

March 20, 2024

Senator Richard Durbin
Chairman
U.S. Senate Judiciary Committee

Senator Lindsey Graham Ranking Member U.S. Senate Judiciary Committee Senator Chris Coons
Chairman
U.S. Senate Judiciary Committee
Subcommittee on Intellectual Property

Senator Thom Tillis
Ranking Member
U.S. Senate Judiciary Committee
Subcommittee on Intellectual Property

Dear Chairman Durbin, Ranking Member Graham, Chairman Coons and Ranking Member Tillis,

Re: S.2140, Patent Eligibility Restoration Act

This responds to the unsigned letter dated March 11, 2024 ("Letter") that you received from a group of organizations opposing enactment of S.2140, the Patent Eligibility Restoration Act or "PERA." Notably, most if not all the listed entities were given the opportunity to participate in the two-year process of drafting and editing corrective patent eligibility legislation, but none chose to propose language or offer constructive alternatives. Instead, a number of the listed entities stated (or otherwise manifested) an unyielding preference for the status quo, indicating that they would oppose any change in the law, despite pleas for more clarity from each of the judges of the U.S. Court of Appeal for the Federal Circuit, many district court judges, former Directors of the U.S. Patent and Trademark Office, the Congressional Research Service, and thousands of inventors, investors and entrepreneurs whose inventions no longer have the protection needed to compete in established markets dominated by large incumbents.

Apart from the apparent self-interest of most of the listed entities, the Letter itself is rife with inaccuracies and misstatements as to how PERA would affect the acquisition and enforcement of U.S. patents. The most egregious falsehood is the Letter's repeated use of "patentable" instead of "patent eligible" as if these words mean the same thing. They do not. Many inventions that might be "eligible" for consideration will not meet one or more of the three primary requirements of the Patent Act to be awarded a patent – namely, the invention must be novel (35 USC 102), nonobvious (35 USC 103), and described with sufficient detail and clarity so that others can make and use the invention when the patent expires (35 USC 112).

To use the two terms as if they are interchangeable is highly misleading and confusing. The third paragraph of the Letter states, for example, that PERA would allow "any idea [to be] patented so long as it cannot 'practically be performed' without simply using technology." That statement is nonsense. Nothing in PERA specifies what can be "patented." PERA merely restores the four categories of invention that have been "patent eligible" since 1793, the date of the first Patent Act as it was drafted by Thomas Jefferson. The relevant provision in current section 101 and in PERA provides that machines, articles of manufacture, compositions of matter and processes are "eligible" for patent protection. PERA will eliminate the confusion fostered by "judicial exceptions" that the Supreme Court conjures up whenever it chooses to depart from the pristinely clear statutory language of Section 101. Furthermore, PERA does not make "any idea" even eligible, let alone patentable, as also misrepresented by the third paragraph. Ideas, laws of nature, and abstract concepts are not mentioned in PERA, because none of these falls into one of the four specified categories of eligible inventions.

For people not familiar with the U.S. patent system and its complex analytical structures, the difference between eligibility and patentability might seem overly technical, but for the last 12 years, the distinction has proven to be of critical importance. The primary reason the law on eligibility is so profoundly unpredictable today is that the Supreme Court, in its 2012 decision in *Mayo v. Prometheus*, choose to ignore both the statutory language provided by Congress and strong warnings from the U.S. Solicitor General and others, instead conflating a lack of novelty with the concept of eligibility to find a medical diagnostic test ineligible. The Court stated that claims were ineligible because they added nothing that was novel. The Court recognized that rejecting the invention on the basis of eligibility rather than novelty may well make all future diagnostic testing ineligible for patent protection. And to make sure there was no doubt as to its intention, the Court emphasized in its 2014 decision in Alice v CLS Bank case that the conflation of Section 101 with other parts of the statute was intentional. These two Supreme Court cases led the Federal Circuit and district courts into a decade long state of confusion that has resulted in hundreds of important inventions being deemed ineligible even for consideration of their patentability. That problem cannot be corrected without guidance that the Supreme Court has refused to provide on 30 or more occasions, leaving the matter to Congress to correct.

