

# 19TH CENTURY PATENT-ELIGIBILITY DENIALS *VEL NON*: THE EMPEROR WEARS NO CLOTHES\*

Harold C. Wegner\*\*

DETAILED TABLE OF CONTENTS	2
I. OVERVIEW	3
II. THE THREE MEANINGS OF “EXPERIMENTAL USE”	4
III. NINETEENTH CENTURY PATENT LAW CORNERSTONES	5
IV. “PREEMPTION” BASIS TO DENY PATENT-ELIGIBILITY	13
V. CONFUSION OVER EXPERIMENTAL USE	34
VI. CONCLUSION	42

---

\*This paper is adapted from the monograph, SEQUENOM PATENT ELIGIBILITY, planned for publication this year. The title is adapted from Hans Christian Andersen, *The Emperor's New Clothes* (1837). [This paper: January 8, 2016.]

\*\*This paper was written without sponsorship from any other person or organization. *Author contact*: 8805 Tamiami Trail North PMB-150; Naples, Florida 34108. [hwegner@gmail.com](mailto:hwegner@gmail.com).

## DETAILED TABLE OF CONTENTS

<b>I. OVERVIEW</b>	<b>3</b>
<b>II. THE THREE MEANINGS OF “EXPERIMENTAL USE”</b>	<b>4</b>
<b>III. NINETEENTH CENTURY PATENT LAW CORNERSTONE</b>	<b>5</b>
A. Constitutional Right to Experiment “On” the Invention	
B. The Right to Experiment on the Invention	
C. Early Recognition of the Need for Broad Protection	
<b>IV. “PREEMPTION” BASIS TO DENY PATENT-ELIGIBILITY</b>	<b>13</b>
A. The Current Supreme Court View of Historic “Preemption” Cases	
B. The Reality of Nineteenth Century Case Law	
1. <i>O’Reilly v. Morse</i> , the Telegraph Case	
2. <i>Le Roy v. Tatham</i> , The Lead Pipe Case	
3. The “Abstract” Pencil of the <i>Rubber-Tip Pencil</i> Case	
<b>V. CONFUSION OVER EXPERIMENTAL USE</b>	<b>34</b>
A. <i>Deuterium</i> Ghost at the Federal Circuit	
B. The <i>Madey</i> “Microscope”, Experimentation “with” the Invention	
C. <i>Integra v. Merck</i> , a True Experimentation “On” an Invention	
D. <i>Alice</i> Swallows the <i>Deuterium</i> Kool-Aid	
<b>VI. CONCLUSION</b>	<b>42</b>

## I. OVERVIEW

At some point early this year it is expected that there will be a petition for *certiorari* in a case likely to be styled as *Sequenom v. Ariosa Diagnostics*, proceedings below sub nom *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371 (Fed. Cir. 2015). Center stage is the issue of patent “preemption” as a basis for denial of patent-eligibility. This paper focuses upon the nineteenth century basis for the Supreme Court concern over patent “preemption”, and why the case law often cited for preemption doesn’t stand for preemption at all.

To the contrary, the nineteenth century is rich with precedent establishing the right to experiment on a patented invention all the way back to legendary jurist-scholar Joseph Story. See § III, *Nineteenth Century Patent Law Cornerstone*.

However, modern case law creates a mythology that patent-eligibility denial can be traced to such nineteenth century precedent on the basis of preemption. See § IV, “*Preemption*” *Basis to Deny Patent-Eligibility*. But, for example, in *Gottschalk v. Benson*, 409 U.S. 63 (1972); *Bilski v. Kappos*, 561 U.S. 593 (2010); *Parker v. Flook*, 437 U.S. 584 (1978); and *Diamond v. Diehr*, 450 U.S. 175 (1981), the Court speaks of denial of patent-eligibility being based upon cases such as *Le Roy v. Tatham*, 55 U.S. (14 How.) 156 (1853), which in fact is a patent directed to a *lead pipe*. A lead pipe! See § IV-C-2, *Le Roy v. Tatham, The Lead Pipe Case*. See § IV, “*Preemption*” *Basis to Deny Patent-Eligibility*.

A major problem is the confusion generated by Federal Circuit case law that muddles the right to experiment “on” a patented invention versus the infringing experimentation “with” a patented invention. See § V, *Confusion over Experimental Use*. Of particular interest is the continued Federal Circuit viability of a case law line dating back to the notorious *Deuterium* case. See § IV-A, *Deuterium Ghost at the Federal Circuit*.

## II. THE THREE MEANINGS OF “EXPERIMENTAL USE”

For purposes of this paper, “experimental use” is considered only in the context as to whether a use by a third party of a patented invention is outside the scope of patent coverage. As perhaps best explained by Professor Janice Mueller, studying an invention to see how it operates or to make improvements on that invention is a noninfringing experimentation “on” the patented invention – such as tinkering with a patented microscope to see how it operates, whereas using a patented invention for its intended purpose – such as an experiment using a patented microscope to study an object, is an infringing experimentation “with” the patented invention. Janice M. Mueller, *No ‘Dilettante Affair’: Rethinking the Experimental Use Exception to Patent Infringement for Biomedical Research Tools*, 76 Wash. L.Rev. 1, 17 (2001).

There is yet a third meaning of “experimental use” that has no relevance to the present issue, the experimental use of an invention before filing a patent application without forfeiture of the patent right based upon premature commercialization of the invention. Such an “experimental use” is in

negation of a statutory bar. *See, e.g., Pfaff v. Wells Electronics, Inc.*, 142 L.Ed.2d 261, 525 U.S. 55, 65 (1998)(citing *City of Elizabeth v. American Nicholson Pavement Co.*, 97 U.S. 126, 137 (1877)) (“[I]t is the interest of the public, as well as himself, that the invention should be perfect and properly tested, before a patent is granted for it. *Any attempt to use it for a profit, and not by way of experiment, for a longer period than two years before the application, would deprive the inventor of his right to a patent.*”)(emphasis added by the Court in *Pfaff*). *See also Dey, L.P. v. Sunovion Pharms., Inc.*, 715 F.3d 1351, 1359 (Fed. Cir. 2013)(Bryson, J.)(discussing “the seminal ‘experimental use’ case, *City of Elizabeth v. American Nicholson Pavement Co.*, 97 U.S. 126, 137 (1877)”).

### **III. NINETEENTH CENTURY PATENT LAW CORNERSTONES**

#### **A. Constitutional Right to Experiment “On” the Invention**

The foundational, Constitution basis for patents is quite simple, it is for the purpose of advancing the practical application of science, to Promote the Progress of \*\*\* the Useful Arts. The Constitutional objective of the patent system is to *encourage* research through patent disclosures. Manifest, the right to conduct follow-on research *on* the patented invention is the heart and soul of the patent system. As stated in the “Promote the Progress” provision of the Constitution: “Pursuant to its power ‘[t]o promote the Progress of ... useful Arts, by securing for limited Times to ... Inventors the exclusive Right to their ... Discoveries,’ U.S. Const., Art. I, § 8, cl. 8, Congress has passed a series of patent laws that grant certain exclusive rights over certain inventions and discoveries as a means of encouraging innovation.” *Bilski v. Kappos*, 561 U. S. 593 (2010).

Manifestly, the public must be able to experiment on the invention, to see how it operates, to make improvements, and otherwise “Promote the Progress” of the Useful Arts. It would make absolutely no sense for the public to wait for the expiration of the patent before conducting experiments *on* the patented invention.

With citations again starting with Joseph Story, the Supreme Court in the *Pretty Woman* Case explains the “Promote the Progress” Clause in the copyright context:

“ From the infancy of copyright protection, some opportunity for fair use of copyrighted materials has been thought necessary to fulfill copyright's very purpose, ‘[t]o promote the Progress of Science and useful Arts....’ U.S. Const., Art. I, § 8, cl. 8. For as Justice Story explained, ‘[i]n truth, in literature, in science and in art, there are, and can be, few, if any, things, which in an abstract sense, are strictly new and original throughout. Every book in literature, science and art, borrows, and must necessarily borrow, and use much which was well known and used before.’ *Emerson v. Davies*, 8 F.Cas. 615, 619 (No. 4,436) (CCD Mass.1845).

Similarly, Lord Ellenborough expressed the inherent tension in the need simultaneously to protect copyrighted material and to allow others to build upon it when he wrote, ‘while I shall think myself bound to secure every man in the enjoyment of his copy-right, one must not put manacles upon science.’ *Carey v. Kearsley*, 4 Esp. 168, 170, 170 Eng.Rep. 679, 681 (K.B.1803). In copyright cases brought under the Statute of Anne of 1710, [An Act for the Encouragement of Learning, 8 Anne, ch. 19,] English courts held that in some instances ‘fair abridgements’ would not infringe an author's rights, see W. Patry, *The Fair Use Privilege in Copyright Law* 6-17 (1985) [ ]; Leval, *Toward a Fair Use Standard*, 103 Harv.L.Rev. 1105 (1990)[ ], and although the First Congress enacted our initial copyright statute, Act of May 31, 1790, 1 Stat. 124, without any explicit reference to ‘fair use,’ as it later came to be known, the doctrine was recognized by the American courts nonetheless.”

