



February 10, 2023

Kathi Vidal
Under Secretary of Commerce for Intellectual Property
Director
United States Patent and Trademark Office
600 Dulany Street
Alexandria, VA 22314
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VIA ONLINE SUBMISSION

Re: Comments of Engine Advocacy on United States Patent and Trademark Office 2022–2026
Draft Strategic Plan

Dear Director Vidal,

Engine is a non-profit technology policy, research, and advocacy organization that bridges the gap between policymakers and startups. Engine works with government and a community of thousands of high-technology, growth-oriented startups across the nation to support the development of technology entrepreneurship through economic research, policy analysis, and advocacy on local and national issues. We appreciate the opportunity to provide these comments and suggestions as the U.S. Patent and Trademark Office (USPTO) crafts its strategic plan for 2022-2026.

I. INTRODUCTION

USPTO's draft strategic plan correctly recognizes that we *all* have a stake in the agency's work.¹ That is a critical theme that should be echoed, often and explicitly, in every section of the strategic plan—each of the agency's stakeholders should see her interests reflected in USPTO's goals, objectives, strategies, and KPIs.

In these comments, Engine offers suggested edits to the draft plan which would better position the agency to be responsive to all of its stakeholders—including innovators who have not (yet) applied

¹ United States Patent and Trademark Office 2022–2026 Draft Strategic Plan, USPTO, https://www.uspto.gov/sites/default/files/documents/USPTO_2022-2026_Draft_Strategic_Plan.pdf [hereinafter "Draft Plan"].

for patents or registered trademarks, entrepreneurs who never intentionally interact with the patent system, small businesses who suffer in the face of wrongful infringement allegations, and the broader public. Before turning to the specific text, two general comments:

- ***Mechanisms to engage with all stakeholders.*** Right now, the agency has numerous channels to talk and listen to IP applicants, IP owners, and IP attorneys. And in recent years, agency leadership has demonstrated its willingness to engage with stakeholders across sectors, including listening to those beyond the “usual suspects.”² But USPTO lacks formal mechanisms to communicate with most of its stakeholders.³ To be truly responsive, and to advance innovation to positive impact for everyone in the nation, the agency needs to be able to listen to more people in consistent and meaningful ways. We urge USPTO to build these new channels of communication, for example creating new advisory bodies or internal organizational units that interface with the broader public.
- ***Moving away from the language of USPTO “customers.”*** The draft plan should be more precise in describing USPTO’s stakeholders. There are places, throughout, where the word “customer” is used in a way that seems misplaced. The agency provides an important service to benefit everyone in the nation, although many of us might not see ourselves as USPTO “customers.” Likewise, it seems the agency sometimes uses “customer” when it means IP “applicants” and/or IP “owners”—and where that is the case, it should use those terms. Otherwise, the agency could be positioning itself to pick some stakeholders over others, giving certain “customers” what they want and disregarding the others. Relatedly, where the agency seeks “customer satisfaction” information, it should think about how it could get satisfaction information from all of its stakeholders (including non-applicants).

As the agency embraces bringing innovation to impact, it must always remember that IP is a means to an end, not an end itself.⁴ And it should work to ensure IP rights truly foster the broader goals of innovation, creation, entrepreneurship, competition, and progress for all of us.

II. GOAL 1

This section of the draft plan paints a promising picture of an agency invested in the success of every domestic innovator, creator, and entrepreneur, but the specific objectives, strategies, and KPIs need to be refined to better align with that goal. Engine enthusiastically agrees that we want “everyone with a novel idea to know they can bring it to reality, create a brand, start a company, and

² See, e.g., Abby Rives, Opinion, *USPTO Public Advisory Board Must Represent the Public*, Law360 (Oct. 6, 2022), <https://www.law360.com/articles/1537017/>.

³ *Id.*; *Integrating Public Voices Into the Patent System: A Blueprint for Reforms*, I-MAK, <https://www.i-mak.org/public-participation-blueprint/> (last visited Feb. 1, 2023).

⁴ E.g., Orin Herskowitz, *For Start-ups, Patents Should be a Means to an End, Not an End in Themselves*, IAM (Oct. 3, 2019), <https://www.iam-media.com/article/patents-and-start-ups>.

secure investment.”⁵ That demands a nuanced consideration of the IP system, though, and USPTO’s strategic plan must account for the full reality innovators and entrepreneurs face.

To champion all innovators, creators, and entrepreneurs, USPTO needs a plan that will work for varied paths to success, e.g., those who have not and/or will not apply for IP. And the agency needs to support startups and small businesses when others’ IP claims improperly stand in their way. Low-quality patents and meritless infringement allegations are routinely raised in ways that harm innovation, creativity, and competition—and startups and small businesses are particularly vulnerable. But USPTO can (and should) help.

Merely by way of example, the draft plan says USPTO wants to encourage veterans to participate in our innovation ecosystem.⁶ That should include people like Justus Decher, the founder and president of MyVitalz.⁷ In 2016, his telehealth startup received a demand letter from an entity that claimed to own the idea of telehealth generally. At the time, MyVitalz was a finalist in a Veterans Affairs’ competition to improve remote medical practice, and the startup suddenly found itself accused of infringing a patent that lacked any technical details for how to build or run a telehealth product. But in another litigation involving the same patent, a court recommended that the patent be held ineligible—saving MyVitalz the choice of tens of thousands in settlement fees or selling the founder’s personal assets to pay a lawyer—and allowing him to refocus on launching the company.⁸ MyVitalz got there through its founder’s diligence and research,⁹ but USPTO would be wise to think about how it could have helped—and chart a plan to start helping similarly-situated companies.

The draft plan also says USPTO wants to encourage innovation and entrepreneurship by retirees.¹⁰ That should include people like Jean Anne Booth, the CEO and founder of UnaliWear. She came out of retirement to create smart watches that extend independence with dignity for vulnerable populations. Reflecting on her experience with the patent system, she has explained:

I had to stop publicizing positive news about UnaliWear because every time I did, we would get hit with a demand or lawsuit from a patent troll. It does not matter that we do not violate their patents—they still threaten to sue. The whole business model feels

⁵ Draft Plan at 9.

⁶ *Id.*

⁷ Engine has made similar points in previous material. *E.g.*, Response of Engine Advocacy Regarding Patent Eligibility Jurisprudence Study, Docket No. PTO-P-2021-0032 (Oct. 15, 2021), [https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/6169e0c4bad1714c70899988/1634328772919/2021.10.15_Engine+Response+to+101+Study+RFI+\(1\).pdf](https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/6169e0c4bad1714c70899988/1634328772919/2021.10.15_Engine+Response+to+101+Study+RFI+(1).pdf).

