

No. 08-964

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**IN THE  
THE SUPREME COURT OF THE UNITED  
STATES**

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Bernard L. BILSKI and Rand A. Warsaw,

*Petitioners*

v.

John J. DOLL, Acting Under Secretary of Commerce  
for Intellectual Property and Acting Director, Patent  
and Trademark Office

*Respondent*

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**ON PETITION FOR WRIT OF CERTIORARI  
TO THE COURT OF APPEALS FOR THE  
FEDERAL CIRCUIT**

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**BRIEF OF AMICA CURIAE ANNE E.  
BARSCHALL, PRO SE  
IN SUPPORT OF PETITIONERS**

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## STATEMENT OF AMICA'S INTEREST<sup>1</sup>

The author is a sole practitioner patent attorney who has been interested in the field of patentable subject matter for over 25 years. She argued the case of In re Trovato<sup>2</sup>, a case in this same field. She has not been paid for this brief. It represents her concern for sensible jurisprudence and the advancement of patent law. Her undergraduate degree is in physics. She has worked professionally as a computer programmer and taken both graduate and undergraduate courses in computer science.

## SUMMARY OF ARGUMENT

The law with respect to patentable subject matter contains flaws in reasoning that have led to endless litigation and therefore need to be reviewed and corrected. *Dicta* from various cases that have been erroneously recited as law should be repudiated. The example here, in the area of “Business Methods,” requires deliberation in light of corrected reasoning to yield sound outcomes and resolve inconsistencies between cases, whatever the conclusion the Court

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<sup>1</sup> Both parties were notified at least 10 days before the filing of this brief. Both parties have consented to the filing of this brief. Neither party has written this brief or contributed financially to it.

<sup>2</sup> *In re Trovato*, 60 F.3d 807; 1995 U.S. App. LEXIS 20022; 35 U.S.P.Q.2D (BNA) 1570,(Fed. Cir. *en banc* 1995) *below* 42 F.3d 1376; 1994 U.S. App. LEXIS 35544; 33 U.S.P.Q.2D (BNA) 1194, December 19, 1994, Decided , As Amended January 3, 1995. Vacated by the Court on Grant of Rehearing of July 25, 1995, Reported at: 1995 U.S. App. LEXIS 20022

may reach, though this brief takes the position that the claims at hand should be patentable subject matter.

## ARGUMENT

### Introduction

The field of patentable subject matter under 35 U.S.C. 101<sup>3</sup> is one of the most fascinating fields of the law, invoking the deepest philosophy and metaphysics, where thought meets matter, matter meets energy, and the fundamental nature of creation is to be considered.<sup>4</sup>

Technical training and technically trained employees are expensive, but such training and employees are necessary to develop improved goods and services. Especially in the current economic environment, the Court must see that those who hire for research and development need economic protection for that investment. Even if the reward seems broad, it is time-limited. The Court should therefore not cast whole areas of technology out of the field of patentable subject matter.

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<sup>3</sup> Whoever invents or discovers any new and useful process, machine, manufacture or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore....

<sup>4</sup> The field is so fascinating that the preeminent treatise in this area, *Chisum on Patents* (Lexis Publishing 2008) §1.03[6] n.200 p.1-168 includes a seven page footnote listing articles on the topic. Moreover, there are an astounding number of cases in the area, but this brief will be particularly focused on why poor reasoning in certain leading cases has given rise to this whole flood of paper.

Those who seek to reproduce results first developed by others will naturally loudly proclaim that their innovation is stifled by intellectual property law. Their cries are not dissimilar from those of the angry driver, stopped for speeding, who feels entitled to violate the speed limits due to his or her own personal haste. The speed limits, like the patent law, serve a valuable purpose.

### ***O'Reilly v. Morse*<sup>5</sup> and *Parker v. Flook***

In this case, the issue of patenting a “principle” was considered. A closer review of the facts of *Morse* reveals that statements about this issue were *obiter dicta* in that case at the time and, additionally, are no longer precedential due to changes in statute and case law.

The *Morse* Court, in examining the topic, first looked at a prior case, *Neilson v. Harford* in the English Court of Exchequer [citation, sic]<sup>6</sup>. That case is misleadingly summarized in *Morse* as “a patent for throwing hot air into the furnace instead of cold, and thereby increasing the intensity of the heat, was a patent for a principle, and that a principle was not patentable.” It becomes clear, from the portion of the case reproduced at the cite given in the footnote, that

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<sup>5</sup> *O'Reilly v. Morse*, 56 U.S. (15 How.) 62 (1853)

