The 800 Pound Faux Stare Decisis Gorilla: Whither Biotechnology?

The previously distributed paper, "Cabining the 800 Pound *Faux Stare Decisis* Gorilla in the The Room of Patent-Eligibility", has been revised to include a new section, §VI, *Biotechnology Compositions, a Different Case*, pp.40-42.

Biotechnology Compositions as Patent-Eligible Subject Matter: The new section details why even assuming, *arguendo*, that certain software inventions lack patent-eligibility, the same is far from true for biotechnology "compositions of matter."

The revised paper is included as part of the PDF version of this note (*attached*).

Patent-Eligibility at the Naples Beachfront January 14-17, 2017: Patent-eligibility will be one of the back corridor discussions at the Naples Conference to be held at the Naples Beachfront Hotel. Details are available at www.TheNaplesRoundtable.org.

Regards, Hal

CABINING THE 800 POUND FAUX STARE DECISIS GORILLA IN THE ROOM OF PATENT-ELIGIBILITY $^{\rm a}$

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"The exceptions [to categories of § 101 patent- eligible subject matter] have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years [to] *Le Roy v. Tatham*, [55 U.S. (14 How.)] 156, 174–75 (1853)."

-- Hon. Anthony Kennedy**

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^a This is an update of *The 800 Pound Faux Stare Decisis Gorilla in the Room of Patent-Eligibility: An Opportunity to Distinguish Supreme Court Precedent* (November 16, 2017).

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**Bilski v. Kappos, 561 U.S. 593, 602 (2010).

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About this Paper:

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I. OVERVIEW

What is the proper scope of case law exclusions to patent-eligible subject matter under 35 USC § 101 in view of recent Supreme Court case law? This is the macroscopic focus of this paper. Serious exceptions to subject matter remaining open to patent-eligibility under 35 USC § 101 have been established by the Supreme Court in the just the past ten years in *Bilski v. Kappos, Mayo v. Prometheus Laboratories*, the *Myriad* case and *Alice v. CLS Bank*.

The primary goal of this paper is suggest ways to *distinguish* but not *overrule* any of these decisions. (To be sure, basis for argumentation in a test case to overrule such case law is one of the subsidiary benefits this paper. *See* § X, *A Test Case, Bypassing the Commissioner.*)

A. Faux Stare Decisis

The more modest goals of this paper are keyed to a predicate study of the common thread which is basis for denial of patent-eligibility in the *Bilski* line of case law: The grant of a patent should not "preempt" research to phenomena of nature or an "abstract" concept. The paper then assumes, for purposes of this paper only, that the *holdings* in these cases denying patent-eligibility are correct. (It is up to the Supreme Court or the legislature to overturn a Supreme Court holding.)

To best define the limits of the Supreme Court case law denying patenteligibility, one should first of all examine the nineteenth century supposed roots of the practice, the now-leading case of *Le Roy v. Tatham*, 55 U.S. (14 How.) 156 (1853)). Citing this case, the Court has said in *Benson* that "the[] exceptions [to patent-eligibility] have defined the reach of the statute as a matter of statutory stare decisis going back 150 years"^{*n*}*Gottschalk v. Benson*, 409 U.S. 63, 67(1972).

Based upon this predicate study, there are two primary objectives:

In the first instance, this paper provides basis to argue that the cases should not be so broadly interpreted as to deny patent-eligibility to situations where the grant of patent is free from an issue of denying a patent that would block research to phenomena of nature or an "abstract" concept.

Secondly, in an area where the Under Secretary of Commerce has abdicated her responsibility to provide guidance (and apparently without principal draftsmanship from the patent law experts of the Solicitor's Office), the Commissioner for Patents has thoughtfully and with good intentions provided an exhaustive treatment as to specific factual situations where patent-eligibility should or should not be found.

But, the Commissioner's approach provides a Pandora's Box of at first blush helpful guidance, which – being divorced from a study of the rationale of underlying case law – has the opposite effect. The Commissioner's guidance must be abandoned in favor of an actual study of the case law itself, to find ways to *distinguish* such case law in a principled manner. (The "hypotheticals" approach of the Commissioner is considered in more detail at § IX, *Inside the Mind of the Commissioner*.)

The central area of the predicate study of this paper is the critical analysis of the argument that *stare decisis* dating back to the mid-nineteenth century *Le Roy v*. *Tatham* undergirds the current Supreme Court case law.

Both the CCPA and Federal Circuit have uncritically cited this case – claiming a *lead pipe* – is the leading case to deny patent-eligibility.¹

¹The CCPA and Federal Circuit have both uncritically cited *Le Roy v. Tatham* for the proposition that the case is foundational for exclusions from patent-eligibility. The cases include the following (some, here, without listing Supreme Court proceedings in the same case): *In re Walter*, 618 F.2d 758, 765 CCPA 1980)(Rich, J.)(citing, *inter alia, Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 174 (1853))(" The common thread running through prior decisions regarding statutory subject matter is that a principle of nature or a scientific truth (including any mathematical algorithm which expresses such a principle or truth) is not the kind of discovery or invention which the patent laws were designed to protect."); "Comiskey I", *In re Comiskey*, 499 F.3d 1365, 1376 (Fed. Cir. 2007)(Dyk, J.)("As early as *Le Roy v. Tatham*, 55 U.S. (14 How.) 156 (1852)[sic], the Supreme Court explained that '[a] principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right. *Id.* at

175."); In re Bilski, 545 F.3d 943, 952 (Fed. Cir. 2008)(Michel, J.)(en banc)(quoting Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1853)("A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."); "Comiskey II", In re Comiskey, 554 F.3d 967, 977-78 (Fed. Cir. 2009)(Dyk, J.)("Abstract ideas' are one type of subject matter that the Supreme Court has consistently held fall beyond the broad reaches of patentable subject matter under § 101. As early as Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1852)[sic], the Supreme Court explained that '[a] principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."); Prometheus Laboratories, Inc. v. Mayo Collaborative Services, 628 F.3d 1347, 1353 (Fed. Cir. 2010)(Lourie, J.)("The Court's precedents provide three specific exceptions to § 101's broad patent-eligibility principles: 'laws of nature, physical phenomena, and abstract ideas."" [citations omitted] Although not compelled by the statutory text, the Court has held that 'these exceptions have defined the reach of the statute as a matter of statutory stare decisis going back 150 years,'[Bilski v. Kappos, 130 S.Ct. 3218, 3225 (2010),] (citing Le Roy v. Tatham, 55 U.S. (14 How.) 156, 174–75 (1853))[.]"); Classen Immunotherapies, Inc. v. Biogen IDEC, 659 F.3d 1057, 1063-64 (Fed. Cir. 2011)(Newman, J.)("In Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1852)[sic], the Court reiterated that 'A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."")

Classen v. Biogen, supra, 659 F.3d at 1080 (Moore, J., dissenting)("'A patent is not good for an effect, or the result of a certain process, as that would prohibit all other persons from making the same thing by any means whatsoever. This, by creating monopolies, would discourage arts and manufactures, against the avowed policy of the patent laws.' *Le Roy v. Tatham,* 14 How. 156, 173 (1853); *cf. O'Reilly v. Morse*, 15 How. 62, 113 (1854) ('[W]hile he shuts the door against inventions of other persons, the patentee would be able to avail himself of new discoveries in the properties and powers of electro-magnetism which scientific men might bring to light.... The court is of opinion that the claim is too broad....')."); *MySpace, Inc. v. GraphOn Corp.*, 672 F.3d 1250, 1264 (Fed. Cir. 2012)(Mayer, J., dissenting)("'[A] principle is not patentable. A principle, in the abstract, is a fundamental truth; an

Such *stare decisis* based upon *Le Roy v. Tatham* – so the argument goes -locks into place the recent Supreme Court case law that denies subject matterbased patent-eligibility, and hence blocks grant of valid patents to certain areas of innovation.

To understand whether *stare decisis* applies to a particular case, it is first helpful to understand what *is* the doctrine of *stare decisis*. It is an abbreviation for a longer phrase which, translated into English, limits "the doctrine of stare decisis *** for what [the case] decides." The doctrine is limited so that a future court "stand[s] by and adhere[s] to *decisions* and [does] not disturb what is settled." *See* § II, *Le Roy v. Tatham: "150 Years" of Stare Decisis.*

original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.' *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1853) ."); *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016)(Reyna, J.)("'A patent is not good for an effect, or the result of a certain process' because such patents 'would prohibit all other persons from making the same thing by any means whatsoever.' *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1853)."); *Amdocs (Israel) Limited v. Openet Telecom, Inc.*, ______F.3d _____, _____, 2016 WL 6440387, slip op. at 18 (Fed. Cir. 2016)(Reyna, J., dissenting)(quoting *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1853))("A patent is not good for an effect, or the result of a certain process" because such patents 'would prohibit all other patents 'would prohibit all other patent is not good for an effect, or the result of a certain process" because such patents 'would prohibit all other patent is not good for an effect, or the result of a certain process" because such patents 'would prohibit all other patent is not good for an effect, or the result of a certain process" because such patents 'would prohibit all other persons from making the same thing by any means whatsoever.").

For a century, the 1853 *Le Roy v. Tatham* case was a minor precedent that was essentially thrown onto the legal scrap heap when in the same case, six years later, a holding of patent validity was reached, effectively upsetting the 1853 denial of patentability. Like the Phoenix rising from the ashes, the case was reborn in importance when it was revived in 1948 by Justice Douglas in *Funk v. Kalo*, which in turn was basis for his opinion a generation later in *Gottschalk v. Benson* where *Le Roy v. Tatham* was relied upon for the statement that "patents cannot issue for the discovery of the phenomena of nature." . *See* § II-D,*Rebirth of Le Roy v. Tatham in Funk v. Kalo*.

One may compare the legal situation here to that of the naked King in the Hans Christian Andersen fable, *The Emperor's New Clothes*: Without realizing the lack of precedential value of *Le Roy v. Tatham*, the Supreme Court has attached itself to *Le Roy v. Tatham* as basis for its decisions in *Parker v. Flook, Diamond v. Diehr, Lab. Corp. of Am. Holdings v. Metabolite Labs., Diamond v. Chakrabarty, Bilski v. Kappos, Mayo v. Prometheus Laboratories* and, *Alice v. CLS Bank. See* § III, *The Mythology of Le Roy v. Tatham*, particularly § III-A, *Supreme Court decisions*.

With at least one notable exception in the case of the late Giles Sutherland Rich, the Federal Circuit has accepted without question the Supreme Court explanation of *Le Roy v. Tatham. See* § III-B, *An Uncritical Acceptance of Le Roy v. Tatham.* While most of the articles written in the various law reviews have accepted *Le Roy v. Tatham* without questions, there are notable exceptions which are worth mentioning and confirm the point that it is important to scour the legal

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literature to gain a full understanding of many issues. *See* § III-C, *Scholarship from the Academy*.

It would be one thing if the only fault in reliance on *Le Roy v. Tatham* were that we are dealing with *dictum* instead of a holding. Here, the matter is different in kind from what in the overall scheme of things is a relatively minor matter. In the first instance, the Supreme Court in 1859 in a continuation of the same litigation in the 1853 *Le Roy v. Tatham* reached the *opposite* conclusion to *uphold* the very same patent. *See* § IV, *Le Roy v. Tatham, Overruled a Century Ago.* At least as important, the *dictum* relied upon from the 1853 case is contrary to what the Court said a generation later in the *Goodyear Dental Vulcanite* and *Badische Anilin* cases. *Id.*

Looking at Le Roy v. Tatham in a vacuum, one may wonder precisely whythe Court in 1853 neglected to consider the process used to make the patented lead pipes as a "product by process" limitation on the *definition* of the product. The answer is that the case was decided before the clear establishment of principles of claim scope and infringement for "product by process" claims which only evolved a generation after this case. *Id.* The case was a generation before principles relating to product-by-process claiming was established in cases such as *Smith v. Goodyear Dental Vulcanite.*

Much is made of the long time interval between the decision in *Le Roy v*. *Tatham*, that it was of a vintage of more than "150 years" ago. It would be one thing if this implies 150 years of settled practice over this period. But, the truth is that after the 1859 second decision in *Le Roy v*. *Tatham* the precedent was essentially abandoned for more than a century up until the time that Justice Douglas brought its *dicta* to life once again in Funk v. Kalo. See § IV B, *Stare Decisis ... or Judicial Silence*?