⁸ *Alice Saves Medical Startup From Death By Telehealth Patent*, Elec. Frontier Found., <https://www.eff.org/alice/alice-saves-medical-startup-death-telehealth-patent> (last visited Feb. 3, 2023); Joe Mullin, *Video: How Justus Decher Beat a Patent Troll, With Help From Alice*, Elec. Frontier Found (Feb. 8, 2019), <https://www.eff.org/deeplinks/2019/02/video-interview-how-justus-decher-beat-patent-troll-help-alice>.

⁹ *See, e.g.*, Minda Zetlin, *How to Fight—and Win—Against Patent Trolls*, Inc. (Mar./Apr. 2020), <https://www.inc.com/magazine/202004/minda-zetlin/patent-troll-assertion-entity-intellectual-property-lawsuit-settlement.html>.

¹⁰ Draft Plan at 9.

like legalized extortion. . . . Patents should be there for the people who are doing something meaningful and implementing novel ideas. With [patent assertion entities], it is just a waste of time and investors' money. . . . There are good things that I and my company could be doing in the world besides dealing with patent trolls.¹¹

As we have previously discussed:¹²

Meritless cases over invalid patents force startups to waste precious time and money.¹³ And being accused of infringing even low-quality patents affects startups in broad and sweeping ways:¹⁴ it becomes harder for them to compete, gain market share, attract customers, and attract investors.¹⁵ Startups report significant operational impacts, like changes in business strategy, business or business line exits, delays in hiring, and reduced valuations upon receipt of demand letters from patent assertion entities.¹⁶ Ultimately, the assertion of low-quality patents can unfortunately be (and has been) the reason some startups close up shop—especially companies that cannot afford the cost or weather the duration of a patent validity challenge.¹⁷ Setting aside assertion, low-quality patents create other substantial burdens and costs on innovation ecosystems. They operate like “scarecrows” that prevent would-be competitors from

¹¹ #StartupsEverywhere profile: Jean Anne Booth, Founder and CEO, UnaliWear, Engine (Apr. 30, 2021), <https://www.engine.is/news/startupseverywhere-austin-tx-unaliwear>.

¹² Response of Engine Advocacy to Request for Comments on USPTO Initiatives To Ensure the Robustness and Reliability of Patent Rights, Docket No. PTO-P-2022-0025, at 5-6 (Feb. 1, 2023), https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/63daa6decc3075607011a003/1675273950899/2023.02.01_Engine+Comments+on+Robustness+and+Reliability+Docket+No+PTO-P-2022-0025.pdf.

¹³ E.g., Colleen V. Chien, *Patent Assertion and Startup Innovation*, New Am. Found. (2013), <https://www.newamerica.org/oti/policy-papers/patent-assertion-and-startup-innovation/>; Nat'l Research Council, *A Patent System for the 21st Century* 38 (Stephen A. Merrill et al. eds., 2004) (describing patent litigation as “particularly burdensome for small firms and start-ups with fewer managerial personnel and less access to capital finance”).

¹⁴ Engine has made similar points in previous material. E.g., Comments of Engine Advocacy in Response to Request for Comments on Discretion to Institute Trials Before the Patent Trial and Appeal Board, Docket No. PTO-C-2020-0055, at 3-4 (Dec. 3, 2020), https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/5fca4fad1a258d244fec7ba7/1607094191551/2020.12.03_Comments+to+Docket+PTO+C+2020+0055.pdf.

¹⁵ See, e.g., *Startups Need Comprehensive Patent Reform Now*, Engine 7-14, <http://static1.squarespace.com/static/571681753c44d835a440c8b5/57323e0ad9fd5607a3d9f66b/57323e14d9fd5607a3d9faec/1462910484459/Startup-Patent-Troll-Stories1.d.pdf?format=original> (recounting startups stories); Robin Feldman, *Patent Demands & Startup Companies: The View From the Venture Capital Community*, 16 Yale J.L. & Tech. 236, 280 (2014) (investors report that an existing patent demand against a startup as a deterrent in deciding whether to invest); Colleen V. Chien, *Of Trolls, Davids, Goliaths, and Kings: Narratives and Evidence in the Litigation of High-Tech Patents*, 87 N.C. L. Rev. 1571, 1587-89 (2009) (describing how litigation can damage, e.g. defendants credit, relationships with customers and investors).

¹⁶ Colleen Chien, *Startups and Patent Trolls*, 17 Stan. Tech. L. Rev. 461, 474-75 (2014).

¹⁷ See, e.g., Engine, *Comprehensive Reform*, *supra* note 15; Amy L. Landers, *The Antipatent: A Proposal for Startup Immunity*, 93 Neb. L. Rev. 950, 979-80 (2015) (recounting examples of two former startups who won patent cases but lost market opportunities); Ethan Rothstein, *Arlington Startups Founder Testifies Before Congress About Patent Trolls*, ARL Now (Mar. 27, 2015), <https://www.arlnow.com/2015/03/27/arlington-startup-founder-testifies-before-congress/> (referring to “college students developing a product in a startup incubator who were threatened with a lawsuit by a patent troll” and “folded their company because they couldn’t even pay the licensing fee . . . that trolls ask for to avoid a lawsuit”).

innovating in areas where invalid patents stand in the way.¹⁸ Startups, in particular, may be more likely to skip R&D in the space low-quality patents improperly cover.¹⁹

To put this all another way: misuse of our current IP system has been the reason many people with novel, creative ideas have struggled to bring them to reality, struggled to create a brand, struggled to start a company, and/or struggled to secure investment. As the agency finalizes its strategic plan, it should build specific objectives and KPIs with those experiences in mind. Below are a few reflections and proposed edits to bring this section into alignment with its pro-innovation, pro-creation, pro-entrepreneurship goals.

A. OBJECTIVE 1.1

This section of the draft plan is properly framed around advancing innovation, but USPTO should amend its strategies and KPIs to match. And as it engages on the global stage, the agency should also factor the complexities startups face navigating international expansion and IP protection.

Measuring USPTO's success in supporting innovation. First, the draft plan emphasizes innovation, but then it shifts to counting patents and trademarks—the agency should revise its metrics to correspond with the innovation goals. Counting patents and trademarks as proxy for innovation and entrepreneurship is fraught. For one, the number of U.S. patents does not reflect domestic innovation. For example, all kinds of great innovation are not patented and patents can go to foreign inventors or others who never make a product or offer a service in the country.²⁰ And trying to increase patent counts could easily hurt domestic innovation—e.g., favoring the issuance of low-quality patents merely to up the numbers. Likewise, the number of trademarks may not reflect new companies or new products. For example, as the draft plan acknowledges, there are apparent

¹⁸ E.g., Christopher R. Leslie, *The Anticompetitive Effects of Unenforced Invalid Patents*, 91 Minn. L. Rev. 101, 116 (2006) (quoting *Bresnick v. U.S. Vitamin Corp.*, 139 F.2d 239, 242 (2d Cir. 1943)) (citing *Cardinal Chem. Co. v. Morton Int'l, Inc.*, 508 U.S. 83, 95-96 (1993)); see generally, *id.* at 113-39 (analyzing how the “mere possession of invalid patents can injure competition”); Jay P. Kesan, *Carrots and Sticks to Create A Better Patent System*, 17 Berkeley Tech. L.J. 763, 767 (2002) (“the social costs of improvidently granted patents are numerous”).

