

Alice In Wonderland: Amending Section 101 to Get Out of the Rabbit Hole

Intellectual Property Section of the Dallas Bar Association

February 26, 2016

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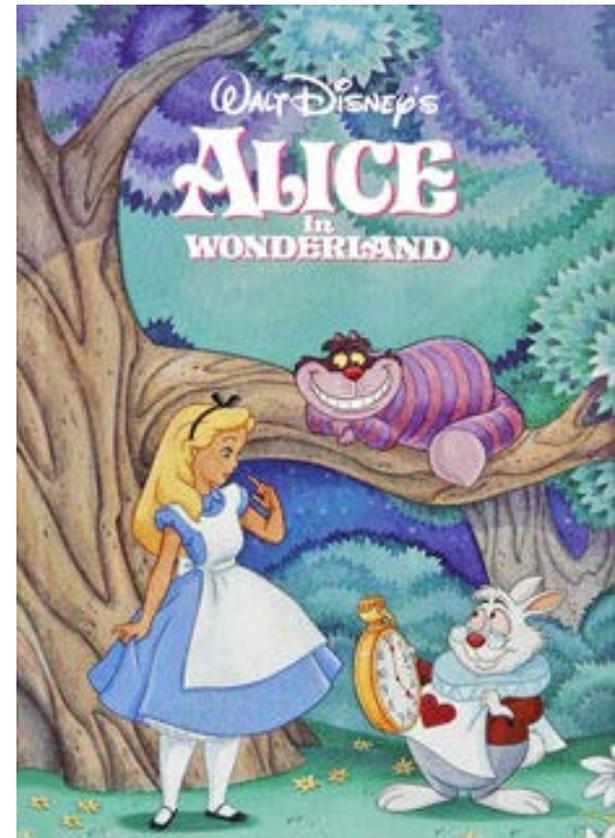
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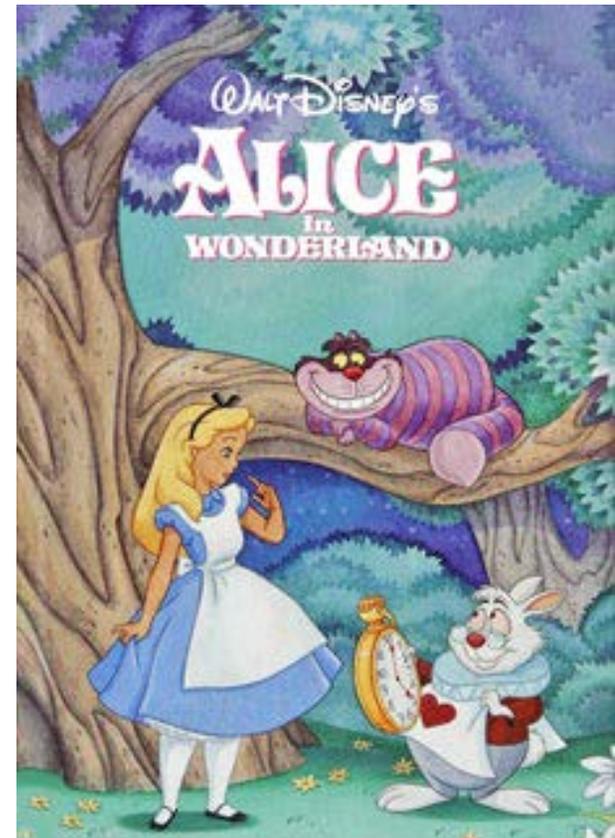
Agenda

- David: The rabbit hole in which we find ourselves
- Russ: How we got out of the last, similar rabbit hole
- Marc: Ways to climb out of the current rabbit hole
- Discussion!



Questions To Think About

- Does current §101 jurisprudence draw the eligibility line in the right place? Is it too tight, too loose, or just right?
- Is the Supreme Court's §101 jurisprudence clear, particularly the two-part *Mayo* test confirmed in *Alice*?
- Is an amendment to the patent statute warranted? If so, what would work?