<sup>6</sup> *Neilson v. Harford*, 151 Eng. Rep. 1266, 8 M. & W. 806, Web. Pat. Cases 295 (1841) Citation cribbed from, and copy to be found at R.H. Stern, “Computer Law 484: Cases and Materials Chapter 7: Patent Protection of Software: Introduction to Software Patent Cases <http://docs.law.gwu.edu/facweb/claw/ch7.htm> (giving the citation:.)

the *Morse* court did not notice that the *Neilson* court actually said “we think that the plaintiff does not merely claim a principle, but a machine embodying a principle, and a very valuable one,” raising the specter of an entire body of law based on a misquote. The principle might be that heat would warm something, but that did not mean that throwing hot air into a furnace would be a principle. The *Neilson* court went on to say that the principle would be “taken” as old, but the principle that hot air would warm things up was in fact old, so that any implication that principles must be taken as old would not be necessary to the holding there.

Moreover, under modern U.S. patent law, the limitation of throwing hot air into a furnace would even more clearly be considered a process step. This step might be invalid as non-novel under 35 U.S.C. 102 or obvious under 35 U.S.C. 103, but 35 U.S.C. 101 as it now exists includes processes<sup>7</sup> within patentable subject matter. 35 U.S.C. 101 was not extant at the time of the *Morse* case<sup>8</sup>.

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<sup>7</sup> As did the later case of *Cochrane v. Deener*, 94 U.S. 780 (1877)

<sup>8</sup> *Diamond V. Diehr*, 450 U.S. 175, 182 (1981) explains this history as follows:

The Patent Act of 1793 defined statutory subject matter as “any new and useful art, machine, manufacture or composition of matter, or any new or useful improvement [thereof].” Act of Feb. 21, 1793, ch. 11, 1, 1 Stat. 318. Not until the patent laws were recodified in 1952 did Congress replace the word “art” with the word “process.” It is that latter word which we confront today, and in order to determine its meaning we may not be unmindful of the Committee Reports accompanying the 1952 Act which inform us that Congress intended

The *Morse* case, mischaracterizing *Neilson*, disallowed a claim to the use of an electromagnetic signal, to wit

the use of the motive power of the electric or galvanic current, which I call electromagnetism, however developed, for making or printing intelligible characters, signs or letters at any distances, being a new application of that power

on the ground that this claim recited a “principle.” In fact, this was a process claim just as the claim in the *Neilson* case was, because the claim was for *the use* of electric or galvanic current, not any principle of such current and not for the current itself.

The *Morse* Court went on to expound, in what is clearly erroneous *obiter dicta*, that “the court, it appears, would have held his patent to be void because the discovery of a principle in natural philosophy or physical science is not patentable.” 56 U. S. at 116. In fact, no such principle of natural philosophy or physical science was actually before either court. In each case, what was before the courts were specific processes – not “principles.” Both involved specific interaction with physical phenomena.

*Parker v. Flook*<sup>9</sup> included the following quote,

“A principle, in the abstract, is a fundamental truth; an original cause; a

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statutory subject matter to "include anything under the sun that is made by man." S. Rep. No. 1979, 82d Cong., 2d Sess., 5 (1952); H. R. Rep. No. 1923, 82d Cong., 2d Sess., 6 (1952).

<sup>9</sup> *Parker v. Flook*, 437 U.S. 584, 589, 198 USPQ 193, 197 (1978)

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)]<sup>10</sup>. 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.” [citation to *Benson*]

The line between a patentable “process” and an unpatentable “principle” does not always shimmer with clarity. Both are “**conception[s] of the mind** [emphasis added], seen only by [their] effects when being executed or performed.”<sup>11</sup>

The reasoning in this quotation is another example of why the current petition should be granted for clarification. How is throwing hot air into a furnace a conception of the mind? How is using an electric

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<sup>10</sup> In this case, the dispute centered on whether a process/principle was claimed or rather a mechanical device was claimed. The majority interpreted the claim as related to the mechanical device, so that the issue of patentable subject matter was not pertinent to the holding.

<sup>11</sup> citing *Tilghman v. Proctor*, 102 U.S. 707, 728 (1888). That case mentioned the idea that a process step is a conception of the mind. It is difficult to understand why the court makes this statement. If one watches an action and sees its effect, how is that a conception of the mind any more than if one watches a stationary object? There is something distressingly reminiscent here of the sufferer from obsessive compulsive disorder (OCD), who must keep checking the front door of his home dozens of times in succession in order to verify that it is still locked – because of a lack of confidence in the reality of his memory.

current a conception of the mind? Unless the observer is hallucinating, these process steps are no more conceptions of the mind than an apparatus limitation. It is not that the line between “principle” and “process” lacks clarity, but rather that the earlier Court was simply wrong in denominating as “principle” the recitation before it.