¹⁹ E.g., Fed. Trade Comm’n, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy*, Exec. Summ. p.5 (2003); cf. Jean O. Lanjouw & Mark Schankerman, *Enforcement of Patent Rights in the United States*, in *Patents in the Knowledge-Based Economy* 145, 146 (Wesley M. Cohen & Stephen A. Merrill eds., 2003) (“small firms avoid R&D areas where the threat of litigation from larger firms is high”).

²⁰ E.g., Gary N. Smith & Jeffrey Funk, *Why We Need to Stop Relying on Patents to Measure Innovation*, ProMarket (Mar. 19, 2021), <https://www.promarket.org/2021/03/19/patents-bad-measure-innovation-new-metric/>; see also, e.g., Charles Duan, *COVID-19 Shows What Innovation Looks Like Without Patents (Spoiler: It Works)*, Techdirt (July 22, 2021), <https://www.techdirt.com/2021/07/22/covid-19-shows-what-innovation-looks-like-without-patents-spoiler-it-works/>; Stephen Kinsella, *Study: Most Important Innovations Are Not Patented*, InfoJustice (Dec. 2, 2013), <https://infojustice.org/archives/31509>; Abby Rives, *A Brief Case Study: The Shortcomings of Counting Patents by Country to Inform Patent Eligibility in the U.S.*, Engine (Oct. 12, 2021), <https://engineadvocacyfoundation.medium.com/a-brief-case-study-in-policy-relevant-empirical-assessments-the-shortcomings-of-counting-patent-444acf13195f>; Bart Kolodziejczyk, *Why Do We Fail to Measure the Most Innovative Countries?*, Brookings (Jan. 22, 2018), <https://www.brookings.edu/blog/techtank/2018/01/22/why-do-we-fail-to-measure-the-most-innovative-countries/>.

efforts to flood the trademark register with more marks, which makes it more difficult for new entrants to secure protection.²¹

Measuring innovation by counting IP filings also improperly discounts and ignores most of the work that goes into successfully launching a new technology or a new company.²² Even though USPTO is, understandably, focused on patents and trademarks, it should build its strategic plan in a way that recognizes and supports every step along the path of innovation and entrepreneurship.

The agency should add metrics to assess the rate, direction, and volume of innovation, which will also help gauge success in delivering innovation to impact. The following types of data, for example, are a better fit: how much money is invested in domestic R&D, from public and private sources; how much money is invested in emerging technologies like quantum computing and artificial intelligence and priority areas like climate tech and advanced manufacturing; how does that investment in R&D compare to other economic indicators;²³ the number of new products or services offered;²⁴ the number of new businesses launched each year; startup survival rates; startup job creation; the percent of new entrepreneurs who launch out of opportunity versus necessity;²⁵ technological progress in terms of new products offered; the price of emerging technologies; regulatory approvals for new technologies; and technology adoption, e.g., the penetration of emerging tech and the availability of more mainstream technology.²⁶

Finally, the agency should partner with organizations like the Census Bureau and the National Science Foundation to collect any additional data USPTO needs. There may be easy ways to amend existing surveys to gather it—for example, amending the Annual Business Survey to identify startups with growth potential and understand their funding sources.²⁷

Factoring in startup experiences on the global stage. The draft plan also emphasizes USPTO's role influencing other countries' IP policies. We urge the agency to think about what U.S. startups

²¹ See, e.g., Draft Plan at 21-22; Beth Kowitt, *China is Flooding the U.S. with Trademark Applications and No One is Sure Why*, Yahoo (July 1, 2021), <https://www.yahoo.com/now/china-flooding-u-trademark-applications-130000415.html>.

²² See generally Christopher S. Storm, *Measuring the Inventor's Contribution*, 21 Univ. N. Hampshire L. Rev. 167, 172-85 (2022) (summarizing activities and roles required for a firm to successfully launch new technology products, highlighting a broad range of contributions beyond inventorship).

²³ See, e.g., *Gross Domestic Spending on R&D*, OECD, <https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm> (last visited Feb. 10, 2023).

²⁴ See, e.g., Branwen Morgan, *How Should Governments Measure Innovation?*, Nature Index (Oct. 11, 2016), <https://www.nature.com/nature-index/news-blog/how-should-governments-measure-innovation>.

²⁵ See, e.g., Robert Farlie & Sameeksha Desali, *State Report on Early-Stage Entrepreneurship in the United States: 2020*, Ewing Marion Kauffman Foundation 3 (Mar. 2021), https://indicators.kauffman.org/wp-content/uploads/sites/2/2021/03/2020_Early-Stage-Entrepreneurship-State-Report.pdf.

²⁶ See, e.g., Global Innovation Index 2022, <https://www.globalinnovationindex.org/Home> (last visited Feb. 6, 2023) (looking at technological progress indicators like semiconductor speeds, electric battery prices, the cost of renewable energy, and new drug approvals and looking at technology adoption in areas like penetration of electric vehicles and the availability of mobile broadband).

²⁷ See, e.g., Press Release: Eshoo Leads 10 Colleagues in Urging Better Data Collection on Startup Companies (Nov. 4, 2021), <https://eshoo.house.gov/media/press-releases/eshoo-leads-10-colleagues-urging-better-data-collection-startup-companies>.

need—and the challenges they face—when they think about expanding abroad (which can include seeking IP protection outside the U.S.). For example, startups operate under unique resource constraints and have to be more strategic in deciding what to patent where. They cannot afford to seed patent applications on every idea in every country. For example, as one founder has explained:²⁸

Overall, as a startup founder, it can feel like international patent systems are very much geared towards large corporations that have a lot of resources. It is easier for them to navigate, while the increased workload and costs associated with international filing can be too much for innovative startups to endure. On the other hand, it can be relatively easier to file a U.S. patent, and we can be confident that it will be protected by the court system. . . . I would say that the U.S. patent system has done very well. Given that most companies are international, we are constantly making the tradeoff between filing patents in other countries or saving money.

Likewise, startups have to figure out what you can disclose to whom before you file for patents in other countries. Streamlining and harmonizing, or at least educating, around that process is also important. For example, as one founder recently told us:²⁹

One of my biggest takeaways is that it's difficult to understand the rules around what you can say about your invention, when you should say it, or who you can disclose your invention to before you have filed for patent protection across the globe. This can be a challenge for everyone—including university professors who may have better access to IP resources. . . . If I present my research in the U.S., or at a conference somewhere else in the world, that could prohibit me from seeking patent protection abroad and mean I'm limited to filing U.S. patents. It's hard to understand the complexities of international patent law and I do not think young faculty realize that. I think that's something we should start teaching people in graduate school, as well as just making that type of information about IP systems more accessible.

