



Are Business Method Patents on Life Support in Light of *Bilski*?

(Practical) OBJECTIVES

- Learn to better challenge or defend business method patents using the decision in *Bilski*
- Learn to better draft and prosecute patent applications for business method inventions

Marin Cionca, Esq.
OCBA-IP/T Section
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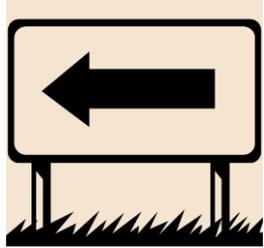
Claim 1 of *Bilski*

1. 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 ... at a fixed rate ...
 - b) identifying market participants...
 - c) initiating a series of transactions ... at a second fixed rate ...



Federal Circuit

Machine-or-Transformation Test



- Sole patentability test for *process* claims under 35 U.S.C. § 101 (\leftrightarrow *State Street Bank*, ‘useful, concrete, and tangible result’, overturned)

- ✓ process is tied to a particular *machine* or apparatus, or
- ✓ process *transforms* a particular article into a different state or thing

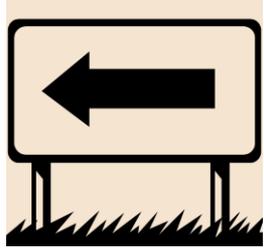


Bilski: no machine (e.g., computer) or transformation



Federal Circuit (Cont'd)

Machine-or-Transformation Test



- In light of *Flook*, could not be met by:
 - a field-of-use limitation
 - an *insignificant* step such as post- or pre-resolution activity



U.S. Supreme Court

Bilski v. Kappos



■ *Machine-or-Transformation* Test is NOT the sole patentability test for *process* claims under 35 U.S.C. § 101

- ✓ a useful and important clue
- ✓ an investigative tool



U.S. Supreme Court (Cont'd)

Bilski v. Kappos



- *Abstract Ideas* – **Not Patentable** under Section 101 (*process*, machine, manufacture, composition of matter, and useful improvement thereof)

✓ *Bilski* might be a process; however,

- Case law exceptions: processes that are laws of nature, physical phenomena or *abstract ideas* are not patentable



Bilski = Abstract Idea



U.S. Supreme Court (Cont'd)

Bilski v. Kappos

○ Process or *Abstract Idea*?

➤ *Benson*: algorithm to convert binary-coded decimal numerals into pure binary code.



Benson = abstract idea; a contrary holding would wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself.



U.S. Supreme Court (Cont'd)

Bilski v. Kappos

○ Process or *Abstract Idea*?

➤ *Flook*: procedure for monitoring the conditions during the catalytic conversion process in the petrochemical and oil-refining industries.



Flook = abstract idea; unpatentable, not because it contained a mathematical algorithm as one component, but because once that algorithm was assumed to be within the prior art, the application, *considered as a whole*, contained no patentable invention; prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant post-solution activity.



U.S. Supreme Court (Cont'd)

Bilski v. Kappos

○ Process or *Abstract Idea*?

- *Diehr*: a previously unknown method for molding raw, uncured synthetic rubber into cured precision products, using a mathematical formula to complete some of its several steps by way of a computer.



Diehr = process; the invention has to be *considered as a whole*; the claim was not an attempt to patent a mathematical formula, but rather was an industrial process; while an abstract idea, law of nature, or mathematical formula could not be patented, an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.



U.S. Supreme Court (Cont'd)

Bilski v. Kappos

- *Abstract Idea* Exception Applied to *Bilski*
 - The concept of hedging, described in claim 1 and reduced to a mathematical formula in claim 4, is an unpatentable abstract idea, just like the algorithms at issue in *Benson and Flook*. Allowing petitioners to patent risk hedging would preempt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea.
 - The remaining dependent claims are broad examples of how hedging can be used in commodities and energy markets. *Flook* established that limiting an abstract idea to one *field of use* or adding token *post-solution components* did not make the concept patentable.



What is USPTO saying after *Bilski*?

➤ *Interim Bilski Guidance*, July 27, 2010

- Factors that weigh in favor of patent-eligibility satisfy the criteria of the **machine-or-transformation** test or provide evidence that the **abstract idea** has been **practically applied**, and factors that weigh against patent-eligibility neither satisfy the criteria of the machine-or-transformation test nor provide evidence that the abstract idea has been practically applied.



What is USPTO saying after *Bilski*?

(Cont'd)

- *Process Claims That Do Not Meet M-o-T Test Are Possibly Patentable*
- “To date, no court, presented with a subject matter eligibility issue, has ever ruled that a method claim that lacked a machine or a transformation was patent-eligible. However, *Bilski* held open the **possibility** that some claims that do not meet the machine-or-transformation test might nevertheless be patent-eligible.” *Interim Bilski Guidance (Federal Register Vol. 75, No. 143, p. 43924)*



What is USPTO saying after *Bilski*?