To be sure, *Le Roy v. Tatham* does not stand alone amongst nineteenth century cases that should be considered in the context of *stare decisis*. These cases include the 1853 *O'Reilly v. Morse* case to the telephone; the 1853 *Rubber-Tip Pencil* case to the classic eraser-tipped "lead pencil," and the 1880 *Tilghman v. Proctor,* the *Fat Separation* case. Beyond *stare decisis,* the Court explains that its denials of patent-eligibility find support from the English 1843 *Househill Coal* caseto "hot blast" steel manufacturing. *See* § V, *Nineteenth Century Cases Beyond Le Roy v. Tatham.*

Even assuming, *arguendo*, precedent exists to deny patent-eligibility to software innovations, the same is not true for biotechnology inventions which have a history of patents granted and supported in litigation that have an early history in United States patent law. *See* § VI, *Biotechnology Compositions, a Different Case*.

One of the nagging issues as seen from both *Mayo* and *Alice* is the Supreme Court focus on patent "preemption" as a basis to deny patent-eligibility. For claims presented to a combination where one element, standing alone, lacks patent eligibility, it is important to include a *Summary of the Invention* that disclaims

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coverage of the element lacking patent-eligibility (outside the claimed combination). *See* § VII, *Prophylactic Approach to Patent "Preemption."*

B. The Monkey on the Back of Patent-Eligibility

With near unanimity, the Federal Circuit appears to view *stare decisis* as a fundamental stumbling block to reaching decisions favoring patent-eligibility. *Bilski v. Kappos*, 561 U. S. 593, 601 (2010), is basis for the concept that patent-eligibility provides 150 years of *stare decisis* to deny claims to "laws of nature, physical phenomena, and abstract ideas."² The "150 years" of *stare decisis* has been quoted by several Circuit Judges as closing the door to patent-eligibility as seen from the opinions of Circuit Judges Dyk³, Mayer⁴ and Lourie.⁵

³ *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1369-70 (Fed. Cir. 2011)(Dyk, J.)("The Court [in *Bilski v. Kappos*, 561 U.S. 593 (2010),] declined to "define further what constitutes a patentable 'process,' beyond pointing to the definition of that term provided in § 100(b) and looking to the guideposts in [the Court's precedents]." [quoting *Bilski*]. 'The Court's precedents provide three specific exceptions to § 101's broad patent-eligibility principles: 'laws of nature, physical phenomena, and abstract ideas. ' [quoting *Bilski*](quoting *Diamond*, 447 U.S. at 309, 100 S.Ct. 2204). The Court noted that these judicially created exceptions 'have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years," and are " 'part of the storehouse of knowledge of all men ... free to all men and reserved exclusively to none." *Id.* (quoting *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)).")

⁴ *MySpace, Inc. v. GraphOn Corp.*,672 F.3d 1250, 1268 (Fed. Cir. 2012)(Mayer, J., dissenting)("[T]here is nothing in *Bilski* to suggest that section 101 can be subverted by a

²Bilski v. Kappos, 561 U. S. at 601-02 ("The Court's precedents provide three specific exceptions to § 101's broad patent-eligibility principles: "laws of nature, physical phenomena, and abstract ideas." [*Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980).] While these exceptions are not required by the statutory text, they are consistent with the notion that a patentable process must be 'new and useful.' And, in any case, these exceptions have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years. See *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 174-75 (1853). The concepts covered by these exceptions are 'part of the storehouse of knowledge of all men ... free to all men and reserved exclusively to none.' *Funk Brothers Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948).")

It is not merely the Courts which have had difficulty with stare decisis in the area of patent-eligibility:

Genomic Health, Inc., Veracyte, Inc., XDX, Inc., Biodesix, Inc., Target Discovery, Inc., The Coalition for 21st Medicine, and Baybio have jointly argued "that *stare decisis*, not the governing statute itself, is the identified authority for the existing judge-made exceptions."⁶

misplaced reliance on sections 102, 103, or 112. To the contrary, the Court reaffirmed section 101's vital role by emphasizing that '[c]oncerns about attempts to call any form of human activity a 'process' can be met by making sure the claim meets the requirements of § 101.' *Bilski*, 130 S.Ct. at 3226. Thus, while the scope of section 101 is broad, it is not unbounded. *Id.* at 3225. Prohibitions against patenting abstract ideas, physical phenomena, and laws of nature 'have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years.' *Id.*")

⁵ Prometheus Laboratories, Inc. v. Mayo Collaborative Services, 628 F.3d 1347, 1353-54 (Fed. Cir. 2010)(Lourie, J.), subsequent proceedings, Mayo Collaborative Services v. Prometheus Laboratories, Inc., 132 S. Ct. 1289 (2012)("[I]t is *** well-established that § 101, while broad, is not unlimited. 'The Court's precedents provide three specific exceptions to § 101's broad patent-eligibility principles: 'laws of nature, physical phenomena, and abstract ideas.' (*Bilski*, 130 S.Ct. at 3225 (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980))]. Although not compelled by the statutory text, the Court has held that 'these exceptions have defined the reach of the statute as a matter of statutory stare decisis going back 150 years,' *id.* (citing *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 174–75 (1853)), and '[t]he concepts covered by these exceptions are 'part of the storehouse of knowledge of all men ... free to all men and reserved exclusively to none,' ' id. (quoting *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)); see also *Benson*, 409 U.S. at 67 ('Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.').").

⁶ Mayo Collaborative Services v. Prometheus Laboratories, Inc., 132 S.Ct. 1289 (2012) (Brief of Genomic Health, Inc., Veracyte, Inc., XDX, Inc., Biodesix, Inc., Target Discovery, Inc., The Coalition for 21st Medicine, and Baybio as Amici Curiae in Support of Respondent, Prometheus Laboratories, Inc., pp. 21-22)("Just last term in *Bilski v. Kappos*, 130 S.Ct. 3218, 3225 (2010) this Court again acknowledged that "Congress plainly contemplated that the patent laws would be given wide scope," citing *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980). This Court also acknowledged that *stare decisis*, not the governing statute itself, is the identified authority for the existing judge-made exceptions. *Id.* at 3225 ("[T]hese exceptions are not required by the statutory text."). For this reason alone, the exceptions should remain narrow and should not be expanded based on the policy preferences of Mayo and its amici.")(footnote deleted).

Under the imprimatur of the American Bar Association as *amicus curiae*, it has been argued that "Supreme Court's precedents provide three specific exceptions to the broad patent-eligibility principles of Section 101: laws of nature, natural phenomena, and abstract ideas."⁷ A parallel argument has been made by a party in the *Alice* case by *amici* Curiae Trading Technologies International, Inc., Cantor Fitzgerald, L.P., Cummins Inc., Scientific Games Corporation, Align Technology, Inc.⁸

The Clearing House Association L.L.C. and Financial Services Roundtable, quoting *Bilski*, jointly argued in *Alice* that "[t]he unpatentability of 'laws of nature, physical phenomena, and abstract ideas ***defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years."⁹ ARUP Laboratories and

⁸ Alice Corporation Pty. Ltd. v. CLS Bank International, 134 S. Ct. 2347 (2014) (Brief of Amici Curiae Trading Technologies International, Inc., Cantor Fitzgerald, L.P., Cummins Inc., Scientific Games Corporation, Align Technology, Inc., et al., in Support of Petitioner, p. 19 n.12)("This Court in *Chakrabarty* identified the border separating the judicial and legislative powers in the specific context of interpreting Section 101: 'Congress has performed its constitutional role in defining patentable subject matter in § 101; we perform ours in construing the language Congress has employed. In so doing, our obligation is to take statutes as we find them, guided, if ambiguity appears, by the legislative history and statutory purpose.' 447 U.S. at 315. *See also Bilski*, 130 S. Ct. at 3226 ('This Court has more than once cautioned that courts should not read into the patent laws limitations and conditions which the legislature has not expressed.' (quotation marks omitted)). Given that the judicial exceptions to patent eligibility are not required by 'the language Congress has employed' in Section 101, it appears that they can be justified, if at all, only as a matter of *stare decisis.*").

⁹ Alice Corporation Pty. Ltd. v. CLS Bank International, 134 S. Ct. 2347 (2014)(Brief for Respondents, the Clearing House Association L.L.C. and Financial Services Roundtable as

⁷ Association for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013)(Brief of the American Bar Association as Amicus Curiae in Support of Respondents, p. 34a)("The Supreme Court's precedents provide three specific exceptions to the broad patent-eligibility principles of Section 101: laws of nature, natural phenomena, and abstract ideas. The Supreme Court has held that "these exceptions have defined the reach of the statute as a matter of statutory stare decisis going back 150 years." *Bilski*, 130 S. Ct. at 3225 (citation omitted).")

Labcorp (quoting *Bilski*) jointly argued that "t]hese exceptions [to patenteligibility] have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years.").¹⁰

Petitioners in *Myriad* argued (quoting *Bilski*) that "these exceptions have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years."¹¹

Amici Curiae in Support of Respondents, pp. 7-8)("*Bilski* reaffirmed that '[t]he § 101 patenteligibility inquiry is only a threshold test,' as a 'claimed invention must *also* satisfy 'the conditions and requirements of this title,' such as 'that the invention be novel, see § 102, nonobvious, see § 103, and fully and particularly described, see § 112.' 130 S. Ct. at 3225 (emphasis added). Applying the 'threshold test' of <u>Section 101</u>, the Court resolved *Bilski* 'narrowly on the basis of ... *Benson, Flook*, and *Diehr,' id.* at 3229, and held that a patent application claiming a procedure for hedging against the risk of price changes was unpatentable under <u>35 U.S.C. § 101</u> because it was an 'abstract idea, just like the algorithms at issue in *Benson* and *Flook.'* <u>Id. at 3231</u>. The unpatentability of 'laws of nature, physical phenomena, and abstract ideas,' *Bilski* noted, 'defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years.' <u>Id. at 3225</u>.")

¹⁰ *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S.Ct. 1289 (2012)(Brief for ARUP Laboratories, Inc. and Laboratory Corporation of America Holdings (d/b/a Labcorp) as Amici Curiae in Support of Petitioners, p.7)("'[T]hese exceptions [to patent-eligibility] have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years.' *Bilski*, 130 S. Ct. at 3225 (citing *Le Roy v. Tatham*, 55 (14 How.) 156, 174-75 (1853)). This Court thus has properly hesitated to alter the fundamental concepts of patent law that have guided generations of inventors and succeeded in furthering the progress of science and useful arts. *See Bd. of Trs. of Stanford Univ. v. Roche Molecular Sys., Inc.*, 131 S. Ct. 2188, 2198-99 (2011).")

¹¹Association for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013)(Petitioner's Brief at pp. 26-27)("The patenting of isolated DNA violates long-established precedent that prohibits the patenting of laws of nature, natural phenomena, products of nature, and abstract ideas. *Chakrabarty*, 447 U.S. at 309; *see also J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc.*, 534 U.S. 124, 134 (2001) (' 'the relevant distinction' for purposes of § 101 is ... 'between products of nature, whether living or not, and human-made inventions' '). '[T]hese exceptions have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years.' *Bilski v. Kappos*, 130 S. Ct. 3218, 3225 (2010) (citing *Le Roy v. Tatham*, 55 U.S. 156, 174-75 (1853)). 'Phenomena of nature,

To be sure, there are exceptional briefs that do not follow the conventional wisdom manifested, here, by the *Galvin* brief in *Alice*.

"Turning now to the cases cited in *Benson*, we will see that the cases do not support the points in *Benson* for which they were relied upon. The first case, *MacKay Radio*, deals with directional radio antennas, and with the natural phenomena exception (which is clear in the case law). Specifically, *MacKay Radio* states that, while knowledge of the Abraham formula governing how radio waves vary based on the geometry of antennas is not itself patentable, a novel type of antenna that leverages the Abraham formula to achieve a new and useful end (highly directional radio wave transmission) may be (and in fact was).