*Pretty Woman* Case, *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 576-76 (1994)(footnotes deleted). Again in the copyright context in *Eldred*, the “Promote the Progress” clause was explained with reference to patents:

“‘[I]mplicit in the Patent Clause itself’ is the understanding ‘that free exploitation of ideas will be the rule, to which the protection of a federal patent is the exception. Moreover, the ultimate goal of the patent system is to bring new designs and technologies into the public domain through disclosure.’” *Eldred v. Ashcroft*, 537 U.S. 186, 225 (2003)(Stevens, J., dissenting)(quoting *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 151 (1989)).

It should be recognized that the public has the right to experiment “on” the patented invention, to see how it operates, make improvements and so forth, and not a right to experiment “with” the patented invention for commercial purposes.

### **B. The Right to Experiment On the Invention**

Justice Joseph Story, the foremost Constitutional law scholar of his era and a leading jurist of the early nineteenth century expressly, recognized that the patent does not cover the right to conduct scientific experiments or to ascertain whether a patented machine does in fact operate as described in the patent. Specifically, he explained that “it could never have been the intention of the legislature to punish a man, who constructed such a machine merely for [scientific] experiments, or for the purpose of ascertaining the sufficiency of the machine to produce its described effects.” *Whittemore v. Cutter*, 29 F. Cas. 1120 (C.C.D. Mass. 1813) (No. 17,600) (Story, J.)(riding circuit). To be sure, the opinion speaks of “philosophical experiments” which, in the context of contemporary usage, means “scientific experiments”.

A principal author of the 1952 Patent Act, the late Giles Sutherland Rich, stated, without qualification, that “experimental use is not infringement[.]” *In re Kirk*, 376 F.2d 936, 965 n.7 (CCPA 1967)(Rich, J., dissenting)(citing *Chesterfield*



Wegner, *19th Century Patent-Eligibility Denials* Vel Non

*v. United States*, 159 F.Supp. 371 (Ct.Cls. 1958); *Whittemore v. Cutter*, 29 Fed.Cas. 1120 (No. 17,600) (C.C.D. Mass.1813); *Sawin v. Guild*, 21 Fed.Cas. 554 (No. 12,391) (C.C.D.Mass.1813); *Kaz Mfg. Co. v. Chesebrough-Ponds, Inc.*, 317 F.2d 679 (2nd Cir. 1963)). See also *Bonsack Machine Co. v. Underwood*, 73 F. 206, 211 (C.C.E.D.N.C. 1896)(“The accused devices \*\*\* can be eliminated from consideration [as infringement] for it affirmatively appeared \*\*\* that [the accused infringer] built that device only experimentally and that it has neither manufactured it for sale nor sold any.”); *Chesterfield*, 159 F.Supp. at 375)(“[T]he evidence shows that a portion of the [patented] alloy procured by the defendant was used only for testing and for experimental purposes, and there is no evidence that the remainder was used other than experimentally. Experimental use does not infringe.”); *Dugan v. Lear Avia, Inc.*, 55 F.Supp. 223, 229 (S.D.N.Y. 1944), *aff’d*, 156 F.2d 29 (2nd Cir. 1946).

The “Promote the Progress” Clause of the Constitution governs intellectual property rights for both copyrights and patents. For both, the Clause provides the foundation for exemptions from infringement for fair use or experimental use, respectively, because such exemptions “Promote the Progress”: “[T]he primary purpose of our patent laws is not the creation of private fortunes for the owners of patents but is ‘to promote the progress of science and useful arts.’” *Quanta Computer, Inc. v. LG Electronics, Inc.*, 553 U.S. 617, 626 (2008), quoting *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 511 (1917).



Wegner, *19th Century Patent-Eligibility Denials* Vel Non

In the quoted *Motion Picture Patents* case, historical perspective is provided:

“Since *Pennock v. Dialogue*, 27 U.S. (2 Pet.) 1 (1829)[(Story, J.)], was decided . . ., this court has consistently held that the primary purpose of our patent laws is not the creation of private fortunes for the owners of patents, but is ‘to promote the progress of science and the useful arts’ (Constitution, art. 1, § 8),-an object and purpose authoritatively expressed by Mr. Justice Story, in that decision, saying:

“ ‘While one great object [of our patent laws] was, by holding out a reasonable reward to inventors and giving them an exclusive right to their inventions for a limited period, to stimulate the efforts of genius, the main object was ‘to promote the progress of science and useful arts.’ ”

“Thirty years later this court, returning to the subject, in *Kendall v. Winsor*, 62 U.S. (21 How.) 322 (1858), again pointedly and significantly says:

“‘It is undeniably true, that the limited and temporary monopoly granted to inventors was never designed for their exclusive profit or advantage; the benefit to the public or community at large was another and doubtless the primary object in granting and securing that monopoly.’ ”

“This court has never modified this statement of the relative importance of the public and private interests involved in every grant of a patent, even while declaring that, in the construction of patents and the patent laws, inventors shall be fairly, even liberally, treated. *Grant v. Raymond*, 31 U.S. (6 Pet.) 218 (1832); *Winans v. Denmead*, 56 U.S. (15 How.) 330 (1854); Walker, Patents, § 185.”

*Motion Picture Patents*, 243 U.S. at 510-11.

Sixteen years before *Pennock v. Dialogue*, the author of that case explained the right to experiment on a patented invention:

Wegner, *19th Century Patent-Eligibility Denials* Vel Non

*Whittemore v. Cutter* is not an isolated case. Justice Story next explained the right to experiment *on* a patented invention in *Sawin v. Guild*, 21 F. Cas. 554 (C.C.D. Mass. 1813) (No. 12,391) (Story, J.). There, Justice Story first emphasizes that commercial use of an invention is patent infringement. “[T]he making of a patented machine to be an offence within the purview of it, must be the making with an intent to use for profit....” *Sawin v. Guild*, 21 F. Cas. at 555.

But, as a caveat, there is no infringement if the use of the invention was “for the mere purpose of [scientific] experiment, or to ascertain the verity and exactness of the specification.” *Id.*

As previously explained:

“*Evans v. Eaton*, [16 U.S. (3 Wheat.) 454 (1818),]... sheds further light on the view that there should be experimenting on a patented invention to make a yet further patented invention – but that the commercial practice of that later patented invention had to give way to the rights of the earlier patentee. Thus, *Evans* recognizes that an infringing improvement invention can be made during the term of an earlier patent, but not practiced commercially free from the senior patent. Citing as authority a contemporaneous English precedent,

*Evans* states that “[i]f a person has invented an improvement upon an existing patented machine, he is entitled to a patent for his improvement; but he cannot use the original machine, until the patent for it has expired.”

Wegner, *Post-Merck Experimental Use and the “Safe Harbor,”* 15 Fed. Cir. B.J. 1, 7 (2005) (quoting *Evans*, 16 U.S. (3 Wheat.) app. at 17, citing *Ex parte Fox*, 35 Eng. Rep. 26 (1812) (The Lord Chancellor Eldon)). Professor Dreyfuss quotes with approval from Professor William Robinson's leading late nineteenth century patent law treatise:

“[W]here [the patented invention] is made or used as an experiment, whether for the gratification of scientific tastes, or for curiosity, or for amusement, the interests of the patentee are not antagonized, the sole effect being of intellectual character ... But if the products of the experiment are sold ... the acts of making or of use are violations of the rights of the inventor and infringements of his patent.”

Rochelle Cooper Dreyfuss, *Protecting the Public Domain of Science: Has the Time for an Experimental Use Defense Arrived?*, 46 Ariz. L. Rev. 457, 458 (2004) (quoting William C. Robinson, *The Law of Patents for Useful Inventions* § 898 (1890)).

Professor Dreyfuss concludes that “[i]n other words, to early jurists, a clear distinction could be made between using patented material to learn about the patented invention and using patented material for business or for commerce-- between using the patent to satisfy curiosity or using it to turn a profit.” *Id.*

### **C. Early Recognition of the Need for Broad Protection**

Case law developed beginning in the second half of the nineteenth century firmly established the principle that a pioneer patent should be given broad protection. *See, inter alia, Morley Sewing-Machine Co. v. Lancaster*, 129 U. S. 263 (1889); *Miller v. Eagle Mfg. Co.*, 151 U. S. 186 (1894); *Cimiotti Unhairing Co. v. American Fur Refining Co.*, 198 U.S. 399 (1905); *Continental Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U.S. 405 (1908).