(Cont'd)

➤ *Factors To Be Considered in an Abstract Idea Determination of a Method Claim*

- A. Whether the method involves or is executed by a particular **machine** or apparatus. If so, the claims are less likely to be drawn to an abstract idea; if not, they are more likely to be so drawn. Where a machine or apparatus is recited or inherent in a patent claim, the following factors are relevant:

+	-
<ul style="list-style-type: none">•particular machine•use of machine for performance•machine imposes meaningful limits on the execution of the claimed method	<ul style="list-style-type: none">•general machine•machine is merely an object on which the method operates• machine involvement is extra-resolution activity (e.g., data gathering step) or a field-of-use



What is USPTO saying after *Bilski*?

(Cont'd)

➤ *Factors To Be Considered in an Abstract Idea Determination of a Method Claim*

B. Whether performance of the claimed method results in or otherwise involves a **transformation** of a particular article. If such a transformation exists, the claims are less likely to be drawn to an abstract idea; if not, they are more likely to be so drawn. Where a transformation occurs, the following factors are relevant:

+	-
<ul style="list-style-type: none">•particular transformation•transformation of a particular article•change of function•physical article•meaningful transformation	<ul style="list-style-type: none">•general transformation•transformation of any and all articles• change of location•concept (e.g., mental judgment)•nominal transformation (e.g., in a data gathering step)



What is USPTO saying after *Bilski*?

(Cont'd)

- *Factors To Be Considered in an Abstract Idea Determination of a Method Claim*
- C. Whether performance of the claimed method involves an **application of a law of nature**, even in the absence of a particular machine, apparatus, or transformation. If such an application exists, the claims are less likely to be drawn to an abstract idea; if not, they are more likely to be so drawn. Where such an application is present, the following factors are relevant:

+	-
•particular application	•general application (e.g., “the use of electromagnetism for transmitting signals at a distance.”) •application of a law of nature to a particular way of thinking about, or reacting to, a law of nature •application of the law of nature that contributes only nominally or insignificantly to the execution of the claimed method (inessential step)



What is USPTO saying after *Bilski*?

(Cont'd)

➤ *Factors To Be Considered in an Abstract Idea Determination of a Method Claim*

D. Whether a **general concept** (which could also be recognized in such terms as a principle, theory, plan or scheme) is involved in executing the steps of the method. The presence of such a general concept can be a clue that the claim is drawn to an abstract idea. Where a general concept is present, the following factors are relevant:

+	-
<ul style="list-style-type: none">• a concept that is well-instantiated (i.e., implemented, in a tangible way); however, limiting an abstract idea to one field of use or adding token post-solution components does not make the concept patentable.• steps that are observable and verifiable	<ul style="list-style-type: none">• great extent to which use of the concept, as expressed in the method, would preempt its use in other fields; i.e., the claim would effectively grant a monopoly over the concept.• claim covers both known and unknown uses• claim effectively covers all possible solutions to a particular problem• steps are subjective or imperceptible



What is USPTO saying after *Bilski*?