Even the *Parker v. Flook* recitations, which are the most abstract of any of the claims in this line of Supreme Court cases, do not truly represent a principle or theoretical mathematics. The updating of an alarm limit is a process step with a commercial context, not a pure principle.

The non-patentability of processes having been eliminated both in *Cochrane* and in the current statute, 35 U.S.C. 101, *Morse* and its progeny, are no longer relevant precedents, despite later attempts to reconcile them. Moreover, the statements they made about patentability of “principle” were always *dicta* and should never have been taken as law.

### ***Gottshalk v. Benson***<sup>12</sup>

This seminal case in the field of patentable subject matter was decided with an opinion written by Justice Douglas. When the undersigned was first learning about patent law, she heard patent attorneys sniping rather cynically about Justice Douglas, opining that the approach of Justice Douglas towards patents was “The only valid patent is one that has not been reviewed by this court.”

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<sup>12</sup> *Gottshalk v. Benson*, 409 U.S. 63, 172 U.S.P.Q. (BNA) 673, (1972)

Perhaps attorneys did not say so in court papers, but they said so to each other.

The *Benson* case contains a number of statements that invite clarification or repudiation.

Anxiety about the idea of patent monopoly manifests, e.g.

“The end use may (1) vary from the operation of a train to verification of drivers’ licenses to researching the law books for precedents and (2) be performed through any existing machinery or future-devised machinery or without any apparatus...” 408 U.S. at 68

Some of this language seems to contradict the opinion’s later conclusion that the algorithm had no practical application outside a digital computer.

Additionally, the anxiety expressed here about breadth of claims really has nothing to do with subject matter. If one imagines hypothetically the first inventor of the carpentry nail, for instance, such an inventor could get a patent that would cover a nail, whether that nail were to be used in constructing a house, constructing a boat, scratching the surface of a soft material, or cleaning dirt out of a crevice. This is the nature of a patent, to give the inventor broad scope of protection – and, yet, if one were to apply the reasoning of the above paragraph, one might strike down a patent on such an original mechanical device out of fear of its scope. This would defeat the whole purpose of the patent law.

Another statement in *Benson* is “A digital computer, as distinguished from an analog computer, is that which operates on data expressed in digits, solving a problem by doing arithmetic as a person

would do it by head and hand.” 409 U.S. at 65.<sup>13</sup> Perhaps some computer scientists thought this was true at the time, but experts in artificial intelligence and neurology no longer believe that computers think like people, at least when using the type of program that was at issue in this case<sup>14</sup>. People may have in their heads some illusion that they are thinking the way that computers process data, but this is not at all a complete explanation of the mysterious workings of the human brain.

Another statement from *Benson* is:

We have, however, made clear from the start that we deal with a program only for digital computers... The mathematical formula involved here has no substantial

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<sup>13</sup> The aspect of computer software that looks like mathematics, namely its source code, belies the fact that upon compilation and execution that software actually becomes a configuration of a hardware device. see e.g. “Dissent of Commissioner Hersey” to the report of the National Commission on Ne Technological Uses of Copyrighted Works” at Ch. 3 (CONTU) (1978) <http://digital-law-online.info/CONTU/contu14.html>.

<sup>14</sup> *cf* M. Minski, “Why People Think Computers Can’t”, (MIT, Cambridge, 7/6/2005) [http://aleph0.clarku.edu/~jbreecher/public/2005\\_Can\\_Computers\\_Think/Minsky-WhyPeopleThinkComputersCant.pdf](http://aleph0.clarku.edu/~jbreecher/public/2005_Can_Computers_Think/Minsky-WhyPeopleThinkComputersCant.pdf) (Describing how early computer programs were quite different from human thought and how researchers are trying to make them closer); J. Bryner, “Greatest Mysteries: How Does the Brain Work?” (Live Science, Au., 2, 2007) [http://www.livescience.com/strangenews/070802\\_gm\\_brain.html](http://www.livescience.com/strangenews/070802_gm_brain.html) (explaining that scientists still do not know how the brain works, because of the complexity of neurons, so it would be difficult to conclude that binary electronic circuits such as are found in a computer actually work “like” the brain)

practical application except in connection with a digital computer, which means that if the judgment below is affirmed, the patent would wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself. 409 U.S. 71-72

These assertions recognize that the invention can only be practically used in a computer and then jump to the conclusion that the entire algorithm is pre-empted. This reasoning, operating in conjunction with the belief stated earlier that computers think like people, gives rise to the disturbing implication that software related inventions include human thought, “pre-empting the entire algorithm” — that if computers think like people, then a claim reading on a computer processing reads on a person thinking. Such a leap of logic would be a clear fallacy. If one starts from a premise that an airplane flies like a bird, one should not therefore conclude that a claim reading on an airplane flying would read on a bird flying.