In *Miller v. Eagle*, quoting *Morley Sewing-Machine*, the Court explained:

“The range of equivalents depends upon the extent and nature of the invention. If the invention is broad or primary in its character, the range of equivalents will be correspondingly broad, under the liberal construction which the courts give to such inventions. The doctrine is well stated in *Morley Sewing-Machine Co. v. Lancaster*, 129 U. S. 263, 273 (1889), where it is said: 'Where an invention is one of a primary character, and the mechanical functions performed by the machine

are, as a whole, entirely new, all subsequent machines which employ substantially the same means to accomplish the same result are infringements, although the subsequent machine may contain improvements in the separate mechanism which go to make up the machine.”

*Miller v. Eagle Mfg. Co.*, 151 U. S. at 207. In *Cimiotti Unhairing* the Court stated that:

“In determining the construction to be given to the claim in suit \* \* \* it is necessary to have in mind the nature of this patent, its character as a pioneer invention or otherwise, and the state of the art at the time when the invention was made. It is well settled that a greater degree of liberality and a wider range of equivalents are permitted where the patent is of a pioneer character than when the invention is simply an improvement, may be the last and successful step, in the art theretofore partially developed by other inventors in the same field. Upon this subject it was said by this court (*Westinghouse v. Boyden Power Brake Co.* 170 U. S. 537 (1898), quoted with approval in *Singer Mfg. Co. v. Cramer*, 192 U. S. 265, 276-77(1904)):

““To what liberality of construction these claims are entitled depends to a certain extent upon the character of the invention, and whether it is what is termed in ordinary parlance a 'pioneer.' This word, although used somewhat loosely, is commonly understood to denote a patent covering a function never before performed, a wholly novel device, or one of such novelty and importance as to mark a distinct step in the progress of the art, as distinguished from a mere improvement or perfection of what had gone before. Most conspicuous examples of such patents are: The one to Howe of the sewing machine; to Morse of the electric telegraph; and to Bell of the telephone. The record in this case would indicate that the same honorable appellation might safely be bestowed upon the original air-brake of Westinghouse, and perhaps also upon his automatic brake. In view of the fact that the invention in this case was never put into successful operation, and was, to a limited extent, anticipated by the Boyden patent of 1883, it is perhaps an unwarrantable extension of the term to speak of it as a 'pioneer,' although the principle involved subsequently and through improvements upon this invention became one of great value to the public.”

*Cimiotti Unhairing Co. v. American Fur Refining Co.*, 198 U.S. 399, 406-07 (1905).

Three years later in *Continental Paper Bag*, the Court explained that “[t]he range of equivalents [beyond the literal scope of protection] depends upon the extent and nature of the invention. If the invention is broad or primary in its character, the range of equivalents will be correspondingly broad, under the liberal construction which the courts give to such inventions.” *Continental Paper Bag*, 210 U.S. at 414, quoting *Miller v. Eagle*, 151 U. S. at 207.

#### IV. “PREEMPTION” BASIS TO DENY PATENT-ELIGIBILITY

##### A. The Current Supreme Court View of Historic “Preemption” Cases

Per Justice Breyer, “sometimes *too much* patent protection can impede rather than ‘promote the Progress of Science and useful Arts,’ the constitutional objective of patent and copyright protection.” *Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc.*, 548 U.S. 124, 126 (2006) (Breyer, J., joined by Stevens, Souter, JJ., dissenting from dismissal of writ of certiorari) (emphasis in original).

The Breyer argument that there may be “too much patent protection” has been uncritically referenced in subsequent opinions both at the Supreme Court and the Federal Circuit. In *Bilski* Justice Stevens reiterated the Breyer argument:

“[E]ven if patents on business methods were useful for encouraging innovation and disclosure, it would still be questionable whether they would, on balance, facilitate or impede the progress of American business. For even when patents encourage innovation and disclosure, ‘too much patent protection can impede rather than ‘promote the Progress of . . . useful Arts.’” *Laboratory Corp. of America Holdings v. Metabolite Laboratories, Inc.*, 548 U. S. 124, 126-127 (2006) (Breyer, J., dissenting from dismissal of certiorari). Patents ‘can discourage research by impeding the free exchange of information,’ for example, by forcing people to ‘avoid the use of potentially patented ideas, by leading them to conduct costly and time-consuming searches of existing or pending patents, by requiring complex

licensing arrangements, and by raising the costs of using the patented' methods. Id., at 127. Although '[e]very patent is the grant of a privilege of exacting tolls from the public,' *Great Atlantic [ & Pacific Tea Co. v. Supermarket Equipment Corp.*, 340 U. S. 147, 154 (1950)](Douglas, J., concurring), the tolls of patents on business methods may be especially high."

*Bilski v. Kappos*, 561 U. S. 593 (2010)(Stevens, J., joined by Ginsburg, Breyer, Sotomayor, concurring in the judgement). Earlier, in the same case at the Federal Circuit as part of an *en banc* proceeding, Judge Mayer made a parallel argument:

'[S]ometimes too much patent protection can impede rather than 'promote the Progress of Science and useful Arts,' the constitutional objective of patent and copyright protection.' *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) (emphasis in original). This is particularly true in the context of patents on methods of conducting business. Instead of providing incentives to competitors to develop improved business techniques, business method patents remove building blocks of commercial innovation from the public domain. [Rochelle Cooper Dreyfuss, *Are Business Method Patents Bad for Business?*, 16 Santa Clara Computer & High Tech. L.J. 263, 275-77 (2000)].. Because they restrict competitors from using and improving upon patented business methods, such patents stifle innovation. When 'we grant rights to exclude unnecessarily, we ... limit competition with no quid pro quo. Retarding competition retards further development.' [Malla Pollack, *The Multiple Unconstitutionality of Business Method Patents*, 28 Rutgers Computer & Tech. L.J. 61, 76 (2002)]. 'Think how the airline industry might now be structured if the first company to offer frequent flyer miles had enjoyed the sole right to award them or how differently mergers and acquisitions would be financed ... if the use of junk bonds had been protected by a patent.' [Dreyfuss, *supra* at 264]. By affording patent protection to business practices, 'the government distorts the operation of the free market system and reduces the gains from the operation of the market.' [James S. Sfekas, *Controlling Business Method Patents: How the Japanese Standard for Patenting Software Could Bring Reasonable Limitations to Business Method Patents in the United States*, 16 Pac. Rim. L. & Pol'y J. 197, 214 (2007)]



*In re Bilski*, 545 F.3d 943, 1006 (Fed. Cir. 2008)(en banc)(Mayer, J., dissenting), *further proceedings sub nom Bilski v. Kappos*, 561 U. S. 593 (2010). Subsequently in the *Myriad* case, Judge Moore considered the same argument but with a more realistic view of the real world of technology:

The dissent suggests that ‘this may well be one of those instances in which ‘too much patent protection can impede rather than ‘promote the Progress of Science and useful Arts.’ ’ ‘Dissent at 1380 (quoting *Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc.*, 548 U.S. 124, 126 (2006) (Breyer, J., dissenting from dismissal of writ as improvidently granted)). Yet the biotechnology industry is among our most innovative, and isolated gene patents, including the patents in suit, have existed for decades with no evidence of ill effects on innovation. See David E. Adelman & Kathryn L. DeAngelis, *Patent Metrics: The Mismeasure of Innovation in the Biotech Patent Debate*, 85 Tex. L.Rev. 1677, 1681 (2007) (‘The existing empirical studies find few clear signs that the patenting of biotechnology inventions is adversely affecting biomedical innovation.’); *id.* at 1729 (concluding ‘that overall biotechnology innovation is not being impaired by the growth in patents issued’).

With respect, whether in the real world of commerce or the basic Supreme Court case law established in the nineteenth century, the quoted statement represents a mythology divorced from the real world of commerce and innovation.

In the limited circumstance of a hypothetical laboratory experiment where there is neither any competing technology to a pioneer invention nor the possibility for any room for improvement in that pioneer invention, one may assume, *arguendo*, that this Breyer-eye view of the patent system may be correct. But that is rarely – if ever – the case.

Even with the broadest imaginable protection for a new innovation, it is difficult for a new technology to enter the marketplace. In the usual situation, a pioneer invention is introduced with great difficulty to challenge the *status quo* of an established industry. The established technology is supported by numerous



factories and distribution networks that are at best difficult for a newcomer to penetrate. The innovator has difficulty breaking down the barriers of the establishment to enter the distribution system and to penetrate the consumer base that is subject to a barrage of advertisements and other advantages for the established technology.

Even facing the scope of a broad pioneer patent, however, there is every incentive for competitors to make further innovations. Some of these efforts will result in a further breakthrough outside the scope of the pioneer patent. Others may well fall within the scope of the pioneer's patent, but patent protection for the subsequent innovator will block the pioneer from practicing that innovation, absent a license from the subsequent innovator.

