

Responses of John D. Vandenberg to Questions

From Senator Mazie K. Hirono

July 2, 2019

Thank you, Chairman Tillis, Ranking Member Coons, and Senator Hirono for this opportunity to further participate in this process.

Introductory Statement on the Cause of the Angst over Patent Eligibility

The angst surrounding what is and is not eligible for patenting is not the fault of Congress, or the Supreme Court. The problem is that various stakeholders persuaded the Patent Office and Federal Circuit in the 1990s to stray from the governing Supreme Court precedents, forcing the Supreme Court to intervene and reinstate the law as it had stated it in the late 1970s and early 1980s, and before. The result was that likely thousands of facially invalid patents were issued, and now many hundreds of those have been litigated and properly declared invalid.

The above summary is not the majority view of the witnesses before the Subcommittee. But consider the below statement of today's *Alice* standard for patent eligibility:

Even though a phenomenon of nature or mathematical formula may be well known, an inventive application of the principle may be patented. Conversely, the discovery of such a phenomenon cannot support a patent unless there is some other inventive concept in its application.

This is a fair statement of the *Alice* standard and it was made in 1978 by the Supreme Court. *Parker v. Flook*, 437 U.S. 584, 594. *Alice* is not new law. Its standard was simply ignored for a decade or so.

Today, similar stakeholders again have persuaded the Patent Office and some Federal Circuit judges to stray from governing Supreme Court and Federal Circuit precedents, but the common law system this time appears to be working.

First, a Federal Circuit panel declined to follow the new Patent Office eligibility guidelines where they deviated from governing precedents.

Especially regarding the issue of patent eligibility and the efforts of the courts to determine the distinction between claims directed to natural laws and those directed to patent-eligible applications of those laws, we are mindful of the need for consistent application of our case law. *Cleveland Clinic Found. v. True Health Diagnostics LLC*, 760 F. App'x 1013, 1020 (Fed. Cir. 2019) (non-precedential) (affirming Sec. 101 invalidity on R. 12(b)(6) motion despite USPTO guidance example on point, because guidance example contrary to Fed. Cir. precedent).

Hopefully, the Patent Office will now revise its new guidance to conform to the case law.

Second, the Supreme Court has asked for the Government’s views on a petition for *certiorari*, *HP Inc. v. Berkheimer*, 139 S. Ct. 860 (2019), challenging the decisions of some Federal Circuit panels to convert patent eligibility into a fact-bound exercise inappropriate, often, for early decision—at odds with the Supreme Court’s view that patent eligibility presents a threshold issue of law. Hopefully, the Supreme Court will grant *certiorari* and correct this error.

This history is background to my answers to Senator Hirono’s specific questions.

Responses to Senator Hirono’s Questions

1. Last year, Judge Alan Lourie and Judge Pauline Newman of the Federal Circuit issued a concurring opinion to the court’s denial of *en banc* rehearing in *Berkheimer v. HP Inc.*, 890 F.3d 1369, 1376 (Fed. Cir. 2018), in which they stated that “the law needs clarification by higher authority, perhaps by Congress, to work its way out of what so many in the innovation field consider are § 101 problems.”

Do you agree with Judges Lourie and Newman? Does § 101 require a Congressional fix or should we let the courts continue to work things out?

Answer: No, Congressional action is not needed, at least not now. Congressional action is likely to do more harm than good on the question of patent eligibility. But, if action is taken, it should be narrowly tailored to useful and innovative physical-realm applications of discoveries of how biological systems work, without otherwise disturbing the current state of the law governing the abstractness exclusion to patent eligibility. A narrower solution has been suggested by Judge Dyk: “if the breadth of the claim is sufficiently limited to a specific application of the new law of nature discovered by the patent applicant and reduced to practice, I think that the novelty of the discovery should be enough to supply the necessary inventive concept.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 809 F.3d 1282, 1291 (Fed. Cir. 2015) (Dyk, concurring in denial of rehearing *en banc*).

Patent protection is a two-edged sword. A given patent grant (and the promise thereof) may have incentivized some worthy innovations that otherwise would not have been invented, and/or chilled important innovations that would have benefitted the public but for the patent. The Patent Act and its judicial interpretations must maintain a delicate balance or else too little or too much patent protection will transform the patent system’s engines of innovation into brakes on innovation.