The agency should keep these sorts of experiences top of mind, and weave them into its strategic plan. To that end, we offer these suggested redline edits to the draft plan:

²⁸ *#StartupsEverywhere* profile: Rishi Ranjan, Founder & CEO, GridRaster, Engine (July 2, 2021), <https://www.engine.is/news/startupseverywhere-mountainview-ca-gridraster>.

²⁹ *#StartupsEverywhere* Profile: Dr. Chelsea Monty-Bromer, Founder & CTO, SweatID, Engine (Feb. 10, 2023), <https://www.engine.is/news/startupseverywhere-cleveland-oh-sweatid>.

- Proposed amendments to Objective 1.1 strategies:³⁰
 - Strategy 1: Develop incentives and programs to encourage innovation in key technology areas, including climate, health, manufacturing, and other critical and emerging technologies
 - Strategy 2: Work with federal partners to identify key technologies the United States should focus on and support innovation and IP protection in those areas
 - ~~Strategy 3: Work to ensure money invested by the government and companies in U.S. innovation is safeguarded with IP protection~~
 - Strategy 4: Work with other nations on capacity-building, ~~and~~ training, ~~and~~ policy development to streamline the path and reduce times to global protection for U.S. inventions
- Proposed amendments to Objective 1.1 KPIs:
 - KPI A: U.S. innovation, especially in key technology areas, as measured by ~~patent data~~ investment in domestic R&D, share of GDP invested in R&D, technological progress, and technology adoption
 - KPI B: U.S. innovation and entrepreneurship as measured by ~~trademark registration data~~ new business starts, amount of public and private investment in early stage innovators, startup job creation, startup survival rate, and the percent of new entrepreneurs who launched out of opportunity
 - KPI C: Global data and studies of innovation by nation
 - KPI D: Innovation incentive program data
 - KPI E: Patent application and issuance rates, including in key technology areas
 - KPI F: Trademark registration rates, including by new or small businesses

B. OBJECTIVE 1.2

Here, the agency should make clear that it is collecting separate innovation data (which is already included as KPI B) and IP data (which can be added).

- Proposed addition to Objective 1.2 KPIs:³¹
 - KIP F: Geographic and socioeconomic patent application, patent issuance, and trademark registration data

³⁰ See Draft Plan at 10-11.

³¹ See Draft Plan at 12.

C. OBJECTIVE 1.3

Here, the agency should explicitly incorporate innovation, entrepreneurship, and IP education and training.

- Proposed edits to introductory language of Objective 1.3:³²
 - IP and innovation education are critical to bringing more Americans into the innovation ecosystem. We must engage the next generation while they are ~~the~~ young students and continue to provide training and opportunities for them to gain exposure to innovation, entrepreneurship, and IP as they mature.

III. GOAL 2

Engine applauds USPTO exploring ways to promote the robustness and reliability of patent rights. Reliability turns on validity: if the agency issues too many low-quality patents (that are invalid over the prior art, have unclear scope, and/or lack sufficient description), that undercuts confidence in the patent system. And policymakers cannot just avoid the problem by making it easier to enforce or harder to clear-out invalid claims, either.³³ History has shown the many harms that come from the assertion of invalid patents.³⁴ So, this part of the strategic plan should focus on equipping the agency and applicants with what they need to pursue (only) high-quality patents.

This portion of the strategic plan also overlaps with parallel initiatives to improve patent examination.³⁵ As the agency implements new policies and procedures based on its *Request for Comments on USPTO Initiatives to Ensure the Robustness and Reliability of Patent Rights*, it should evaluate whether those initiatives are working.³⁶ Relevant evaluation metrics should be added to the strategic plan, too. The agency should also study, e.g., how patents fare when they are asserted in court and

³² See Draft Plan at 12.

³³ Engine has made similar points in previous material. *E.g.*, Letter from Engine to Members of the Subcommittee on Intellectual Property of the Senate Judiciary Committee (Nov. 6, 2019), https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/5dc3450ea46cc2710de48442/1573078286667/2019.11.06_Comments+on+patent+quality.pdf.

³⁴ See, e.g., *supra* Part II (summarizing some of the ways startups suffer in the face of invalid patents).

³⁵ See, e.g., Request for Comments on USPTO Initiatives To Ensure the Robustness and Reliability of Patent Rights, 87 Fed. Reg. 60130 (Nov. 4, 2022); see also *Engine RFC Response*, *supra* note 12.

³⁶ *Id.*

subject to validity challenges, assess how courts rely on improved prosecution records, and consider whether new initiatives impact the cost and length of litigation.³⁷

USPTO should consider these sorts of amendments under Objective 2.1:

- Proposed amendments to Objective 2.1 strategies:³⁸
 - Strategy 1: Optimize the strategic integration of AI and robotic process automation (RPA) into the patent application system to achieve greater efficiency in examination, including enhanced and more efficient access to prior art
 - Strategy 1.1: Introduce more examining time
 - Strategy 2: Better ensure the Patents and PTAB workforces have the needed expertise, guidance, and support to assess patentability
 - Strategy 3: Strengthen the feedback loop between Patents (including the CRU) and the PTAB
 - Strategy 4: Enhance application readiness by promulgating rules and working with patent application filers to improve training and tools for patent prosecution
 - Strategy 5: Continuously enhance training programs to keep pace with emerging issues and challenges
 - Strategy 6: Enhance collaboration between art units to address applications where technologies converge
 - Strategy 7: Support and enhance expedited examination processes in key technology areas
 - Strategy 8: Explore changes to USPTO procedures to protect and promote U.S. innovation while advancing competition
- Proposed amendments to Objective 2.1 KPIs:
 - KPI A: Patent statutory compliance, all statutes
 - KPI B: Patent ~~customers'~~ applicants' net promoter score on overall patent examination quality (i.e., ~~customer~~ applicant survey data)
 - KPI C: Average amount of time examiners have to spend with each application
 - KPI D: Examiner perception about the sufficiency of time they can allocate to each application
 - KPI E: Policy, tools, procedures, or guidance to implement lessons learned from PTAB feedback loop
 - KPI F: Rates of patent litigation and the percentage of disputes where claims are found invalid

³⁷ Engine offered ideas for other metrics or evaluation in its comments on the robustness and reliability initiatives. *See generally Engine RFC Response, supra* note 12.

³⁸ *See* Draft Plan at 15.

IV. GOAL 3

The draft plan correctly acknowledges that “abuses or misuses of our IP systems cut against” the agency’s objectives. “They harm consumers, create significant financial losses for individuals and businesses, and undermine U.S. competitive advantages.”³⁹ Given the significance of this point, it warrants additional detail in the strategic plan, and here again the agency needs to refine certain objectives, strategies, and KPIs, to position it to deter and mitigate these harms.