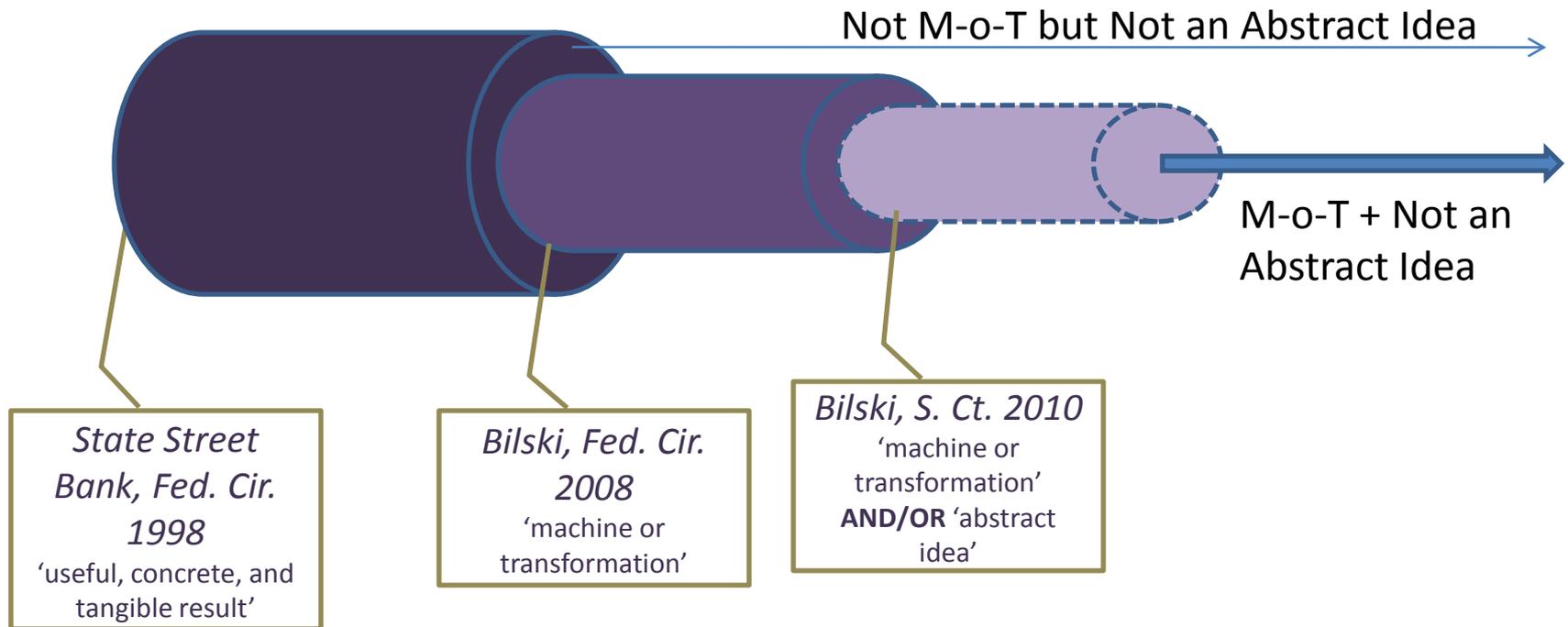
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- **Examples of general concepts** include, but are not limited to:
- Basic economic practices or theories (*e.g., hedging, insurance, financial transactions, marketing*);
 - Basic legal theories (*e.g., contracts, dispute resolution, rules of law*);
 - Mathematical concepts (*e.g., algorithms, spatial relationships, geometry*);
 - Mental activity (*e.g., forming a judgment, observation, evaluation, or opinion*);
 - Interpersonal interactions or relationships (*e.g., conversing, dating*);
 - Teaching concepts (*e.g., memorization, repetition*);
 - Human behavior (*e.g., exercising, wearing clothing, following rules or instructions*);
 - Instructing “how business should be conducted.”

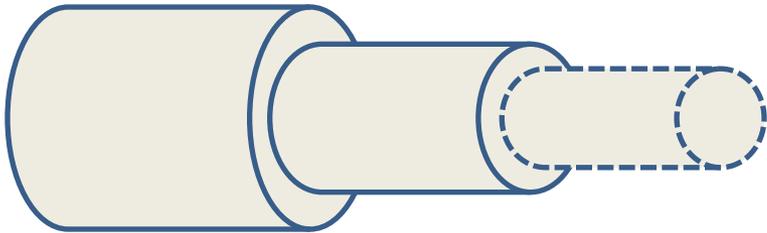


“Business Method” Invention

Narrower Passage Way? Will less “business method” applications survive prosecution?



“Business Method” Invention



Narrower Passage Way?

✓ “Business Method” inventions may still be patentable processes under § 101. No categorical exclusion of business method patents by the Supreme Court.

[At Fed. Cir., dissenting Judge Mayer argued that *Bilski* application was “not eligible for patent protection because it is directed to a method of conducting business.” He urged the adoption of a “technological standard for patentability.”]

▪ *Abstract Idea test*, an additional obstacle?

[At Fed. Cir., dissenting Judge Rader would also have found *Bilski* claims an unpatentable abstract idea.]

[Interim *Bilski* Guidance:

a claimed method that fails the machine or-transformation test may nonetheless be patent eligible (i.e., is not an abstract idea), and also, **a claimed method that meets the machine-or-transformation test may nonetheless be patent-ineligible** (i.e., is an abstract idea)].



Looking Forward

➤ Prosecution of “Business Method” Applications

- Machine-or-Transformation Test – still alive
 - Draft or amend the claim to have at least one essential step implemented by a machine (e.g., computer);
 - If possible, draft or amend the claim to include transformation in one or more essential steps;

- Watch for “Abstract Idea” Problems
 - Monopoly over a general concept?
 - Field of use limitation: not enough!



Looking Forward

- Challenge/Defend “Business Method” Patents
 - Machine-or-Transformation Test – still alive
 - Determine if the claim have at least one essential step implemented by a machine (e.g., computer);
 - Determine if the claim include transformation in one or more essential steps;
 - Watch for “Abstract Idea” Problems
 - Monopoly over a general concept?
 - Field of use limitation: not enough!



Looking Forward

- “Business Method” Patents Are Still Alive, But...
 - Likely, more “business method” patents will be successfully challenged through litigation (and reexamination?)
 - It is possible that less “business method” applications will issue as patents (USPTO may be strict in applying the Abstract Idea test).
- Watch for future case law developments
 - Will Federal Circuit develop other test(s)?
 - How will the courts apply the *Bilski* precedent?



Thank You