For centuries the Supreme Court (and more recently the Federal Circuit) on a case-by-case basis has policed the boundary between patent-eligible and patent-ineligible subject matter in order to maintain the patent system’s delicate balance. Congress has already legislated the broad outlines of that boundary. Patent practitioners will continue to adapt to case-law precedents by changing how they draft patent applications and patent claims.

This process inherently takes about a decade for the Federal Circuit to issue sufficient opinions reacting to a Supreme Court decision, for practitioners then to adjust their practices accordingly and draft and “prosecute” patent applications in the Patent Office, in light of that decision, and for parties to litigate those patents in the courts through appeal to the Federal Circuit. Even if drawing a “clearer” or “better” boundary in a few sentences

of legislation were easy, or even doable, it is too early just five years post *Alice* to give up on the traditional common law approach.

Further, it is far from easy and likely not doable. Congress created our patent system and has improved it over the years but the Supreme Court, now in conjunction with the Federal Circuit, has been its guardian. As shown by the below excerpts, the Supreme Court has been remarkably consistent over the centuries in its view of our patent system's nature, both from a public policy viewpoint and also from a Constitutional viewpoint. While many stakeholders would cite the below decisions as proof that the Supreme Court is "anti patent," on the contrary, it is this consistent and balanced view that has given us the patent system so many witnesses have praised.

- **Patents Are Qualified Public Franchises That Take Rights From The Public:** "By 'issuing patents,' the PTO 'take[s] from the public rights of immense value, and bestow[s] them upon the patentee.'" The "statutory requirements prevent the 'issuance of patents whose effects are to remove existent knowledge from the public domain.' [S]o, like the PTO's initial review, the Board's inter partes review protects 'the public's paramount interest in seeing that patent monopolies are kept within their legitimate scope.'" *Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC*, 138 S. Ct. 1365, 1373–74 (2018).
- **Imitation Is Necessary To Invention:** "Patent law reflects 'a careful balance between the need to promote innovation' through patent protection, and the importance of facilitating the 'imitation and refinement through imitation' that are 'necessary to invention itself and the very lifeblood of a competitive economy.'" *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1935 (2016).
- **Public Interest In Limiting Patents To Legitimate Scope:** "The public interest, of course, favors the maintenance of a well-functioning patent system. But the 'public' also has a 'paramount interest in seeing that patent monopolies . . . are kept within their legitimate scope.'" *Precision Instrument Mfg. Co. v. Automotive Maintenance Machinery Co.*, 324 U.S. 806, 816 (1945). A patentee 'should not be . . . allowed to exact royalties for the use of an idea . . . that is beyond the scope of the patent monopoly granted.' *Blonder-Tongue Laboratories, Inc. v. University of Ill. Foundation*, 402 U.S. 313, 349–350 (1971). *Medtronic, Inc. v. Mirowski Family Ventures, LLC*, 134 S. Ct. 843, 851–52 (2014).
- **Patents Are A "Two-Edged Sword":** "Patent protection is, after all, a two-edged sword. On the one hand, the promise of exclusive rights provides monetary incentives that lead to creation, invention, and discovery. On the other hand, that very exclusivity can impede the flow of information that might permit, indeed spur, invention, by, for example, raising the price of using the patented ideas once created, requiring potential users to conduct costly and time-consuming searches of existing patents and pending patent applications, and requiring the negotiation of complex licensing arrangements." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1305 (2012).
- **Clear Claiming Is Essential:** "The patent laws 'promote the Progress of Science and useful Arts' by rewarding innovation with a temporary monopoly. U.S. Const., Art. I, § 8, cl. 8. The monopoly is a property right; and like any property right, its boundaries should be clear. This

clarity is essential to promote progress, because it enables efficient investment in innovation. A patent holder should know what he owns, and the public should know what he does not. For this reason, the patent laws require inventors to describe their work in ‘full, clear, concise, and exact terms,’ 35 U.S.C. § 112, as part of the delicate balance the law attempts to maintain between inventors, who rely on the promise of the law to bring the invention forth, and the public, which should be encouraged to pursue innovations, creations, and new ideas beyond the inventor’s exclusive rights. *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U. S. 141, 150 (1989).” *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722, 730–31 (2002).