Consider, for example, the invention that was misappropriated successfully as a result of a Federal Circuit's ruling in *Ariosa v Sequenom*, where the inventor discovered that minute amounts of fetal DNA can be found in the blood of the mother, thus allowing the inventor to make available a wide range of genetic testing that no longer required the risky and invasive withdrawal of amnionic fluid from the mother. Not eligible for patent protection, said the Federal Circuit, because testing for DNA in general was itself well known so it did not matter that fetal DNA had gone undiscovered for several decades and the invention otherwise met all the primary requirements for a patent. This ruling prompted an impassioned plea from one of the appellate court judges asking the Supreme Court to reconsider its *Mayo* ruling, but to no avail.

Another invention misappropriated by *Mayo* was disclosed in a patent to *Athena Diagnostics* that disclosed a genetic test for a small subset of people with *myasthenia gravis*, a terrible autoimmune disease that was not previously detectable for this group by prior testing methods. Once again, the Federal Circuit ruled that since the general technique for genetic testing was well known, a discovery correlating a particular gene in a patient's genome with a horrid disease was not eligible, even though the correlation was not known at all and the invention met all of the other requirements for a patent. The effect of these decisions and the *Prometheus* case has been to reduce drastically the investment in this country in diagnostic testing, both for large organizations and for venture capital investors.

The damage done by the Court's mix and match misuse of the statutory requirements of the Patent Act has not been confined to the biotechnology sector. In *American Axle v NEAPCO*, for example, a two-judge panel of the Federal Circuit held that an invention on a device for damping vibrations in a rotating axle was deemed ineligible for patent coverage. Virtually anyone would know that this invention is a machine, unquestionably eligible for patenting under the clear wording of Section 101. The court's contrary reasoning was incoherent – the court relied on an opinion by the defendant's paid expert to conclude that a mathematical formula not even mentioned in the patent must have been used to calculate the exact weight and size of the dampening device; the court then stated that the formula was just a law of nature and, therefore, the invention itself was not eligible for patent coverage. Using that logic, virtually all inventions are ineligible for patent coverage, because most advances in technology are created using some principle of mathematics or science as an analytical tool. This exemplifies the level of chaos that the authors of the Letter want to preserve as the status quo.

The Letter further states "Under PERA, any business methods, legal agreement, media content, or even games and entertainment could be patented so long as the invention required some use of computers or electronic communications." That statement is also wrong. As noted above, PERA retains the identical categories of invention that have been used to determine eligibility for 250 years. PERA instead eliminates the judge made

exceptions to what is eligible for patenting, and replaces that approach with clearly defined exceptions to eligibility grounded on long standing principles of patent law. Contrary to what is suggested by opponents, PERA confirms that fundamental principles of mathematics, science and nature are not eligible for patents, although properly defined inventions that implement one of these principles in one of the four specified categories may be. The basic principles, however, remain available to the inventing public.

The provision of PERA referred to in the fourth paragraphs of the Letter sets aside several categories of possible processes that are not necessarily technological in nature and prevents inventors from arguing that the mere use of a computer to perform these processes should render them eligible if the process is readily capable of being performed without a computer. In an abundance of caution, PERA provides that only where a computer or other patent eligible invention is essential to perform the process will the invention be eligible, and of course even then, the invention still must meet the other statutory tests for novelty, lack of obviousness and a satisfactory description – to become patentable.

With characteristic hyperbole, the Letter states "To allow patents to claim any activity that is performed at a speed, scale, or distance that requires some use of technology is to allow the patenting of much of daily life." If one looks at the actual language of PERA, that statement is utter nonsense. No "activity" is eligible for patent coverage unless it is a machine, manufacture, composition of matter or process, or an improvement on one of the foregoing. And almost anything that occurs as "much of daily life" is neither novel nor nonobvious.

The Letter states "PERA would also overrule the long-standing legal principle that a patent must claim actual means or method for achieving a result," claiming that PERA would overrule two 1853 cases requiring such. This statement is also wrong and misleading; PERA is designed only to restore section 101 to what it was in 1853 (and much earlier) before the Supreme Court's misguided approach to judicial exceptions to Section 101 created the chaos that plagues the judiciary and patent owners today. Neither PERA nor any other aspect of patent eligibility law has anything to do with how an invention may be claimed, which is governed by Section 112 of the patent statute.