The Rabbit Hole in Which We Find Ourselves

- Patent law—and in particular the law governing patent eligibility—is in a state of crisis following *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014).
- There, the Supreme Court doubled-down on its two-part test for determining patent eligibility:
 - Are the claims directed to a law of nature, natural phenomenon, or abstract idea?
 - If so, is there an inventive concept?



The Rabbit Hole in Which We Find Ourselves

- Alice signals confusion regarding the relevant policy concerns underlying numerous discrete policy doctrines
 - Claim Breadth
 - Abstractness
 - “Inventive Concept”
 - Existing statutory doctrines already deal with each of these policy concerns



The Rabbit Hole in Which We Find Ourselves

- Alice's test lacks administrability
 - The Supreme Court has not provided any objective guidelines to determine what is an "abstract idea" or an "inventive concept."
 - But other doctrines, like non-obviousness and the statutory limit on functional claiming, do provide objective guidelines.



The Rabbit Hole in Which We Find Ourselves

- Alice has had a perverse impact
 - Ironically, the result of all the confusion and lack of administrability is seemingly clear:
 - When challenged, patent applications and issued patents probably do not satisfy the requirement of eligibility (at least that's the perception)
 - Risk of reduced incentive to invest in research and development



The Rabbit Hole in Which We Find Ourselves

- Alice has had a perverse impact
 - “The commercial embodiment of the invention . . . was the first marketed non-invasive prenatal diagnostic test for fetal aneuploidies, such as Down’s syndrome, and presented fewer risks and a more dependable rate of abnormality detection than other tests. . . . Sequenom ‘effectuate[d] a practical result and benefit not previously attained,’ so its patent would traditionally have been valid. . . . But for the sweeping language in the Supreme Court’s Mayo opinion, I see no reason, in policy or statute, why this breakthrough invention should be deemed patent ineligible.”
 - *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1381 (Fed. Cir. 2015) (Linn, J., concurring) (emphasis added).



The Rabbit Hole in Which We Find Ourselves

- We got here in large part because of the focus on searching for “inventive” applications of natural laws, natural phenomena, and abstract ideas
 - *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S.Ct. 1289 (2012); *Alice Corp. v. CLS Bank Int’l*, 134 S.Ct. 2347 (2014).
- But the error in *Mayo* and *Alice* originated in *Funk Brothers Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 132 (1948).



The Rabbit Hole in Which We Find Ourselves

- “But once nature's secret of the non-inhibitive quality of certain strains of the species of *Rhizobium* was discovered, the state of the art made the production of a mixed inoculant a simple step. Even though it may have been the product of skill, it certainly was not the product of invention.”
- *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 132 (1948).



The Rabbit Hole in Which We Find Ourselves

- The error in *Funk Brothers* propagated:
 - “The notion that post-solution activity, no matter how conventional or obvious in itself, can transform an unpatentable principle into a patentable process exalts form over substance.”
 - *Parker v. Flook*, 437 U.S. 584, 590 (1978).



The Rabbit Hole in Which We Find Ourselves

- The error in *Funk Brothers* propagated:
 - “*Flook* rejected ‘[t]he notion that post-solution activity, no matter how conventional or obvious in itself, can transform an unpatentable principle into a patentable process.’”
 - *Bilski v. Kappos*, 561 U.S. 593, 610 (2010) (quoting *Parker v. Flook*, 437 U.S. 584, 590 (1978)).



The Rabbit Hole in Which We Find Ourselves

- The error in *Funk Brothers* propagated:
 - “[The Court’s precedents] insist that a process that focuses upon the use of a natural law also contain other elements or a combination of elements, sometimes referred to as an ‘inventive concept,’ sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself.”
 - *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294 (2012) (citing *Parker v. Flook*, 437 U.S. 584, 594 (1978); *Bilski v. Kappos*, 561 U.S. 593, 610-11 (2010)).