- **A Carefully Crafted Bargain:** “. . . the patent system represents a carefully crafted bargain that encourages both the creation and the public disclosure of new and useful advances in technology, in return for an exclusive monopoly for a limited period of time. The balance between the interest in motivating innovation and enlightenment by rewarding invention with patent protection on the one hand, and the interest in avoiding monopolies that unnecessarily stifle competition on the other, has been a feature of the federal patent laws since their inception.” *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 63 (1998).
- **Patent System Has Three Purposes:** “[W]e reviewed the purposes of the federal patent system. First, patent law seeks to foster and reward invention; second, it promotes disclosure of inventions to stimulate further innovation and to permit the public to practice the invention once the patent expires; third, the stringent requirements for patent protection seek to assure that ideas in the public domain remain there for the free use of the public.” *Aronson v. Quick Point Pencil Co.*, 440 U.S. 257, 262 (1979).
- **Patents Are Monopolies Which Must Be Kept Within Their Legitimate Scope:** “Although recognizing the patent system’s desirable stimulus to invention, we have also viewed the patent as a monopoly which, although sanctioned by law, has the economic consequences attending other monopolies. A patent yielding returns for a device that fails to meet the congressionally imposed criteria of patentability is anomalous. This Court has observed: ‘A patent by its very nature is affected with a public interest. . . . [It] is an exception to the general rule against monopolies and to the right to access to a free and open market. The far-reaching social and economic consequences of a patent, therefore, give the public a paramount interest in seeing that patent monopolies spring from backgrounds free from fraud or other inequitable conduct and that such monopolies are kept within their legitimate scope.’” *Blonder-Tongue Labs., Inc. v. Univ. of Illinois Found.*, 402 U.S. 313, 343 (1971) (unanimous).
- **Public Policy Encourages Challenges To Patents:** “[T]he equities of the licensor do not weigh very heavily when they are balanced against the important public interest in permitting full and free competition in the use of ideas which are in reality a part of the public domain. Licensees may often be the only individuals with enough economic incentive to challenge the patentability of an inventor’s discovery. If they are muzzled, the public may continually be required to pay tribute to would-be monopolists without need or justification.” *Lear, Inc. v. Adkins*, 395 U.S. 653, 670 (1969); *Pope Mfg. Co. v. Gormully*, 144 U.S. 224, 234 (1892) (“It is as important to the public that competition should not be repressed by worthless patents, as that the patentee of a really valuable invention should be protected in his monopoly.”)

- **Prerequisites And Limitations On Patents Are “Strictly” Observed And Enforced:** “But in rewarding useful invention, the ‘rights and welfare of the community must be fairly dealt with and effectually guarded.’ To that end the prerequisites to obtaining a patent are strictly observed, and when the patent has issued the limitations on its exercise are equally strictly enforced. To begin with, a genuine ‘invention’ or ‘discovery’ must be demonstrated ‘lest in the constant demand for new appliances the heavy hand of tribute be laid on each slight technological advance in an art.’ Once the patent issues, it is strictly construed, it cannot be used to secure any monopoly beyond that contained in the patent, the patentee’s control over the product when it leaves his hands is sharply limited, and the patent monopoly may not be used in disregard of the antitrust laws.” *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 230–31 (1964).
- **Balancing Inducement To Invention vs. Embarrassment Of A Private Monopoly:** According to Thomas Jefferson, “the patent monopoly was not designed to secure to the inventor his natural right in his discoveries. Rather, it was a reward, an inducement, to bring forth new knowledge. The grant of an exclusive right to an invention was the creation of society—at odds with the inherent free nature of disclosed ideas—and was not to be freely given. Only inventions and discoveries which furthered human knowledge, and were new and useful, justified the special inducement of a limited private monopoly. Jefferson did not believe in granting patents for small details, obvious improvements, or frivolous devices. His writings evidence his insistence upon a high level of patentability. As a member of the patent board for several years, Jefferson saw clearly the difficulty in ‘drawing a line between the things which are worth to the public the embarrassment of an exclusive patent, and those which are not.’ ... The inherent problem was to develop some means of weeding out those inventions which would not be disclosed or devised but for the inducement of a patent.” *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 9–11 (1966).
- **Functional Patent Claims And Unclear Claims Impede Progress:** “The statutory requirement of particularity and distinctness in claims is met only when they clearly distinguish what is claimed from what went before in the art and clearly circumscribe what is foreclosed from future enterprise. A zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims would discourage invention only a little less than unequivocal foreclosure of the field.” *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942) (unanimous); *accord Halliburton Oil Well Cementing Co., v. Walker*, 329 U.S. 1, 12, 13 (1946) (“unless frightened from the course of experimentation by broad functional claims like these, inventive genius may evolve many more devices to accomplish the same purpose.” “A patentee cannot obtain greater coverage by failing to describe his invention than by describing it as the statute commands.”)
- **Patents Can Create A “Class Of Speculative Schemers”:** “The design of the patent laws is to reward those who make some substantial discovery or invention, which adds to our knowledge and makes a step in advance in the useful arts. Such inventors are worthy of all favor. It was never the object of those laws to grant a monopoly for every trifling device, every shadow of a shade of an idea, which would naturally and spontaneously occur to any skilled mechanic or operator in the ordinary progress of manufactures. Such an indiscriminate creation of exclusive privileges tends rather to obstruct than to stimulate invention. It creates a class of speculative schemers who make it their business to watch the advancing wave of improvement,

