Questions for Michael Blankstein

1. Can you explain why complex software based games like the kind your company develops are worthy of patent protection, as opposed to basic and non-complex games, like hopscotch for example?

We refer to our prior testimony explaining the importance of game patents to our company and industry and the adverse effects of current patent eligibility law.

Whether basic or complex, games that are implemented with a computer or other article of manufacture should be patent eligible under Section 101. The complexity of such a physically implemented game may affect its patentability under Sections 102 or 103 but should not affect its eligibility under Section 101. Thus, the game of hopscotch implemented with a playfield, game board, or other physical layout should be patent eligible under Section 101. However, it would <u>not</u> be worthy of patent protection under Sections 102 or 103 unless a novel and non-obvious improvement were made to the existing game or some improvement in the manner in which the game is played.

A game performed solely in the human mind would <u>not</u> have the requisite specific and practical utility to be patent eligible under Section 101.

2. Do you think our draft bill can be amended to address concerns that it will cause a spike in non-practicing entity lawsuits? Do you have any suggestions you can offer the Committee?

We offer the following suggestions:

- 1. Expand the scope of Inter Partes Review under 35 USC 311(b) to enable challenges on any and all invalidity grounds, not just Section 102 and 103 grounds based on patents and printed publications.
- 2. For Inter Partes Review, Post-Grant Review, and Covered Business Method Review proceedings, reduce the USPTO fees for small and micro entities. Currently, the fee schedule is the same for all types of entities. For Inter Partes Review, the request and post-institution fees are \$15,500 and \$15,500, respectively. For Post-Grant or Covered Business Method Review, the request and post-institutions fees are \$16,000 and \$22,000, respectively. Most other USPTO fees are reduced for small and micro entities.
- 3. Reconsider prior bills intended to curb bad faith NPE litigation.
- 4. Review the NPE litigation database published by the Stanford Law School at https://npe.law.stanford.edu/ to understand the true impact that *Alice/Mayo* had on NPE litigation and whether clarifying the patent eligibility standard is likely to cause a spike in such litigation. Concerns that the draft bill will cause a spike in NPE lawsuits may be overblown.

Questions for the Record for Michael Blankstein From Senator Mazie K. Hirono

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.*, 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?

Section 101 requires a Congressional fix. Section 101 should be a coarse filter, i.e., serve a minimal gatekeeping function, leaving other statutory provisions to act as a fine filter. Section 101 was crafted to accommodate <u>any</u> invention or discovery, assuming it passed other statutory requirements: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter..." The legislative history behind Section 101 indicates Congress intended patentable subject matter to include "anything under the sun that is made by man." *Diamond v. Diehr*, 450 U.S. 175 (1981), *citing* S.Rep. No.1979, 82d Cong., 2d Sess., 5 (1952); H.R.Rep. No.1923, 82d Cong., 2d Sess., 6 (1952). Unfortunately, the courts have departed from the literal wording and legislative intent behind Section 101 and conflated eligibility under Section 101 with considerations relating to Sections 102, 103, and 112. Because the Section 101 problems are significant, as demonstrated by the variety of arguably conflicting decisions to date, the courts will not reconcile interpretations of the statute to a predictable result anytime soon. In the meantime, patents on what should be patent-eligible inventions are being rejected or invalidated under Section 101by both the U.S. Patent Office and the Federal Courts using differing standards for patent eligibility.

- 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 everchanging." 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"?

We do <u>not</u> consider "field of technology" to be a clear, understood term. The term "technology" has wide-ranging definitions in dictionaries and even a patent regulation. For example, Merriam-Webster's online dictionary defines the term "technology" as:

1a: the practical application of knowledge especially in a particular area

1b: a capability given by the practical application of knowledge

2: a manner of accomplishing a task especially using technical processes, methods, or knowledge

3: the specialized aspects of a particular field of endeavor

While definitions 1a, 1b, and 3 are consistent with both the Constitutional grant to Congress in Article 1, Section 8, and with the concept that an invention should have specific and practical utility, definition 2 not only narrows what may be characterized as "technology" but also introduces the further, undefined requirement of technical processes, methods or knowledge. Patent regulation 37 CFR 42.301(b) relating to CBM proceedings introduces yet another definition that defines "technological invention" as "...whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art, and solves a technical problem using a technical solution."

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?