"Rubber-Tip Pencil concerns an invention that today is an everyday item (at least for school children) - the removable rubber eraser that one can place on the end of a pencil. Arguably the case was poorly decided, since the majority in *Rubber-Tip Pencil* recomposed the claimed invention into its constituent parts, declared that each of them was well-known (even though no one had ever made such erasers

though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.' *Mayo*, 132 S. Ct. at 1293 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). This Court has explained repeatedly that '[s]uch discoveries are 'manifestations of ... nature, free to all men and reserved exclusively to none.' '*Chakrabarty*, 447 U.S. at 309 (quoting *Funk Bros.*, 333 U.S. at 130). Otherwise, 'there is a danger that the grant of patents that tie up their use will inhibit future innovation premised upon them.' *Mayo*, 132 S. Ct. at 1301; *see also Funk Bros.*, 333 U.S. at 130-31.

"Laws of nature, products of nature, and abstract ideas are not patentable based 'on the more fundamental understanding that they are not the kind of 'discoveries' the statute was enacted to protect.' *Parker v. Flook*, 437 U.S. 584, 593 (1978). A product of nature does not become a patentable invention based on utility, novelty, hard work, or the need to recoup investment. *See Mayo*, 132 S. Ct. at 1304. Nor can clever draftsmanship – such as adding the word 'isolated' – rescue a claim that otherwise falls short of Section 101 scrutiny. The Court's 'cases warn us against interpreting patent statutes in ways that make patent eligibility 'depend simply on the draftsman's art' without reference to the 'principles underlying the prohibition against patents for [natural laws].' '*Id.* at 1294 (quoting *Flook*, 437 U.S. at 593).").

before), and then said 'What, therefore, is left for this patentee but the idea that if a pencil is inserted into a cavity in a piece of rubber smaller than itself the rubber will attach itself to the pencil, and when so attached become convenient for use as an eraser?' Then, in the final paragraph of the opinion, the author states, 'An idea of itself is not patentable, but a new device by which it may be made practically useful is. The idea of this patentee was a good one, but his device to give it effect, though useful, was not new. Consequently he took nothing by his patent'.

"The opinion, earlier, went to some length to disparage the novelty of each aspect of the invention. So this case was a case of *novelty*, and a poorly executed one at that (the claims as a whole were not examined for novelty, which would have revealed - based at least on the record available today - that in fact the combination of known elements was in fact new, and it was explicitly stated that it was useful). In any case, the citation used in Benson actually works, but not for the purpose it was used for in Benson (as one of the litany of precedents supposedly establishing the abstract idea exception). Rubber-Tip Pencil states that, 'an idea of itself is not patentable, but a new device by which it may be made practically useful is'. This does not mean necessarily only that a *device* that makes an *idea* useful makes patentability possible; it means that an idea, by itself, is not patent-eligible (because ideas don't have any use when they are in our heads), but *anything that* makes an idea useful may be. We should not be trapped by the fact that, in 1874 when this opinion was written, the vast majority of patents (including those of Morse and Bell) were for mechanical devices with at most some modest involvement of electricity (as in the case of Morse and Bell). The field 'electronics' didn't even exist then (in fact, the electron itself was not discovered until much later). So the fact that the word 'a device' was used to render 'an idea' patent-eligible merely reflects the time, and should never have led us down the path we have taken, where there is an implicit bias in patent law towards tangibility. The key word, and the key concept, in Rubber-Tip Pencil is not 'abstract idea' (which was never used), but useful.

Turning now to *Le Roy v. Tatham*, we note first that again it refers to a natural phenomenon, not an abstract idea. But the passage cited, which states, 'That the discovery of a new principle is not patentable; but it must be embodied and brought into operation by machinery, so as to produce a new and useful result', again both suffers from its era-specific tangibility bias ('embodied', 'machine'), but also emphasizes the correct issues ('new and useful', 'operative'). That is, an invention, to be patent-eligible, must take a principle and make it operative to provide a new and useful result. But 'operative' really just means 'useful', for a useful invention either does something or is used to do something - it is operative.

A proper reading of *Le Roy v. Tatham*, in view of the proper interpretation of §101 (discussed below), is only that a principle (a natural phenomenon or law of nature) must be made *useful* in some *new* way (the principle itself cannot be new, since Nature predates all patent law).

"As an aside, it should be noted that not all 'ideas' involve laws of nature or natural phenomena. One can readily create, for example, a completely new algorithm (assume for our purposes that no other person has previously developed the same algorithm, or one that would render it obvious); such an algorithm is neither a 'principle' nor a 'law of nature'. And it is therefore undoubtedly new (since we stipulated that there was no prior art for our hypothetical). But, until it is rendered operable in some way, it is not *useful* - an idea, in my head (or anyone else's), is just that, and it is not useful. That is the point of *Le Roy v. Tatham*.

"Finally, let us consider *Funk Bros.* as cited in *Benson.* This also applies to a law of nature (in this case, a newly-discovered law of nature), and states that the law of nature itself is unpatentable (because it is not new), but rather patentability 'must come from the application of that law of nature to a *new* and *useful* end'. This again comports with the text of §101 - the law of nature itself preexists patent law and cannot be new. But a *new* and *useful* application of the law is deserving of a patent. The key here and with the law of nature/natural phenomena exceptions in general (which are in essence the same thing) is that the law/phenomenon itself *cannot be new* (since Nature predates patent law), so to achieve patentability one must develop some *new* (relative to the prior art, which of course includes the natural law/phenomenon *per se*) and *useful* application. But *useful* does not mean 'embodied' or 'material' - these are nineteenth century biases. The meaning of useful has not changed, but the march of technology means that the scope of what may be useful certainly has.

"This examination - admittedly somewhat lengthy - of the cases cited by *Benson* show that the precedents *do not support the existence of a judicially created abstract idea exception.* It simply isn't there. It was created out of thin air in *Benson.*"¹²

¹² Alice Corporation Pty. Ltd. v. CLS Bank International, 134 S. Ct. 2347 (2014)(Brief of Brian R. Galvin as Amicus Curiae in Support of Neither Party, *The Venerable §101 Cases Have Routinely Been Misconstrued - There Is No Abstract Idea Exception*, pp. 15-19)(original emphasis; footnotes deleted)

II. LE ROY V. TATHAM: "150 YEARS" OF STARE DECISIS

A. Pure Dicta is not Entitled to Stare Decisis Status

Before considering *whether* the doctrine of *stare decisis* applies to *Le Roy v*. *Tatham* – or any other case –, as a predicate to the discussion it is best to first understand what is meant by *stare decisis*: "[U]nder the doctrine of stare decisis a case is important only for what it decides."¹³

"Stare decisis" are two words that do not stand alone: The two words are shorthand for the phrase *"stare decisis et non quieta movere*[, which in translation means] 'to stand by and adhere to *decisions* and not disturb what is settled."¹⁴

Stare decisis is limited to the *holding* in the case.¹⁵The doctrine is *not* applicable to what the opinion *says*, but only to "the decision, for the detailed legal consequence following a detailed set of facts."¹⁶

¹⁵*Id.* ("Consider the word 'decisis.' The word means, literally and legally, the decision.").

¹⁶*Id.* ("Nor is the doctrine stare dictis; it is not 'to stand by or keep to what was said.' Nor is the doctrine *stare rationibus decidendi* – 'to keep to the *rationes decidendi* of past cases.' Rather, *under the doctrine of stare decisis a case is important only for what it decides* – for the 'what,' not for the 'why,' and not for the 'how'. Insofar as precedent is concerned, stare decisis is important only for the decision, for the detailed legal consequence following a detailed set of facts.")(emphasis added).

¹³In re Osborne, 76 F.3d 306, 309 (9th Cir. 1996)(Aldisert, J.).

¹⁴*Id.* ("Stare decisis is the policy of the court to stand by precedent; the term is but an abbreviation of *stare decisis et non quieta movere* – 'to stand by and adhere to decisions and not disturb what is settled."").

Professors Abramowicz & Stearns explain that "stare decisis applies only to holdings of announced precedents..."¹⁷ Professor Beck agrees, stating that "the rule of stare decisis attaches only to a court's previous holdings, [so] the distinction between holding and dictum lies at the heart of the law of precedent."¹⁸ Justice Goldberg in *Gillespie v. United States Steel* explains that "[e]ven the English courts, which hold to a doctrine of stare decisis more [] than our own, hold that obiter dicta are in no wise controlling. Surely the rule of stare decisis should not preclude consideration of whether such dicta were originally supported by logic and have withstood the test of time."¹⁹ To be sure, the case law does allow for *stare decisis* to apply beyond the holding of the case, but under circumstances not applicable here.²⁰

¹⁹ *Gillespie v. United States Steel Corp.*, 379 U.S. 148, 162 (1964)(Goldberg, J., dissenting in part)(footnote omitted).

²⁰ Seminole Tribe of Florida v. Florida, 517 U.S. 44, 67 (1966)(Rehnquist, C.J.)(citing County of Allegheny v. American Civil Liberties Union, Greater Pittsburgh Chapter, 492 U.S. 573, 668 (1989) ("As a general rule, the principle of stare decisis directs us to adhere not only to the holdings of our prior cases, but also to their explications of the governing rules of law") (Kennedy,J., concurring and dissenting); Carey v. Musladin, 549 U.S. 70, 79 (2006)(Stevens, J., concurring in the judgment)(same); see also Perry v. Thomas, 482 U.S. 483, 493 (1987)(Stevens, J., dissenting)(citing Shearson/American Express Inc. v. McMahon, 482 U.S. 220 (1987)("The dicta in some of these recent cases are admittedly broad enough to cover this case, ... but since none of our prior holdings is on point, the doctrine of stare decisis is not controlling.").

¹⁷ Michael Abramowicz & Maxwell Stearns, *Defining Dicta*, 57 Stan. L. Rev. 953 (2005).

¹⁸ Randy Beck, *Transtemporal Separation of Powers in the Law of Precedent*, 87 Notre Dame L. Rev. 1405, 1409 (2012) (citing Abramowicz and Stearns).

The diminished value of dicta is explained in *Kirtsaeng v. John Wiley.*²¹ As explained in *Patterson v. McLean Credit Union*, changed circumstances occurring over time diminish the impact of *stare decisis.*²²

B. Recent Supreme Court Citations

If one were to take a narrow view of precedent, looking only to the lifetimes of members of the profession who started their careers in the past forty years, the 1853 *Le Roy v. Tatham* decision would appear to be one of the major patent precedents in the history of the Republic.

In the wake of the second (1859) opinion in *Le Roy v. Tatham* up until the *Funk v. Kalo* (1948) – a period of eighty-nine (89) years – there was only a handful of Supreme Court cases to even *cite* the 1853 *Le Roy v. Tatham*. Since *Funk Brothers Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127 (1948), there have been

²¹ *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S.Ct. 1351, 1368 (2013)("[W]e are not necessarily bound by dicta should more complete argument demonstrate that the dicta is not correct. *Central Va. Community College v. Katz*, 546 U.S. 356, 363 (2006) ('[W]e are not bound to follow our dicta in a prior case in which the point now at issue was not fully debated'); *Humphrey's Executor v. United States*, 295 U.S. 602, 627–28 (1935) (rejecting, under *stare decisis*, dicta, 'which may be followed if sufficiently persuasive but which are not controlling'

²² Patterson v. McLean Credit Union, 491 U.S. 164, 173(1989)("In cases where statutory precedents have been overruled, the primary reason for the Court's shift in position has been the intervening development of the law, through either the growth of judicial doctrine or further action taken by Congress. Where such changes have removed or weakened the conceptual underpinnings from the prior decision, see, *e.g., Rodriguez de Quijas v. Shearson/American Express, Inc.*, 490 U.S. 477, 480–81 (1989); Andrews v. Louisville & Nashville R. Co., 406 U.S. 320, 322–23 (1972), or where the later law has rendered the decision irreconcilable with competing legal doctrines or policies, see, *e.g. Braden v. 30th Judicial Circuit Ct. of Ky.*, 410 U.S. 484, 497–99 (1973); Construction Laborers v. Curry, 371 U.S. 542, 552 (1963), the Court has not hesitated to overrule an earlier decision.")

numerous citations to the 1853 *Le Roy v. Tatham* opinion. *See Gottschalk v. Benson*, 409 U.S. 63, 67(1972); *Parker v. Flook*, 437 U.S. 584 (1978); *Diamond v. Chakrabarty*, 447 U.S. 303 (1980); *Diamond v. Diehr*, 450 U.S. 175 (1981); *Laboratory Corp. of America Holdings v. Metabolite Laboratories, Inc.*, 548 U.S. 124 (2006)(Breyer, J., joined by Stevens and Souter, JJ., dissenting from dismissal of writ of certiorari); *Bilski v. Kappos*, 561 U. S. 593 (2010); *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S.Ct. 1289, 1293 (2012); *Alice Corp. Pty. Ltd. v. CLS Bank Intern.*, 134 S.Ct. 2347, 2354 (2014).

