Text Released for Draft Bill to Reform Section 101 of Patent Act

On May 22, 2019, a group of U.S. Senators and Representatives released a bipartisan, bicameral draft bill to reform Section 101 of the Patent Act, following the mid-April release by the same congressmen of a framework on Section 101 patent reform.

Jason Rhodes

Release of Framework

- Press Release on April 17, 2019
- U.S. Sens. Thom Tillis (R-NC) and Chris Coons (D-DE), Chair and Ranking Member of Senate Judiciary Subcommittee on Intellectual Property
- Reps. Doug Collins (R-GA-9), Ranking Member of House Judiciary Committee; Hank Johnson (D-GA-4), Chairman of House Judiciary Subcommittee on Intellectual Property and the Courts; Steve Stivers (R-OH-15)

Release of Framework

- Sen. Tillis: “The release of this framework comes after multiple roundtables and extensive discussions with stakeholders who would be affected by reforming Section 101”
- Sen. Coons: “Today U.S. patent law discourages innovation in some of the most critical areas of technology, including artificial intelligence, medical diagnostics, and personalized medicine. That’s why Senator Tillis and I launched this effort to improve U.S. patent law based on input from those impacted most.”
- Contains several provisions proposed by
  - IPLAC (Intellectual Property Law Association of Chicago)
  - AIPLA (American Intellectual Property Law Association)
  - IPO (Intellectual Property Owners Association)
  - ABA-IPL (American Bar Association, Intellectual Property Law Section)

DRAFT OUTLINE OF SECTION 101 REFORM

- Keep existing statutory categories of process, machine, manufacture, or composition of matter, or any useful improvement thereof.

- Eliminate, within the eligibility requirement, that any invention or discovery be both "new and useful." Instead, simply require that the invention meet existing statutory utility requirements.

- Define, in a closed list, exclusive categories of statutory subject matter which alone should not be eligible for patent protection. The sole list of exclusions might include the following categories, for example:

    - Fundamental scientific principles;
    - Products that exist solely and exclusively in nature;
    - Pure mathematical formulas;
    - Economic or commercial principles;
    - Mental activities.

- Create a "practical application" test to ensure that the statutorily ineligible subject matter is construed narrowly.

- Ensure that simply reciting generic technical language or generic functional language does not salvage an otherwise ineligible claim.

- Statutorily abrogate judicially created exceptions to patent eligible subject matter in favor of exclusive statutory categories of ineligible subject matter.

- Make clear that eligibility is determined by considering each and every element of the claim as a whole and without regard to considerations properly addressed by 102, 103 and 112.

Release of Draft Bill Text

- Press Release on May 22, 2019
  - Available at https://www.tillis.senate.gov/press-releases
- Publicized as “bipartisan, bicameral draft bill that would reform Section 101 of the Patent Act”
- Sens. Tillis & Collins; Reps. Collins, Johnson & Stivers
- Follows feedback from dozens of stakeholders, industry representatives & individual inventors after release of framework
- Rep. Johnson: “Section 101 of the Patent Act is foundational to the patent system, but recent court cases have upset what should be solid ground.”

Section 100:

(k) The term "useful" means any invention or discovery that provides specific and practical utility in any field of technology through human intervention.

Section 101:

(a) Whoever invents or discovers any useful process, machine, manufacture, or composition of matter, or any useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

(b) Eligibility under this section shall be determined only while considering the claimed invention as a whole, without discounting or disregarding any claim limitation.

Section 112

(f) Functional Claim Elements—
An element in a claim expressed as a specified function without the recital of structure, material, or acts in support thereof shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Additional Legislative Provisions:

The provisions of section 101 shall be construed in favor of eligibility.

No implicit or other judicially created exceptions to subject matter eligibility, including "abstract ideas," "laws of nature," or "natural phenomena," shall be used to determine patent eligibility under section 101, and all cases establishing or interpreting those exceptions to eligibility are hereby abrogated.

The eligibility of a claimed invention under section 101 shall be determined without regard to: the manner in which the claimed invention was made; whether individual limitations of a claim are well known, conventional or routine; the state of the art at the time of the invention; or any other considerations relating to sections 102, 103, or 112 of this title.

Release of Draft Bill Text

- Following the framework:
  - Keeps existing statutory categories
  - Eliminates requirement of being both “new and useful”
  - Creates a “practical application” test (via § 100)
  - Ensures generic functional language not used to salvage otherwise ineligible claim (via § 112(f))
  - Statutorily abrogates judicially created exceptions
  - Makes clear eligibility determined by considering each and every claim element as a whole, without considering Secs. 102, 103, 112
- Omits:
  - Closed list of categories ineligible for patent

bskb

Draft Bill Text

- ***Section 100:***

  …

  (k) The term "useful" means any invention or discovery that provides specific and practical utility in any field of technology through human innovation.

  – Seems to explicitly overrule Supreme Court's ruling in AMP v. Myriad

  – Bringing patent law back to Chakrabarty?