Furthermore, the subsequent innovator will in the end have a monopoly on its new technology versus the pioneer, because the pioneer's patent will expire at a point in time when the subsequent innovator's patent will remain in force. Cf. *Transparent-Wrap Mach. Corp. v. Stokes & Smith Co.*, 329 U.S. 637, 642 (1947)(Douglas, J.) (“An improvement patent may \*\*\* have great strategic value. For it may, on expiration of the basic patent, be the key to a whole technology. One who holds it may therefore have a considerable competitive advantage.”)

It must also be remembered that one cannot view the pioneer patent and the subsequent innovator's patent *in vacuo*, but must consider the patents in light of the overall marketplace where there will be competing technologies. It makes great sense in this real world scenario for the pioneer and the subsequent innovator to cross-license their technology to each other so that both can better compete with the alternative, competing technologies. (Or, it may make sense for one of the two patentees to buy the other one out.)

## Wegner, 19th Century Patent-Eligibility Denials *Vel Non*

The Supreme Court in its early jurisprudence recognized the importance of broad patents to *stimulate* the Progress of the Useful Arts. Thus, instead of minimizing the scope of protection for a pioneer invention, the Supreme Court did just the opposite: It gave broader protection beyond the literal wording of the claims of the pioneer patent through an expansive doctrine of equivalents.

In case law created *sua sponte* without regard even to the very precedent it cites, the Supreme Court has said in *Bilski v. Kappos*, 561 U. S. 593 (2010), that:

“The Court has kept this ‘constitutional standard’ in mind when deciding what is patentable subject matter under §101. For example, we have held that no one can patent ‘laws of nature, natural phenomena, and abstract ideas.’ [*Diamond v. Diehr*, 450 U.S. 175, 185(1981)]. These ‘are the basic tools of scientific and technological work,’ [*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)], and therefore, if patented, would *stifle the very progress* that Congress is authorized to promote, see, e.g., *O’Reilly [v. Morse*, 56 U.S. 62, 113 (1853)](explaining that Morse’s patent on electromagnetism for writing would preempt a wide swath of technological developments).

In the context of copyright protection under the same Constitutional provision, the Court has distinguished between the object to Promote the Progress of Science and the Useful Arts from the right of the author or inventor to commercialize that right:

In *Goldstein v. California*, 412 U.S. 546, 555 (1973)(Burger, C.J.), the Court explained the Constitutional purpose of the patent and copyright clause of the Constitution with particular reference to copyrights and the dual function to “Promote the Progress” with the “carrot” of commercial exclusivity for a reasonable period of time to be set by Congress:

“Article I, § 8, cl. 8, of the Constitution gives to Congress the power—

“‘To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Rights to their respective Writings and Discoveries . . . .’

“The clause thus describes both the objective which Congress may seek and the means to achieve it. The objective is to promote the progress of science and the arts. As employed, the terms 'to promote' are synonymous with the words 'to stimulate,' 'to encourage,' or 'to induce.' To accomplish its purpose, Congress may grant to authors the exclusive right to the fruits of their respective works. An author who possesses an unlimited copyright may preclude others from copying his creation for commercial purposes without permission. In other words, *to encourage people to devote themselves to intellectual and artistic creation, Congress may guarantee to authors and inventors a reward in the form of control over the sale or commercial use of copies of their works.*”

*Goldstein*, 412 U.S. at 555 (emphasis added; footnote deleted)

Precisely what does *Benson* say about “preemption” at the page cited in *Bilski*?

“The Court stated in *Mackay Co. v. Radio Corp.*, 306 U.S. 86, 94 that '(w)hile a scientific truth, or the mathematical expression of it, is not patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be.' That statement followed the longstanding rule that '(a)n idea of itself is not patentable.' *Rubber-Tip Pencil Co. v. Howard*, 20 Wall. (87 U.S.) 498, 507. '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*, 14 How. (55 U.S.) 156, 175. 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. As we stated in *Funk Bros. Seed Co. v. Kalo Co.*, 333 U.S. 127, 130, 'He who discovers a hitherto unknown phenomenon of nature has no claim to a monopoly of it which the law recognizes. If there is to be invention from such a discovery, it must come from the application of the law of nature to a new and useful end.'”

*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972).

Precisely what does *Diehr* say about “preemption” at the page cited in *Bilski*? Nothing, directly, but indirectly, *arguendo*, preemption could be understood as implicated. As stated in *Bilski*:

“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*, 14 How. 156, 175 (1853). Only last Term, we explained:

“ ’[A] new mineral discovered in the earth or a new plant found in the wild is not patentable subject matter. Likewise, Einstein could not patent his celebrated law that  $E = mc^2$ ; nor could Newton have patented the law of gravity. Such discoveries are 'manifestations of . . . nature, free to all men and reserved exclusively to none.' [*Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980)], quoting *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, [333 U.S. 127, 130 (1948)].”

## B. Federal Circuit Adoption of the Breyer Mythology

There are plural examples in the case of the “150 years” of *stare decisis* concerning patent-eligibility where this is not the case:

The second longest serving active member of the court with more than forty years of patent experience both corporate and as a member of the court has spoken of “*stare decisis* going back 150 years[.]” *Prometheus Laboratories, Inc. v. Mayo Collaborative Serv.*, 628 F.3d 1347, 1353 (Fed. Cir. 2010)(Lourie, J.)(citing *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 174-75 (1853)), *subsequent proceedings sub nom Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012).

Wegner, *19th Century Patent-Eligibility Denials* Vel Non

A dissent in *Myspace* includes the statement that “[p]rohibitions 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.’” *Myspace, Inc. v. Graphon Corp.*, 672 F.3d 1250, 1268 (Fed. Cir. 2012)(Mayer, J., dissenting)(quoting *Bilski v. Kappos*, 130 S.Ct. 3218, 3225 (2010)).

A panel in *Cybersource* stated that “[t]he 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.’” *Cybersource Corp. v. Retail Decisions Inc.*, 654 F.3d 1366, 1369-70 (Fed. Cir. 2011)(Dyk, J.)(quoting *Bilski v. Kappos*, 130 S.Ct. 3218, 3225 (2010), quoting *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)).

More recently, yet another panel stated that “[t]he Supreme Court has ‘interpreted § 101 and its predecessors ... for more than 150 years’ to ‘contain[ ] an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.’” *Buysafe, Inc. v. Google, Inc.*, 765 F.3d 1350, 1352 (Fed. Cir. 2014)(Taranto, J.)(quoting *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S.Ct. 2347, 2354 (2014), quoting *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S.Ct. 2107, 2116 (2013)).

It is without question the responsibility of an appellate court to follow *the law* as set forth by the Supreme Court. It is yet another matter for an appellate court to swallow Supreme Court Kool-Aid as to factual predicates for its jurisprudence. If the Court says black is white, the Court is wrong: Black is always black and never white.

Yet, the Federal Circuit has uncritically accepted factual predicates that are both wrong as a matter of the real world and which furthermore are in conflict with the earlier Supreme Court case law that the Federal Circuit has generally refrained from consideration in its opinions.

One dissent at the Federal Circuit notes:

Our patent system \*\*\* does not award a monopoly that precludes others from using the basic procedures of scientific investigation to study the same phenomenon. *See Bilski [v. Kappos]*, 130 S.Ct. 3218, 3253 (2010) (Stevens, J., concurring) (Patents on laws of nature, natural phenomena, and abstract ideas “would stifle the very progress that Congress is authorized to promote.”). \* \* \* When, as here, the claims so clearly offend the constitutional imperative to promote the useful arts, where they preempt all application of a principle or idea, it is entirely appropriate to hold them unpatentable subject matter before reaching anticipation, obviousness, or any other statutory section that might also prove invalidity.

*Classen Immunotherapies Inc. v. Idec*, 659 F.3d 1057, 1080 (Fed. Cir. 2011)(Moore, J., dissenting)

In yet another dissent, it is stated that:

“[S]ometimes *too much* patent protection can impede rather than ‘promote the Progress of Science and useful Arts,’ the constitutional objective of patent and copyright protection.’ *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) (emphasis in original). This is particularly true in the context of patents on methods of conducting business. Instead of providing incentives to competitors to develop improved business techniques, business method patents remove building blocks of commercial innovation from the public domain. [Rochelle Cooper Dreyfuss, *Are Business Method Patents Bad for Business?*, 16 Santa Clara Computer & High Tech. L.J. 263, 275-77 (2000)]. Because they restrict competitors from using and improving upon patented business methods, such patents stifle innovation.”



*In re Bilski*, 545 F.3d 943, 1006 (Fed. Cir., 2008)(en banc)(Mayer, J., dissenting), *aff'd sub nom Bilski v. Kappos*, 561 U.S. 593 (2010). See also *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 719 (Fed. Cir., 2014)(Mayer, J., concurring)(““Subject matter eligibility challenges provide the most efficient and effective tool for clearing the patent thicket, weeding out those patents that stifle innovation \*\*\*.”)