The Rabbit Hole in Which We Find Ourselves

- The error in *Funk Brothers* propagated:
 - “We have described step two of this analysis as a search for an ‘inventive concept’—i.e., an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’”
 - *Alice Corp. Pty. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2355 (2014) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294 (2012)).



How we Got out of the Last, Similar Rabbit Hole

- Forget *Alice in Wonderland*,
It's *Back to the Future*!



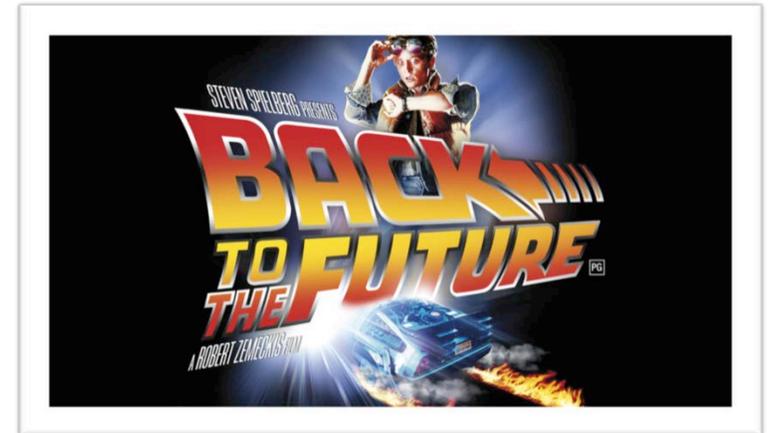
How we Got out of the Last, Similar Rabbit Hole

As we refrain from granting patents on inventions that are not new, we must also refrain from granting patents on those inventions which would arise *spontaneously*, given the need or the desire for them, as the yelp of the dog surely follows from stepping on his tail, or with *only a nominal expenditure of time, effort, money or wit*—especially if the invention is one of real utility likely to meet with substantial or popular demand.

- Giles S. Rich, *The Vague Concept of "Invention" as Replaced by Sec. 103 of the 1952 Patent Act*, 46 J. Pat. Off. Soc'y 855, 859 (1964).

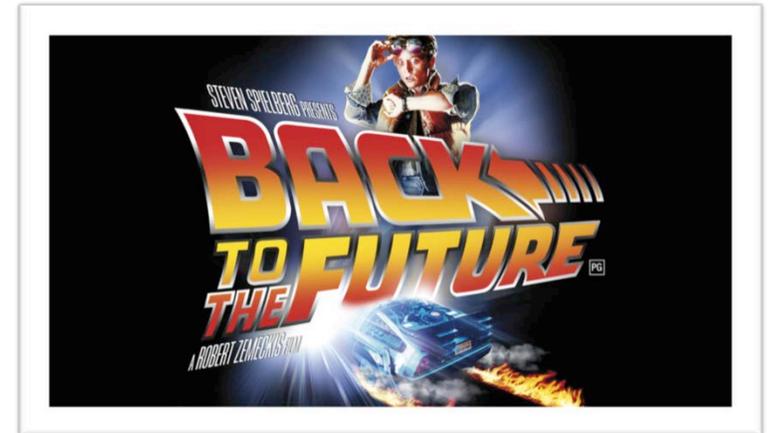
How we Got out of the Last, Similar Rabbit Hole

- Pre-1952 Act Analysis: Is it an “Invention”?
- “It has been stated to be the law that, in addition to being new and useful, and invention, to be patentable, must involve ‘invention.’ Merely to state that proposition, in the absence of an initiation into the mysteries, sounds ridiculous.”
- Giles S. Rich, *The Principles of Patentability*, The George Washington University Law Review, January 1960, pp. 393-407.