But, in the more than 110 years since the 1859 *Le Roy v. Tatham* opinion, up until the 1972 *Gottschalk v. Benson*decision, there were precious few opinions citing the 1853 *Le Roy v. Tatham* opinion. It became an obscure precedent that was not followed by the Supreme Court virtually throughout this period. There were five exceptions over this long period in the nineteenth century²³ and two in the twentieth century.²⁴

C. Rebirth of Le Roy v. Tatham in Funk v. Kalo

Nearly a full century after *Le Roy v. Tatham*, the case was resurrected as a leading case by the late Justice William O. Douglas to deny patent-eligibility in *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)(Douglas, J.).

²³Stimpson v. Woodman, 77 U.S. 117, 124 n.4 (1869); Busell Trimmer Co. v. Stevens, 137 U.S.
423, 433 (1890); Knapp v. Morss, 150 U.S. 221, 228 (1893); Magin v. Karle, 150 U.S. 387, 392 (1893).

²⁴*Minerals Separation v. Butte & Superior Mining Co.*, 250 U.S. 336, 349 (1919); *De Forest Radio Co. v. General Electric Co.*, 283 U.S. 664, 685 (1931).

There, Justice Douglas resurrected the "Lead Pipe" case, *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1853)(McLean, J.), *subsequent proceedings, Le Roy v. Tatham*, 63 U.S. (22 How.) 132 (1859)(McLean, J.), for the proposition that patents cannot issue for the discovery of the phenomena of nature."

D. From Funk to Benson

The same Justice Douglas more than a generation later bootstrapped both *Funk v. Kalo* and *Le Roy v. Tatham* to deny patent-eligibility in *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)(Douglas, J.). He quotes from *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1853): "A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.").

Since *Funk v. Kalo*, the "lead pipe" technology and the original holding have been forgotten, while *Le Roy v. Tatham* has become a leading case to deny patent-eligibility, both at the Supreme Court and at the appellate level.



III. MYTHOLOGY KEYED TO LE ROY V. TATHAM

A. Supreme Court Citations

At the Supreme Court, see Parker v. Flook, 437 U.S. 584, 589 (1978)(quoting Gottschalk v. Benson, 409 U.S. 63, 67 (1972))(" 'A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.' [The "Lead Pipe" case, Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1853)(McLean, J.), subsequent proceedings, Le Roy v. Tatham, 63 U.S. (22 How.) 132 (1859)(McLean, J.)]. Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work."); Diamond v. Diehr, 450 U.S. 175, 185(1981)(quoting Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1853))"A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."); Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc., 548 U.S. 124, 126 (2006) (Breyer, J., joined by Stevens and Souter, JJ., dissenting from dismissal of writ of certiorari)(citing, inter alia, Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1853), for the proposition that "[t]his principle [of excluding subject matter from what is patent-eligible] finds its roots in both English and American law."); Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980)(citing, inter alia, Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1853), for the proposition that "[t]he laws of nature, physical phenomena, and abstract ideas have been held not patentable."); Bilski v. Kappos, 561 U.S. 593 (2010)("While not required by the statutory text, the[] exceptions [to patent-eligibility] are consistent with the notion that a patentable process must be 'new and useful.' And, in any case, the exceptions have defined the statute's reach as a matter of statutory stare decisis going back 150 years. See

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Le Roy v. Tatham, 55 U.S. (14 How.) 156, 174 (1853).'v(citing, *inter alia, Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1853), for the proposition that "[t]he Court has long held that this provision contains an important implicit exception. '[L]aws of nature, natural phenomena, and abstract ideas" are not patentable.'"); *Alice Corporation Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347, 2354 (2014)(citing, *inter alia*, the "Lead Pipe" case, *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 174-75 (1853) (McLean, J.), *subsequent proceedings, Le Roy v. Tatham*, 63 U.S. (22 How.) 132 (1859)(McLean, J.), for the proposition that "[w]e have interpreted § 101 and its predecessors in light of th[e] exception [that laws of nature, natural phenomena, and abstract ideas are not patentable] for more than 150 years.")

B. An Uncritical Judicial Acceptance of Le Roy v. Tatham

Since *Gottschalk v. Benson*, the appellate courts have proceeded in near 100 % lockstep with the Supreme Court interpretation of *Le Roy v. Tatham*, with one exception.²⁵ Cases following the Supreme Court include *In re Walter*, 618 F.2d 758, 765 (Fed. Cir. 1980)(Rich, J.)(citing, *inter alia*, the "Lead Pipe" case, *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 174 (1853)(McLean, J.), *subsequent proceedings, Le Roy v. Tatham*, 63 U.S. (22 How.) 132 (1859)(McLean, J.)), for the proposition that "[t]he common thread running through prior decisions regarding statutory subject matter is that a principle of nature or a scientific truth (including any mathematical algorithm which expresses such a principle or truth) is not the kind of discovery or invention which the patent laws were designed to

²⁵To be sure, there is at least one opinion that recognizes the different issue actually raised in *Le Roy v. Tatham. See In re Bergy, 5*96 F.2d 952, 990-91 (CCPA 1979)(Rich, J.).

protect."); In re Bilski, 545 F.3d 943, 952 (Fed. Cir. 2008)(en banc)(Michel, C.J.)(quoting Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1852) ("A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."); In re Comiskey, 554 F.3d 967, 977-78 (Fed. Cir. 2009)(Dyk, J.)("As early as Le Roy v. Tatham, [55 U.S. (14 How.) 156, 175 (1853)], the Supreme Court explained that '[a] principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."); Classen Immunotherapies, Inc. v. Biogen IDEC, 659 F.3d 1057, 1063-64 (Fed. Cir. 2011)(Newman, J.)("In Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1852), the Court reiterated that 'A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."; MySpace, Inc. v. GraphOn Corp., 672 F.3d 1250, 1264 (Fed. Cir. 2012)(Mayer, J., dissenting)(quoting Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1853))("[A] principle is not patentable. A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."); McRO, Inc. v. Bandai Namco Games America Inc., ____ F.3d ___, ___, 2016 WL 4896481, slip op. at 8 (Fed. Cir. 2016)(Reyna, J.)(quoting Mayo Collaborative Services v. Prometheus Laboratories, Inc., 132 S. Ct. 1289, 1301 (2012)) ("A patent is not good for an effect, or the result of a certain process' because such patents 'would prohibit all other persons from making the same thing by any means whatsoever.' Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1853).")

C. Scholarship from the Academy

To be sure, there are scoresof references to *Le Roy v. Tatham*, 55 U.S. (14 How.) 156 (1853), which uncritically accept the premise that this case is viable precedent. Some of these references are in the judicial literature but most come from practitioners and the Academy. The point of this paper is not to cite this majority, but instead to explain a very important: *Le Roy v. Tatham* is not binding precedent to dictate the future direction of the patent law.

If one simply looks at the volume of uncritical literature concerning *Le Roy v. Tatham* one may think that legal scholarship is totally dead.

But, that is not true.

Significant scholarship exists that recognizes the place of *Le Roy v. Tatham* in the overall scheme of the body of case law:

Professor Lefstin explains the significance of *Le Roy v. Tatham* in today's patent-eligibility discussions. He considers the interrelationship of this case with the English *Neilson* case: "[T]he Supreme Court's first significant engagement with the *Neilson* cases came in 1852, with *Le Roy v. Tatham. Le Roy* later became the fountainhead of subject-matter exclusion in American patent law, via its oft-quoted (and *largely tautological*) pronouncement on the unpatentability of principles: 'A principle, in the abstract, is a fundamental truth; an original cause; a

motive; these cannot be patented, as no one can claim in either of them an exclusive right."²⁶

Professors Holman²⁷ and Durham²⁸ also provide valuable insights. Other academic literature also has citations to *Le Roy v. Tatham* in a similar vein.²⁹

²⁶Jeffrey A. Lefstin, *Inventive Application: A History*, 67 Fla. L. Rev. 565, 594 (2015)(emphasis added).

²⁷ Christopher M. Holman, Patent Eligibility Post-Myriad: A Reinvigorated Judicial Wildcard of Uncertain Effect, 82 Geo. Wash. L. Rev. 1796, 1817 (2014)("[I]n Bilski, the Court asserted that its 'precedents provide three specific exceptions to § 101's broad patent-eligibility principles: 'laws of nature, physical phenomena, and abstract ideas.'' The Court acknowledged that the exceptions 'are not required by the statutory text,' but stated that they 'have defined the reach of the statute as a matter of statutory stare decisis going back 150 years.' I recently participated in an interdisciplinary roundtable in which law professors and patent attorneys sat down with scientists, linguists, and philosophers and attempted to make some sense of the current state of the patent eligibility doctrine. I found it interesting that some of the participants seemed to believe that insight into the nature of patent eligibility could be gleaned by rigorously parsing the language used by the Court in defining the 'three exceptions.' Implicit in this earnest inquiry was an assumption that the Supreme Court had carefully considered the language it had used to define the three exceptions, and that each of the three exceptions had independent meaning and corresponded to some discrete category of patent-ineligible subject matter. But I think that if one traces the origins of the purported three exceptions to patent eligibility it will become apparent that any search for deep and profound meaning in the language used by the Court will prove *largely futile.*" (footnotes omitted; emphasis added)

²⁸Alan L. Durham, *The Paradox of "Abstract Ideas*", 2011 Utah L. Rev. 797 (2011)("Concurring in *Bilski*, Justice Stevens complained that the majority 'never provides a satisfying account of what constitutes an unpatentable abstract idea.' Indeed, the 150 years of precedent to which *Bilski* alludes provides no such 'satisfying account.' The history of the abstract ideas exclusion is one of circular reasoning, vagueness, and obscurity, in part because courts rarely acknowledge the inherently abstract qualities of any patented invention.")

As to the *holding* in *Le Roy v. Tatham*, Professor Durham explains that "[a]lthough the applicant in Le Roy had in fact applied his discovery to the manufacture of superior lead pipes, he made the mistake (fatal in the majority's view) of claiming his invention as the machinery used in the process. The machinery itself was not new."³⁰ The passages of the case relied upon by modern

³⁰Alan L. Durham, *Two Models of Unpatentable Subject Matter*, 31 Santa Clara High Tech. L.J. 251, 264-65 (2015).