The idea that patents “stifle” research is reprised in *Genetics Institute*:

“My fear is that the majority's rule could ultimately stifle the important incentives for innovation that drive our patent system. \*\*\* [T]he majority has effectively allowed Novartis to broaden the scope of its claims to usurp the fruits of research by the subsequent, independent inventors who actually discovered the location of vWF binding in the a3 region. By ruling that a patentee can have a monopoly on the later-discovered properties of a structure merely by claiming the structure itself, the majority's decision would discourage others from investing in future research into that very structure.”

*Genetics Institute, LLC v. Novartis Vaccines and Diagnostics, Inc.*, 655 F.3d 1291, 1318 (Fed. Cir. 2011)(Dyk, J., concurring-in-part and dissenting-in-part). The second senior-most active member of the Federal Circuit expressed his level of knowledge in the *CLS Bank* case:

“[E]ven inventions that fit within one or more of the [§ 101] statutory categories are not patent eligible if drawn to a law of nature, a natural phenomenon, or an abstract idea. The underlying concern is that patents covering such elemental concepts would reach too far and claim too much, on balance obstructing rather than catalyzing innovation. But danger also lies in applying the judicial exceptions too aggressively because ‘all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.’”

*CLS Bank Int'l v. Alice Corp.*, 717 F.3d 1269, 1277 (Fed. Cir., 2013)(en banc)(per curiam)(Lourie, J., joined by Dyk, Prost, Reyna, Wallach, JJ., concurring), *subsequent proceedings sub nom Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347



(2014), quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S.Ct. 1289, 1293 (2012).

Much earlier, one member of the court said that “sometimes *too much* patent protection can impede rather than ‘promote the Progress of Science and useful Arts,’ the constitutional objective of patent and copyright protection.” *In re Bilski*, 545 F.3d 943, 1006 (Fed. Cir., 2008) (en banc)(Mayer, J., dissenting), *subsequent proceedings sub nom Bilski v. Kappos*, 561 U.S. 593 (2010)(quoting *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)) emphasis in original).

A senior member of the court has expressed reservations to broad claims in the context of the *Myriad* case:

“[I]t is important to consider the effects of such broad patent claims on the biotechnology industry. While [the patentee] has emphasized the biotechnology industry's need of patent protection to encourage and reward research in this difficult and important field, there is another side to the coin. Broad claims to genetic material present a significant obstacle to the next generation of innovation in genetic medicine—multiplex tests and whole-genome sequencing. New technologies are being developed to sequence many genes or even an entire human genome rapidly, but firms developing those technologies are encountering a thicket of patents. Secretary's Advisory Comm. on Genetics, Health, and Society, Dep't of Health & Human Servs., *Gene Patents and Licensing Practices and Their Impact on Patient Access to Genetic Tests* 49–62 (2010). In order to sequence an entire genome, a firm would have to license thousands of patents from many different licensors. *See id.* at 50–51. Even if many of those patents include claims that are invalid for anticipation or obviousness, the costs involved in determining the scope of all of those patents could be prohibitive. *See id.* at 51–52; Rebecca S. Eisenberg, *Noncompliance, Nonenforcement, Nonproblem? Rethinking the Anticommons in Biomedical Research*, 45 *Hou. L.Rev.* 1059, 1076–1080 (2008) (concluding that existing studies ‘have focused relatively little attention on downstream product development’ and that interviews accompanying those studies suggest that, though smaller than initially feared, the costs associated with the patent thicket are ‘quite

real in the calculations of product-developing firms’). In light of these considerations, this may well be one of those instances in which ‘*too much* patent protection can impede rather than ‘promote the Progress of Science and useful Arts.’ ” *Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc.*, 548 U.S. 124, 126 (2006) (Breyer, J., dissenting from dismissal of writ as improvidently granted).

The *Myriad* Case, *The Ass'n For Molecular Pathology v. U.S. Patent and Trademark Office* , 653 F.3d 1329, 1379-80 (Fed. Cir., 2011)(Bryson, J., concurring in part and dissenting in part), *subsequent proceedings sub nom Association for Molecular Pathology v. Myriad*, 133 S. Ct. 2107 (2013).

In the same case, a differing view expressed by a less senior member of the court:

“The dissent suggests that ‘this may well be one of those instances in which ‘too much patent protection can impede rather than ‘promote the Progress of Science and useful Arts.’ ” Dissent at 1380 (quoting *Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc.*, 548 U.S. 124, 126 (2006) (Breyer, J., dissenting from dismissal of writ as improvidently granted)). Yet the biotechnology industry is among our most innovative, and isolated gene patents, including the patents in suit, have existed for decades with no evidence of ill effects on innovation. See David E. Adelman & Kathryn L. DeAngelis, *Patent Metrics: The Mismeasure of Innovation in the Biotech Patent Debate*, 85 Tex. L.Rev. 1677, 1681 (2007) (‘The existing empirical studies find few clear signs that the patenting of biotechnology inventions is adversely affecting biomedical innovation.’); *id.* at 1729 (concluding ‘that overall biotechnology innovation is not being impaired by the growth in patents issued’).”

The *Myriad* Case, *The Ass'n For Molecular Pathology v. U.S. Patent and Trademark Office* , 653 F.3d 1329, 1371(Fed. Cir. 2011)(Moore, J., concurring), *subsequent proceedings sub nom Association for Molecular Pathology v. Myriad*, 133 S. Ct. 2107 (2013).

### C. The Reality of Nineteenth Century Case Law

The simple truth is that in the nineteenth century there was no need for a “preemption” doctrine to permit experimentation on a patented invention because the Story line of case law gave the public the *right* to experiment “on” a patented invention. The mischaracterization of nineteenth century English and American case law as establishing exceptions to patent-eligibility under 35 USC § 101 dating back 150 years is exposed as a myth by Professors Lefstin and Mossoff. Jeffrey A. Lefstin, *Inventive Application: a History*, 67 Fla. L. Rev. 565, 594-96 (2015); Adam Mossoff, *O’Reilly v. Morse*, George Mason University Law and Economics Research Paper Series (2014).

#### 1. *O’Reilly v. Morse*, the Telegraph Case

What does *O’Reilly v. Morse*, 56 U.S. 62, 113 (1853), say?

“If [ ]his 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.

Nor is this all, while 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. For he says he does not confine his claim to the machinery or parts of machinery, which he specifies; but claims for himself a monopoly in its use, however developed, for the purpose of printing at a distance. New discoveries in physical science may enable him to combine it with new agents and new elements, and by that means attain the object in a manner superior to the present process and altogether different from it.

And if he can secure the exclusive use by his present patent he may vary it with every new discovery and development of the science, and need place no description of the new manner, process, or machinery, upon the records of the patent office. And when his patent expires, the public must apply to him to learn what it is. In fine he claims an exclusive right to use a manner and process which he has not described and indeed had not invented, and therefore could not describe when he obtained his patent. *The court is of opinion that the claim is too broad, and not warranted by law.*”

[emphasis added]. Thus, while most of the claims in *O’Reilly v. Morse* were *sustained* by the Supreme Court, the one lone claim that was invalidated was done so on the basis of undue breadth as opposed to patent-eligibility. As explained by Professor Lefstin, “Morse is about disclosure and scope, not patent-eligible subject matter.” 67 Fla. L. Rev. at 597. Further research by Professor Lefstin only serves to confirm this earlier study. See *Sequenom Patent Eligibility*, § 2[a][3], *The Real Story of O’Reilly v. Morse* (discussing Jeffrey A. Lefstin, *The Three Faces of Prometheus: A Post-Alice Jurisprudence Of Abstractions*, 16 N. C. J. L. & Tech. 647, 666 n.82 (2015) (quoting *The Telephone Cases*, 126 U.S. 1, 535(1888)), and his extensive quotation from Professor Robinson, Lefstin, 16 N. C. J. L. & Tech. at 666-67 (quoting William C. Robinson, *THE LAW OF PATENTS FOR USEFUL INVENTIONS* 44 (1890)).

## 2. *Le Roy v. Tatham*, The Lead Pipe Case

In *Bilski*, the Court cites with approval *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 174-175 (1853), for the proposition that “the[ ] exceptions [to patent-eligibility] have defined the reach of the statute as a matter of statutory stare decisis going back 150 years.” In *Diamond v. Diehr*, 450 U.S. 175, 185 (1981), the court quotes the same case, 55 U.S. (14 How.) at 175: “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 same

quotation from *Le Roy v. Tatham* is also found in *Parker v. Flook*, 437 U.S. 584, 589 (1978), which itself is a quotation from of *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972).

