed to subject the special lock associated with the identification structure to the special procedure and that the luggage screening entity has a master key that opens the special lock, and

the luggage screening entity acting pursuant to a prior agreement to look for the identification structure while screening luggage and, upon finding said identification structure on an individual piece of luggage, to use the master key previously provided to the luggage screening entity to, if necessary, open the individual piece of luggage.

Pet. App. 11a-12a; C.A. App. at Claim 1 ('537 Patent).

Applying the *Alice* framework, the district court held that the claims at issue are ineligible for patent protection because they concern only abstract ideas. Pet. App. 20a-24a. In the court's view, the patent claims involved "the application of dual-access locks to airport luggage inspection," "a long-standing fundamental economic practice and method of organizing human activity." *Id.* at 21a.

The district court further concluded that the patent claims did not contain an inventive concept sufficient to transform an abstract idea into something patent-eligible. Pet. App. 25a-28a. The court's analysis on the second step of the *Alice* framework largely mirrored its analysis on the first. Again, the court stated that the patent claims "simply describe a well-understood and conventional device, a dual-access lock, and incorporate[] it with the fundamental economic practice of baggage inspection at airports." *Id.* at 26a.

All told, the district court devoted little attention to the second stage of Section 101 patent-eligibility analysis. See, e.g., Pet. App. 25a-28a. It discounted petitioner's arguments about an inventive combination of elements in the patent claims that made an entirely new process possible—the post-

September 11 system of mass baggage screening, C.A. App. 19—concluding that the “proffered ‘combination’ does not significantly deviate from the use of dual access locks and master key rings already available on the market,” C.A. App. 18. The court did not address petitioner’s evidence showing a material dispute of fact as to inventiveness over the prior art, *e.g.*, C.A. App. 1676-83, 1702. See Pet. App. 25a-28a. Nor did the court look to details in the patent claims, specifications, or drawings; identify the relevant activity at issue; or analyze the claimed benefits. See *ibid.*

3. Petitioner appealed to the Federal Circuit. Petitioner explained that his patents for a physical process that makes use of a physical apparatus were not directed to an ineligible concept, and that even if they were they would still be eligible because they contained an inventive concept sufficient to transform them into a patent-eligible application. Petitioner also flagged in his briefs that the Supreme Court “could address the scope of judicially created exceptions to patent eligibility and delineate the extent to which \* \* \* patent eligibility at either step is a question of law for the court based on the scope of the claims or a question of fact for the jury based on the state of art at the time of the patent.” Tropp CAFC No. 21-1908 Br. of Appellants at ix-x (ECF No. 35) (discussing *American Axle & Mfg., Inc. v. Neapco Holdings LLC*, No. 20-891).

The Federal Circuit affirmed. See Pet. App. 1a-5a. On step one of the *Alice* patent-eligibility framework, the panel pointed to Federal Circuit precedent to hold that the patent claims are directed to a “longstanding fundamental economic practice and method of organizing human activity.” Pet. App. 3a (citations

omitted).<sup>6</sup> Then, also under recent Federal Circuit precedent, the panel collapsed the *Alice* step-two inquiry into the first. *Id.* at 4a (stating that “where the focus of the claimed advance is abstract, an abstract-idea improvement cannot transform the ineligible claim into an eligible one”).<sup>7</sup>

### REASONS FOR GRANTING THE PETITION

The decision below rests on an application of the two-step framework this Court set out in *Alice Corporation Pty. v. CLS Bank International*, 573 U.S. 208 (2014), for determining whether claims are ineligible for patent protection because they concern one of this Court’s “implicit exception[s]” (*id.* at 216) to 35 U.S.C. § 101. The only issue in this case is whether the claims in petitioner’s patents are patent-eligible under 35 U.S.C. § 101. Applying the *Alice* framework, the district court found the claims ineligible as directed to an abstract concept, and the Federal Circuit panel affirmed. Pet. App. 1a-5a, 6a-29a.

The Court should grant certiorari to address the scope of judicially created exceptions to 35 U.S.C. § 101 patent eligibility and the *Alice* framework.

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<sup>6</sup> Separately, the panel concluded that petitioner did not preserve an argument that the ’537 and ’728 patents also teach “the creation of a new dual-access lock with a master key capable of opening dual-access locks whose combination-lock mechanisms differed from one another.” Pet. App. 4a. Petitioner does not seek this Court’s review of that aspect of the Federal Circuit’s decision.