and gather its foam in the form of patented monopolies, which enable them to lay a heavy tax upon the industry of the country, without contributing anything to the real advancement of the arts. It embarrasses the honest pursuit of business with fears and apprehensions of concealed liens and unknown liabilities to lawsuits and vexatious accountings for profits made in good faith.” *Atlantic Works v. Brady*, 107 U.S. 192, 200 (1883).

2. The Federal Circuit rejected a “technological arts test” in its *en banc Bilski* opinion. It explained that “the terms ‘technological arts’ and ‘technology’ are both ambiguous and ever-changing.” The draft legislation includes the requirement that an invention be in a “field of technology.”

- a. **Do you consider this a clear, understood term? If so, what does it mean for an invention to be in a “field of technology”?**

Answer: No, “field of technology” is not a precise, well-understood term.

As important, the term “field” confuses the issue. The field or environment of something new is rarely, if ever, relevant to whether a particular patent claim encompasses patent eligible subject matter. New math used in the field of space travel is patent ineligible while a new brush used in the field of art is patent eligible.

Which patents tend to chill innovation more than promote innovation depends on the nature of the claimed invention, and how it has been claimed, not the field in which the invention is utilized.

Some might try to marry this “field of technology” language with the foregoing “specific and practical utility” language in the draft bill text to imply a requirement of “technological utility,” implying that the utility arises from technology not from math, a mental process, information manipulation, etc. But that would be a forced reading and at best would engender more confusion and unpredictability than exists at present.

- b. **The European Union, China, and many other countries include some sort of “technology” requirement in their patent eligibility statutes. What can we learn from their experiences?**

Answer: I offer no opinion on this question.

- c. **Is a claim that describes a method for hedging against the financial risk of price fluctuations—like the one at issue in the *Bilski* case—in a “field of technology”? What if the claim requires performing the method on a computer?**

Answer: Yes, any claim reciting a processor or computer or a process that has no practical use but for use on a computer, ought to be considered in a “field of technology,” which is one reason why such language is unworkable in Sec. 100 or 101.

d. What changes to the draft, if any, do you recommend to make the “field of technology” requirement more clear?

Answer: Slightly better language would be “provides a technical solution to a technical problem.” This should be accompanied by legislative history distinguishing “technical” from “business,” “mathematical,” and other examples of what is not “technical.” It also should distinguish merely using a technological tool, such as running a new formula on a computer.

But even this alternative language, however, would be unclear, and not justify abrogating the “abstract idea” exclusions to eligibility as proposed in the current draft bill text.

3. Sen. Tillis and Sen. Coons have made clear that genes as they exist in the human body would not be patent eligible under their proposal.

Are there other things that Congress should make clear are not patent eligible? There are already statutes that prevent patents on tax strategies and human organisms. Are there other categories that should be excluded?

Answer: Probably not. The current statute as interpreted by the courts is working as well as can be expected given the complexity of maintaining the right “delicate balance.” Adding additional categories of patent-ineligible to the statute might cause more harm than good.

Today, it is well settled in the courts—if not in the Patent Office—that the following are patent-ineligible abstract ideas:

1. mathematical concepts,
2. certain methods of organizing human activity,
3. mental processes,
4. information (and collecting, analyzing, classifying, organizing, filtering, storing, manipulating and/or displaying information), and
5. results achieved and functions performed without reciting particular ways (i.e., particular structures and acts) to achieve or perform them.