*Le Roy v. Tatham*, 55 U.S. (14 How.) 156 (1853), states that:

“A new property discovered in matter, when practically applied, in the construction of a useful article of commerce or manufacture, is patentable; but the process through which the new property is developed and applied, must be stated, with such precision as to enable an ordinary mechanic to construct and apply the necessary process. This is required by the patent laws of England and of the United States, in order that when the patent shall run out, the public may know how to profit by the invention. *It is said, in the case of the Househill Company v. Neilson, Webster's Patent Cases, 683, 'A patent will be good, though the subject of the patent consists in the discovery of a great, general, and most comprehensive principle in science or law of nature, if that principle is by the specification applied to any special purpose, so as thereby to effectuate a practical result and benefit not previously attained.'*”

*Le Roy v. Tatham*, 55 U.S. (14 How.) at 175 (emphasis added). The emphasized portion of this opinion is repeated in *Le Roy v. Tatham*, 63 U.S. (22 How.) 132 (1859). *Le Roy v. Tatham* has nothing to do with an “abstract” idea.

The invention involved was to a method of making a lead pipe.

A lead pipe!

George Ticknor Curtis, the leading patent scholar-practitioner at the time of *Le Roy v. Tatham*, 55 U.S. (14 How.) 156 (1853), provides a contemporaneous view of the case that demonstrates that the patentee essentially suffered from a case of bad claim drafting: “The case of *Le Roy v. Tatham*[, 55 U.S. (14 How.) 156 (1853),] resulted unfavorably to the patentees, by a construction of the claim which, if correct, shows that the real invention was not duly described in the claim

itself. But in a subsequent proceeding (in equity), this patent again came before the Supreme Court, and appears to have been construed and sustained as a patent for a new *process*, which it undoubtedly was.” George Ticknor Curtis, *A Treatise on the Law of Patents for Useful Inventions as Enacted and Administered in the United States of America*, § 153, p. 135 n.1 (Boston: Little, Brown and Company)(3rd ed. 1867)(original emphasis). That the patentee’s lead pencil *was* directed to patentable subject matter was emphasized when the case returned to the Supreme Court several years later: “[The invention’s] application to the development and employment of a new property of lead made a new and patentable process. *See Le Roy v. Tatham*[, 63 U.S. (22 How.) 132 (1859)].” *Id.*

A detailed analysis of the case is provided by Professor Jeffrey A. Lefstin, *Inventive Application: A History*, 67 Fla. L. Rev. 565, 594-96 (2015). In contrast to the characterization of *Le Roy v. Tatham* since *Funk v. Kalo* nineteenth century case law more properly provides a more contemporaneous explanation of the case.

A Supreme Court case from the same century, *Busell Trimmer Co v. Stevens*, 137 U.S. 423 (1890)(Lamar, J.). *See also* Professor Jeffrey A. Lefstin, *Inventive Application: A History*, 67 Fla. L. Rev. 565, 594-96 (2015). As explained in *Bussell Trimer*:

In *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 177 (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.' The court also quoted, with approval, the following from *Bean v. Smallwood*, 2 Fed. Cas. 1142 (No. 1,173)(D. Mass. 1843), an opinion by Mr. Justice STORY: 'He [the patentee] says that the same apparatus, stated in this last claim, has been long in use, and applied, if not to chairs, at least in other machines, to purposes of a similar nature.



If this be so, then the invention is not new, but at most is an old invention or apparatus or machinery applied to a new purpose. Now, I take it to be clear that a machine or apparatus or other mechanical contrivance, in order to give the party a claim to a patent therefor, must in itself be substantially new. If it is old and well known, and applied only to a new purpose, that does not make it patentable.”

*Busell Trimmer*, 137 U.S. at 433-34.

*Bean v. Smallwood* is just one of several leading cases standing for the proposition that the application of an old process to a new use lacks patentable novelty. See *Dunbar v. Myers*, 94 U.S. 187, 199 (1876)(Clifford, J.)(citing *Howe v. Abbott*, 12 Fed. Cas. 42 (No. 6,766)(D. Mass. 1842)(Story, J.); *Bean v. Smallwood*, 2 Fed. Cas. 1142 (No. 1,173)(D. Mass. 1843); *Glue Co. v. Upton*, 97 U.S. 3 (1877)) (“Judge Story held, many years ago, that the mere application of an old process, machine, or device to a new use was not patentable,— that there must be some new process or some new machinery to produce the result, in order that the supposed inventor may properly have a patent for the alleged improvement.”). See also *Brown v. Piper*, 91 U.S. 37, 41 (1875)(Swayne, J.)(citing, *inter alia*, *Howe v. Abbott* and *Bean v. Smallwood*) (“[T]his was simply the application by the patentee of an old process to a new subject, without any exercise of the inventive faculty, and without the development of any idea which can be deemed new or original in the sense of the patent law. The thing was within the circle of what was well known before, and belonged to the public. No one could lawfully appropriate it to himself, and exclude others from using it in any usual way for any purpose to which it may be desired to apply it.”).

As explained in *Diehr*, “[t]he question ... of whether a particular invention is novel is ‘wholly apart from whether the invention falls into a category of statutory subject matter.’” *Id.*, quoting *Diamond v. Diehr*, 450 U.S. 175, 190 (1981), quoting *In re Bergy*, 596 F.2d 952, 961 (CCPA 1979)(Rich, J.).



Wegner, *19th Century Patent-Eligibility Denials* Vel Non

To be sure, *Le Roy v. Tatham* is not the only case relied upon by the Court as basis for an exception to patent-eligibility. Other notable cases having nothing to do with patent-eligibility but instead deal with the nineteenth century invention of the eraser-tipped pencil, the *Rubber-Tip Pencil* case, *Rubber-Tip Pencil Co. v. Howard*, 87 U.S. (20 Wall.) 498 (1874), and the more modern aggregation of several known species of microorganism in *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127 (1948).

The *Rubber-Tip Pencil* case has been cited for “the longstanding rule that ‘an idea of itself is not patentable.’” See *Diamond v Diehr*, 450 U.S. at 164-65 (dictum)(citing *Rubber-Tip Pencil*, 87 U.S. (20 Wall.) at 507), and other cases for the proposition that “[t]his Court has undoubtedly recognized limits to § 101 and every discovery is not embraced within the statutory terms. Excluded from such patent protection are laws of nature, natural phenomena, and abstract ideas.’); see also *Parker v. Flook*, 437 U.S. at 598-99 (Stewart, J., joined by Burger, C.J., Rehnquist, J., dissenting)(citing *Rubber-Tip Pencil*, 87 U.S. (20 Wall.) at 507), and other cases 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 USC § 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.’”

The first two paragraphs of the opinion in the *Rubber-Tip Pencil* case make it crystal clear that it was *acknowledged* that the claimed rubber-tipped pencil *is* an “article of manufacture” (and hence to patent-eligible subject matter). But, the question presented was whether this new article of manufacture is *patentable* in the

sense of what today are the patentability considerations of novelty and nonobviousness:

“The question which naturally presents itself for consideration at the outset of this inquiry is, whether the new article of manufacture, claimed as an invention, was patentable as such. ...

“A patent may be obtained for a new or useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof. In this case..., [the] patent was for ‘a new manufacture,’ being a new and useful rubber head for lead-pencils. It was not for the combination of the head with the pencil, but for a head to be attached to a pencil or something else of like character. It becomes necessary, therefore, to examine the description which the patentee has given of his new article of manufacture, and determine what it is, and whether it was properly the subject of a patent.”

*Rubber-Tip Pencil*, 87 U.S. (20 Wall.) at 504-05.

Patentability was denied under classic principles of novelty and nonobviousness:

“But the cavity [of the claimed pencil] must be made smaller than the pencil and so constructed as to encompass its sides and be held thereon by the inherent elasticity of the rubber. This adds nothing to the patentable character of the invention. Everybody knew, when the patent was applied for, that if a solid substance was inserted into a cavity in a piece of rubber smaller than itself, the rubber would cling to it. The small opening in the piece of rubber not limited in form or shape, was not patentable, neither was the elasticity of the rubber. 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?

“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.”

*Rubber-Tip Pencil*, 87 U.S. (20 Wall.) at 507.

The holding in the *Rubber-Tipped Pencil* case was to the product still in use today, the modern pencil pointed at one end with “lead” and eraser-tipped at the other, which was found invalid over the prior art under what today would be obviousness under 35 USC § 103.

### 3. The “Abstract” Pencil of the *Rubber-Tip Pencil* Case

*Rubber Tip Pencil Co. v. Howard*, 87 U.S. (20 Wall.) 498 (1874), has been repeatedly relied upon as basis for the position that an abstract idea is an exception to patent-eligibility under what is today 35 USC § 101.