<sup>7</sup> Petitioner did not seek *en banc* review; the Federal Circuit had recently split evenly on *en banc* review in *American Axle & Manufacturing, Inc. v. Neapco Holdings LLC*, 966 F.3d 1347 (Fed. Cir. 2020), showing that the full court of appeals was deadlocked on the issue of 35 U.S.C. § 101 patent eligibility.

Through this case, the Court could provide guidance on the proper application of the *Alice* framework or otherwise clarify the breadth of assessing whether patents fall into one of the judicially created exceptions to patent eligibility. Either way, the Court's action is needed to return this inquiry to something closer to the statutory text at issue here, which broadly authorizes the issuance of a patent for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101.

**I. THIS COURT'S GUIDANCE ON 35 U.S.C. § 101 PATENT ELIGIBILITY IS NEEDED**

A. It is by this point well-known that the U.S. Patent & Trademark Office, judges, congressmen, industry leaders, practitioners, and scholars alike have been calling for additional guidance on how to assess whether patents fall into one of the judicially created exceptions to 35 U.S.C. § 101. See, e.g., U.S. Patent & Trademark Office, *Patent eligible subject matter: Public views on the current jurisprudence in the United States* 18-41 (June 2022) (noting that many stakeholders find the current state of 35 U.S.C. § 101 law unclear and unpredictable, with consequences for American innovation investment, competition, and even national security); Shahrokh Falati, *Patent Eligibility of Disease Diagnosis*, 21 N.C. J.L. & Tech. 63, 99, 125 (Mar. 2020). The "*Mayo/Alice* test has been very difficult for patent stakeholders, including examiners, inventors, patent owners, patent lawyers and judges alike, to implement and/or interpret because it remains unclear what the boundaries of Section 101 are." Falati, *supra*, at 99. Indeed, the problem has not gone unnoticed at the Federal Circuit itself. In a recent dissent from denial of rehearing en

banc, several judges stated that “[t]he court’s rulings on patent eligibility have become so diverse and unpredictable as to have a serious effect on the innovation incentive in all fields of technology.” *American Axle*, 966 F.3d at 1357 (Newman, J., dissenting, joined by Moore, O’Malley, Reyna, and Stoll, JJ.).

B. The United States has repeatedly urged the Court to revisit the *Alice* two-step framework for Section 101 patent eligibility and provide much-needed course correction. For years, and across administrations, the Solicitor General has asked the Court to weigh in on how the judicially created exceptions to patent eligibility should be assessed.

For instance, in response to the Court’s request, the then-Solicitor General filed a brief expressing his views in *HP, Inc. v. Berkheimer*, No. 18-415. See Brief for the United States, *Berkheimer*, No. 18-415 (U.S. Dec. 6, 2019). The United States recommended denial of certiorari in that case because the petition appeared to be limited only to the second step of the *Alice* framework. See *id.* at 18-19. But it noted the importance of taking a case that would allow the Court to address the entire *Alice* framework at an appropriately holistic level. See, e.g., *id.* at 11 (noting that the *Alice* step-two question in *Berkheimer*— “[w]hether the patent-eligibility determination entails a legal, factual, or hybrid inquiry, and who (judge or jury) is properly tasked with making that determination”—“turn[s] largely on the substance of the inquiry.” *Id.* at 11 (citing *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 384-391 (1996))). The United States observed that, “although the Court has construed Section 101 and its precursors for well over a century, its recent decisions have introduced

substantial uncertainty regarding the proper Section 101 inquiry.” *Ibid.* The result, the United States said, left lower courts in the dark as to the proper “scope of the [judicially created] exceptions and the proper methodology for determining whether a particular patent implicates them.” *Id.* at 12-13.