But the Patent Office’s new guidelines appear to jettison the last two accepted categories of patent-ineligible subject matter. They do not cite the many Federal Circuit precedents applying those two categories. These categories are fundamental. Information is not patentable. Results achieved and functions performed are not patentable. Patents are reserved for *how* results are achieved and functions performed, in the physical realm. There should be no serious doubt about these basic principles.

Were Congress to add each the above categories to the statute, that might help dissuade the Patent Office from its present course. But, presumably the Federal Circuit rejecting the new guidelines will achieve that. And, whatever Congress adds will be argued to exclude by

negative implication other categories of patent-ineligible subject matter. This is best left to the courts, at least for now only five years post the recalibration caused by *Alice* reinstating its prior precedents.

4. I have heard complaints that courts do not consistently enforce Section 112 with respect to claims for inventions in the high tech space.

a. Are these valid complaints?

Answer: Yes. The cited complaints likely concern the problem of patent claims that recite a function performed or result achieved without specifying how to accomplish the function or result. I agree this is a widespread problem. Mr. Armitage’s written testimony addresses this problem well.

The word “functional” generally refers to recitations of what something *does* rather than what it *is*. But, the word “functional” alone is imprecise in patent law as sometimes facially functional language imparts definite structure by operation of law (e.g., Sec. 112(6/f)) or by its accepted meaning in the art (e.g., “screwdriver”). Therefore, “functional” claim language is not *per se* objectionable.

But, what is objectionable is any “functional” claim language not complying with Sec. 112(6/f) that is either purely functional (i.e., recites a “result” of overall device/method not a structure-imparting “function” of an element and not a “way” of achieving the result), or is functional at the purported point of novelty. In part, such language is objectionable because it fails to “particularly point out and distinctly claim” a method, machine, etc., as required by Sec. 112(b).

Patent drafters can be forgiven for choosing functional language. Why say “steering wheel” when you can say “steering mechanism” and perhaps capture uses of the claimed invention with fully autonomous vehicles?

Courts, including the Federal Circuit, have been uneven in insisting that patent claims be limited to how (a particular way) a function or result is accomplished. The proposed amendments to Sec. 112(f), removing reference to “means for” and “step for” likely would help, as discussed below.

b. Do the proposed changes to Section 112 adequately address those complaints and limit the scope of claims to what was actually invented?

Answer: Yes, they will help address those complaints, particularly if coupled with the additional change I proposed in my written testimony, reproduced below:

The Subcommittee should revise the bill’s text to add the following sentence to the end of Sec. 112(f):

“The Director shall identify each such claim element in the record of the patent.”

Patent Office examiners necessarily construe a patent claim before comparing its claim scope to the prior art to determine novelty and obviousness. Part of this necessary claim-construction step is identifying which claim elements, if any, trigger construction under Sec. 112(f). One might think, therefore, that the examiners write that down so that the inventor and public know which claim-construction rules were applied to which claim elements: special construction under Sec. 112(f) or normal claim construction rules. But the Patent Office is not mandated by law to do that and examiners often do not do that, despite being encouraged to do so. *See* M.P.E.P. 2181 VI (“When an examiner interprets a claim limitation under the provisions of 35 U.S.C. 112(f) ..., the Office action should specify that the examiner has done so.”)

(<https://www.uspto.gov/web/offices/pac/mpep/s2181.html>)

A court need not abide by the Patent Office determination whether a claim element is construed under Sec. 112(f). But surely a court is more likely to agree with the Patent Office if the Patent Office makes its determination on the record, as mandated by statute, so that an inventor can react to that determination by amending his or her claims if necessary, to trigger or not trigger Sec. 112(f). Therefore, this proposed revision advances the clarity of patent claim scope, and requires no more than what the Patent Office already encourages its examiners to do.

Congress enacted Sec. 112(f) in response to and as a way for patent drafters to comply with Supreme Court precedents—based on the patent system’s second engine of innovation described in my written testimony—that “functional” elements, particularly at a point of novelty, invalidate a patent claim for lack of particularity. *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1, 12 (1946) (“The language of the claim . . . describes this most crucial element in the ‘new’ combination in terms of what it will do rather than in terms of its own physical characteristics or its arrangement in the new combination apparatus. We have held that a claim with such a description of a product is invalid.” “[U]nless frightened from the course of experimentation by broad functional claims like these, inventive genius may evolve many more devices to accomplish the same purpose.”)