How we Got out of the Last, Similar Rabbit Hole

- Pre-1952 Act Analysis: Is it an “Invention”?
- “It is that ‘impalpable something’ which you must have to get a patent. Experienced patent lawyers, the Patent Office, and the courts understand what it is, only they never agree.”
- Giles S. Rich, *The Principles of Patentability*, The George Washington University Law Review, January 1960, pp. 393-407.



How we Got out of the Last, Similar Rabbit Hole

- Pre-1952 Act Analysis: Is it an “Invention”?
- “The truth is the word cannot be defined in such manner as to afford any substantial aid in determining whether a particular device involves an exercise of the inventive faculty or not. In a given case we may be able to say that there is present invention of a very high order. In another we can see that there is lacking that impalpable something which distinguishes invention from simple mechanical skill.”
- *McClain v. Ortmyer*, 141 U.S. 419, 427 (1891)



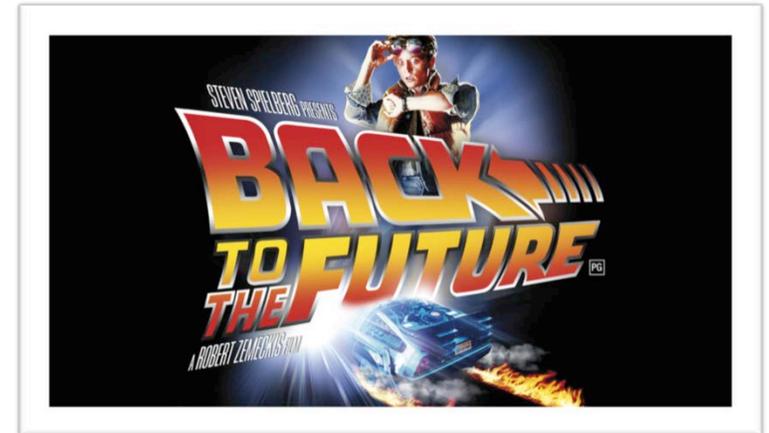
How we Got out of the Last, Similar Rabbit Hole

- Pre-1952 Act Analysis: Is it an “Invention”?
- “Patentable novelty, or simply patentable invention.”
- *United Chromium, Inc. v. Int’l Silver Co.*, 53 F.2d 390, 393 (D. Conn. 1931), *aff’d*, 60 F.2d 913 (2d Cir. 1932).



How we Got out of the Last, Similar Rabbit Hole

- Pre-1952 Act Analysis: Is it an “Invention”?
- Exercise of the inventive faculty the creative faculty, inventive skill, or inventive effort.
- *Potts v. Craeger*, 155 U.S. 597, 608 (1895); *Hammond Buckle Co. v. Goodyear Rubber Co.*, 58 Fed. 411, 413 (2d Cir. 1893); *Ansonia Brass & Copper Co. v. Elec. Supply Co.*, 144 U.S. 11, 18 (1892); *Smith v. Goodyear Dental Vulcanite Co.*, 93 U.S. 486, 497 (1876).



How we Got out of the Last, Similar Rabbit Hole

- Pre-1952 Act Analysis: Is it an “Invention”?
- “The creative work in the inventive faculty.”
- *Hollister v. Benedict & Burnham Mfg. Co.*, 113 U.S. 59, 73 (1885).



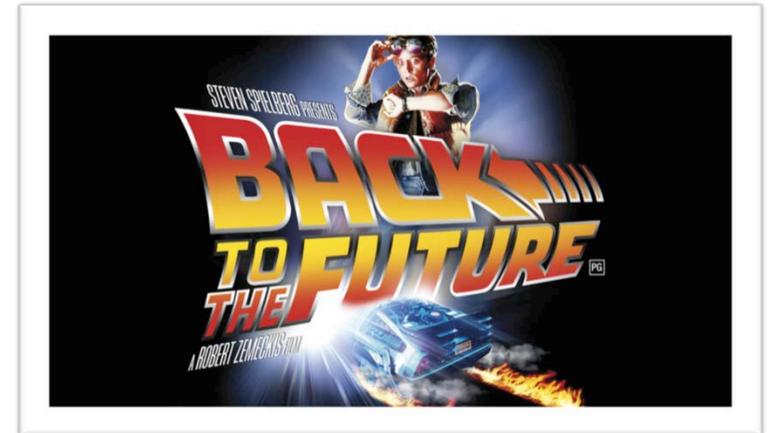
How we Got out of the Last, Similar Rabbit Hole