²⁹ John M. Golden, Patentable Subject Matter and Institutional Choice, 89 Tex. L. Rev. 1041, 1085 n.221 (2011)("See Bilski v. Kappos, 130 S. Ct. 3218, 3225 (2010) (citing Le Roy v. Tatham, 55 U.S. (14 How.) 156, 174-75 (1853), to support a statement that specified 'exceptions to \$101's broad patent-eligibility principles ... have defined the reach of the statute ... going back 150 years')."); Katherine J. Strandburg, Much Ado about Preemption, 50 Hous. L. Rev. 563, 570 n.18 (2002)(quoting Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1852) ("A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."); Dina Roumiantsevad, *The Eye of the Storm*: Software Patents and the Abstract Idea Doctrine in CLS Bank v. Alice, 28 Berkeley Tech. L.J. 569, 572 n.14 (2013)("Bilski v. Kappos, 130 S. Ct. 3218, 3225 (2010) (describing the exceptions as "statutory stare decisis going back 150 years" (citing Le Roy v. Tatham, 55 U.S. 156, 173 (1852))"); Jesse D.H. Snyder, Have We Gone Too Far: Does the Seventh Amendment Compel Fact-Finding before Reaching a Decision on Patent-Eligible Subject Matter?, 14 Chi.-Kent J. Intell. Prop. 436, 444 (2015)("[T]he Supreme Court has recognized certain "important implicit exception[s]: laws of nature, natural phenomena, and abstract ideas are not patentable." Federal courts have held fidelity to those exceptions "for more than 150 years." [Alice Corp. Pty. v. CLS Bank Int'l, 134 S. Ct. 2347, 2349 (2014) (citing Bilski v. Kappos, 561 U.S. 593, 130 (2010)); O'Reilly v. Morse, 56 U.S. 62, 62 (1853); the "Lead Pipe" case, Le Roy v. Tatham, 55 U.S. (14 How.) 156, 160 (1853) (McLean, J.), subsequent proceedings, Le Roy v. Tatham, 63 U.S. (22 How.) 132 (1859)(McLean, J.)]. At their core, those exceptions seek to avoid preemption of "the basic tools of scientific and technological work.")(footnotes omitted or integrated into text in brackets).

writers is simply *dictum.*³¹ Professor Menell explains the Supreme Court reference to *Bilski v. Kappos.*³²

³¹*Id.* ("In *Le Roy v. Tatham*, the Supreme Court considered a patent application based on the discovery that a piece of lead could be firmly bonded to another under the application of pressure and heat, a discovery that the applicant had applied in the manufacture of lead pipes. The fact that lead surfaces will adhere under those conditions can aptly be described as a principle of nature. After noting a lack of precision in the use of the word 'principle,' the majority nevertheless observed that 'a principle is not patentable.' 'A principle, in the abstract,' the court explained, 'is a fundamental truth; an original cause; a motive; these cannot be patented as no one can claim in either of them an exclusive right.' [55 U.S. 156, 175 (1853).] On the other hand, where a principle is 'applied to any special purpose, so as thereby to effectuate a practical result and benefit not previously obtained,' a patent for that application can be had, even if it is based on 'the discovery of a great, general, and most comprehensive principle in science or law of nature.' [*Id.* (quoting *Househill Co. v. Neilson*, Webster's Patent Cases 683 (1843)).] *Although the applicant in Le Roy had in fact applied his discovery to the manufacture of superior lead pipes, he made the mistake (fatal in the majority's view) of claiming his invention as the machinery used in the process. The machinery itself was not new.*

"Dissenting Justice Nelson, who would have looked past the infirmities of the claim, expanded upon the same concept of principle versus application introduced by the majority. The patentee, he pointed out, had turned 'the discovery of this property of lead, which had never before been known, but on the contrary, had been supposed and believed, by all men of science skilled in metals, to be impossible' into wrought lead pipe of such superiority that it had 'wholly superseded [its predecessors] in the market.' The apparatus used by the patentee 'was but incidental, and subsidiary to the new and leading idea of the invention'--the 'leading idea' being '[t]he discovery of a new property in the article of lead.' That discovery 'led naturally to the apparatus,' which itself 'required very little ingenuity.' Given 'the state of the art at the time,' the machinery could have been constructed by '[a]ny skillful mechanic.' Its importance was only in making practical use of the natural properties of lead. Drawing support from English precedent involving Watt's steam engine patent, Judge Nelson observed that patenting a practical application did not amount to patenting a natural principle.80 On the contrary, '[f]or every other purpose and end, the principle [remains] free for all mankind to use.'")(emphasis added).

³²Peter S. Menell, Forty Years of Wondering in the Wilderness and No Closer to the Promised Land: Bilski's Superficial Textualism and the Missed Opportunity to Return Patent Law to its Technology Mooring, 63 Stan. L. Rev. 1289, 1301 (2011)(footnote omitted)("Justice Kennedy [in Bilski v. Kappos, 130 S. Ct. 3218, 3226 (2010),].... invokes Le Roy v. Tatham to ground the

IV. LE ROY V. TATHAM, RESULT OVERRULED A CENTURY AGO

A. Post-Le Roy Nineteenth Century Supreme Court Decisions

It should be sufficient that the 1853 *Le Roy v. Tatham* denial of patentability is rendered without significant precedential value by the conflicting holding in that same case in 1859. Beyond this one case, however, is the fact that the case law a generation later that requires that process limitations that *define* a claimed product overturn the underlying basis for the 1853 decision. The early principles of product-by-process case law are thus found in *Smith v. Goodyear Dental Vulcanite Co.*, 93 U.S. 486 (1877), and *Cochrane v. Badische Anilin & Soda Fabrik*, 111 U.S. 293 (1884).

Le Roy v. Tatham in modern times stands for the proposition that process features in the definition of a claimed product are to be *ignored* for patentability purposes.³³*Le Roy v. Tatham* is contrary to established modern product-by-process

exclusion of 'laws of nature, physical phenomena, and abstract ideas' from 'the reach of the statute as a matter of statutory stare decisis going back 150 years.' But this invocation merely begs the question. It reveals nothing of the basis for delineating these exceptions. The *Le Roy* opinion, like most nineteenth- and twentieth-century patentable subject matter decisions, does not expressly tie its analysis to specific statutory or constitutional text, but rather reasons loosely from various cases and treatise authorities as well as functional and policy considerations. It reflects the interpretive philosophy of an era in which Congress legislated tersely, recognizing that courts would evolve statutes through interpretation based on the underlying purposes.")

³³ The law today is that a process feature in a product-by-process claim is a limitation to the extent that the *product* is defined by that process. If that same product *as defined by that process* is made by a *different* process, that same product is unpatentable. *See In re Thorpe*, 777 F.2d 695, 697 (Fed. Cir. 1985)(Newman, J.)("The patentability of a product does not depend on its method of production. *In re Pilkington*, 411 F.2d 1345, 1348 (CCPA 1969). If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Marosi*, 710

practice where a process feature that *defines* the claimed product cannot be ignored as to the *definition* of that product.³⁴

Smith v. Goodyear Dental Vulcanite and Badische Anilin each takes an entirely different approach to product-by-process claiming than the 1853 Le Roy v. Tatham. Goodyear Dental Vulcanite process details that define the invention were ignored for purposes of validity determination.

The *en banc* Federal Circuit cites *Goodyear Dental Vulcanite* for the proposition that "[t]he process detailed [in the patent] is thereby made as much a part of the invention as are the materials of which the product is composed."³⁵ The Federal Circuit also cites *Badische Anilin* for the proposition that the Court "has

F.2d 799, 803 (Fed.Cir.1983); *Johnson & Johnson v. W.L. Gore*, 436 F.Supp. 704, 726 (D.Del.1977); see also *In re Fessman*, 489 F.2d 742 (CCPA 1974).").

³⁴Purdue Pharma L.P. v. Epic Pharma, LLC, 811 F.3d 1345, 1354 (Fed. Cir. 2016)(Prost, C.J.)("[I]n determining validity of a product-by-process claim, the focus is on the product and not the process of making it.' *Greenliant Sys., Inc. v. Xicor LLC,* 692 F.3d 1261, 1268 (Fed.Cir.2012) (quoting Amgen Inc. v. F. Hoffman–La Roche Ltd., 580 F.3d 1340, 1369 (Fed.Cir.2009)). 'That is because of the ... longstanding rule that an old product is not patentable even if it is made by a new process.' Id.; see also SmithKline Beecham Corp. v. Apotex Corp., 439 F.3d 1312, 1317 (Fed.Cir.2006) ('It has long been established that one cannot avoid anticipation by an earlier product disclosure by claiming ... the product as produced by a particular process.'); In re Thorpe, 777 F.2d 695, 697 (Fed.Cir.1985) ('If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.').")

³⁵*Abbott Laboratories v. Sandoz, Inc.*, 566 F.3d 1282, 1291 (Fed. Cir. 2009)(en banc in relevant part)(Rader, J.)("Supreme Court opinions [] have addressed the proper reading of product-by-process claims. See *Smith v. Goodyear Dental Vulcanite Co.*, 93 U.S. 486, 493 (1877) ('The process detailed is thereby made as much a part of the invention as are the materials of which the product is composed.').

long emphasized the limiting requirement of process steps in product-by-process claims. "³⁶

Le Roy v. Tatham was decided at a time before patent claims were a mandatory feature of a patent: The patent in controversy was filed long before claims became a mandatory feature of a patent through an amendment to the patent law in 1870. There clearly was no formal understanding of product-by-process claiming, although a generation later the Court recognized the importance of process features of a claimed invention as part of the *definition* of the invention – consistent with the practice of today insofar as patentability or validity is concerned: One could consider *Le Roy v. Tatham* as having been overruled not later than 1877 as to its denial to recognize process features as definition of an invention for patentability purposes: In *Smith v. Goodyear Dental Vulcanite Co.,* 93 U.S. (3 Otto) 486 (1877), the patentee claimed artificial teeth including a product-by-process definition of such teeth where that definition of the product was a part of the reason that the claimed invention was sustained:

³⁶Abbott Laboratories v. Sandoz, Inc., 566 F.3d 1282, 1292 (Fed. Cir. 2009)(en banc in relevant part)(Rader, J.)("*The Supreme Court has long emphasized the limiting requirement of process steps in product-by-process claims*. In [*Cochrane v. Badische Anilin & Soda Fabrik*, 111 U.S. 293 (1884)], the Court considered a patent relating to artificial alizarine. Specifically, the patent claimed '[a]rtificial alizarine, produced from anthracine or its derivatives by either of the methods herein described, or by any other method which will produce a like result.' 111 U.S. at 296 (quoting U.S. Patent Reissue No. RE 4,321). In turn, the specification generally described a method for making artificial alizarine involving anthracine or its derivatives. Alizarine had been in use for thousands of years as a red textile dye, traditionally extracted from madder root. Pure alizarine has the chemical formula $C_{14}H_8 O_4$, but 'artificial alizarines' available in the market at the time of the litigation varied from almost completely pure alizarine, to combinations of alizarine and anthrapurpurine, to pure purpurine containing no alizarine whatsoever. Id. at 309– 10. The defendant's product contained approximately sixty percent anthrapurpurine.")(emphasis added).

[A] set of artificial teeth as a new article of manufacture, consisting of a plate of hard rubber, with teeth, or teeth and gums, secured thereto in the manner described in the specification, by embedding the teeth and pins in a vulcanizable compound, so that it shall surround them while it is in a soft state, before it is vulcanized, and so that when it has been vulcanized the teeth are firmly and inseparably secured in the vulcanite, and a tight joint is effected between them, the whole constituting but one piece."³⁷

The *en banc* Federal Circuit in *Abbott Laboratories v. Sandoz* cites *Smith v. Goodyear Dental Vulcanite* for the proposition that "[t]he process detailed [in the patent] is thereby made as much a part of the invention as are the materials of which the product is composed."³⁸ In *Abbott Laboratories v. Sandoz* the Federal Circuit cites *Badische Anilin* for the proposition that the Supreme Court "has long emphasized the limiting requirement of process steps in product-by-process claims."³⁹

³⁷*Smith v. Goodyear Dental Vulcanite*, 93 (3 Otto) U.S. at 494. The wording, here, is *not* that of an actual claim in the patent but, instead, the Court's synthesis of what was claimed, taking into account the description in the specification. (The original patent filing of a caveat took place on May 14\, 1852, long prior to the date when formal patent claims became a statutory requirement.)

³⁸*Abbott Laboratories v. Sandoz, Inc.*, 566 F.3d 1282, 1291 (Fed. Cir. 2009)(en banc in relevant part)(Rader, J.)("Supreme Court opinions [] have addressed the proper reading of product-by-process claims. See *Smith v. Goodyear Dental Vulcanite Co.*, 93 U.S. 486, 493 (1877) ('The process detailed is thereby made as much a part of the invention as are the materials of which the product is composed.').

³⁹Abbott Laboratories v. Sandoz, Inc., 566 F.3d 1282, 1292 (Fed. Cir. 2009)(en banc in relevant part)(Rader, J.)("*The Supreme Court has long emphasized the limiting requirement of process steps in product-by-process claims*. In BASF, the Court considered a patent relating to artificial alizarine. Specifically, the patent claimed '[a]rtificial alizarine, produced from anthracine or its derivatives by either of the methods herein described, or by any other method which will produce a like result.' 111 U.S. at 296 (quoting U.S. Patent Reissue No. RE 4,321). In turn, the specification generally described a method for making artificial alizarine involving anthracine or

B. Stare Decisis...or Judicial Silence?

Like the overwhelming majority of Supreme Court patent cases in the era of an appeal as a matter of right – without *certiorari* – *Le Roy v. Tatham* is like the vast majority of decisions in that era where Supreme Court decisions for the most part were case-specific and rarely if ever cited again in a Court opinion. So it was with *Le Roy v. Tatham*.