*Rubber-Tip Pencil* is a very important case in the area of patent-eligibility precisely because it has been so frequently cited for this proposition. *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)(quoting *Rubber-Tip Pencil*, 87 U.S. (20 Wall.) at 507, for “the longstanding rule that '[a] idea of itself is not patentable.’”); *Parker v. Flook*, 437 U.S. 584, 598-99 (1978) (Stewart, J., joined by Burger, C.J., Rehnquist, J., dissenting)(citing, *inter alia*, *Rubber-Tip Pencil*, 87 U.S. (20 Wall.) at 507, for the proposition that “[a] patent could not issue... 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.”); *Diamond v. Diehr*, 450 U.S. 175, 185 (1981)(quoting *Rubber-Tip Pencil*, 87 U.S. (20 Wall.) at 507)(“An idea of itself is not patentable[.]”). *See also In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994)(“As the Supreme Court has made clear, ‘[a]n idea of itself is not patentable; *Rubber-Tip Pencil Co. v. Howard*, 87 U.S. (20 Wall.) 498, 507 (1874); taking several abstract ideas and manipulating them together adds nothing to the basic equation.”); *In re Comiskey*, 554 F.3d 967, 978 (Fed. Cir. 2009)(Dyk, J.)(quoting *Rubber-Tip Pencil*, 87 U.S. (20 Wall.) at 507)(“[W]hen an abstract concept has no claimed practical

application, it is not patentable. The Supreme Court has held that “[a]n idea *of itself* is not patentable.”)(original emphasis by the Court).

“An idea of itself is not patentable” is an out of context quotation, completely divorced from the fact that the issue was *novelty* and not *patent-eligibility*. *Diehr*, 450 U.S. at 185 (quoting *Rubber-Tip Pencil*, 87 U.S. (20 Wall.) at 506). The patentee had an excellent inventive concept but simply failed to *define* his invention in a manner to exclude having the invention read on the prior art: The issue was clearly one of *novelty* and not patent-eligibility.

The question presented was whether the now classic eraser-embedded pencil is *novel*, a point set out in the very first sentence of the opinion: “The question which naturally presents itself for consideration at the outset of this inquiry is, whether the new article of manufacture, claimed as an invention, was patentable as such.” *Rubber-Tip Pencil*, 87 U.S. (20 Wall.) at 506.

In essence, the definition of the invention was stated too broadly to read on subject matter that lacked patentability:

“[T]he patentee is careful to say that 'he does not limit his invention to the precise forms shown, as it may have such or any other convenient for the purpose, so long as it is made so as to encompass the pencil and present an erasive surface upon the sides of the same.' Certainly words could hardly have been chosen to indicate more clearly that a patent was not asked for the external form, and it is very evident that the essential element of the invention as understood by the patentee was the facility provided for attaching the head to the pencil. The prominent idea in the mind of the inventor clearly was the form of the attachment, not of the head.”

*Id.*

Thus, the *Rubber-Tip Pencil* case concludes by saying that “[a]n 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 \*\*\* was *not new*.” *Rubber-Tip Pencil*, 87 U.S. (20 Wall.) at 507 (emphasis added).

## V. CONFUSION OVER EXPERIMENTAL USE

As explained in the above-cited article of Professor Mueller, the distinction must be made between the right to experiment “on” a patented invention (e.g., understanding how a patented microscope works) versus an infringing experiment “with” the patented invention (e.g., using a microscope for its intended purpose to view objects).

### A. *Deuterium* Ghost at the Federal Circuit

The Federal Circuit was created to establish a uniform body of patent case law. In the area of whether there is a right to “experiment on” a patented invention, an aberrant line of case law has persisted for more than twenty-five years stemming from the notorious *Deuterium* case that denied the existence of a right to experiment on a patented invention by “question[ing] whether any infringing use can be de minimis. *Deuterium Corp. v. United States*, 19 Cl.Ct. 624 (Cl.Ct.1990)(Rader, J.).

In tune with the *Deuterium* is the unequivocal and total denial in the *Myriad* case of any third party right to use a patented invention issued by the now retired Vice President of SmithKline Beecham Corporation; he unqualifiedly states that “during the term of the patent, unauthorized parties are ‘preempted’ from

practicing the patent \* \* \*.” The *Myriad* case, *Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office*, 689 F.3d 1303, 1331 (Fed. Cir. 2012)(Lourie, J.), subsequent proceedings, *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S.Ct. 2107 (2013).

The Federal Circuit to this day is influenced by *Deuterium*, a bold departure from precedent grounded on a unique theory of *de minimis* infringement that was decided by a fresh jurist in his first important patent case who had never practiced law of any kind that was handed down during the jurist’s successful candidacy for a position on the Federal Circuit.

In the area of whether there is a right to “experiment on” a patented invention, an aberrant line of case law has persisted for more than twenty-five years stemming from the notorious *Deuterium* case that denied the existence of a right to experiment on a patented invention by “question[ing] whether any infringing use can be *de minimis*. *Deuterium Corp. v. United States*, 19 Cl.Ct. 624 (Cl.Ct.1990)(Rader, J.).

The Federal Circuit to this day is influenced by *Deuterium*, a bold departure from precedent grounded on a unique theory of *de minimis* infringement that was decided by a fresh jurist in his first important patent case who had never practiced law of any kind that was handed down during the jurist’s successful candidacy for a position on the Federal Circuit.

The ghost of *Deuterium* lives on as foundation for an aberrant line of case law denying a right to “experiment on” a patented invention. *Deuterium* took the

unique approach to the experimental use right that questioned “whether any infringing use can be de minimis. Damages for an extremely small infringing use may be de minimis, but infringement is not a question of degree. Damages for an extremely small infringing use may be de minimis, but infringement is not a question of degree.” *Deuterium*, 19 Cl.Ct. at 631 (Cl.Ct.1990)(Rader, J.)

More than a decade after *Deuterium* its authored doubled down on his denial of any experimental use exception to patent infringement in the *Embrex* case where he ridiculed the defense: “[I]n my judgment, the” Patent Act leaves no room for any de minimis or experimental use excuses for infringement.” *Embrex v. Service Eng'g Corp.*, 216 F.3d 1343, 1352 (Fed.Cir.2000) (Rader, J., concurring). He adds that “no room remains in the law for a de minimis excuse.” *Id.* (emphasis added). Further, “this court has not tolerated the notion that a little infringement – de minimis infringement – is acceptable infringement or not infringement at all.” *Embrex*, 216 F.3d 1352-53. “[T]he statute leaves no leeway to excuse infringement because the infringer only infringed a little.” *Embrex*, 216 F.3d 1353.

To do justice to the *Embrex* concurrence, it is useful to study the document itself to see precisely what it states:

“While joining the court's conclusions on all issues, I write separately because, in my judgment, the Patent Act leaves no room for any de minimis or experimental use excuses for infringement. Because the Patent Act confers the right to preclude ‘use,’ not ‘substantial use,’ no room remains in the law for a de minimis excuse. Similarly, because intent is irrelevant to patent infringement, an experimental use excuse cannot survive. When infringement is proven either minimal or wholly non-commercial, the damage computation process provides full flexibility for courts to preclude large (or perhaps any) awards for minimal infringements.

“I.



“This court affirms the district court's denial of SEC's de minimis and experimental use excuses, but I read the Patent Act to preclude these excuses altogether. SEC essentially asserts an affirmative defense, combining a plea based on the amount or quantum of infringing activity (de minimis) with a plea based on the character or intent of the infringing activity (experimental use). Although courts have occasionally addressed these separate excuses as if they were one, see, e.g., *Douglas v. United States*, 181 USPQ 170 (Ct. Cl. Trial Division 1974), *aff'd*, 510 F.2d 364 (1975), clarity calls for separate analyses.

“Since its inception, this court has not tolerated the notion that a little infringement – de minimis infringement – is acceptable infringement or not infringement at all. The statute states directly that any unauthorized use of a patented invention is an infringement. See 35 U.S.C. § 271(a) (1994). Thus, the statute leaves no leeway to excuse infringement because the infringer only infringed a little. Rather, the statute accommodates concerns about de minimis infringement in damages calculations. See *Deuterium Corp. v. United States*, 19 Cl. Ct. 624, 631 (1990) (‘This court questions whether any infringing use can be de minimis. Damages for an extremely small infringing use may be de minimis, but infringement is not a question of degree.’). Although not influencing the finding of infringement itself, the amount, quantum, or economic effect of wrongful conduct is central to the damages assessment. For these reasons, this court might better have declined SEC's invitation to engage in an inherently subjective determination of how little infringement is necessary to escape infringement liability. The Patent Act simply authorizes no such conjecture.

“II.

“Turning next to the experimental use excuse, neither the statute nor any past Supreme Court precedent gives any reason to excuse infringement because it was committed with a particular purpose or intent, such as for scientific experimentation or idle curiosity. Rather, the Supreme Court and this court have recently reiterated that intent is irrelevant to infringement. See *Warner-Jenkinson Co., v. Hilton Davis Chem. Co.*, 520 U.S. 17, 34 (1997) (‘Application of the doctrine of equivalents, therefore, is akin to determining literal infringement, and neither requires proof of intent.’); *Hilton Davis Chem. Co. v. Warner-Jenkinson Co.*, 62 F.3d 1512, 1519 (Fed. Cir. 1995) (‘Intent is not an element of infringement.’), *rev'd on other grounds*, 520 U.S. 17 (1997). These recent pronouncements should dispose of the intent-based prong of SEC's argument.