- Pre-1952 Act Analysis: Is it an “Invention”?
- “A substantial invention or discovery.”
- *Atlantic Works v. Brady*,
107 U.S. 192, 200 (1882).



How we Got out of the Last, Similar Rabbit Hole

- Pre-1952 Act Analysis: Is it an “Invention”?
- “The flash of creative genius.”
- *Cuno Eng'g Corp. v. Automatic Devices Corp.*, 314 U.S. 84, 91 (1941).



How we Got out of the Last, Similar Rabbit Hole

- Pre-1952 Act Analysis: Is it an “Invention”?
- “Something new, unexpected, and exciting.”
- *Thurber Corp. v. Fairchild Motor Corp.*, 269 F.2d 841, 849 (5th Cir. 1959).



How we Got out of the Last, Similar Rabbit Hole

- Pre-1952 Act Analysis: Is it an “Invention”?
- “An invention is the result of an inventive act.”
- *Walker on Patents*, First Deller Ed., Vol. 1, p. 110 (1937).



How we Got out of the Last, Similar Rabbit Hole

- Pre-1952 Act Analysis: Is it an “Invention”?
- Opinions below applied a “standard of invention... that is less exacting than required....”
- *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147 (1950).



How we Got out of the Last, Similar Rabbit Hole

- “[T]he so-called ‘standard of invention’ ...is an unmeasurable quantity having different meanings for different persons.”
- P.J. Federico,
*Commentary on the
New Patent Act, 1954.*



How we Got out of the Last, Similar Rabbit Hole

Upon examination in the Patent Office or upon adjudication in court, under the statute, when novelty, utility, and unobviousness as defined in section 103 are found to exist, and provided there is no one-year statutory bar, then there is *patentability* and *that is the end of the matter*. An examination for the presence or absence of “invention,” or adherence to precedents on that muddy issue, is not called for and is not proper. It is a work of supererogation. It illustrates, furthermore, a failure to grasp the meaning of the statutory provisions. There is no such prerequisite in the statutory law.

- Giles S. Rich, *The Vague Concept of “Invention” as Replaced by Sec. 103 of the 1952 Patent Act*, 46 J. Pat. Off. Soc’y 855, 859 (1964).

How we Got out of the Last, Similar Rabbit Hole

- Rich: The 1952 Patent Act did three things:

1. *It put the requirement into the statutes for the first time, in section 103. The “sufficiently useful and important” clause in R. S. 4893 never seems to have been regarded as the true basis for the requirement of “invention,” which was treated as the creation of the courts. Though one may call section 103 “codification” it took a case law doctrine, expressed in hundreds of different ways, and put it into statutory language in a single form approved by Congress. In such form it became law superior to that which may be derived from any prior court opinion.*

- Giles S. Rich, *The Principles of Patentability*, The George Washington University Law Review, January 1960, pp. 393-407.

How we Got out of the Last, Similar Rabbit Hole

- Rich: The 1952 Patent Act did three things:

2. *The Patent Act of 1952 expresses this prerequisite to patentability without any reference to “invention” as a legal requirement. Nowhere in the entire act is there any reference to a requirement of “invention” and the drafters did this deliberately in an effort to free the law and lawyers from bondage to that old and meaningless term. The word “invention” is used in the statute only to refer to the thing invented. That is why the requirement of “invention” should be referred to, if at all, only with respect due to that which is dead.*

- Giles S. Rich, *The Principles of Patentability*, The George Washington University Law Review, January 1960, pp. 393-407.