Simple subtraction shows that there is an interval of more than150 years between the 1853 *Le Roy v. Tatham* and the 2010 decision in *Bilski v. Kappos*. But, simple subtraction to determine this time interval does not translate into the earlier decision "defin[ing] the reach of the statute as a matter of statutory *stare decisis* going back 150 years."⁴⁰ Looking to the actual case law and not arithmetic, one finds that during this period of more than 150 years, the 1853 *Le Roy v. Tatham* was never quoted, *even once*. If anything, the judicial silence speaks of a long forgotten precedent of *de minimis* precedential value for the issue at hand.

its derivatives. Alizarine had been in use for thousands of years as a red textile dye, traditionally extracted from madder root. Pure alizarine has the chemical formula $C_{14}H_8O_4$, but 'artificial alizarines' available in the market at the time of the litigation varied from almost completely pure alizarine, to combinations of alizarine and anthrapurpurine, to pure purpurine containing no alizarine whatsoever. Id. at 309–10. The defendant's product contained approximately sixty percent anthrapurpurine.")(emphasis added).

⁴⁰*Bilski v. Kappos*, 561 U.S. 593, 602 (2010)("The exceptions [to patent-eligibility] have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years. See *Le Roy v. Tatham*, 14 How. 156, 174–75 (1853)." At the appellate level below, in *In re Bilski*, 545 F.3d 943, 952 (Fed. Cir. 2008)(Michel, J.)(en banc), quoting *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1852), the court said: "A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."

From the 1859 second opinion in *Le Roy v. Tatham* up until the 1948 *Funk v. Kalo* decision, there is not one single holding that quotes the passage from *Le Roy v. Tatham* made famous in *Funk v. Kalo*. From the time of the 1859 second opinion in *Le Roy v. Tatham* there are only three Supreme Court opinions which even *cite* to the 1853 opinion all the way up until 1895 when decisions were based on appeals to the Supreme Court as a matter of *right* (versus the *certiorari* process today).⁴¹ In none of the three is there a holding on patent-eligibility based upon the now famous passage that made the 1853 case famous.⁴² The paucity of Supreme Court cases even *citing* the *Le Roy v. Tatham* opinion in the thirty-five years following the second (1859) opinion is striking, given that there were approximately 475 patent appeals decided in the period 1860-1895.⁴³ In the period

⁴¹Busell Trimmer Co. v. Stevens, 137 U.S. 423 (1890); Knapp v. Morss, 150 U.S. 221 (1893); Magin v. Karle, 150 U.S. 387 (1893).

⁴²Busell Trimmer, 137 U.S. at 433-34 ("We do not think that the cases cited by counsel for the appellants sustain his position that Orcutt's alleged invention is a combination of previous devices, rearranged with connections and adaptations so adjusted as to produce a novel and valuable use. In Le Roy v. Tatham, 55 U.S. (14 How.) 156, 157 (1853) *** the claim was for a combination of old parts of machinery to make lead pipes, in a particular manner, under heat and pressure. The combination was held not to be patentable, the court saying: 'The patentees claimed the combination of the machinery as their invention in part, and no such claim can be sustained without establishing its novelty, not as to the parts of which it is composed, but as to the combination.""); Knapp v. Morss, 150 U.S. at 227-28 (citing Le Roy v. Tatham, 55 U.S. (14 How.) 156 (1853))("[I]t is well settled by the authorities that the end of purpose sought to be accomplished by the device is not the subject of a patent. The invention covered thereby must consist of new and useful means of obtaining that end. In other words, the subject of a patent is the device or mechanical means by which the desired result is to be secured."); Magin v. Karle, 150 U.S. at 392 (citing Le Roy v. Tatham, 55 U.S. (14 How.) 156 (1853))("The purpose to be accomplished was not patentable, and the particular means devised to secure that purpose did not involve invention.").

⁴³Decisions in this thirty-five year period were based on the fact that the appeals decided in this period were without a *certiorari* filter, which eliminates the possibility that the Court was simply uninterested in granting review of certain areas of the law. The number of decided patent

from 1895 until the beginning of 1948 (the year of *Funk v. Kalo*) there were no Supreme Court opinions citing *Le Roy v. Tatham* on all fours.⁴⁴

V. NINETEENTH CENTURY CASES BEYOND LE ROY V. TATHAM

Le Roy v. Tatham is not the only nineteenth century case that has been cited by the Supreme Court in the wake of *Funk v. Kalo* as basis for exceptions to the scope of patent-eligibility.

appeals is approximate, based on a Westlaw search of the Supreme Court database [patent and invention and da(bef 1/1/1896) and da(aft 1/1/1860)].

The year 1895 is chosen as the end point, here, as it is both significantly after the decision date, and also corresponds to the end of the period where decisions were made where appeals in patent cases could be taken as a matter of right to the Supreme Court on a patent (or other) case.(Although the Evarts Act requiring grant of *certiorari* had an effective date for appeals filed as of 1891, there was a roughly four year backlog of cases filed before the effective date. *See* John F. Duffy, *The Festo Decision and the Return of the Supreme Court to the Bar of Patents*, 2002 Sup. Ct. Rev. 273, 290 n.56 (2002)("As was true for the rest of the [Supreme] Court's docket, patent appeals were being filed faster than the Court could decide them. By the end of the 1880s the Court had a several-years-long backlog of patent appeals. In fact, after the EvartsAct of 1891 eliminated the Court's mandatory appellate jurisdiction in patent cases, the number of patent cases decided by the Court did not drop significantly until four years later because the Court had to clear out the large backlog of cases filed prior to the effectivedate of the Act. (By law, the new statute eliminating mandatory Supreme Court appellate jurisdiction did not affect any appeal that had been perfected prior to July 1, 1891. See Act of March 3, 1891, 26 Stat 1115, 1116.)").

⁴⁴ There were two Supreme Court cases that *cited* to *Le Roy v. Tatham* in this period. *See Minerals Separation v. Butte & Superior Mining Co.*, 250 U.S. 336, 349 (1919) (citing *Le Roy v. Tatham*, 55 U.S. (14 How.) 156 (1853)) ("The patentees discovered the [] process for producing the result or effect, the metal-bearing froth, but they did not invent that result or froth—their patent is on the process, it is not and cannot be on the result—and the scope of their right is limited to the means they have devised and described as constituting the process."); *De Forest Radio Co. v. General Electric Co.*, 283 U.S. 664, 684-85 (1931) (citing *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 174-76 (1853))("[I]t is method and device which may be patented and not the scientific explanation of their operation.").

These cases include the English *Househill Coal* caseto "hot blast" steel manufacturing;⁴⁵the *O'Reilly v. Morse* case to the telephone;⁴⁶ the *Rubber-Tip Pencil* case to the classic eraser-tipped "lead pencil,"⁴⁷ and *Tilghman v. Proctor*, the *Fat Separation* case.⁴⁸

⁴⁵*Househill Coal & Iron Co. v. Neilson*, Webster's Patent Case 673, 683 (House of Lords 1843)), cited in *Le Roy v. Tatham*, 55 U.S. 156, 175 (1852). *See* Jeffrey A. Lefstin, *Inventive Application: a History*, 67 Fla. L. Rev. 565, 594-96 (2015)(analyzing traditional notions of patent eligibility of newly discovered laws of nature); cf. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1381 (Fed. Cir. 2015)(Linn, J., concurring)("Sequenom's invention is nothing like the invention at issue in *Mayo[Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012)]. Sequenom 'effectuate[d] a practical result and benefit not previously attained,' so its patent would traditionally have been valid. *Le Roy v. Tatham*, 63 U.S. 132, 135-36 (1859)(quoting *Househill Coal & Iron Co. v. Neilson*, Webster's Patent Case 673, 683 (House of Lords 1843)); *Le Roy v. Tatham*, 55 U.S. 156, 175 (1852) (same); see generally Jeffrey A. Lefstin, *Inventive Application: a History*, 67 Fla. L. Rev. [565, 594-96 (2015)](analyzing traditional notions of patent eligibility of newly discovered laws of nature). 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.").

⁴⁶The invention in *O'Reilly v. Morse*, 56 U.S. (15 How.) 62 (1853), was clearly patent-eligible, as seen from the successful enforcement of most of the claims. One that was held invalid was simply too broad. *See Gottschalk v. Benson*, 409 U.S. 63, 68 (1972)("In *O'Reilly v. Morse*, [], Morse was allowed a patent for a process of using electromagnetism to produce distinguishable signs for telegraphy. [56 U.S. (15 How.) at 111]. But the Court denied the eighth claim in which Morse claimed the use of 'electromagnetism, however developed for marking or printing intelligible characters, signs, or letters, at any distances.' Id. at 112. The Court in disallowing that claim said, 'If this claim can be maintained, it matters not by what process or machinery the result is accomplished. For aught that we now know, some future inventor, in the onward march of science, may discover a mode of writing or printing at a distance by means of the electric or galvanic current, without using any part of the process or combination set forth in the plaintiff's specification. His invention may be less complicated—less liable to get out of order—less expensive in construction, and in its operation. But yet, if it is covered by this patent, the inventor could not use it, nor the public have the benefit of it, without the permission of this patentee.' Id., at 113.")

⁴⁷*Rubber-Tip Pencil Co. v. Howard*, 87 U.S. (20 Wall.) 498, 507 (1874)(patentability of the "lead pencil" with an eraser tip, cited in *Diamond v Diehr*, 450 U.S. 175, 164-65 (1981), for "the longstanding rule that 'an idea of itself is not patentable."); *see also Parker v. Flook*, 437 U.S. 584, 598-99 (1978)(Stewart, J., joined by Burger, C.J., Rehnquist, J., dissenting)(citing *Rubber-Tip Pencil*, 87 U.S. (20 Wall.) at 507), for the proposition that '[i]t is a commonplace that laws of nature, physical phenomena, and abstract ideas are not patentable subject matter [under 35

U.S.C.A. § 101]. A patent could not issue, in other words, on the law of gravity, or the multiplication tables, or the phenomena of magnetism, or the fact that water at sea level boils at 100 degrees centigrade and freezes at zero –even though newly discovered.").

⁴⁸*Tilghman v. Proctor*, 102 U.S. (12 Otto) 707, 708 (1880)(The patent in question relates to the treatment of fats and oils, and is for a process of separating their component parts so as to render them better adapted to the uses of the arts.").

VI. BIOTECHNOLOGY COMPOSITIONS, A DIFFERENT CASE

Cobwebs of nineteenth century case law and practice as well as longstanding practices must be unraveled to reach a conclusion of patent-eligibility for software innovations. The same is not true for compositions of matter of chemistry and biotechnology.

The United States has a long history of granting patents to "living" bacteria dating back to at least the 1873 grant of a patent to Louis Pasteur to disease-free yeast.⁴⁹

As explained by the late Judge Rich, "[t]he law has long and unhesitatingly granted patent protection to new, useful, and unobvious chemical compounds and compositions, in which category are to be found such important Products of microbiological process as vitamin B-12 and adrenalin[*,Merck & Co. v. Chase Chemical Co.*, 273 F.Supp. 68 (D.N.J.1967); Merck & Co. v. Olin Mathieson Chemical *Corp.*, 253 F.2d 156 (4th Cir. 1958); *Parke Davis & Co. v. H. K.*

⁴⁹ Pasteur, U.S. Patent 141,072, claim 2 ("Yeast, free from organic germs of disease, as an article of manufacture."). See In re Bergy, 596 F.2d 952, 985 (CCPA 1979)(Rich, J.), aff'd sub nom Diamond v. Chakabarty, 447 U.S. 303 (1980). In re Bergy was a consolidated opinion for the inventions of both Drs. Bergy et al and Chakrabarty et al. Certiorari was granted as to both Bergy and Chakrabarty and then dismissed as moot in as to Bergy. See Diamond v. Chakrabarty, 447 U.S. at 307 ("[W]e granted the writ [of certiorari] as to both Bergy and Chakrabarty. 444 U.S. 924 (1979). Since then, Bergy has been dismissed as moot, 444 U.S. 1028 (1980), leaving only Chakrabarty for decision).") Whereupon, the opinion in Bergy remained very much alive and the result was affirmed sub nom Diamond v. Chakrabarty.