In *Hikma Pharmaceuticals USA Inc. v. Vanda Pharmaceuticals Inc.*, No. 18-817, the United States similarly recommended that the Court deny certiorari. See Brief for the United States at 22-23, *Hikma*, No. 18-817 (U.S. Dec. 6, 2019). But again the United States noted the importance of the Court weighing in on the *Alice* framework in an appropriate case. The United States observed that the Patent & Trademark Office’s “ability to provide direction [was] constrained by the lack of clarity in judicial precedent.” *Id.* at 16 (discussing 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019). Under then-existing Court precedent, the United States said, courts, parties, and patent examiners were left with “little guidance” on the *Alice* first step, a “similarly ambiguous” *Alice* second step, and an overall framework that “cause[d] the Section 101 inquiry to overlap with the application of other Patent Act provisions.” *Id.* at 18.

In the end, the Court denied certiorari in *Berkheimer* and *Hikma*. See 140 S. Ct. 911 (2020) (mem.). And thus the Court did not revisit the judicially created exceptions to 35 U.S.C. § 101.

This May, the Solicitor General again called on the Court to address the scope of the *Mayo/Alice* framework for assessing judicially created exceptions to patent eligibility. See Brief for the United States, *American Axle*, No. 20-891 (May 24, 2022) (U.S. Br.). Among other things, the United States observed that

“[t]he *Mayo/Alice* framework has given rise to substantial uncertainty” (U.S. Br. 10) and “fractured the Federal Circuit” (*id.* at 19), and that the Federal Circuit’s application of that framework has left the Patent & Trademark Office with little guidance to apply Section 101 in a consistent manner, *id.* at 20.

The United States pointed out that this Court’s earlier cases correctly noted that even patents involving in some respect the application of an “abstract” idea can be patent eligible if directed to new and useful ends, particularly when employed as part of a process that takes place in the physical realm. U.S. Br. 8, 11. And the United States emphasized this Court’s earlier instruction for courts to “tread carefully” in holding an invention patent ineligible simply because it involves a patent-ineligible concept, noting that “a claim that confers exclusivity only over a narrow range of activity is less likely to implicate” preemption concerns. *Id.* at 12-13 (quoting *Alice*, 573 U.S. at 217; *Mayo v. Prometheus*, 566 U.S. 66, 71 (2012)).

The United States took issue with the Federal Circuit’s analysis at both steps of the *Alice* framework. U.S. Br. 14-19.

*First*, as to step one, the United States faulted the Federal Circuit for not considering the process by which patent claims achieve an identified goal. U.S. Br. 15-16. The court of appeals should look to the “specific sequence of steps” recited in the patent. *Id.* at 15. In the end, the United States said, the Federal Circuit’s “analysis blurs” the Section 101 inquiry with other requirements in the Patent Act, “by demanding that the claims provide a degree of detail more appropriate to the enablement inquiry.” *Ibid.*

*Second*, as to step two, the United States faulted the Federal Circuit for erecting in effect a “categorical rule that conventional claim elements should be disregarded” when assessing whether patent claims contain an inventive concept. U.S. Br. 18. The United States emphasized that “clarification” of how step two should work is “especially important,” because that determination “is coextensive with the ultimate question of patent-eligibility in the many cases where a court reaches that step.” *Id.* at 19. And it urged the Court to adopt an approach by which the “step-two analysis should be performed in accordance with the longstanding principle that a combination of claim elements may reflect a patent-eligible invention even though each individual element was part of the prior art.” *Ibid.* Under that approach, the United States said, “the step-one determination whether a particular claim is ‘directed to’ [an ineligible concept] can simply serve as an initial screen, identifying claims that warrant further scrutiny to ascertain whether they claim patent-eligible applications \* \* \* or instead effectively claim the [ineligible concept] themselves.” *Ibid.*

C. Following the Solicitor General’s suggestion, it appeared that the Court might weigh in on the *Alice* framework through the petition in *American Axle*. After all, in its petition, American Axle described how a highly fractured Federal Circuit “used Section 101 to invalidate patent claims directed to a new and useful industrial process for manufacturing an improved driveshaft for an automobile.” Pet. at 2, *American Axle*, No. 20-891 (U.S. Dec. 28, 2020). The result, American Axle said, was the latest in “a steady expansion of the exceptions to Section 101.” *Id.* at 20. American Axle urged the Court to grant review “to recalibrate Section 101 jurisprudence and ensure that

the types of inventions at the heart of our country's patent system for centuries remain eligible for patent protection." *Id.* at 21; see also *id.* at 35 ("This case \* \* \* presents the Court with a unique opportunity to clarify the law on Section 101 as to all technologies and industries and, at the same time, [rein] in the non-textual exceptions that have steadily crept into our nation's manufacturing sector.").