The Letter states, in its penultimate paragraph, that eligibility serves to "ensure that bad patents do not issue." The Letter does not tell us what a "bad patent" is or how a governmental body should determine which issued patents are good and which are bad. Presumably, if the term has any meaning at all, it refers to issued patents for which prior art would invalidate some or all of the claims, rendering the term "bad patents" to be just a backdoor way to retain the conflation of Section 101 with Section 102 and 103 that is creating confusion and chaos throughout the system.

For 250 years, patents have served this country by creating incentives for our citizens to create their own inventions and to invest in the commercialization of those inventions for the benefit of the public. As noted by President Abraham Lincoln, himself an inventor and patent holder, "patents add the fuel of interest to the fire of genius." Carefully crafted claims are required by Section 112 to differentiate an invention for which patent protection is sought from all that exists in the public domain, namely the prior art; both entrepreneur inventors and their investors are willing to accept the risk that prior art unknown at the time of patenting may surface to invalidate or narrow the scope of their protection. The risk that they cannot tolerate, however, is the terrible uncertainty that exists when two Federal Circuit judges, after millions of dollars have been spent on litigation to stop infringement, merely pluck from the air a bizarre interpretation of Section 101, holding the invention of a machine was not even "eligible" for patenting.

We anticipate that the author(s) of the Letter will respond to this statement by arguing, as David W. Jones stated in his written testimony (page 10) before the Senate Judiciary IP Subcommittee on January 23, 2024, that the patent system is working just fine right now, but if Congress wants to create a narrow restoration of patentability for specific areas, that might be okay with HTIA, which is an organization comprising ten of the most valuable digital technology companies on the planet having a total market cap in excess of \$8 Trillion. The problem with trying to fix Section 101 in piecemeal fashion is that any categorization of "inventions" is likely to be impossible, particularly since even a field such as diagnostics may rely on chemical reactions, digital analysis of data, optical devices that read color, genetic discoveries, etc., any of which may be a separate invention with multiple uses. Creativity does not have boundaries and any effort to incentivize the development and commercialization of entirely new ideas requires patent eligibility that is similarly unbounded. As noted by the Supreme Court in *Diamond v. Chakrabarty*, Congress intended that all inventions reflecting "human ingenuity" are to be eligible for patent coverage.

Another argument offered by Mr. Jones is that if Congress is dissatisfied with the current operation of the law on eligibility, it should consider "a broader legislative solution that tethers patentability to its underlying policy purpose by explicitly limiting the availability of patent protection to only those inventions that embody an advance in technology" (Jones Testimony at p. 11). This is not a "solution" in any meaningful sense. The collective role of Sections 102, 103 and 112 already is to assure that patents do reflect an "advance in technology," so there is no reason to redesign the system on that basis. Far more importantly, of course – the suggestion is merely an argument for delay. For Congress to start over and create an entirely new patent system would not come to fruition for decades if ever. Such delay would inflict devastating damage on our entire country.

Anyone familiar with the current state of global competition for technological supremacy knows that America does not have decades to sit around arguing about a new system. Our

country right now is sacrificing its leadership in science and technology to other countries, most particularly China, by limiting the opportunities for small innovative companies and creative individuals to pursue breakthrough inventions. Numerous reports from knowledgeable observers and government studies have noted that China has already overtaken the U.S. in the amounts spent on scientific research and in a number of critical technologies. Exemplary is a study funded in part by our State Department and the Australian Strategic Policy Institute reported on by Business Insider last year; that study concluded that China is "leading the U.S. in researching 37 out of 44 critical and emerging technologies across the defense, space, energy and biotechnology sectors." A report from "Defense News" last July noted that the issuance of patents is a "leading indicator" and that U.S. patents on strategic technologies "have stagnated" while those of Chinese companies continue to increase. Three years ago, the final report of the National Security Commission on Artificial Intelligence warned that China is "poised to fill the void" left by vacant by inadequate U.S. patent policies and the loss of reliable property rights in technology. These are not isolated observations; they represent the very core of the American economy that we rely on for national security, economic prosperity and the health and wellbeing of our citizens.

The Alliance for U.S. Startups and Inventors for Jobs (USIJ) strongly encourages the Committee to move forward with the enactment of PERA because time is running out. USIJ will be pleased to assist the Committee any way we can.

Respectfully submitted,

Bob Taylor General Counsel Alliance for U.S. Startups and Inventors for Jobs