Moreover, there remains the inconsistency between the one statement saying that the claim reads on a person and the other statement that says the reasoning is motivated by the fact that the algorithm has no substantial application outside a computer. Indeed, no art having apparently been cited, it would appear that no one was motivated to attempt this rather cumbersome representation of decimal numbers prior to the arrival of computer storage with its binary nature.

Another sub-optimal aspect of this opinion is a failure to make a distinction between two very

different claims. Claim 13<sup>15</sup> could conceivably have read on a human working with head and hand. Claim 8<sup>16</sup>, on the other hand, recited the use of a

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<sup>15</sup> “A data processing method for converting binary coded decimal number representations into binary number representations comprising the steps of—

“(1) testing each binary digit position  $i$ , beginning with the least significant binary digit position, of the most significant decimal digit representation for a binary ‘0’ or a binary ‘1’;

“(2) if a binary ‘0’ is detected, repeating step (1) for the next least significant binary digit position of said most significant decimal digit representation;

“(3) if a binary ‘1’ is detected, adding a binary ‘1’ at the  $(i+1)$ th and  $(i+3)$ th least significant binary digit positions of the next lesser significant decimal digit representation, and repeating step (1) for the next least significant binary digit position of said most significant decimal digit representation;

“(4) upon exhausting the binary digit positions of said most significant decimal digit representation, repeating steps (1) through (3) for the next lesser significant decimal digit representation as modified by the previous execution of steps (1) through (3); and

“(5) repeating steps (1) through (4) until the second least significant decimal digit representation has been so processed.”  
409 U.S. at 74

<sup>16</sup> “The method of converting signals from binary coded decimal form into binary which comprises the steps of—

“(1) storing the binary coded decimal signals in a reentrant shift register,

“(2) shifting the signals to the right by at least three places, until there is a binary ‘1’ in the second position of said register,

“(3) masking out said binary ‘1’ in said second position of said register,

“(4) adding a binary ‘1’ to the first position of said register,

“(5) shifting the signals to the left by two positions,

”(6) adding a ‘1’ to said first position, and

shift register. A shift register is a piece of electronic equipment that can only be used with other electronic equipment, such as sources of power, electronic data signals, and clock signals. A shift register absolutely and categorically cannot be used by a human's naked hand. This is physically impossible. The failure of *Benson's* insufficiently considered opinion to recognize the distinction between these two claims has given rise to much later confusion.

There seems to be a prejudice against electronic devices in both *Benson* and *Morse*. Patent attorneys, with their scientific training, have studied Newtonian mechanics<sup>17</sup> together with Maxwell's Equations<sup>18</sup> regarding electricity and magnetism in

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“(7) shifting the signals to the right by at least three positions in preparation for a succeeding binary ‘1’ in the second position of said register.” 409 U.S. at 73-74

<sup>17</sup> see, e.g. I. Newton, *De motu corporum in gyrum* (1684); I. Newton, I Newton, *Philosophiae Naturalis Principia Mathematica* (1687)

<sup>18</sup> In electromagnetism, Maxwell's equations are a set of four partial differential equations that describe the properties of the electric and magnetic fields and relate them to their sources, charge density and current density. These equations are used to show that light is an electromagnetic wave. Individually, the equations are known as Gauss's law, Gauss's law for magnetism, Faraday's law of induction, and Ampère's law with Maxwell's correction.

These four equations, together with the Lorentz force law are the complete set of laws of classical electromagnetism. The Lorentz force law itself was actually derived by Maxwell under the name of "Equation for Electromotive Force" and was one of an earlier set of eight Maxwell's equations. “Maxwell's

the same physics courses with the same physics professors. They have seen, in quantum mechanics, how subatomic wave/particles — surrounded mostly by empty space — cooperate to create classical mechanics, electricity, magnetism, and radiation — allowing one form of physical phenomenon to be transformed into another: matter into energy and energy into matter<sup>19</sup>. Those thus trained have no philosophical rubric with which to distinguish electrical and mechanical devices one from the other logically, rendering the distinctions between the two categories from the point of view of patentable subject matter unjustifiable.