Mulford Co., 189 F. 95 (S.D.N.Y.1911), *aff'd*, 196 F. 496 (2nd Cir. 1912),] and countless other pharmaceuticals."⁵⁰

A "composition of matter" has been one of the categories of patent-eligible subject matter since the early patent laws of the late eighteenth century. The current statutory wording of Section 101 has been carried forward, essentially verbatim, since the second Patent Act of 1793:

"The present recital of categories in [35 USC] § 101, '*Any* new and useful process, machine, manufacture, or composition of matter, or *any* new and useful improvement thereof' ([emphasis by the Court]), has been the same ever since the Patent Act of 1793, except for substituting 'process' for 'art' and defining it (§ 100(b)) to include art. For the nearly 200 years since, those words have been liberally construed to include the most diverse range imaginable of unforeseen developments in technology."⁵¹

In the pre-*Bilski* era, there is no viable Supreme Court precedent for denial of patents to biotechnology compositions as patent-eligible compositions of matter. To be sure, inventions were denied patentability as being *obvious* under 35 USC § 103 (or predecessor statute before the 1952 Patent Act), as opposed to lacking subject matter patent-*eligibility*:

"The PTO, in administering the patent laws, has, for the most part, consistently applied § 102 in making rejections for lack of novelty. To provide the option of making such a rejection under either § 101 or § 102 is confusing and therefore bad law. Our research has disclosed only two instances in which rejections for lack of

⁵⁰ *Bergy*, 596 F.2d at 973-74 (CCPA 1979)(Rich, J.) (footnote integrated into text in brackets).

⁵¹*Id*.(footnote omitted).

novelty were made by the [Patent Office] under § 101, *In re Bergstrom*, 427 F.2d 1394 (CCPA 1970); *In re Seaborg*, 328 F.2d 996 (CCPA 1964). In *In re Bergstrom* we in effect treated the rejection as if it had been made under § 101, observing in the process that "[t]he word 'new' in § 101 is defined and is to be construed in accordance with the provisions of § 102." 427 F.2d at 1401.

"When § 101 was enacted, the accompanying Reviser's Note stated (inserts and emphasis [by the Court]):

" 'The corresponding section of the existing statute (R.S. § 4886) is split into two sections, section 101 relating to the *subject matter* for which patents *may* be obtained ('subject to the conditions and requirements of this title'), and section 102 defining statutory novelty and stating other conditions for patentability. ***''').⁵²

VII. PROPHYLACTIC APPROACH TO PATENT "PREEMPTION"

As explained first in *Mayo* and then refined in *Alice*, for a claim to a combination of elements one of which is, standing alone, patent ineligible subject matter, the overall combination must have "an 'inventive concept' – i.e., ...[a] 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.' *** [T]he approach *** considers all claim elements *** in combination [which] is consistent with the general rule that patent claims 'must be considered as a whole.'"⁵³

⁵² *Bergy*, 596 F.2d at 961.

⁵³*Alice Corp. Pty. Ltd. v. CLS Bank Intern.*, 134 S.Ct. 2347, 2355 (2014). The overall passage from which this quotation has been taken is reproduced here with footnote 3 integrated into text in brackets:

[&]quot;We have described step two of this analysis [*from Mayo Collaborative Services v. Prometheus Laboratories, Inc.,* 132 S.Ct. 1289 (2012),] as a search for an 'inventive concept' – i.e., an

In light of the emphasis given in *Mayo* and *Alice* to patent-eligibility of claimed subject matter being dependent of a freedom from patent "preemption,"⁵⁴ it is useful to include at the end of the *Summary of the Invention* which first identifies the invention as a combination of a patent-ineligible feature and a patent-eligible feature that the claimed invention is limited to the combination and does not cover the patent-ineligible feature, standing alone.⁵⁵

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.' *Id.*, 132 S.Ct., at 1294. [Because the approach we made explicit in *Mayo* considers all claim elements, both individually and in combination, it is consistent with the general rule that patent claims 'must be considered as a whole.' *Diamond v. Diehr*, 450 U.S. 175, 188 (1981); see *Parker v. Flook*, 437 U.S. 584, 594 (1978) ('Our approach ... is ... not at all inconsistent with the view that a patent claim must be considered as a whole').]"

⁵⁴ *Mayo* explains that:

"Our conclusion [on patent-eligibility] rests upon an examination of the particular claims before us in light of the Court's precedents. Those cases warn us against interpreting patent statutes in ways that make patent eligibility 'depend simply on the draftsman's art' without reference to the 'principles underlying the prohibition against patents for [natural laws].' [*Parker v. Flook*, 437 U.S. 584, 593 (1978).] They warn us against upholding patents that claim processes that too broadly preempt the use of a natural law. [*O'Reilly v. Morse*, 15 How. 62, 112–120 (1854); *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972).] And they 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. *Flook, supra*, at 594; see also [*Bilski v. Kappos*, 130 S.Ct. 3218, 3218 (2010)]('[T]he prohibition against patenting abstract ideas 'cannot be circumvented by attempting to limit the use of the formula to a particular technological environment' or adding 'insignificant postsolution activity''(quoting [*Diamond v. Diehr*, 450 U.S. 175, 191-92 (1981)])."

Mayo Collaborative Services v. Prometheus Laboratories, Inc., 132 S.Ct. 1289, 1294 (2012).

⁵⁵ For example:

"SUMMARY OF THE INVENTION

"The invention is directed to the combination of [PATENT INELIGIBLE ELEMENT A] and [ELEMENT B].

VIII. PROPOSED POLICY CHANGE

It is proposed that Office policy be modified in the following manner:

First, where an Examiner sees an issue of patent-eligibility that appears to be raised by the claims of an application, the Office should include in the publically available file wrapper a notification that the Office is considering making a rejection of at least some of the claims under 35 USC § 101, and permit an amendment, argument or both as to why a Section 101 rejection should not be made, particularly as to why there is no "preemption" of subject matter not eligible for patent protection.

<u>Second</u>, as part of the decision making practice as to whether there is or is not a Section 101 rejection possible, the Examiner should conduct a complete search of the prior art to determine whether there is basis in fact for a determination that the invention lacks an "inventive concept"

Third, in the Examiner's notification of the possibility of a Section 101 rejection, the Examiner should spell out precisely why the invention lacks an "inventive concept".

[&]quot;Applicants claims are limited to the combination of these elements so the claims do not cover or in any way preempt making, using or selling [PATENT INELIGIBLE ELEMENT A], standing alone or with any combination of other features *except* the claimed combination of [PATENT INELIGIBLE ELEMENT A] and [ELEMENT B]."

Fourth, the public would be free to file a Preissuance Submission explaining why there is an inventive concept in the claimed invention, nullifying an argument that the claims "preempt" use of the claimed invention.

Under the existing statutory and regulatory scheme, a third party is free to submit prior art within twenty-four months of the effective filing date (i.e., six months from the automatic 18 month publication of the application) under 35 USC § 122(e) that may be used in the first instance to cite prior art to show that an invention is obvious, i.e., it lacks an "inventive concept".

The citation should generally be a minimum number of references and there is the obligation to provide a concise statement as to why the references render the invention obvious; with the citation of a minimum number of references, there is no fee for this submission. The submission is governed by 35 USC § $122(e)^{56}$ and 37 CFR § 1.290(a).⁵⁷

"(B) the later of—

⁵⁶ "35 USC § 122(e) PREISSUANCE SUBMISSIONS BY THIRD PARTIES.—

[&]quot;(1) IN GENERAL.—Any third party may submit for consideration and inclusion in the record of a patent application, any patent, published patent application, or other printed publication of potential relevance to the examination of the application, if such submission is made in writing before the earlier of—

[&]quot;(A) the date a notice of allowance under [35 USC] 151 is given or mailed in the application for patent; or

[&]quot;(i) 6 months after the date on which the application for patent is first published under [35 USC §] 122 by the Office, or

[&]quot;(ii) the date of the first rejection under [35 USC §] 132 of any claim by the examiner during the examination of the application for patent.

[&]quot;(2) OTHER REQUIREMENTS.—Any submission under paragraph (1) shall—

[&]quot;(A) set forth a concise description of the asserted relevance of each submitted document;

[&]quot;(B) be accompanied by such fee as the Director may prescribe; and

IX. INSIDE THE MIND OF THE COMMISSIONER

A. Guidance Divorced from Case Law Reality

There is little reason for optimism that the proposal of the previous section will be followed: The current Administration under the leadership of the incumbent Under Secretary has *de facto* delegated her responsibilities in this area to the Commissioner for Patents:

Precisely *why* does the Patent Office guidance focus on *specific factual examples* in the various cases decided by the Courts – as opposed to the legal issues involved in the case law as a whole? The answer is seen from the authorship responsibility vested in the Commissioner for Patents.

A career patent examiner for more than twenty years, the Commissioner for Patents, Drew Hirshfeld, is the highest ranking career employee of the Patent Office responsible for patent policy. He is essentially guaranteed to stay in that position at least until the summer of 2020 when his current (first) term in his position expires.⁵⁸

[&]quot;(C) include a statement by the person making such submission affirming that the submission was made in compliance with this section."

⁵⁷ Under 37 CFR § 1.290(a), "[a] third party may submit, for consideration and entry in the record of a patent application, any patents, published patent applications, or other printed publications of potential relevance to the examination of the application if the submission is made in accordance with 35 U.S.C. 122(e) and this section."

⁵⁸ The Hon. Drew Hirshfeld is Commissioner for Patents for the U.S. Patent and Trademark Office who is serving a term that expires in July 2020, shortly before the end of the first Term of President-Elect Trump. Commissioner. Hirshfeld received a Bachelor of Science from the

Given that his published guidance on patent-eligibility is short on consideration of legal principles and long on the specific holdings of subject matter patent-eligibility tied more to the facts than the law, one may get the impression that the Commissioner is anti-patentee, and that he has set the groundwork for *pro forma* denials of patent-eligibility.

Under such a scenario, one could get the false impression that the Commissioner is anti-patent and is seeking ways to simplify the denial of patents through such guidance.

Such an impression would be wrong.

In a revealing interview with the popular blogster Eugene Quinn – the selfstyled " IP Watchdog", <u>www.IPWatchdog.com</u>, the Commissioner reveals his thought process in a three segment interview published on the Quinn blog in September 2015. It is particularly significant that the Commissioner cites the

University of Vermont, and a J.D. from Western New England College School of Law before becoming what has been since 1994 an essentially lifetime career as a Patent Examiner, including promotions up through the ranks. As stated on the PTO website, "[a]s Commissioner for Patents, Mr. Hirshfeld manages and leads the patent organization as its chief operating officer. He is responsible for managing and directing all aspects of this organization which affect administration of patent operations, examination policy, patent quality management, international patent cooperation, resources and planning, and budget administration." Previous to his current position, "[i] his previous role as Deputy Commissioner for Patent Examination Policy, Mr. Hirshfeld served as an authority on patent laws, rules, and examining practice and procedure, and provided administrative oversight and direction for the activities of the Office of Petitions, Office of Patent Legal Administration, and the Office of the Manual of Patent Examining Procedure. Further, Mr. Hirshfeld established patent examination and documentation policy standards for the Commissioner for Patents." Id. "Prior to serving as Deputy Commissioner for Patent Examination Policy, Mr. Hirshfeld was the Chief of Staff to the Under Secretary of Commerce for Intellectual Property and Director of the USPTO." Id. "Mr. Hirshfeld began his career at the USPTO in 1994 as a Patent Examiner. He became a Supervisory Patent Examiner in 2001, and was promoted to the Senior Executive Service in 2008 as a Group Director in Technology Center 2100, Computer Architecture and Software."

IPWatchdog blog as one of his "must read" sources of legal information, as seen from the interview itself.⁵⁹

The interview shows the hasty selection process used to identify candidates for the Commissioner process.⁶⁰ His view of patent-eligibility guidance is revealed in this brief excerpt from his interview:

BLOGSTER EUGENE QUINN: Yes. So you're a career person here at the Patent Office.