“Before *Warner-Jenkinson*, this court addressed arguments based on the character or intent of infringement in *Roche Products, Inc. v. Bolar Pharmaceutical Co., Inc.*, 733 F.2d 858, 863 (Fed. Cir. 1984); but see 35 U.S.C. § 271(e); *Glaxo, Inc. v. Novopharm, Ltd.*, 110 F.3d 1562, 1568 (1997) (noting that § 271(e) changes the result in *Roche*). The Supreme Court's recent reiteration that infringement does not depend on the intent underlying the allegedly infringing conduct, to my eyes, precludes any further experimental use defense, even in the extraordinarily narrow form recognized in *Roche*. Of course, even if the experimental use excuse retains some lingering vitality, the slightest commercial implication will render the ‘philosophical inquiry/experimental use’ doctrine inapplicable, as occurs in the court's resolution today.”

*Embrex*, 216 F.3d at 1352-53 (Rader, J., concurring).

### **B. The *Madey* “Microscope”, Experimentation “with” the Invention**

In *Madey v. Duke Univ.*, 307 F.3d 1351 (Fed.Cir.2002)(Gajarsa, J.), another member of the Federal Circuit embraced the *Deuterium* way of thinking. Dr. Madey’s invention was a patented laboratory tool, a figurative “microscope”, was used for experiments on objects as part of the daily use of this “microscope”, a classic infringing experimentation *with* the “microscope”. See, generally, Wegner, *Post-Merck Experimental Use and the “Safe Harbor,”* 15 Fed. Cir. B.J. 1 (2005).

To do justice to the *Madey* opinion, it is best to read what it says:

“The district court acknowledged a common law ‘exception’ for patent infringement liability for uses that, in the district court's words, are ‘solely for research, academic or experimental purposes.’ Summary Judgment Opinion at 9 (citing *Deuterium Corp. v. United States*, 19 Cl.Ct. 624, 631 (1990); *Whittemore v. Cutter*, 29 F. Cas. 1120 (C.C.D.Mass.1813) (No. 17,600); and citing two commentators[. Janice M. Mueller, *No ‘Dilettante Affair’: Rethinking the Experimental Use Exception to Patent Infringement for Biomedical Research Tools*, 76 Wash. L.Rev. 1, 17 (2001); 5 Chisum on Patents § 16.03[1] (2000)]).The

district court recognized the debate over the scope of the experimental use defense, but cited this court's opinion in *Embrex, Inc. v. Service Engineering Corp.*, 216 F.3d 1343, 1349 (Fed.Cir. 2000) to hold that the defense was viable for experimental, non-profit purposes. *Summary Judgment Opinion* at 9 (citing *Embrex[, Inc. v. Service Engineering Corp.*, 216 F.3d 1343, 1349 (Fed.Cir. 2000)](noting that courts should not ‘construe the experimental use rule so broadly as to allow a violation of the patent laws in the guise of `scientific inquiry,’ when that inquiry has definite, cognizable, and not insubstantial commercial purposes laws in the guise of `scientific inquiry,’ when that inquiry has definite, cognizable, and not insubstantial commercial purposes’ (quoting *Roche Prods., Inc. v. Bolar Pharm. Co.*, 733 F.2d 858, 863 (Fed.Cir.1984))))).

\* \* \*

“Given this standard [for experimental use], for [Madey] to overcome his burden of establishing actionable infringement in this case, he must establish that [Duke] has not used the equipment at issue ‘solely for an experimental or other non-profit purpose.’ 5 Donald S. Chisum, *Chisum on Patents* § 16.03[1] (2000). More specifically, [Madey] must sufficiently establish that [Duke's] use of the patent had ‘definite, cognizable, and not insubstantial commercial purposes.’ *Roche Prods., Inc. v. Bolar Pharm. Co.*, 733 F.2d 858, 863 (Fed.Cir.1984)[ ].”

*Madey v. Duke University*, 307 F.3d 1351, 1355 (Fed. Cir. 2002)(Gajarsa, J.) footnote 2 integrated into text; footnote 3 omitted).

*Madey* cites *Roche Prods., Inc. v. Bolar Pharm. Co.*, 733 F.2d 858 (Fed.Cir.1984), for the denial of a right to experiment on a patented invention, whereas *Roche v. Bolar* involved no experimentation *on* the invention but rather testing to gain regulatory approval. The superficial nature of the *Madey* opinion is its citation of 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). It is difficult to believe that the jurist even read this work as Professor Mueller clearly establishes a regime for dividing commercial exploitation from experimentation “on” the patented invention:

If the author of *Madey* actually read and understood Professor Mueller's piece, then the opinion in *Madey* could not possibly have turned out with such misunderstanding of the law.

Factually, neither *Deuterium* nor *Madey* has anything to do with an experimentation "on" a patented invention to see how the invention operates or to improve the invention. In both cases, there was experimentation "with" the patented invention. In *Deuterium*, the experimentation "with" the patented invention was to confirm that government contract specification were met and not to design around or otherwise experiment "on" the patented invention. In *Madey*, a patented laboratory tool was used to conduct research and not to study the laboratory tool itself. The use of the patented invention would be more akin to the situation where a microscope is patented and the accused infringement is the use of the microscope to study a subject – an experimentation *with* the microscope, as opposed to studying the microscope itself, to, for example, improve the microscope or understand its operation, an experimentation *on* the microscope.

### **C. *Integra v. Merck*, a True Experimentation "On" an Invention**

Despite the irrelevancy of the holdings in both *Deuterium* and *Madey* to the issue of experimentation *on* a patented invention, where the precise factual situation of an experimentation *on* a patented invention was raised in *Integra Life Sciences I*, the accused infringer *waived* this argument, manifesting how strongly the *Deuterium* line of case law had taken hold at the Federal Circuit. *Integra Lifesciences I, Ltd. v. Merck KGaA*, 331 F.3d 860 (Fed. Cir. 2003), *rev'd sub nom Merck KGaA v Integra Lifesciences I, Ltd.*, 545 U.S. 193 (2005).

In *Integra Life Sciences I*, despite the fact that the accused infringer waived the right to rely upon the experimental use doctrine, a dissenting member of the panel *sua sponte* raised the issue. To this point, the author of the *Deuterium* case answered:

In her dissent, Judge Newman takes this opportunity to restate her dissatisfaction with this court's decision in *Madey v. Duke Univ.*, 307 F.3d 1351 (Fed.Cir.2002). However, the common law experimental use exception is not before the court in the instant case. \*\*\* On appeal, Merck does not contend that the common law research exemption should apply to any of the infringing activities evaluated by the jury. \*\*\* Moreover, during oral arguments, counsel for Merck expressly stated that the common law research exemption is not relevant to its appeal. Judge Newman's dissent, however, does not mention that the Patent Act does not include the word "experimental," let alone an experimental use exemption from infringement. See 35 U.S.C. § 271 (2000). Nor does Judge Newman's dissent note that the judge-made doctrine is rooted in the notions of de minimis infringement better addressed by limited damages. *Embrex v. Service Eng'g Corp.*, 216 F.3d 1343 (Fed.Cir.2000) (Rader, J., concurring); see also *Deuterium Corp. v. United States*, 19 Cl.Ct. 624, 631 (Cl.Ct.1990) ("This court questions whether any infringing use can be de minimis. Damages for an extremely small infringing use may be de minimis, but infringement is not a question of degree.").

*Integra Lifesciences I*, 331 F.3d at 863 n.2.

#### **D. Alice Swallows the Deuterium Kool-Aid**

One relatively new jurist has swallowed the *Deuterium* Kool-Aid but with citation to Supreme Court precedent: "The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability. *Alice [Corp. v. CLS Bank Int'l]*, 134 S. Ct. 2347, 2354 (2014) ("We have described the concern that drives this exclusionary principal as one of pre-emption"). For this reason, questions on preemption are inherent in and resolved by the § 101 analysis. The concern is that "patent law not inhibit further discovery by improperly tying up the future use of these building blocks of human ingenuity." *Id.* (internal quotations

omitted). In other words, patent claims should not prevent the use of the basic building blocks of technology—abstract ideas, naturally occurring phenomena, and natural laws.” *Ariosa*, \_\_\_ F.3d at \_\_\_ (Reyna, J.)

## VI. CONCLUSION

There has been much talk within patent circles critical of the Supreme Court case law denying patent-eligibility. Federal Circuit practitioners need to look in the mirror and see what arguments and briefing they have provided to develop the case law in this area. What, precisely, has the patent community done to erase the progeny of the *Deuterium* case which clearly is antithetical to the case law of Joseph Story and his followers?

If the idea that patent “preemption” falls by the wayside then there is no policy underpinning for the *Bilski* era of denials of patent-eligibility.