### ***In re Nuijten***

In *In re Nuijten*,<sup>20</sup> the Federal Circuit spoke of some of these physics-related issues when they said, “Nuijten and the PTO agree that the claims include physical but transitory forms of signal transmission such as radio broadcasts, electrical signals through a wire, and light pulses through a fiber-optic cable” and “We recognize the wave-particle duality as applied to electromagnetic energy. However, the fact

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equations,”

[http://en.wikipedia.org/wiki/Maxwell%27s\\_equations](http://en.wikipedia.org/wiki/Maxwell%27s_equations)  
(18 February 2009, at 01:59)

<sup>19</sup> In the immortal prose of Albert Einstein  $E=mc^2$

<sup>20</sup> *In re Nuijten*, 500 F.3d 1346; 2007 U.S. App. LEXIS 22426; 84 U.S.P.Q.2D (BNA) 1495, September 20, 2007, Decided, Rehearing denied by, Rehearing, en banc, denied by *In re Petrus A.C.M. Nuijten*, 515 F.3d 1361, 2008 U.S. App. LEXIS 2965 (Fed. Cir., 2008)US Supreme Court certiorari denied by *Nuijten v. Dudas*, 2008 U.S. LEXIS 6858 (U.S., Oct. 6, 2008)

that photons traveling at or near the speed of light behave in some ways like particles does not make them tangible articles.”<sup>21</sup>

This case, despite recognizing that signals are physical, held signals too transitory to be patentable.

But why should the transitory nature of a human creation be determinative? Everything that man creates is transitory when considered with the age of the universe<sup>22</sup>. Even such durable creations as the Sphinx in Egypt are gradually deteriorating into dust.<sup>23</sup> It is only a question of how long such creations exist. Any attempt for a Court to legislate some definite boundary for how long something must endure in order to be patentable, is doomed to result in more confusion and litigation. Also, it is difficult to imagine a mechanical invention being considered non-patentable merely because of short duration. The *Nuijten* case essentially continues a discomfort with inventions relating to electro-magnetic phenomena, just like *Morse* and *Benson*. This discomfort gives rise to language that makes no sense and has led to the extensive litigation in this area of the law.

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<sup>21</sup> *Ibid* n. 8

<sup>22</sup> At least as that age is calculated by scientists, apologies to those who hold to the literal truth of certain religious texts.

<sup>23</sup> J. Levin, “International Symposium on the Great Sphinx,” Newsletter 7.2 (1992)  
[http://www.getty.edu/conservation/publications/newsletters/7\\_2/sphinx.html](http://www.getty.edu/conservation/publications/newsletters/7_2/sphinx.html)

### “Laws” of nature<sup>24</sup>

Both *Diamond v. Diehr* 450 U.S. 175 (1981) and *Parker v. Flook*, 348 U.S. 193, 198 (1978) misquote *Benson* as saying that a “law of nature” is not patentable, when in fact the *Benson* case only refers to “phenomena of nature.” Moreover, these statements about laws or phenomena of nature were *dicta* in all those cases, as no question regarding that sort of subject matter was before the court. For instance, the use of electric current per to transmit letters per *Morse* or the calculations of alarm limits per *Parker v. Flook* do not occur in nature, despite all the talk in the latter opinion that might lead one to suppose the contrary. Nevertheless, the MPEP, and Examiners who follow it have dutifully cited “law of nature” as unpatentable subject matter. *Dicta* regarding this area should be repudiated until a case that is actually in that subject matter arises.

The Court should recognize that “laws” of nature are not the same as “phenomena” of nature. A phenomenon of nature is something that existed before a human discovered it. A “law” of nature is a model, created by a human, to describe natural phenomena. The “law” is therefore something

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<sup>24</sup> MPEP 2106 IV. C. Some other cases about “laws of nature” *The Telephone Cases*, 126 U.S. 1, 532 *et seq.* (1888) (referring to this concept, but finding that the claimed subject matter was patentable); *DeForest Radio Co. v. General Electric Co.*, 283 U.S. 664, 684 (1931) (saying that the concept was not necessary to a decision in that case, however); *Mackay Radio & Telegraph Co. v. Radio Corp. of America*, 306 U.S. 86, 94 (1939) (decided on other grounds); *Funk Brothers Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127 (1948) (Douglas opinion: invalidating a patent apparently as inherent in or obvious over nature, not explicitly as a “law” of nature)

created by “man” and therefore could potentially be patentable.

Physics, and many other academic disciplines, involve the use of mathematics to “model” experimental data.<sup>25</sup>

Many people seem to think that these mathematical models reflect some kind of deep, possibly divine, natural truth. This is not so.

In order to illustrate this point, one can consider the simplest of mathematical models, one that appears whenever a child is taught to count. The teacher holds up a hand — fingers and thumb extended — and starts pointing to the digits of her hand. She says out loud: “One, two, three, four, five.” This scene is repeated over and over in family after family, classroom after classroom, country after country, language after language. So common is it that one might suppose it to be some sort of “law of nature” that the hand has five fingers.

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<sup>25</sup> A **mathematical model** uses mathematical language to describe a system. Mathematical models are used not only in the natural sciences and engineering disciplines (such as physics, biology, earth science, meteorology, and electrical engineering) but also in the social sciences (such as economics, psychology, sociology and political science); physicists, engineers, computer scientists, and economists use mathematical models most extensively.