Domestic startups, like many small businesses, are unfortunately familiar with abuses and misuses of our IP system. Too many startups have been threatened with patent litigation, where high legal costs are leveraged to coerce settlements in meritless cases.⁴⁰ They have faced bad faith patent assertions, for example where the purported rightsholder fails to do basic diligence around infringement.⁴¹ They have received demand letters asserting expired patents.⁴² And they have received licensing demands for patents that the PTAB deemed likely invalid.⁴³

Startups and smaller Internet platforms that host user-generated content also know how IP rights can be abused and harm the digital entrepreneurs and Internet-enabled creators they serve.⁴⁴ They have seen “overly-broad takedown notices from large rightsholders against small creators.”⁴⁵ And they have received the spurious takedown notices that claim trademark infringement but are actually designed to undermine competition or censor free speech.⁴⁶

The agency needs to collect data about these problems and share information with startups, small businesses, and digital entrepreneurs. For example, the agency currently collects information about misleading trademark solicitations and posts examples of scam notices—information that can be

³⁹ Draft Plan at 20.

⁴⁰ See, e.g., *Startups & the U.S. Patent System: Prioritizing Quality and Balance to Promote Innovation*, Engine 7-10 (July 2021), <https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/60f8579bae6a2d324b7440a2/1626888093336/Engine+Patent+Quality+Booklet+2021+7.21.pdf>.

⁴¹ See, e.g., *What We Heard from Startups this Patent Quality Week*, Engine (June 10, 2022), <https://www.engine.is/news/category/what-we-heard-from-startups-this-patent-quality-week> (discussing startup GC’s experience with state anti-troll laws); see also Abby Rives, *State Policy Update: Anti-Patent Troll Laws and What They Mean for Startups*, Engine (Nov. 14, 2022), <https://engineadvocacyfoundation.medium.com/state-policy-update-anti-patent-troll-laws-and-what-they-mean-for-startups-ed445184c4b8> (discussing state laws).

⁴² #StartupsEverywhere Profile: Nathan Seidle, CEO & Co-Founder, SparkFun, Engine (Nov. 19, 2021), <https://www.engine.is/news/startupseverywhere-boulder-co-sparkfun>.

⁴³ Press Release: AG Ferguson Files Lawsuit Against “Patent Troll” Targeting Small Businesses (May 14, 2021), <https://www.atg.wa.gov/news/news-releases/ag-ferguson-files-lawsuit-against-patent-troll-targeting-small-businesses> (patent asserted against over 1,000 small businesses in an 18-month window had been subject to instituted CBM before parties settled the dispute).

⁴⁴ See, e.g., *Is the DMCA’s Notice-and-Takedown System Working in the 21st Century?: Hearing Before the Subcomm. on Intellectual Property of the S. Comm. on the Judiciary*, 116th Congress 12-14 (2020) (testimony of Abigail A. Rives), <https://www.judiciary.senate.gov/imo/media/doc/Rives%20Testimony.pdf> (listing examples).

⁴⁵ Letter from Automatic, Discord, Etsy, GitHub, Patreon, Pinterest & Reddit to Sen. Mitch McConnell, Sen. Chuck Schumer, Rep. Nancy Pelosi & Rep. Kevin McCarthy 2 (Dec. 7, 2020), <https://perma.cc/7DYZ-5BHG>.

⁴⁶ E.g., Comments of Etsy, Foursquare, Kickstarter, Meetup, and Shapeways, *In re Development of the Joint Strategic Plan for Intellectual Property Enforcement 2* (Oct. 16, 2015), http://extfiles.etsy.com/advocacy/Etsy_IPEC_Comment.pdf.

invaluable when startups who receive those notices are figuring out what to do next.⁴⁷ The agency should set up similar ways to receive information about abusive demand letters and takedown notices. These types of letters can have a serious, detrimental impact on any small business.⁴⁸ Collecting data and sharing examples is a critical first step to helping startups defend themselves and their users.

To support all innovators, creators, and entrepreneurs in the country—and to increase confidence in our IP systems—USPTO should deter these practices and build plans to protect U.S. innovators and business from abuse under the auspices of the IP system. Below are a few reflections and proposed edits to this section:

- Proposed addition to introductory language of Goal 3:⁴⁹
 - *[Insert additional paragraph in between the second and third paragraph, as follows:]*

Criminal schemes involving IP and IP-protected goods and services . . . We will also work across government, including with Congress to foster and protect innovation and with the courts to increase legal clarity and reliable IP rights.

Frivolous IP assertion drains resources from innovators, creators, and entrepreneurs—and startups and small businesses are often the first to suffer from such abusive tactics. Some purported patent holders make meritless claims of infringement to coerce settlements from U.S. companies that cannot easily afford the associated legal costs. And some purported trademark holders will send spurious takedown notices to remove non-infringing items from online platforms and e-commerce marketplaces. These tactics unfairly injure U.S. companies and consumers. We will build on our education and outreach efforts, to reach these communities and share information to help them defend themselves. We will also work with partners to emphasize the importance of accurate IP enforcement. And we will improve internal USPTO processes that help mitigate the risk of these abusive practices.

A foundational step in protecting the Nation's IP . . .

⁴⁷ *Caution: Scam Alert*, USPTO, <https://www.uspto.gov/trademarks/protect/caution-misleading-notices> (last visited Feb. 10, 2023).

⁴⁸ See, e.g., *supra* Part II; *infra* Part IV.B.

⁴⁹ See Draft Plan at 20.

A. OBJECTIVE 3.1

Under this objective, USPTO should also work to address abusive patent assertion, litigation threats, and demand letters. We have proposed additional language, strategies, and KPIs that reflect problems flagged above.⁵⁰

Relatedly, this section of the draft plan could be read as reinforcing opportunities for abusive patent assertion by insulating invalid claims from PTAB review. Instead, the agency should reaffirm its commitment to all innovators, and set out to mitigate misuse of the IP system and ensure the agency is equipped to clear out invalid patent claims.

⁵⁰ *Supra* Part IV.