How we Got out of the Last, Similar Rabbit Hole

- Rich: The 1952 Patent Act did three things:

3. *The act sets as the standard of patentability the unobviousness of the invention, at the time it was made, to a person having ordinary skill in the art. Therefore, what we have today, and have had since January 1, 1953, is a requirement of unobviousness, rather than a requirement of “invention.”* (It is assumed, of course, that the invention is new and useful and has not run afoul of any statutory provisions such as a statutory bar.)

- Giles S. Rich, *The Principles of Patentability*, The George Washington University Law Review, January 1960, pp. 393-407.

How we Got out of the Last, Similar Rabbit Hole

- But isn't obviousness still subjective?
- "True, but now the statute provides a standard according to which the subjective decision must be made. There is a vast difference between basing a decision on exercise of the inventive or creative faculty, or genius, ingenuity, patentable novelty, flashes, surprises and excitement, on the one hand, and basing it on unobviousness to one of ordinary skill in the art on the other. It is possible to determine what art is involved, what type of skill is possessed by ordinary workers in it, and come to some conclusion as to what 'ordinary skill' would be at a given time."
- Giles S. Rich, *The Principles of Patentability*, The George Washington University Law Review, January 1960, pp. 393-407.

How we Got out of the Last, Similar Rabbit Hole

- But isn't obviousness still subjective?
 - "This may present knotty problems but it is a definite pattern of thinking and does not leave the Patent Office or the courts free to conclude that a thing is not patentable for any old reason and then stand on the proposition that something indefinable and impalpable called 'invention' was not involved. At least they have to talk in terms of obviousness to a man of ordinary skill in the art. While the ultimate decision as to what his skill would be and what would be obvious to him is subjective, it is one definite proposition on which evidence can be adduced."
 - Giles S. Rich, *The Principles of Patentability*, The George Washington University Law Review, January 1960, pp. 393-407.



Options For Climbing Out of the Rabbit Hole

- Push for clarity in the courts
 - Federal Circuit — expressions of concern about apparent *Mayo/ Alice* tests, but refusal to do anything but strictly apply
 - Supreme Court
 - Substantial changes seem highly unlikely.
 - Would they be willing to clarify? If so, how and would it be meaningful?
- Seek a statutory amendment



Is it that the *Mayo* language is just too “sweeping”?

“But for the sweeping language in the Supreme Court's *Mayo* opinion, I see no reason, in policy or statute, why this breakthrough invention should be deemed patent ineligible.”



Ariosa Diagnostics, Inc. v. Sequenom, Inc., 788 F.3d 1371, 1381 (Fed. Cir. 2015)
(Linn, J., concurring)

Can we correct these problems with the Supreme Court providing more guidance?

Judge Dyk: *Mayo* and *Alice* “essential” but could use “further illumination”

“In my view the framework of *Mayo* and *Alice* is an essential ingredient of a healthy patent system, allowing the invalidation of improperly issued and highly anticompetitive patents without the need for protracted and expensive litigation. Yet I share the concerns of some of my colleagues that a too restrictive test for patent eligibility under 35 U.S.C. § 101 with respect to laws of nature (reflected in some of the language in *Mayo*) may discourage development and disclosure of new diagnostic and therapeutic methods in the life sciences, which are often driven by discovery of new natural laws and phenomena. This leads me to think that some further illumination as to the scope of *Mayo* would be beneficial in one limited aspect.”

Ariosa Diagnostics, Inc. v. Sequenom, Inc., 809 F.3d 1282 (2015) (Dyk, J., concurring in the denial of en banc rehearing).

Or, is the problem more fundamental? Judge Lourie: current law “unsound”

“It is unsound to have a rule that takes inventions of this nature out of the realm of patent-eligibility on grounds that they only claim a natural phenomenon plus conventional steps, or that they claim abstract concepts. But I agree that the panel did not err in its conclusion that under Supreme Court precedent it had no option other than to affirm the district court.”