Relevant Court Decision

- Association for Molecular Pathology v. Myriad Genetics, Inc., 569 U.S. 576 (2013)
  - Patents owned/controlled by Myriad claimed isolated DNA sequences (BRCA genes) -- two human genes, mutations of which can substantially increase risks of breast and ovarian cancer
  - Previously, USPTO accepted claims on isolated DNA sequences as composition of matter
  - AMP wanted the claims declared invalid, arguing that they're not patentable under 35 USC 101 because isolated genes are unpatentable products of nature
  - Myriad argued the isolation of DNA sequence renders it different in character from what is present in human body, and thus it is not a "naturally occurring article"
  - Court ruled that "A naturally DNA segment is a product of nature and not patent eligible merely because it has been isolated"

Relevant Court Decision

- Diamond v. Chakrabarty, 447 US 303 (1980)
  - Patentee invented genetically-modified bacterium capable of breaking down multiple components in crude oil (and allow oil from oil spills to be broken down at quicker rate)
  - Combined multiple plasmids, each able to break down different hydrocarbon components, into single bacterium
  - Included a claim on the bacterium species itself, in addition to method to produce and inoculum composed of carrier material and the bacterium
  - Court ruled 5-4 that living human-made micro-organism is patentable “composition of matter”
  - Bacterium wasn’t “hitherto unknown natural phenomenon,” but instead had “markedly different characteristics from any found in nature” due to add’l plasmids & resultant capacity to degrade oil

Draft Bill Text

- ***Section 101:***

  (a) Whoever invents or discovers any ~~new and~~ useful process, machine, manufacture, or composition of matter, or any ~~new and~~ useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title

  (b) Eligibility under this section shall be determined only while considering the claimed invention as a whole, without discounting or disregarding any claim limitation.

- ***The eligibility of a claimed invention under section 101 shall be determined without regard to…whether individual limitations of a claim are well known, conventional or routine…or any other considerations relating to sections 102, 103, or 112 of this title.***

  – Seem to explicitly overrule Mayo

Relevant Court Decision

- Mayo Collaborative Services v. Prometheus Laboratories, 566 U.S. 66 (2012)
  - Patents at issue concern use of thiopurine drugs in treatment of autoimmune diseases
  - Such drugs are metabolized differently by different people, doctors need to find right dose for patients to ensure drugs are effective but don't have too many side effects
  - While the metabolites of the drugs were already known, patentee discovered threshold level for effectiveness of metabolites
  - Claimed a method comprising steps for (1) administering drug to subject, (2) determining level of metabolite in patient, and (3) comparing determined level to thresholds to decide whether to an increase/decrease of dosage is needed

Relevant Court Decision

- Mayo Collaborative Services v. Prometheus Laboratories, 566 U.S. 66 (2012)
  - Court unanimously found claims invalid
  - Correlations between naturally-produced metabolites and therapeutic efficacy and toxicity, as reflected in the thresholds of step (3), is an unpatentable "natural law"
  - Steps (1) and (2) not "genuine applications of those laws[, but] rather…drafting efforts designed to monopolize the correlations"
  - As to (2), "[b]ecause methods for making such determinations were well known in the art, this step simply tells doctors to engage in well-understood, routine, conventional activity previously engaged in by scientists in the field. Such activity is normally not sufficient to transform an unpatentable law of nature into a patent-eligible application of such a law."

Draft Bill Text

- ***The provisions of section 101 shall be construed in favor of eligibility.***
  - What does this mean? If § 101 is so construed, won't everything be patent eligible?

- ***No implicit or judicially created exceptions to subject matter eligibility, including "abstract ideas," "laws of nature," or "natural phenomena," shall be used to determine patent eligibility under section 101, and all cases establishing or interpreting those exceptions to eligibility are hereby abrogated***
  - Too vague?
  - Seems to explicitly overrule Alice (an interpretation of Mayo)

Relevant Court Decision

- Alice Corp. V. CLS Bank International, 573 U.S. 208 (2014)
  - Patents disclosed scheme for mitigating settlement risk (i.e., risk that only one party will satisfy its obligation in agreed upon financial exchange) using a computer system as 3rd party intermediary (or electronic escrow service)
  - Court unanimously invalidated claims
  - Majority opinion relied on Mayo as providing a framework "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts"

Relevant Court Decision

- Alice Corp. V. CLS Bank International, 573U.S. 208 (2014)

  2 Step Test:

  1) Determine whether the claims at issue are directed to one of the patent-ineligible concepts (judicial exceptions), i.e., law of nature, natural phenomena, or abstract idea
  2) If so, examine the elements of the claim to determine whether it contains an “inventive concept” sufficient to “transform” the judicial exception into a patent-eligible application
     - For abstract idea, must include additional features to ensure that the claim is more than a drafting effort designed to monopolize the abstract idea

Draft Bill Text

- ***Section 112:***

  …

  (f) Functional Claim Elements-

  An element in a claim ~~for a combination may be~~ expressed as a ~~means or step for performing a~~ 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.

  – Removes presumptions based on absence of “means for” / “step for”
  – How does this relate to § 101 reform?
  – Legislative aids defend it saying “most stakeholders” had “concerns about the preemptive effect of overly-broad software, computer, or internet-related claims”
  – Wouldn’t it (1) make certain patents harder to enforce, (2) add new battlefield of contention during litigation thus increasing costs, and (3) increase costs of application drafting?

What's Next

- Senate IP Subcommittee hearings to be held on June 4, 5, and 11
- Purpose is "to solicit additional stakeholder feedback and to hear from a diverse set of witnesses on the problems different industries are facing with our nation's patent laws"
- Each hearing will include 3 panels of 5 witnesses (for total of 45 witnesses over the 3 days)

Discussion

- Will the Supreme Court agree that Congress has the ability to abrogate the judicial exceptions? Will the Supreme Court say the Constitution requires them?
- Does this bill have a chance? Will the so-called ‘FAANG’ parties (Facebook, Amazon, Apple, Netflix, Google) prevent it’s passage or water it down?
- How bad will the § 112(f) change be? Will it make patent prosecution more difficult, as well as proving infringement?

The End

Thank You