[ citation deleted] defined a *mathematical model* as 'a representation of the essential aspects of an existing system (or a system to be constructed) which presents knowledge of that system in usable form' “Mathematical Model”,

[http://en.wikipedia.org/wiki/Mathematical\\_model](http://en.wikipedia.org/wiki/Mathematical_model)

(Version of Jan. 19, 2009)

There is no such “law.” The perception of repetitive groupings of “five fingers” is a creature of human mental processes. One could perfectly well look at it some other way – even though that might not be the “normal” thing to do.

For instance, if the undersigned looks at her index finger, she sees that it is slightly crooked. It is crooked in the same way that her mother’s index finger was crooked. It is her mother’s finger, in some sense, though with new sworls capable of generating new prints. Why would one group this finger with the other fingers? Why would one think of one set of fingers as being similar to the fingers of people who do not have the same bone structure or sworls? Why do people choose to group the thumb together with the other fingers and call them five members of a single group?

The statement “a normal human hand has five fingers” is a mathematical model of experimental observations of physical phenomena. This model stems from projecting human thought onto the universe.

All mathematical models, like the equation in *Parker v. Flook* are like this. They involve trying to cram observed data into a reproducible and useful form, a form that will allow engineers and scientists to make useful predictions about the behavior of physical phenomena – a grouping of data into useful categories – not unlike the way a legal secretary organizes legal records into a file.

When Isaac Newton devised his theory of mechanics or when Albert Einstein devised his theory of relativity that modified Newtonian mechanics, neither man discovered a “law” or

phenomenon of nature. They did not suddenly develop clairvoyance into the mind of God. They organized information in a new way so as to predict other information<sup>26</sup>. These theories were, therefore, not unlike a new type of filing cabinet – a useful way of arranging known data in a more compact space.

Scientists such as Newton, Maxwell, and Einstein were in fact great inventors of exceedingly useful mathematical models. A device that would use such a model would be a manufacture. A process that used such a model would be a process. Both could be useful. A useful mathematical model, claimed so as to include some commercially useful item or behavior, should not automatically be excluded from patent protection merely because the “law” so invented might have broad application.

All that having been said, however, no “law” of nature appears before the Court at this juncture. The recitations of the representative claim,<sup>27</sup> present

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<sup>26</sup> Such as, in the case of Newton, remarkable improvements in the aiming of canons.

<sup>27</sup> to wit

A method for managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price comprising the steps of:

(a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumer;

(b) identifying market participants for said commodity having a counter-risk position to said consumers; and

(c) initiating a series of transactions between said commodity provider and said market participants at a

no “law” of nature. Nature fails to initiate transactions or identify market participants. If someone can go out into one of our National Parks and identify wild creatures doing something that might be construed as infringing these claims, that would be substantial evidence of anticipation or obviousness, rather than evidence of non-patentable subject matter<sup>28</sup>.

### Thought and Speech

Language such as “abstract idea,” “mental steps,” “human cognition” or “speech” also have frequently appeared as describing categories of non-patentable subject matter. Again, though, it is difficult to imagine how this could have been anything other than *dicta*. The mental processes of the solitary philosopher lack commercial value. What motivation would the patent holder have for preventing such activity?<sup>29</sup>

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second fixed rate such that said series of market participant transactions balances the risk position of said series of consumer transactions

<sup>28</sup> Given the broad way that these claims are drafted it seems not entirely inconceivable that a clever biologist might find such a thing, especially if a “fixed rate” were zero, but it does not appear that such a biologist has been dispatched or returned with any relevant evidence.

<sup>29</sup> In *Parker v. Flook*, for instance, as pointed out by the dissent, the calculation of the alarm limit was only motivated by a response to an environment around a catalytic converter that needed to be measured and adjusted for. Absent this commercial environment, no one would have had any motivation to bring the case to the Supreme Court of the United States.

The claims in the present case, though, are not confined to an abstract idea. Initiating transactions is not an abstract idea.

Any such motivation to control ideas or speech would likely be in the domain of civil rights. Protection of civil rights is found in amendments to the constitution that succeeded Art. I, §8 cl.8 of the United States Constitution, the clause that gave rise to patents. These amendments therefore would have superseded the latter to the extent there would be any conflict.

The ACLU amicus brief below<sup>30</sup> takes the position that the claim at hand involves speech. Transactions could be initiated via speech — but the law has always been available to control commercial speech, where that speech affects commerce<sup>31</sup>. If the position of the ACLU were to be upheld, then it would be difficult, for instance, to rationalize anti-trust laws prohibiting certain types of contractual arrangements, because such contractual arrangements would be “speech.” The concern of the ACLU is misplaced.

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see e.g.