Ultimately, however, *American Axle* proved ill-suited to the task of reexamining the judicially created exceptions to Section 101 and the *Alice* framework. See *American Axle*, 2022 WL 2347622, at \*1 (U.S. June 30, 2022) (mem.) (denying certiorari). Arguably, broader issues about the continued viability and proper scope of the *Alice* framework applied only "tangentially" in that case. Supp. Brief for Respondents at 3, *American Axle*, No. 18-415 (U.S. June 7, 2022). And in any event, *American Axle* turned in large measure on a factbound application of the natural law exception that was raised by the court of appeals sua sponte. See Pet. at 23, *American Axle*, No. 20-891 (U.S. Dec. 28, 2020).

This case lacks those issues that might get in the way of addressing the full scope of the *Alice* framework. And this case involves the abstract-idea exception, which "has arisen much more frequently" in this Court's 35 U.S.C. § 101 cases (Tanner Mort, *Abstract Ideas: The Time Has Come for Congress to Address the Patentability of Software and Business Method Inventions*, 56 Idaho L. Rev. 383, 388 (2020)) and thus would most benefit from the Court's clarification.<sup>8</sup>

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<sup>8</sup> Unlike *American Axle*, the petition in *Spireon, Inc. v. Procon Analytics, LLC*, No. 21-1370, concerned the abstract-idea

## II. THIS CASE WOULD PROVIDE A GOOD VEHICLE FOR THE COURT'S GUIDANCE ON 35 U.S.C. § 101 PATENT ELIGIBILITY

The full scope of the *Alice* framework for assessing judicially created exceptions to 35 U.S.C. § 101 patent eligibility is squarely at issue here. This case would provide an appropriate blank slate for the Court to revisit or modify the *Alice* framework, either broadly or as confined to innovations involving physical processes. The Federal Circuit's decision below is emblematic of the slow mission creep of judicially created exceptions in general and of the abstract-ideas exception in particular. The Federal Circuit has deviated from this Court's holdings and used 35 U.S.C. § 101 to invalidate patents covering traditional forms of innovation through an often-opaque application of the *Alice* framework. In the absence of guidance from this Court, decisions like the one below are regrettably common. That framework would benefit from a fresh reexamination by the Court—for several reasons exemplified by this case.

A. The decision below expands *Alice* far beyond its appropriate limits, in tension with this Court's patent-eligibility precedents. By employing a broad conception of the judicially created exceptions to patent eligibility, the Federal Circuit has invalidated patents that claim new and useful improvements squarely in the physical realm that made it possible

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exception to 35 U.S.C. § 101 patent eligibility. See generally Pet., *Spireon*, No. 21-1370 (U.S. Apr. 19, 2022); *Spireon*, 2022 WL 2347633, at \*1 (U.S. June 30, 2022) (mem.) (denying certiorari). But it did so in the context of an invention concerning improved computer networking capabilities, a concept similar to the abstract idea at issue in *Alice* itself. See Pet. at 7-8, *Spireon*; *Spireon*, 573 U.S. at 216-17.

to conduct mass screening with the special locks' identification structure and TSA's master key. Pet. App. 2a-5a. The Federal Circuit has thereby transformed the patent-eligibility inquiry into something far different—and far more damaging to innovation—than this Court ever contemplated in its decisions addressing 35 U.S.C. § 101. And that damage is particularly acute in cases like this one, which involve innovations and improvements that take place in the tangible physical realm, not life sciences or software.

This case involves improved specific *physical* products, with new characteristics not existing in the prior art, and a new *physical* process. Indeed, petitioner's patents here claim a new physical process to address a new congressional challenge that demanded universal baggage-screening on a massive scale. See pp. 4-5, *supra*. Far from the realm of manipulating ideas, that process involves a series of concrete steps to achieve an outcome and takes place in the real world nearly every minute of every day in airports across the United States. The claims here are directed to specific physical objects—a *particular type* of dual-access lock and a *particular type* of master key—and a *particular process* of utilizing them. C.A. App. 23-32, 33-43. And the claims specifically anticipate manufacturing these locks. See C.A. App. 29 ('537 Patent col. 6, ll. 41-44).