COMMISSIONER FOR PATENTS HIRSHFELD: Correct. All but one year of my working career.

* * *

* * * I start every morning with a meeting with the deputies. And so we meet every single day as a group and go over all the issues that we have on the table so we can be there to help each other. * * * [I]n addition to that, I have individual meetings

⁵⁹" **BLOGSTER EUGENE QUINN:** * * * [Y]ou do read IPWatchdog, right?

"COMMISSIONER FOR PATENTS HIRSHFELD: I do. I absolutely do. ***."

⁶⁰ **BLOGSTER EUGENE QUINN:** How did [you become Commissioner]? It seemed to happen relatively quickly because [when your predecessor] Commissioner Focarino announced that she was retiring and left at the end of June, and then before July was out you were being sworn in.

COMMISSIONER FOR PATENTS HIRSHFELD: Right. When Peggy [Focarino] announced her retirement, [Under Secretary of Commerce] Michelle Lee asked interested candidates to submit their names to be considered. And, of course, I put my name in for consideration.

BLOGSTER EUGENE QUINN: And the process just seemed to happen relatively quickly?

COMMISSIONER FOR PATENTS HIRSHFELD: Sure. There was an interview process. I know they wanted to go quickly in order to not have a vacant spot for the commissioner as we move forward.

with each of the deputies as we go forward, so there's a lot of interplay and interaction with the deputies. * * *

* * *

BLOGSTER EUGENE QUINN: * * * [W]e talked about the hypotheticals for abstract ideas. At that time you said you were going to continue to work on additional hypotheticals. Where does that whole project stand? I ask because it doesn't seem like we've had a whole lot of data points coming from the courts of late.

COMMISSIONER FOR PATENTS HIRSHFELD: Right. We have made the concerted effort to come out with hypothetical claims that help further the discussion on what is an abstract idea and what is not. * * * They're a combination of hypotheticals and a couple real cases, but what we're trying to do with the hypotheticals is address those areas that the courts haven't directly hit head on, they haven't maybe discussed a certain technology.

BLOGSTER EUGENE QUINN: So how should attorneys be using [these hypothetical claims] ? I mean are these [hypothetical claims] supposed to be binding on the examiners or persuasive? I know you were talking about pigeonholes here, and by its very nature innovation is new and it shouldn't really fit into a pigeonhole, but they've got to be illustrative on some level, right?

COMMISSIONER FOR PATENTS HIRSHFELD: *Well, they are* ... * * * [T]they could be used is citing to an examiner, right? If you have a situation in a particular case where you feel your particular situation is similar to the situation of one of those examples, by all means you could be pointing those out and highlighting to the examiner why you have a similar situation and why your claim should be treated the same way. And I've actually * * * had a lot of people tell me they've gotten very positive results from that.

BLOGSTER EUGENE QUINN: OK. The first set of hypotheticals was really the first time that during this whole episode the Patent Office came out and said "here's an example of something that could be patented." * * * [T]he courts have not really liked this whole area very much at all lately. So I think it is helpful to see examples of patent eligible matter, but it is and still remains a little frustrating. * * * In the software area there are so many different possible ways that you can

claim the innovation and I don't think we really still have a good idea about which ones are the right ones to use long term. $* * *^{61}$

B. Guidelines from the Patent Office

1. Fact (not Legal) Based Guidance

The Patent Office has provided extensive guidance, generally divorced from the realities of the patent law but specific to facts of particular case. It provides the following guidance in its *Manual of Patent Examining Procedure*:⁶²

"[To determine patent-eligibility of a claim that includes an element which, standing alone, lacks patent-eligibility, we ask as Step Two:] Does the claim wholly embrace a judicially recognized exception, which includes laws of nature, natural phenomena, and abstract ideas? *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014) (citing *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116, 106 (2013)). See also *Bilski v. Kappos*, 561 U.S.593, 601 (2010) (stating 'The Court's precedents provide three specific exceptions to § 101's broad patent-eligibility principles: 'laws of nature, physical phenomena, and abstract ideas.'') (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980)).

Omitted from the statement, here, is the concluding paragraph: "For a detailed discussion of the analysis required to determine whether a claim is directed to patent-eligible subject matter, see the 2014 Interim Guidance on Patent Subject Matter Eligibility, 79 Fed. Reg. 74618 (December 16, 2014) and related materials available at www.uspto.gov/patent/laws-and-regulations/examination-policy/2014- interim-guidance-subject-matter-eligibility-0." This reference provides a list of numerous tables which have brief snippets that at best invite the reader to study the cases; also, extensive examples are given.

⁶¹Emphasis added.

⁶² MPEP § 2106, Patent Subject Matter Eligibility [R-07.2015], § II, Judicial Exceptions to the Four Categories ('Step 2')(last downloaded November 16, 2016), available at <u>https://www.uspto.gov/patent/laws-and-</u> regulations/examination-policy/2014-interim-guidance-subject-matter-eligibility-0.

"Determining that a claim falls within one of the four enumerated categories of patentable subject matter recited in 35 U.S.C. 101 (i.e., process, machine, manufacture, or composition of matter) does not end the eligibility analysis because claims directed to nothing more than abstract ideas (such as mathematical algorithms), natural phenomena, and laws of nature are not eligible for patent protection. *Diamond v. Diehr*, 450 U.S. 175, 185 (1981); accord, e.g., [*Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980)]; *Parker v. Flook*, 437 U.S. 584, 589; [*Gottschalk v. Benson*, 409 U.S. 63, 67-68(1972)].

"In addition to the terms 'laws of nature,' 'natural phenomena,' and 'abstract ideas,' judicially recognized exceptions have been described using various other terms, including 'physical phenomena,' 'scientific principles,' 'systems that depend on human intelligence alone,' 'disembodied concepts,' 'mental processes' and 'disembodied mathematical algorithms and formulas,' for example. The exceptions reflect the courts' view that the basic tools of scientific and technological work are not patentable. 'A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.' *Le Roy v. Tatham*,55 U.S. (14 How.) 156, 175 (1852). Instead, such 'manifestations of laws of nature' are 'part of the storehouse of knowledge,' 'free to all men and reserved exclusively to none.' *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948).

"Thus, 'a new mineral discovered in the earth or a new plant found in the wild is not patentable subject matter' under Section 101. *Chakrabarty*, 447 U.S. at 309. 'Likewise, Einstein could not patent his celebrated law that E=mc²; nor could Newton have patented the law of gravity.' *Id.* Nor can one patent 'a novel and useful mathematical formula,' *Flook*, 437 U.S. at 585; electromagnetism or steam power, *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 113-114 (1853); or '[t]he qualities of ... bacteria, ... the heat of the sun, electricity, or the qualities of metals,' *Funk*, 333 U.S. at 130; see *Le Roy* [v. *Tatham*], 55 U.S. (14 How.) at 175.

"Analysis Of Subject Matter Eligibility

"While abstract ideas, natural phenomena, and laws of nature are not eligible for patenting, methods and products employing abstract ideas, natural phenomena, and laws of nature to perform a real-world function may well be. Thus, if a claim is directed to a judicial exception, it must be analyzed to determine whether the elements of the claim, considered both individually and as an ordered combination, are sufficient to ensure that the claim as a whole amounts to significantly more than the exception itself - this has been termed a search for an inventive concept.

Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. [2347, 2357 (2014)].

"This analysis considers whether the claim as a whole is for a particular application of an abstract idea, natural phenomenon, or law of nature, as opposed to the abstract idea, natural phenomenon, or law of nature itself. *Mayo Collaborative Serv. v. Prometheus Labs., Inc.,* 132 S. Ct. 1289, 1293-94 (2012) (citing *Diehr*, 450 U.S. at 187)."

2. Incomplete or Erroneous Guidance

The guidance in the foregoing section is sometimes wrong or incomplete:

"A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.' *Le Roy v. Tatham*,55 U.S. (14 How.) 156, 175 (1852). Instead, such 'manifestations of laws of nature' are 'part of the storehouse of knowledge,' 'free to all men and reserved exclusively to none.' *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)."

The quotation from *Le Roy v. Tatham* is *dictum* having nothing to do with the denial of *patentability* to the claimed *lead pipe*, and in any event several years later the same patent on essentially the same record reached a conclusion of patentability.

The quotation from *Funk v. Kalo* is *dictum*. The holding was that the claimed mixture of bacteria was not patentable.

The quotation from *Chakrabarty* is also dictum; the *holding* in the case was that the claimed subject matter *is* patent-eligible.

The quotation from *O'Reilly v. Morse* is dictum; it is a case where most of the claims were sustained as valid, and the subject matter that was denied was keyed to the undue breadth of the claimed invention.

X. A TEST CASE, BYPASSING THE COMMISSIONER

The Supreme Court case law since *Bilski v. Kappos*, 561 U. S. 593 (2010), has justified denial of patent-eligibility where claims would "preempt" the public from future research on the patented invention. An ideal test case would involve a combination invention where an element that, standing alone, lacks patent-eligibility, but as part of a combination with at least one other element is clearly nonobvious, i.e., "inventive".

For the reasons explained, here, there is no danger of any patent "preemption" to the experimentation on the patented invention for at least two independent reasons:

First of all, independent of the combination but focusing on the element said to lack patent-eligibility, the historic precedent *of the Supreme Court* holds that a patent right does *not* include the right to block a third party from experimentation "on" a patented invention.⁶³ Second, although the Federal Circuit admittedly has not taken this issue *en banc* to resolve panel deviations from precedent, for purposes of this case, to the extent that the Federal Circuit deems fit *not* to take this

⁶³ See Harold C. Wegner, First to File Patent Drafting: A Practitioner's Guide, § 21:8, Deuterium Genesis of the Federal Circuit Split (Thomson Reuters forthcoming 2016)("Professor Janice M. Mueller, No 'Dilettante Affair': Rethinking the Experimental Use Exception to Patent Infringement for Biomedical Research Tools, 76 Wash. L.Rev. 1 (2001), [] establishes a regime for dividing commercial exploitation from experimentation 'on' the patented invention. As explained by Andrew S. Baluch, '[p]hilosophical' or verification experiments *** do not constitute infringement; patents are awarded to facilitate the inventor's downstream commercialization of the invention, whereas the public's upstream research activities are believed not to interfere with that end-use.' [Andrew S. Baluch, Relating the Two Experimental Uses in Patent Law: Inventor's Negation and Infringer's Defense, 87 B.U. L. Rev. 213, 232 (2007).]")

case *en banc*, applicants should covenant, here, to refrain from enforcement of any patent right against a party who uses the invention solely to "experiment 'on" that invention and in any event concede that an "experimentation 'on" a patented invention is not an act of patent infringement.⁶⁴

Second, each claim in this test case is directed to a patent-ineligible feature *as an element* in a claimed combination. To the extent that the *combination invention* is both novel and nonobvious – i.e., it necessarily then has an "inventive concept" – there is no danger of preemption of patent-ineligible subject matter because such subject matter is only one element of a novel and nonobvious combination invention that is never infringed by practice of the patent-ineligible subject matter (outside practice of the overall combination). This limitation on the scope of protection is the well established "all elements" rule.⁶⁵

⁶⁴ Id.

⁶⁵ *Id.*, § 12:8, *Pennwalt "All Elements" Claim Drafting Rule* ("The 'all elements' rule [of *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931 (Fed. Cir. 1987) (en banc),] is quite simple. If an invention has parts [A], [B] and [C], a claim reciting *all* of the elements [A], [B] and [C] is directly infringed *only* if the competitor practices the same invention with *all* of the elements [A], [B] and [C]. *** [I]f there is a claim to a combination of elements that includes an 'unimportant' element that does not impact the overall result of an invention, a finding of infringement requires that 'all elements' be present. There is no basis to find infringement where a competitor precisely copies the 'gist' of the invention and the "important" elements *if any unimportant element of the claimed combination (or its equivalent) is eliminated.*")(original original emphasis)

XI. CONCLUSION

Stripping away the mask of *faux stare decisis* would open the door to a fresh consideration as to the current exceptions to patent-eligibility that dominate the Section 101 case law since *Bilski*, and permit a more rational interpretation of the law of statutory subject matter.