- Proposed edits to introductory language of Objective 3.1:⁵¹
 - We will also work to address abuses or behavior that does not advance the USPTO’s mission related to patent assertion and the PTAB. In 2011, the Leahy-Smith America Invents Act (AIA) established new post-grant proceedings “to establish a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation cost.” Based on the USPTO’s experience administering this legislation, it has helped mitigate problems in the patent system. But we recognize that AIA proceedings include the potential for inefficiency and gamesmanship and that U.S. innovators and entrepreneurs continue to experience the harms of abusive patent assertion. As such, we are taking further steps to prevent abusive behaviors as well as activity that does not advance the USPTO’s mission. . . . We will also investigate abuses and take appropriate legal action to strengthen our capacity to deter and/or fight against improper and fraudulent actions.
- Proposed amendments to Objective 3.1 strategies:
 - Strategy 1: Analyze patent application filing behavior, including micro or small-entity designations, to detect and curb any abuses
 - Strategy 1.1: Analyze patent litigation filing behaviors and demand letter activity, including by patent assertion entities, to detect abuses and identify ways USPTO could help curb such abuses or mitigate the harm they cause to domestic innovation and entrepreneurship
 - Strategy 2: Clarify, revise, and formalize appropriate use of discretion in AIA trial proceedings to preserve the agency’s focus on patent validity, to ensure the agency considers meritorious PTAB petitions and can clear out invalid patents when it becomes aware of them, and to address and deter process abuse and promote alignment with the USPTO’s mission and the intent of the AIA
 - Strategy 3: Deliver educational resources, outreach, and training to inform and educate IP stakeholders on PTAB proceedings
 - Strategy 4: Take a comprehensive view of the patent system, and the various ways IP owners, innovators, entrepreneurs, and individuals encounter it, to work to ensure USPTO efforts to identify and combat abuses are responsive to the needs of all stakeholders
- Proposed amendments to Objective 3.1 KPIs:
 - KPI A: Policy (guidance, precedent, rulemaking) or decisions to address abusive patent behaviors, including to address abuse directed to IP owners and to address abuse that occurs under the auspices of the patent and trademark system
 - KPI B: Data relating to education, outreach, and training events

⁵¹ See Draft Plan at 20-21.

B. OBJECTIVE 3.3

As the agency considers improving IP enforcement, it must emphasize *accurate* enforcement. As noted, digital entrepreneurs and Internet-enabled creators too often have their online products and services unfairly stripped from the market over bogus infringement allegations.⁵² This can have a substantial negative impact on their business⁵³—and that is true even for temporary removals where non-infringing items are ultimately restored. For example, if an online seller for seasonal items (like Christmas ornaments, fan art for a convention, or wedding photos) has postings improperly removed during the relevant shopping season, the consequences can be devastating.⁵⁴

USPTO should craft a strategic plan with support for these small business owners, accounting for experiences like the following and seeking ways to help entrepreneurs who face situations like these:⁵⁵

- A restaurant obtained a trademark for the name of a popular southern dessert, and then asked a platform to remove websites that posted recipes to that dessert on the ground of alleged trademark infringement.⁵⁶
- A small business owner that repurposes items—for example, making purses from food packaging or jewelry from building blocks—was subject to trademark infringement allegations for trying to sell those repurposed products on an e-commerce platform for homemade goods.⁵⁷
- An author obtained a trademark on the word “cocky,” and sent takedown notices to an e-book platform seeking removal of other books with “cocky” in the title. Some of the accused authors went so far as changing the name of their book or abandoning merchandise associated with their works. A trade association for authors hired a lawyer to stop improper takedowns and have books restored to the platform.⁵⁸

⁵² See, e.g., *supra* Part IV.

⁵³ Startups and smaller Internet platforms, likewise, want to see policies that support their users. See, e.g., Christian Braun, Opinion, *Congress Should Protect Small Businesses, Reject SHOP SAFE*, Boulder Daily Camera (Dec. 6, 2022), <https://www.dailycamera.com/2022/12/06/guest-opinion-christian-braun-congress-should-protect-small-businesses-reject-shop-safe/> (e-commerce startup founder discussing ways a proposed trademark bill would hurt his users).

⁵⁴ See, e.g., Letter from Etsy to United States Copyright Office 4-5 (Feb. 21, 2017), <https://www.regulations.gov/document?D=COLC-2015-0013-92464> (for a seller who’s posting is improperly removed during the holiday shopping season, that can be “devastating to a seller that relies in large part on holiday sales for their livelihood”).

⁵⁵ Engine has made similar points in previous material. E.g., Comments of Engine Advocacy in re: Secondary Trademark Infringement Liability in the E-Commerce Setting, Docket No. PTO-T-2020-0035, at 6-7 (Dec. 28, 2020), <https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/5ff37a915abd827cadbf968f/1609792145348/20.12.28+Comments+to+Docket+PTO+T+2020+0035.pdf>.

⁵⁶ *The Most Litigious Dessert in America*, Elec. Frontier Found., <https://www.eff.org/takedowns/most-litigious-dessert-america> (last visited Feb. 10, 2023).

⁵⁷ Etsy et al., *supra* note 46, at 3.

⁵⁸ *Author Trademarks the Word “Cocky,” Earns the Ire of Romance Writers Everywhere*, Elec. Frontier Found., <https://www.eff.org/takedowns/author-trademarks-cocky-earns-ire-romance-writers-everywhere> (last visited Feb. 10, 2023).

- Volkswagen filed multiple takedown requests to remove art of beetles from a digital art platform. In an apparent sweep to remove all images that were tagged with the word “beetle,” Volkswagen effectively asserted ownership over bug species and asked the platform to remove images a scientist had drawn of different species of beetles. The artist had to retain a lawyer to have her art restored, and lost revenue in the time her work was removed from the platform.⁵⁹
- Fox sent takedown notices to Google seeking to have a science fiction book titled “Homeland” removed from the platform, suggesting this unrelated book (a sequel in a young adult series) somehow infringed trademark in the television program Homeland based solely on a common title (and no other relation or similarity).⁶⁰

USPTO should advance policies and develop training and education to support these innovators, creators, and entrepreneurs, and forge an IP system that accounts for the downsides they experience.⁶¹

- Proposed amendments to Objective 3.3 strategies:⁶²
 - Strategy 1: Collaborate across the federal government to conduct awareness-raising programs about the dangers of piracy and counterfeiting
 - Strategy 1.1: Analyze information about goods and services sold online that are improperly removed from the Internet over allegations of trademark infringement, and seek to understand the variety and amount of such improper removals
 - Strategy 2: Partner with domestic law enforcement agencies to provide training on IP enforcement
 - Strategy 2.1: Support efforts to increase the accuracy of public and private mechanisms that aid in removing infringing goods and services, and support efforts to ensure that non-infringing goods and services are not improperly removed from the market
 - Strategy 3: Conduct awareness-raising programs in the United States

⁵⁹ *Volkswagen Claims Ownership of an Entire Group of Insects*, Elec. Frontier Found., <https://www.eff.org/takedowns/volkswagen-claims-ownership-entire-group-insects> (last visited Feb. 10, 2023).

⁶⁰ *Homeland Insecurity Through Bogus Takedowns*, Elec. Frontier Found., <https://www.eff.org/takedowns/homeland-insecurity-through-bogus-takedowns> (last visited Feb. 10, 2023).

⁶¹ See also, e.g., Department of Commerce DMCA Multistakeholder Forum: *DMCA Notice-and-Takedown Processes: List of Good, Bad, and Situational Practices*, USPTO, https://www.uspto.gov/sites/default/files/documents/DMCA_Good_Bad_and_Situational_Practices_Document-FINAL.pdf (identifying the “bad general practice” of parties “[s]ubmitting a DMCA takedown notice to assert rights other than copyright rights,” including, e.g., trademark) (last visited Feb. 3, 2023).