Ariosa Diagnostics, Inc. v. Sequenom, Inc., 809 F.3d 1282 (2015) (Lourie, J., concurring in the denial of en banc rehearing).

Judge Lourie hinted that legislative action might be appropriate during his address to AIPLA at its 2015 Annual Meeting.

Options For Climbing Out of the Rabbit Hole

- Like in 1952, the time has come to fix the problem
- Guiding Principles
 - Broad Eligibility
 - Clarity
 - Constraint on Judicial Intervention
 - Flexibility



Questions For Amendments

- What should be eligible? What should be ineligible?
- Do we need to address the policy concerns that the Supreme Court and others seem to share?
- Would we keep §101 and tweak it, or replace it with something entirely new?
- How do we ensure that the Supreme Court does not continue to apply its exceptions?



How Should the Statute Address Policy Concerns?

- Primary policy concerns:
 - Broad claims that are directed to discoveries, laws and principles, which are “basic tools of scientific and technological work,” inhibit further research and innovation
 - An “invention” can only occur in the application of the discovery, and not in the discovery itself
- Is the first one really an issue? Isn't claim overbreadth addressed with 103 and 112, and isn't that enough?
- Should the second one be the law?



Some Approaches to Amending the Statute

- Keep § 101, and its inherent exceptions, but change the requirement for how much more than the exception is required
- Replace § 101 with an entirely new eligibility standard that is broader and clearer to apply
 - Define exclusive list of exceptions and standard for applying them
- Impose more stringent manner of claiming requirements
- Ensure that research is not hampered by providing a broader research exception to infringement



Keeping 101 and *Mayo* Framework, But Legislate Explicit Standard

- Option 1. Require no more than a practical application of an exception
 - Restores law to *Allapat* and *State Street Bank* standards
- Option 2: Require no more than subject matter that is the product of human effort, or that it is made by man
 - Find ineligible only a process, machine, manufacture, or composition that exists in nature, independently of intervention of man, or purely within the human mind



Keep Two Part Framework, But Define Key Parts

- Define “abstract idea”
 - *Allapat*: “abstract ideas constitute disembodied concepts or truths which are not ‘useful’ from a practical standpoint standing alone, i.e., they are not ‘useful’ until reduced to some practical application”
- Define the “something more”
- Define “markedly different”



Come Up with a New § 101 Standard

- Define eligibility very broadly (anything that is useful) and provide an explicit, categorical listing of subject matter that is not eligible
- Harmonize by adopting Art. 52 from EPO, with or without technical field requirement



Example 1

- § 101. Conditions for patentability; eligible subject matter.
 - (b) EXCLUSIVE EXCEPTIONS.—
 - (1) Claimed subject matter directed to a machine, manufacture, or composition of matter, or any improvement thereof, may be denied eligibility under subsection (a) only if the claimed subject matter, as a whole, does not result from human effort, directly or indirectly.
 - (2) Claimed subject matter directed to a process, or any improvement thereof, may be denied eligibility under subsection (a) only if the claimed subject matter, as a whole, is not performed directly or indirectly through human effort or is only capable of being performed in the human mind.

Example 2

- § 101. Conditions for patentability; eligible subject matter.
- (b) PRACTICAL APPLICATION.—A claim expressed in terms of a useful process, machine, manufacture, or composition of matter, or any improvement thereof, may be denied eligibility under this section 101 on the ground that the claimed invention is directed to a law of nature, natural phenomenon, or idea, whether or not abstract, only if, as of the effective filing date of the claimed invention, a person having ordinary skill in the art to which the claimed invention pertains would have concluded that the claimed invention as a whole was not directed to any practical embodiment or application of such law of nature, natural phenomenon, or idea. Eligibility shall not be negated by the embodiment or application lacking inventiveness or being considered routine or conventional, or by the manner in which the invention was made.