The draft bill text improves Sec. 112(f) in two respects, by striking two problematic phrases from the current statute.

112(f) ~~Element in Claim for a Combination~~ Functional Claim Elements—An element in a claim ~~for a combination may be~~ expressed as a ~~means or step for performing~~ specified function without the recital of structure, material, or acts in support thereof; ~~and such claim~~ shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Most significant is striking “means or step for performing.” This phrase has engendered confusion in the courts, a lack of clarity in patent-claim scope, and otherwise undermined the safe-harbor purpose of Sec. 112(f).

Claims reciting a function or result without a particular way of accomplishing the function or result have been called “hollow claims”:

Claiming a result without reciting what materials produce that result is the epitome of an indefinite claim. Such a claim fails to delineate with any reasonable certainty the requirements of the formulation. The claim is thus indefinite irrespective of the twisting narrative that is recited concerning how the result is measured. It is a hollow claim.... [It] is indefinite for the principal and simple reason that it claims a result without reciting how to achieve that result.

Forest Labs., Inc. v. Teva Pharm. USA, Inc., 716 F. App’x 987, 996 (Fed. Cir. 2017) (non-precedential) (Louire, J., concurring op.).

The opposite of a hollow claim might be called a “how” claim. Patent drafters have two ways to draft “how” claims not “hollow” claims: expressly include in the claim a particular way of accomplishing the function or result or, instead, omit such “how” limitations from the claim but clearly disclose them in the patent’s disclosure (specification), per the safe harbor of Sec. 112(f).

While this should work in theory, in practice the language “means or step for performing” has caused uncertainty and often undermined the purpose of Sec. 112(f).

The problem is that courts have misconstrued “means or step for” as being essentially magic words that patent drafters should include in a patent claim to announce that they are triggering Sec. 112(f) or omit from a patent claim to announce that they are not triggering Sec. 112(f). But there is no indication that this was the intent of this statute. On the contrary, the history of Sec. 112(f) indicates that the intent was what the draft bill text better reflects: a safe harbor from the invalidity fate awaiting hollow patent claims, under Sec. 101, 112(a), and/or 112(b).

In a decision reducing but not eliminating the significance of the words “means for” being present in or absent from a patent claim, the *en banc* Federal Circuit described the Congressional intent behind Sec. 102(f) as follows:

In enacting this provision, Congress struck a balance in allowing patentees to express a claim limitation by reciting a function to be performed rather than by reciting structure for performing that function, while placing specific constraints on how such a limitation is to be construed, namely, by restricting the scope of coverage to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.

Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1347 (Fed. Cir. 2015) (en banc).

The Court rejected the then existing “strong presumption” associated with these particular words, as having led to “a proliferation of functional claiming”:

That [“strong” presumption] characterization is unwarranted, is uncertain in meaning and application, and has the inappropriate practical effect of placing a thumb on what should otherwise be a balanced analytical scale. It has shifted the balance struck by Congress in passing § 112, para. 6 and has resulted in a proliferation of functional claiming untethered to § 112, para. 6 and free of the strictures set forth in the statute. Henceforth, we will apply the presumption as we have done prior to *Lighting World*, without requiring any heightened evidentiary showing and expressly overrule the characterization of that presumption as “strong.” We also overrule the strict requirement of “a showing that the limitation essentially is devoid of anything that can be construed as structure.” The standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.

Id. at 1349.

This was a good step but did not solve the problems identified by the Court. Even under its “not strong” presumption associated with “means for” or “step for,” there is still uncertainty and a proliferation of functional claiming. As a result, neither inventors, their patent drafters, would-be follow-on innovators wishing to design around the claims, or judges, can be certain, in many cases, whether or not a claim element triggers construction under Sec. 112(f).

The draft bill text’s amendment to Sec. 112(f) should eliminate this problematic presumption entirely by removing the words that caused the confusion: “means or step for performing.” If properly enforced by the Patent Office, this should induce patent drafters to expressly recite in the claims, where feasible, how the claim-recited function or result is accomplished, leading to greater certainty as to claim scope and more innovation.