The Federal Circuit brushed all this aside as something merely directed to an ineligible concept. Pet. App. 3a-4a. But there is nothing abstract about the objects or process described here. The claims do not simply state an abstract goal; they describe how to reach it and with what tools. Cf. U.S. Br. 15-16. When examined in light of the patent specifications

and particular requirements stated in the patent claims, it is plain that the patents here require specific equipment—a dual-access lock with an improved master key and structure indicating that it is compatible with the luggage screening entity—alongside a specific process for the screening entities to use that new, specific equipment. See C.A. App. 23-32, 33-43. Had the court of appeals examined those claimed steps in any detail, it would have seen that “the claim does considerably more” than simply rely on an ineligible concept, U.S. Br. 16. Performing these process steps leads to a new, useful, and tangible outcome.

The claimed innovation here stands in stark contrast to the cases in which this Court has employed judicially created exceptions to 35 U.S.C. § 101 to invalidate patents that try to preempt matters outside the physical realm. The patent claims at issue in *Alice* and *Mayo* both involved the generic performance on a computer of an existing human process. *Alice*, 573 U.S. at 216-17; *Mayo*, 566 U.S. at 73. And the patent in *Bilski v. Kappos* similarly involved a mental process—hedging risk in commodity brokerage transactions—that amounted to no more than solving a math equation. 561 U.S. 593, 611-612 (2010). It is no surprise that the innovations at issue in those cases were not patent eligible. The manipulation of ideas at issue in those cases is fundamentally different from the physical process described in the two patents at issue here.

This Court’s recent precedents were never intended to expand the conception of abstract ideas in a way that would swallow patent claims like those at issue in this case. The principles prohibiting patents on abstract ideas have been around “for more than 150

years.” *Alice*, 573 U.S. at 216. *Alice*, along with *Mayo* and *Bilski* before it, sought to adapt those principles to the software and computing context. In fact, *Bilski* rejected the “machine-or-transformation test” as too restrictive “of inventions in the Information Age.” *Bilski*, 561 U.S. at 605. In that sense, *Alice* struck a balance between granting patentability to software-based processes and limiting the patentability of the inherent qualities of software itself. *Alice* was not meant to restrict the long-recognized patentability of claims to industrial processes, new physical structures, or inventions “tied to a particular machine or apparatus.” *Bilski*, 561 U.S. at 600.

B. This case also presents an opportunity for the Court to weigh in on the second step of the *Alice* framework. In this case, there is copious record evidence showing innovation over the prior art to allow a factfinder to conclude that there is an inventive concept sufficient to transform the claims into patent-eligible material—up to and including expert testimony on that very issue. See C.A. App. 2147-48, 2153. The district court brushed aside that evidence as irrelevant. Pet. App. 27a-28a. And the court of appeals ignored it outright. See *id.* at 4a.

At the outset, once again, the situation is far afield from that presented in *Alice* itself. There, the Court observed that “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” 573 U.S. at 223. It is unsurprising that simply “[s]tating an abstract idea ‘while adding the words “apply it”’ is not enough for patent eligibility.” *Ibid.* (quoting *Mayo*, 566 U.S. at 72). The claims here, by contrast, fashion an entirely new physical process and do not concern

merely automating a task or making it more efficient by performing it on a computer.

Under a proper application of the second step of the *Alice* framework, the claims here should have survived 35 U.S.C. § 101 review or at least have gone to a jury. The record here shows that petitioner's process of special locks and master keys has displaced earlier luggage locks that lacked uniform identification structures. C.A. App. 1699, 2589-90. Nothing in the record suggests that earlier locks were up to the task of solving the post-September 11 universal screening mandate. *E.g.*, C.A. App. 1082.<sup>9</sup> To the contrary, the record evidence shows that TSA was routinely breaking those earlier locks to implement the heightened screening mandated by Congress. C.A. App. 1070-71, 1188, 1705, 1715, 1844. These problems rightly concerned the federal government, the travel industry, and the general public. Lock sales plummeted by 80% shortly after the institution of the screening mandate, and by the summer of 2003 TSA had received thousands of customer complaints and financial claims over damaged bags. See C.A. App. 1694. TSA was left telling travelers to keep their bags unlocked, *Travel*

