



June 22, 2021

Dear Members of the Subcommittee on Intellectual Property of the Senate Committee on the Judiciary,

We applaud you for convening today’s hearing, and urge the Subcommittee to continue to prioritize patent quality—seeking to ensure only valid patents issue and protecting against the assertion of low-quality patents. Patent quality is essential to the nation’s innovative startups, both because high-quality patents are valuable assets for many nascent tech companies and because low-quality patents are a barrier to innovation and too easily weaponized against small businesses. Today’s conversation, on Protecting Real Innovations by Improving Patent Quality, promises to make a valuable contribution toward better, more quality-focused patent policy.

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 submit this letter to the record of today’s hearing.

High-quality patents can be a valuable asset for many high-growth, high-tech startups. These companies understand the role patents can play in protecting inventions.¹ For many early stage companies, they seek high-quality patents to attract investors, obtain some competitive advantage, prevent direct copying, and enhance their reputation.² Likewise, increasing patent quality will increase confidence in the entire U.S. patent system.

By contrast, low-quality patents—those that claim things that were already known or that are written in vague, overbroad terms that are difficult to understand—lack value and routinely stand in the way of innovation. And they operate in ways that are particularly detrimental to startups. The mere existence of a low-quality patent can distort commercial and innovation markets, operating—as the Supreme Court has noted—like “scarecrows.”³ Even if they are never asserted, “invalid patents can create unacceptable litigation risks for potential entrants, raise entry costs, delay entry, deter

¹ See, e.g., *Patent Quality is Essential to the State of Innovation*, YouTube, (Nov. 9, 2018), https://www.youtube.com/watch?time_continue=1&v=63NYSYcV5kc.

² See, e.g., Stuart J.J. Graham et al., *High Technology Entrepreneurs and the Patent System: Results of the 2008 Berkeley Patent Survey*, 24 Berkeley Tech. L.J. 1255, 1256 (2009) (reporting on survey of entrepreneurs); #StartupsEverywhere profile: Alex Kuklinski, Founder, fyio, Engine (Apr. 24, 2020), <https://www.engine.is/news/startupseverywhere-lincoln-neb> (“While I had some hesitations up front about patent trolls and other concerns, I think when it comes to protecting what you’re doing, I think it is nice to say we have some legal protections with the patents.”).

³ *Cardinal Chem. Co. v. Morton Int’l, Inc.*, 508 U.S. 83, 96 (1993) (quoting *Bresnick v. U.S. Vitamin Corp.*, 139 F.2d 239, 242 (2d Cir. 1943) (Hand, J.)).

customers and business partners from contracting with new entrants, and impose inefficiencies while distorting innovation.”⁴

Yet, low-quality patents are a reality facing the nation’s innovators. And in recent years the country’s global rankings in quality have dropped.⁵ Indeed, one study revealed that 43 percent of patents that are subject to a final court judgment on validity were found invalid.⁶ Another study estimated approximately 28 percent of patents would be found anticipated or obvious (i.e., invalid under 35 U.S.C. §§ 102 or 103) if adjudicated. For patents covering software or business methods, those estimated invalidity rates increase to 39 percent and 56 percent respectively.⁷ And this is likely an underestimate, as the study only looked at prior-art-related invalidity and did not consider how many patents are likely invalid under, e.g., 35 U.S.C. § 112.

Regrettably, low-quality patents can be (and are) weaponized against startups and small businesses in ways that slow them down and have forced many to close up shop altogether.⁸ Startups are more vulnerable than established firms to the costs and risks of abusive patent litigation, making them an attractive and unfortunately common target.⁹ Indeed, many startups will only interact with the patent system in the context of abusive litigation. For example, patent assertion entities (PAEs) use low-quality patents to try to coerce startups to take quick settlements and established competitors can use even meritless patent litigation to distract, slow, or stall new market entrants.¹⁰ And low-quality patents are the type that can be easily asserted against, or used to threaten, a broad range of innovative companies and/or end-users of technology.¹¹

Low-quality patents also pose problems for patent owners. As noted, many startups opt to incur the expense of applying for and obtaining patents. It is frustrating for a company to learn that, after spending that time and money, its patent is easily invalidated; if the applicant knew about prior art or disclosure problems sooner, it could have amended its patent during examination, resulting in a higher-quality patent that truly passes statutory muster at the end. The answer to the quality problem cannot be to make low-quality patents (which, again, do not satisfy the statutory requirements,

⁴ Christopher R. Leslie, *The Anticompetitive Effects of Unenforced Invalid Patents*, 91 Minn. L. Rev. 101, 114 (2006).

⁵ E.g., Adam Houldsworth & Bridget Diakun, *Benchmarking 2020 – Europe Holds its Lead but Honeymoon Might be Over for USPTO Head*, IAM (June 8, 2020), <https://www.iam-media.com/law-policy/benchmarking-2020-europe-holds-its-lead-honeymoon-might-be-over-uspto-head> (U.S. ranks 4th out of 5 patent offices for quality).