<http://www.finnegan.com/amicusbriefsfiledforinrebilski/>

<sup>31</sup> It is beyond the scope of this brief to foray extensively into Constitutional law.

## Business methods

### *State Street Bank*<sup>32</sup>

This case caused quite a stir in the patent law by declaring business methods to be patentable subject matter. The statements about patentability of business methods absent use of a computer were *dicta* in this case, because the representative claim recited a business method implemented on a data processing system, with each element prefaced with a “means for” clause that was read by the court on a specific part of a computer system. The fuzzing of the distinction between abstractly recited business methods and the computer based methods in *State Street Bank* is similar to the fuzzing of the distinction between claims 8 and 13 in *Benson*.

Despite being *dicta*, *State Street Bank*'s statements about the patentability of disembodied business methods raised sufficient concern that Congress felt compelled to pass legislation to protect people who had engaged in business methods for many years under the impression that such methods were not patentable.<sup>33</sup> Seminars were held nationwide for patent attorneys declaring that now a whole new category of patents would be forthcoming.<sup>34</sup> The suite has shown this flurry of activity to be much ado about nothing.

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<sup>32</sup> *State St. Bank & Trust Co. v. Signature Fin. Group*, 96-1327, 149 F.3d 1368; 1998 U.S. App. LEXIS 16869; 47 U.S.P.Q.2D (BNA) 1596, (Fed. Cir 1998), *cert. den.* 1999 U.S. LEXIS 493 (1999)

<sup>33</sup> 35 U.S.C. 273 (passed in 1999)

<sup>34</sup> *see e.g.* “*Patenting the Business Model: Building Fences in Cyberspace*” *PLI 2000* a seminar attended by the undersigned.

*AT&T*<sup>35</sup>, *Comiskey*<sup>36</sup>, and *Bilski*<sup>37</sup>

These three cases show a pattern that departs from the broad *dicta* in *State Street Bank*.<sup>38</sup> and that draws the distinction that *Benson* failed to make between claims 8 and 13. This distinction may be characterized as between, a) a claim that has recitations completely devoid of any relationship to any kind of apparatus, with apparatus to include software; and b) a claim that has recitations indicating such a relationship. The latter would fall within the realm of patentable subject matter, while the former would not.

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<sup>35</sup> *AT & T Corp. v. Excel Communications Inc*, 172 F.3d 1352, 50 USPQ2d 1447, 1999 U.S. App. LEXIS 7221; 50 U.S.P.Q.2D (BNA) 1447 (Fed. Cir 1999);

<sup>36</sup> *In re Comiskey*, 2009 U.S. App. LEXIS 400, (Fed. Cir. 2009 *en banc*) replaces 499 F. 3d 1365 (Fed. Cir. 2007)

<sup>37</sup> *In re Bilski*, 2007-1130, UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, 264 Fed. Appx. 896; 2008 U.S. App. LEXIS 3246, (non precedential Fed. Cir. -- February 15, 2008); 545 F.3d 943; 2008 U.S. App. LEXIS 22479; 2008-2 U.S. Tax Cas. (CCH) P50,621, October 30, 2008, Decided, Petition for certiorari filed at, 01/28/2009 (the case that is the subject of the present petition.

<sup>38</sup> This trend renders pitiful and futile all that frantic activity by practitioners, Congress, and the courts in response to the earlier case. When it is considered how many people hours were wasted in this effort, one must conclude that courts should reiterate their past commitment to caution against *dicta*.

In *AT&T*<sup>39</sup> the claim<sup>40</sup> was found to be patentable, due to sufficient apparatus limitations. While this claim was framed to be limited to a telecommunications system, message records, and facilities of interchange carriers, it has a great deal in common with the claim in *Bilski*. This commonality stems from the fact that the transactions set forth in *Bilski*'s claims inherently are the sort that must be communicated over some telecommunications system at some point, even though the telecommunications system is not recited. The absence of explicit recitation of such communication, though, apparently led to the conclusion of unpatentability below.

The court in *Comiskey* drew a distinction between business method claims that recited "modules," thereby invoking a software embodiment, and claims that did not contain any kind of limitation relating to an embodiment. The former were considered potentially patentable, while the latter were not.

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<sup>39</sup> 172 F.3d 1352, 50 USPQ2d 1447 (Fed. Cir 1999)

<sup>40</sup> A method for use in a telecommunications system in which interexchange calls initiated by each subscriber are automatically routed over the facilities of a particular one of a plurality of interexchange carriers associated with that subscriber, said method comprising the steps of:

generating a message record for an interexchange call between an originating subscriber and a terminating subscriber, and including, in said message record, a primary interexchange carrier (PIC) indicator having a value which is a function of whether or not the interexchange carrier associated with said terminating subscriber is a predetermined one of said interexchange carriers  
172 F.3d at 1354, 50 USPQ2d at 1449

The court below has called this the “machine or transformation” test.