Some object that the amendment would broaden the reach of Sec. 112(f) and that would be bad for inventors. But they have it backwards. Sec. 112(f), again, is a safe harbor against a facially “functional” claim element invalidating a patent claim under Sec. 101 (for claiming a result, not how to accomplish it), 112(a) (for lack of description support for the full scope of the “functional” claim element), or 112(b) (for failure to “particularly point out” the claimed invention). If the bill broadens the reach of Sec. 112(f), this will save more claims from invalidity—at least if the amendment applies prospectively only to claims granted or amended post enactment.

Some object that this would require software inventors to describe every possible detailed implementation in every possible programming language, and require all inventors to include encyclopedic disclosures. But well-settled law is to the contrary. Software inventors need only disclose an algorithm (e.g., a flowchart) describing how to perform the function, not source code.

More generally, patent drafters choose in the first instance what to include as claim elements, and can omit conventional features. Patent drafters also can choose partly functional claim terms known in the art to describe a definite class of structures, such as “filters,” “brakes,” “clamp,” “screwdriver,” “locks,” and “steering wheel.” Most importantly, these objections simply do not acknowledge that Sec. 112(f) is a safe harbor saving otherwise “functional” claim elements from invalidating the claim under Sec. 101, 112(a), or 112(b).

Another problem with current Sec. 112(f) case law is that it treats method claims differently because “step for” is rarely used in a patent claim. By removing the “step for” language from the statute, the proposed amendment to Sec. 112(f) may end this loophole that companies can exploit to obtain (invalid) “hollow” method claims discouraging would-be next innovators.

Some object that it is too difficult to distinguish a “function” from an “act” for performing that function in a method patent claim. But former Chief Judge Rader explained the distinction well:

In general terms, the “underlying function” of a method claim element corresponds to what that element ultimately accomplishes in relationship to what the other elements of the claim and the claim as a whole accomplish. “Acts,” on the other hand, correspond to how the function is accomplished. If a claim element recites only an underlying function without acts for performing it, then § 112, ¶ 6 applies even without express step-plus-function language.

Seal-Flex, Inc. v. Athletic Track and Court Const., 172 F.3d 836, 849–50 (Fed. Cir. 1999) (Rader, J. concurring).

In sum, removing “means or step for performing” from the statute will move us closer both to the goals of the en banc Federal Circuit in *Williamson*, and also the original Congressional attempt to spur innovation by limiting patents to “how” claims.

c. Are you concerned that the proposed changes will make it too easy for competitors to design around patent claims that use functional language?

Answer: Mostly, no. As noted, in the software arts, the law is clear that there is no need to disclose source code or how each different programming language would implement the function. Instead, a generic flowchart (algorithm) will do, so long as it discloses a particular way to accomplish the function or result.

More generally, patent practitioners are a highly skilled group and will quickly adapt to the statutory change to be sure to draft claims directed to a particular way of solving a problem.

However, I do recommend that this change in the statute be applied prospectively.

5. There is an intense debate going on right now about what to do about the high cost of prescription drugs. One concern is that pharmaceutical companies are gaming the patent

system by extending their patent terms through additional patents on minor changes to their drugs. My understanding is that the doctrine of obviousness-type double patenting is designed to prevent this very thing.

The Federal Circuit has explained that obviousness-type double patenting “is grounded in the text of the Patent Act” and specifically cited Section 101 for support.

Would the proposed changes to Section 101 and the additional provision abrogating cases establishing judicial exceptions to Section 101 do away with the doctrine of obviousness-type double patenting? If so, should the doctrine of obvious-type double patenting be codified?

Answer: No, this is not a concern under the current draft bill text. The non-statutory (obviousness) double patenting doctrine is grounded in a portion of Sec. 101 that the draft bill text does not change, namely: “may obtain a patent therefor,” implying that only one patent is obtained on a single invention.

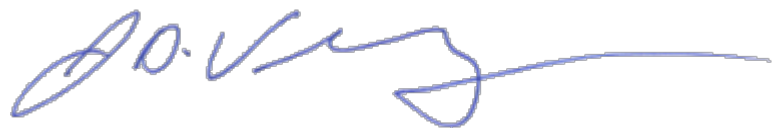
6. In its *Oil States* decision, the Supreme Court explicitly avoided answering the question of whether a patent is property for purposes of the Due Process Clause or the Takings Clause.

What are the Due Process and Takings implications of changing Section 101 and applying it retroactively to already-issued patents?

Answer: I offer no opinion on this question.

Sincerely yours,

KLARQUIST SPARKMAN, LLP



John D. Vandenberg