From their experiences, we can learn that certain industries and emerging technologies don't have the support of their patent systems and are therefore subject to copycats that capitalize on an inventing entity's R&D investments. For example, Article 52 of the European Patent Convention limits patent eligible inventions to those in "all fields of technology" but <u>categorically</u> excludes, among other things, "methods for playing games or doing business, and programs for computers" and "presentations of information" from "all fields of technology." Such artificial exclusions have the effect of discriminating against certain industries that generate man-made inventions deserving of patent protection. In our case, because of Article 52's discrimination against game patents and graphical user interface patents, competitors in Europe clone our games and capitalize on our substantial U.S.-based R&D investments. Because the U.S. has historically protected software innovations, whereas the European Union, China, and others do not, it should not come as a surprise that the U.S. accounts for more than a quarter of the \$3.8 trillion global software and information technology market. International software firms have shown a keen interest in the U.S. market because of its strong intellectual property rights and enforcement.1

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?

If Section 100 is amended to require a "useful" invention to be within a "field of technology," then a claim that describes a hedging or other business method performed on a computer or other article of manufacture should be considered to be in a "field of technology." The draft bill would enable Sections 102 and 103 to still weed out bad patents on mere computerization of well-known business methods.

If, however, the claim does <u>not</u> require performing the method on a computer or other article of manufacture, then the claim should <u>not</u> be considered to be in a "field of technology" because the claimed invention could be performed solely in the human mind.

¹ See https://www.selectusa.gov/software-and-information-technology-services-industry-united-states

An invention that can be performed solely in the human mind would lack the specific and practical utility that is necessary for an invention to be "useful" under the draft bill.

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

The "field of technology" requirement should be (i) deleted, (ii) replaced with a more open-ended, industry neutral phrase like "field of endeavor," or (iii) broadly defined. With respect to (i) and (ii), any invention that provides specific and practical utility through human intervention should be patent eligible, regardless of industry. The inclusion of a "field of technology" requirement only creates ambiguity and confusion. With respect to (iii), a definition that is based on Merriam-Webster's online dictionary and that would support a more open-ended, industry neutral interpretation is as follows: "technology means (i) the practical application of knowledge especially in a particular area, or (ii) a capability given by the practical application of knowledge."

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?

Although the definition of "useful" should make specific exclusions unnecessary, we support the two exclusions in the AIPLA-IPO Joint Proposal: "A claimed invention is ineligible...if and only if the claimed invention as a whole (i) exists in nature independently of and prior to any human activity or (ii) is performed solely in the human mind."

- 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?

No. Enforcement has been more consistent since *Williamson v. Citrix Online*, *LLC*, 792 F.3d 1339 (Fed. Cir. 2015) (en banc), which held:

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. *Greenberg*, 91 F.3d at 1583. When a claim term lacks the word "means," the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to "recite sufficiently definite structure" or else recites "function without reciting sufficient structure for performing that function." *Watts*, 232 F.3d at 880. The converse presumption remains unaffected: "use of the word 'means' creates a presumption that § 112, ¶ 6 applies." *Personalized Media*, 161 F.3d at 703.

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

Although the proposed changes to Section 112 are unnecessary, the changes would address the complaints and limit the scope of claims to what was actually invented.

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

Yes. The proposed changes make it more likely that a claim element will be subject to Section 112(f) interpretation. With respect to pending patent applications and existing patents, the patent drafter may have drafted the claims and/or specification differently if the drafter had known that a claim element would be subject to Section 112(f). For example, the drafter may have avoided functional claim language and/or included more embodiments in the specification. With respect to new patent applications, the concern is that the drafter can realistically only disclose so many embodiments or examples in the specification and that a third party can easily design around a functional claim element with an embodiment that would not be considered an equivalent.

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?

The proposed changes to Section 101 and the additional provision abrogating cases establishing judicial exceptions to Section 101 would <u>not</u> do away with the doctrine of obviousness-type double patenting. There are generally two types of double patenting rejections. One is the "same invention" type double patenting rejection based on 35 U.S.C. 101, which states in the singular that an inventor "may obtain <u>a</u> patent." The second is the non-statutory, obviousness-type double patenting rejection based on a judicially created doctrine grounded in public policy and which is primarily intended to prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinct from claims in a first patent. We see no particular reason to codify the doctrine of obviousness-type double patenting.

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?

There are no Due Process and Taking implications of changing Section 101 and applying it retroactively to already-issued patents. The proposed changes would transform Section 101 from a fine filter to a coarse filter. So a claimed invention that is patent eligible under existing Section 101 would remain patent eligible under amended Section 101.

However, there may be Due Process and Taking implications of changing Section 112(f) and applying it retroactively to already-issued patents. The proposed changes make it more likely that a claim element will be interpreted under Section 112(f), which generally results in a narrower claim interpretation and therefore a narrower scope of patent protection.