⁶² See Draft Plan at 22.

C. OBJECTIVE 3.6

Here again, the agency should be sure to include all innovators, creators, and entrepreneurs in its work, and we offer these proposed amendments to add balance to this section and enable USPTO to account for the varied experiences of startups and small businesses.

This objective also touches on the concept of a small claims court. Engine remains eager to engage with USPTO and ACUS on this topic, including on issues raised in our detailed comments to ACUS last summer.⁶³

⁶³ Comments of Engine Advocacy & the Public Interest Patent Law Institute Regarding Small Claims Patent Court Study (July 5, 2022), https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/62c6e89cb1d9bb79e854b1af/1657202845168/2022.07.05_Engine+and+PIPLI+Comments+on+Small+Claims+Patent+Study.pdf.

- Proposed edits to Objective 3.6 introductory text:⁶⁴
 - Once we issue a patent or register a trademark, the work to protect that right rests with the patent holder or trademark registrant. And when purported IP holders engage in frivolous or abusive conduct, the costs of defense and the economic harm fall on the wrongfully accused infringers. For example, private third parties incur the costs of challenging invalid patent claims. While the USPTO does not have a formal enforcement role, we stand ready to enable IP owners to derive maximum value from their investment in IP. And we reiterate our commitment to try and mitigate the harm of abusive IP assertion. The USPTO already offers significant education and outreach events to IP stakeholders about how to protect their IP as they shift from idea to execution. We will continue these efforts and expand upon them to reach bigger and more diverse audiences, especially first-time IP owners and small businesses wrongfully accused of infringement.
- Proposed amendments to Objective 3.6 strategies:
 - Strategy 1: Equip new IP owners with information on how to protect their IP efficiently and effectively
 - Strategy 1.1: Equip businesses wrongfully accused of infringement, including small businesses that receive demand letters or takedown notices, with information about how to identify and respond to frivolous, meritless, bad faith, or abusive allegations of infringement
 - Strategy 2: Work with online sellers and others on more efficient and effective ways for IP holders to protect their IP
 - Strategy 2.1: Work with online sellers and creators, diverse Internet platforms, and others on more efficient ways to keep non-infringing products and services posted, so that these sellers and creators do not wrongfully lose market opportunities
 - Strategy 3: Investigate small claims courts for patent enforcement
 - Strategy 4: Investigate small claims courts for trademark enforcement
 - Strategy 5: Create new mechanisms to engage with wrongfully accused infringers and build sustained channels of communication to ensure that their experiences inform the agency's work and that they are targets for the agency's outreach and education
- Proposed amendments to Objective 3.6 KPIs:
 - KPI A: Number of IP stakeholders reached with information on enforcement best practices
 - KPI B: Number of IP stakeholders reached with ways to make IP protection more effective and efficient
 - KPI C: Status of congressional report on small claims courts for patents and trademarks
 - KPI D: Number of accused infringers reached with information on mitigating harm from frivolous, meritless, bad faith, or abusive allegations of infringement
 - KPI E: Rates of improper trademark takedown notices

V. GOAL 4

Here again, we urge the agency to refocus on all innovation, creation, and entrepreneurship—instead of narrowly focusing on those who have or plan to seek IP (in particular, patents).⁶⁵ Focusing government support for innovation through the lens of IP misses the mark, especially when the goal is bringing innovation to impact and helping everyone with a great idea. Importantly, this unnecessarily narrow lens unfairly excludes many innovators and entrepreneurs who warrant support and it doubles down on existing inequities in, e.g., our IP and government funding systems. Instead, USPTO should emphasize support for innovators, creators, and entrepreneurs generally and work with government partners to equip them with tools to succeed.

A. OBJECTIVE 4.1

USPTO should craft a plan to help connect all innovators, creators, and entrepreneurs with the financial support they need, instead of favoring those who have already sought patents and formal trademark registration. This section of the draft plan would put a thumb on the scales toward injecting capital to those who already have IP or a plan for getting it. Importantly, the draft plan, as-written, would reinforce entrenched biases in capital access which continue to unfairly exclude underrepresented founders.

It is no secret to USPTO that our patent system is not nearly as diverse as it should be.⁶⁶ Engine applauds recent agency and Congressional action to make our patent system more inclusive.⁶⁷ And we remain a willing and eager partner in that work. (Relatedly, Engine continues to urge USPTO to look comprehensively at the barriers underrepresented innovators face and mobilize whole government solutions to create more diverse, inclusive innovation ecosystems. That means looking beyond the patent system and tackling complex challenges with concrete steps.⁶⁸) The agency must keep pushing these efforts forward.

At the same time, we know that underrepresented innovators and entrepreneurs face serious barriers to every traditional startup funding stream.⁶⁹ Systemic racism and sexism, entrenched wealth gaps, and persistent wage gaps make it harder for many entrepreneurs to access traditional early sources of

⁶⁴ See Draft Plan at 24-25.

⁶⁵ Basically every business is going to need to trademarks and to establish a brand. But putting their products or ideas first, as opposed to emphasizing and leading with the IP, will still help the agency achieve its goals and bolster the U.S. innovation and entrepreneurial ecosystems.

⁶⁶ See, e.g., *Innovators Diversity Pilots Conference*, USPTO (Nov. 17, 2022), <https://www.uspto.gov/about-us/events/innovator-diversity-pilots-conference>.

⁶⁷ See, e.g., Kathi Vidal, *The Unleashing American Innovators Act: Promoting Inclusive Innovation Under the New Law*, USPTO (Jan. 10, 2023), <https://www.uspto.gov/blog/director/entry/the-unleashing-american-innovators-act>.

⁶⁸ See, e.g., Matt O. Dhaiti, Jamie Dohopolski, & Phillip Malone, *Engine's Response to the Call for Comments on Expanding American Innovation*, Engine (Feb. 23, 2021), <https://bit.ly/2NrnfpD>.

⁶⁹ *Id.* at 8-12 (elaborating on each of these points and putting data behind the disparity in capital access).

capital like “friends and family” rounds. Underrepresented founders also have less access to business loans and equity investment is very unevenly distributed in communities across the country. Direct government funding is also plagued with systemic problems that have exacerbated inequities.

Especially right now, as the nation is rightly focused on creating more diverse and inclusive innovation and entrepreneurship, the government should not layer these two existing problems on top of one another. And USPTO should not focus on connecting innovators with capital through the lens of their IP protection. This is consistent with recent moves in the SBIR/STTR program to start de-coupling patents from how we measure awardees and their success.⁷⁰

To that end, we offer these proposed edits to Objective 4.1:

⁷⁰ See, e.g., Dane Stangler & Jason Wiens, *Bipartisan Victory for Small Businesses and U.S. Competitiveness*, Bipartisan Policy Center (Oct. 3, 2022), <https://bipartisanpolicy.org/blog/victory-small-businesses-competitiveness/>.