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<sup>9</sup> For instance, the district court placed particular emphasis on the fact that “[l]uggage makers were no strangers to the concept” of dual-access locks. Pet App. 8a. Thus, the court discussed a handful of examples where manufacturers, such as Samsonite, have sold dual-access locks to consumers since the 1960s. *Ibid.* But record evidence shows that Samsonite lacked a ready solution to the novel issue of September 11 baggage screening. See C.A. 1082 (noting, in January 2003, that “Samsonite is in the process of ‘brainstorming’ new solutions for applying temporary locks to some of its luggage products, said Lynne Berard, the company’s vice president of marketing for its U.S. wholesale division.”).

*Sentry*, 497 F. App'x at 959, leaving passengers' bags susceptible to theft and tampering, C.A. App. 1694. Petitioner solved that security problem with the innovations claimed in his patents. C.A. App. 23-32, 33-43; see also pp. 8-9, *supra* (discussing the four steps to Claim 1). This system constituted a critical advancement over earlier locks that no longer worked in the face of post-September 11 screening requirements. *Contra, e.g.*, Pet. App. 9a-10a, 27a-28. At the very least, with this record evidence, the factfinder should have been able to make that call.

C. Finally, this case ably demonstrates how the Federal Circuit's current 35 U.S.C. § 101 patent-eligibility inquiry has expanded far beyond the statutory text. In practice, the inquiry into judicially created exceptions to patent eligibility now extends to encompass considerations addressed by other express prerequisites for patentability, in contravention of this Court's admonition that these other requirements exist "wholly apart from whether the innovation falls into a category of statutory subject matter." *Diamond v. Diehr*, 450 U.S. 175, 190 (1981) (internal quotation marks omitted).

Much of the discussion below on the question of 35 U.S.C. § 101 patent eligibility was more appropriately directed to other requirements in the Patent Act not at issue—35 U.S.C. § 102 (novelty) or 35 U.S.C. § 103 (non-obviousness). See, *e.g.*, Pet. App. 27a (district court discussing what it characterized as "the well-known technique of inspecting luggage"); *ibid.* ("It is a cold, hard fact that Tropp's proffered 'combination' does not significantly deviate from the use of dual access locks and master key rings already available on the market."); *id.* at 28a (characterizing the patents as claiming "simply the advantages of having a dual

access lock with a master key provided to baggage personnel during luggage inspection”). And many of respondents’ ultimately successful arguments before the court of appeals similarly conflated the Patent Act’s requirements. See, *e.g.*, Travel Sentry CAFC No. 21-1908 Br. of Appellees at 23 (ECF No. 42) (claiming that “reducing the number of master keys for TSA was the common sense solution”); *id.* at 28 (claiming that petitioner “overstates the novelty of his method”); *id.* at 32 (agreeing with the district court’s faulting of petitioner for not better “explaining how or why [his special locks] were novel”).

Matters of obviousness and novelty have no place in the 35 U.S.C. § 101 inquiry, which is meant to be “only a threshold test” of patent eligibility. *Bilski*, 561 U.S. at 602. It is unfair to subject patent holders to roving substantive requirements on what is supposed to be a threshold issue. And it unnecessarily injects confusion and delay into what should be a matter decided definitively at the outset. Indeed, it leads precisely to situations like the one here—where, in a case that had been winding its way through the courts for fifteen years on various other Patent Act issues, respondents effectively got another, bigger bite at the apple under the guise of 35 U.S.C. § 101 patent-eligibility review. Through this case, the Court could set appropriate boundaries of when and what the patent-eligibility inquiry should be.

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This case ably demonstrates how the Federal Circuit has gone astray on the issue of judicially created exceptions to 35 U.S.C. § 101 patent eligibility. The court’s expansive conception of the abstract-ideas exception ultimately led it to toss out, on only the most cursory of analysis, two patents that

had survived Patent & Trademark Office scrutiny. Pet. App. 2a-5a. That approach will hinder American global competitiveness and innovation—whether that innovation would come from the research-and-development arm of a major corporation or from a small-time inventor like the petitioner here, who practices his innovation with a specific solution to a specific problem. The Court’s intervention is needed to set the patent-eligibility inquiry on the right path—one closer to Congress’s command to authorize patents for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101.

### CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted.

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