The claims under scrutiny with present petition, like the ones in *Comiskey*, relate to rejected claims that contain no hint of a recitation of any such embodiment.

While the distinction drawn in these three cases is arguably a clear, bright line that patent attorneys can understand and live by, this line is notably contrary to *Benson*. The opinion below makes an attempt to reconcile with *Benson* that only highlights the internal inconsistency in that opinion.

However, in *Benson*, the limitations tying the process to a computer were not actually limiting because the fundamental principle at issue, a particular algorithm, had no utility other than operating on a digital computer.... Thus, the claim's tie to a digital computer did not reduce the pre-emptive footprint of the claim since all uses of the algorithm were still covered by the claim<sup>41</sup>.

This ignores the implication earlier in the *Benson* case that the claims read on a person “with head and hand.” Moreover, the conclusion, *i.e.* that the narrowness of the algorithm — having no substantial use outside a computer — would make it less patentable than an algorithm that had uses both inside and outside a computer makes no sense.

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<sup>41</sup> slip opinion at p. 13

## More about the present case

Some have argued<sup>42</sup> that the claims of the patent application on petition here are more susceptible of innocent infringement by consumers than claims with apparatus limitations. In this respect, though, the present claims are no different from those of any other process claim<sup>43</sup>.

Moreover, patent litigation is extremely costly<sup>44</sup> and therefore is unlikely to be undertaken against the casual or occasional infringer, especially in the case of the present claims, which seem to be much more valuable in the case of large markets with many transactions.

The claims here relate to real, tangible commercial transactions that could have substantial impact on real markets, indeed on the global economy. There is nothing abstract, theoretical,

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<sup>42</sup> e.g. the Hollaar amicus brief below. All amicus briefs below are currently available at Petitioner's website at <http://www.finnegan.com/amicusbriefsfiledforinrebilski/>.

<sup>43</sup> for more about innocent infringement and marking process patents see e.g. S. P. Pan, "The Intersection Between Damages Recovery Under the Patent Marking Statute and Prosecution Practice", (Sughrue Mion, PLLC 2005) [http://www.aipla.org/Content/ContentGroups/Speaker\\_Papers/Road\\_Show\\_Papers/200512/Patent\\_Prosecution/PanPaper.pdf](http://www.aipla.org/Content/ContentGroups/Speaker_Papers/Road_Show_Papers/200512/Patent_Prosecution/PanPaper.pdf) p. 3 (citing *American Medical Systems Inc. v. Medical Engineering Corp.*, 26 USPQ2d 1081, 1095 (E.D. Wisc. 1992) citing *Bandag, Inc. v. Gerrard Tire Co., Inc.* 217 USPQ 977 (Fed. Cir. 1983). )

<sup>44</sup> L.H. Pretty, "PATENT LITIGATION: IS IT BROKEN AND CAN WE FIX IT?", The 22nd Annual Intellectual Property Law Conference (2007, Arlington VA) <http://www.abanet.org/intelprop/spring2007/coursematerials/pdf/01%20Pretty%20Paper.pdf> p.3 (citing costs in the seven figure range)

natural, or principled about these claims. The worry, expressed in various cases over several centuries, about subject matter that cannot be packed in a box or struck with a hammer is irrational. This is the information age<sup>45</sup>, a time when increasingly life is conducted through the Internet. Businesses in the financial industry regularly hire people of strong scientific and technical background to implement competitive financial systems.<sup>46</sup> The same economic arguments that justify the patent law in protecting those who hire such highly trained people to engage in research in conventional sectors apply to the financial sector. The Court should hear *Bilski* and repudiate all this past apprehension, lest patent law become irrelevant to the current economy. The transactions to be initiated here ought to be recognized as things of human “manufacture” as required by 35 U.S.C. 101.

## CONCLUSION

The entire field of law of patentable subject matter needs to be reviewed and clarified; errors of reasoning eliminated; inconsistencies resolved; and *dicta* identified as such. Anxiety about certain fields of technology must be repudiated so that patent law can be relevant to the areas where commercially valuable innovation currently occurs and not become a dusty relic of the past.

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<sup>45</sup> see e.g. “Information Age”, 2/23/09  
[http://en.wikipedia.org/wiki/Information\\_Age](http://en.wikipedia.org/wiki/Information_Age)

<sup>46</sup> J. Ouellette, “Physicists Graduate from Wall Street,” 9 The Industrial Physicist (American Institute of Physics Dec. 1999) <http://www.tipmagazine.com/tip/INPHFA/vol-5/iss-6/p9.pdf>

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