- Proposed edits to Objective 4.1 introductory text:⁷¹
 - Access to grants, loans, tax incentives, and investments helps propel innovations from concept to market deployment. To maximize the inclusivity of the innovation ecosystem, some inventors, entrepreneurs, and brand owners will require assistance to secure funding to bring their ideas to reality and guard against costly infringement litigation.

The USPTO issues and registers the IP protections that often underlie a successful “go-to market” strategy. ~~Rather than start anew, w~~We will collaborate with other federal agencies and private-sector partners to connect innovators, entrepreneurs, and creators—including potential trademark registrants and patent grantees—with financial resources. For example, in 2022, President Biden signed the Inflation Reduction Act, which, among other benefits, enables federal loans and loan guarantees for energy projects in the United States that utilize innovative technology to reduce, avoid, or sequester greenhouse gas emissions. Working with partner agencies and existing funding channels, we will target outreach and industry networking to engage and educate innovators and brand owners about these funding opportunities, and also discuss the role value and impact of IP in differentiating and strengthening their value propositions might play in their work and how it might come up when they seek access to potential funders and licensees. Without access to funding, many entrepreneurs, creators, and brand owners remain shut out of the innovation ecosystem, which ultimately hurts the country. Strengthening the visibility and value of our services for both innovators and prospective investors will expand innovation’s benefits IP’s reach across a broader swath of the American population.
- Proposed amendments to Objective 4.1 strategies:
 - Strategy 1: Partner with other federal agencies and private-sector entities to connect inventors, creators, entrepreneurs, and brand owners to IP information and tools
 - Strategy 2: Offer targeted outreach and networking resources to link potential applicants emerging innovators and entrepreneurs with potential funders and licensees
- Proposed amendments to Objective 4.1 KPIs:
 - KPI A: Data related to connecting inventors, creators, entrepreneurs, and brand owners to IP resources, including cross-government collaboration
 - KPI B: Data related to connecting innovators, creators, and entrepreneurs to funding, mentorship, community, and other government agency resources

B. OBJECTIVE 4.2

Engine urges USPTO to revisit this objective, as well, so that it can support inclusive federal R&D funding that bolsters all innovators, creators, and entrepreneurs. The draft plan, as-written, would

⁷¹ See Draft Plan at 24-25.

unfairly exclude a lot of people with great ideas—including open source developers—and it would reinforce a culture that tends to leave certain innovators out of federal R&D funding. Instead of pushing federally-funded research towards IP protection, USPTO should emphasize equipping these investigators with the tools they need to pursue the IP strategy that makes sense for them.

One open source hardware developer and small business owner has shared his thoughts and experiences when it comes to the challenges of securing federal support:⁷²

We have talked to the National Science Foundation (NSF) about open source hardware in the past, and the need for different application processes. At the time, NSF was valuing any applications that contained patents or ideas with potential patentability very high, nearly a requirement. Through a collaboration between SparkFun and [the Open Source Hardware Association] we were able to host a series of workshops to show the NSF that the quality of applicants increases if open source based projects are allowed in the process.

These are promising ideas and programs that should be nourished, and USPTO should lend its support.

Relatedly, a blanket push for more IP is likely contributing to situations where open source developers have other people come behind and file patents on their work.⁷³ Those patent applications should be invalid, but sometimes issue⁷⁴—and that could improperly deprive the original open source innovators of the ability to continue their work. This also takes technology, which had been committed to the public domain, and locks it up. USPTO should adopt plans and strategies that allow it to support exciting, cutting edge open source innovation.

With this in mind, we offer these edits to the draft plan:

⁷² SparkFun, *supra* note 42.

⁷³ Mike Masnick, *Ridiculous: Gov't Contractor Copies Open Source 3D Printing Concept... And Patents It*, Techdirt (June 24, 2022), <https://www.techdirt.com/2022/06/24/ridiculous-govt-contractor-copies-open-source-3d-printing-concept-and-patents-it/>; *Help Keep Hangprinter Free*, Go Fund Me, <https://www.gofundme.com/f/keep-hangprinter-free> (last visited Feb. 8, 2023) (open source developers describing the circumstance in their own words).

⁷⁴ E.g., Jie Qi, *Crowdfunding Backer Patented My Project*, Patent Pandas (Nov. 29, 2018) <https://patentpandas.org/stories/crowdfunding-backer-patented-my-project>.

- Proposed edits to introductory language of Objective 4.2:⁷⁵
 - In 2022, the U.S. government, working through several R&D and grant-making agencies, dedicated \$171 billion to funding R&D. This investment in R&D helps supports the type of exploration and discovery that could ultimately lead to innovative products, ~~some of which that~~ may warrant IP protections such as patents and trademarks. Such innovative products may also warrant action and investments that promote domestic deployment so more Americans can reap their benefits.

The USPTO will ~~advocate for the protection and domestic deployment of federally funded IP by partner~~ing with government entities that fund R&D, ~~—~~such as the Department of Defense, the National Science Foundation, and the National Institutes of Health, among others~~—to provide education to federally funded researchers and develop information and resources about the role IP can play in their work~~. Working through these partners, we aim to increase collective knowledge about ~~the value of~~ IP protections in general and ~~equip innovators with the tools they need to strategically and intentionally choose the IP strategy that makes the most sense for them specifically for federally funded innovations~~.
- Proposed amendments to Objective 4.2 strategies:⁷⁶
 - Strategy 1: Strengthen partnerships with federal R&D and grant-making agencies to ~~encourage and~~ develop educational materials about IP protection for federally funded ~~innovations innovators, and work to ensure those innovators have the resources they need in deciding what IP strategy best serves their goals~~
 - Strategy 2: Establish inclusive strategies for education and outreach ~~about the value of IP protections for to~~ federally funded ~~innovations innovators, and work to support innovators interested in pursuing IP as well as, e.g., open source innovators who prefer to avoid patenting their work~~
- Proposed amendments to Objective 4.2 KPIs:⁷⁷
 - KPI A: Number of federal R&D and grant-making agencies the USPTO has engaged ~~on enhanced IP protection~~
 - ~~KPI B: Patent applications filed to protect IP developed with government funding~~

* * *

Thank you again for the opportunity to provide these comments. We appreciate USPTO's interest in and efforts to support technology and innovation in the U.S. High-growth, high-tech startups are an essential component of our innovation economy, and we encourage the Office to continue to weigh their interests as it finalizes and implements its strategic plan. Engine remains committed to engaging with USPTO on these and other important issues.

⁷⁵ See Draft Plan at 27.

⁷⁶ See Draft Plan at 27.

⁷⁷ See Draft Plan at 28.