⁶ John R. Allison et al., *Our Divided Patent System*, 82 U. Chi. L. Rev. 1073, 1099 (2015).

⁷ Shawn P. Miller, *Where’s the Innovation: An Analysis of the Quantity and Qualities of Anticipated and Obvious Patents*, 18 Va. J. L. & Tech. 1, 6-7 (2013).

⁸ See, e.g., Joe Mullin, *New Study Suggests Patent Trolls Really Are Killing Startups*, Ars Technica (June 11, 2014), <https://arstechnica.com/tech-policy/2014/06/new-study-suggests-patent-trolls-really-are-killing-startups/> (startup’s valuation dropped by \$4 million during a patent suit that was ultimately dismissed); 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); Engine, *Startups Need Comprehensive Patent Reform Now* 7-14, <https://perma.cc/8E7R-S46Q> (recounting additional stories of startups harmed by assertion of wrongly-issued patents).

⁹ E.g., Collen Chien, *Startups and Patent Trolls*, 17 Stan. Tech. L. Rev. 461, 461-62 (2014) (“most unique defendants to troll suits are small”); Ted Sichelman, *The Vonage Trilogy: A Case Study in “Patent Bullying.”* 90 Notre Dame L. Rev. 543 (2014) (describing how “incumbents [are] able to exploit defects in the patent system in order to prevent disruptive technologies from competing with their outmoded products and services”).

¹⁰ E.g., *id.*

¹¹ Cf. Chien, *supra* note 9, at 478 (noting patent assertion entities assert in a way that creates more options for “widespread campaigns targeting small companies that have little to do with the underlying technology”)

should not have issued in the first place, and hurt innovation) more enforceable or harder to challenge. Instead, Congress is correct to turn its focus to improving the quality of issued patents.

The Subcommittee will likely hear promising suggestions today, and we hope you will also evaluate these options as you consider how to improve patent quality. First, build on the success of the America Invents Act in creating regional patent offices, to do an even better job of meeting innovators where they are at and ensuring they have ready access to the resources, tools, and advice they need to prepare and file high-quality applications. Second, consider pilots to provide more information about applications and related prior art early in examination.¹² Third, restore quality oriented infrastructure and leadership positions within the U.S. Patent and Trademark Office (PTO).¹³ Fourth, ensure the PTO and examiners have the resources and technology needed to fully evaluate patent quality (including relevant prior art and the time to analyze it).¹⁴ Fifth, identify and correct incentives for the issuance of low-quality patents, including evaluating possible improvements to the PTO's cost structure.¹⁵ Sixth, encourage earlier clarity during patent examination, perhaps through claim construction analysis.¹⁶ Finally, promoting quality must also include meaningful opportunities to challenge low-quality patents, because even with improvements to the system some will continue to issue. Increased patent quality on the front end can reduce demand for post-issuance challenges, but affordable and efficient opportunities to challenge invalid patents are still needed.

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Thank you for your consideration. Engine appreciates the Subcommittee's demonstrated interest in improving patent quality, and remains committed to engaging with Members on these and other important issues.

Sincerely,
Engine

¹² E.g., Colleen V. Chien, *Rigorous Policy Pilots the USPTO Could Try*, 104 Iowa L. Rev. Online 1 (2019), available at <https://ssrn.com/abstract=3499202> (suggesting a pilot to give applicants all relevant prior art "up front"); *Improving Access and Inclusivity in the Patent System: Unleashing America's Economic Engine*, Hearing Before the Subcomm. on Intellectual Property of the S. Comm. on the Judiciary, 117th Congress at 1:01:38 (2021) (testimony of Professor Lateef Mtima, Professor of Law, Howard University School of Law), available at <https://www.judiciary.senate.gov/meetings/improving-access-and-inclusivity-in-the-patent-system-unleashing-americas-economic-engine> (suggesting pre-prosecution patentability assessment for certain applicants).

¹³ See, e.g., Abby Rives, *A Declining Focus on Patent Quality at the USPTO and What it Means for Startups*, Engine (Oct. 21, 2020), <https://www.engine.is/news/ip-recap-102120>.

¹⁴ See, e.g., Josh Landau, *Granted in 19 Hours*, PatentProgress (Mar. 6, 2018), <https://www.patentprogress.org/2018/03/06/granted-19-hours/>.

¹⁵ E.g., *Promoting the Useful Arts: How Can Congress Prevent the Issuance of Poor Quality Patents?: Hearing Before the Subcomm. on Intellectual Property of the S. Comm. on the Judiciary*, 116th Congress (2019) (testimony of Melissa F. Wasserman), available at <https://www.judiciary.senate.gov/imo/media/doc/Wasserman%20Testimony.pdf>.

¹⁶ E.g., R. Polk Wagner, *Understanding Patent-Quality Mechanisms*, 157 U. Penn. L. Rev. 2135, 2165-68 (2009).