



presents

Patentable Subject Matter: Bilski and the New PTO Interim Guidance

Strategies for Patent Process Claims in an Uncertain Environment

A Live 90-Minute Teleconference/Webinar with Interactive Q&A

Today's panel features:

Thomas J. Scott, Jr., Partner, **Goodwin Procter**, Washington, D.C.

Erika H. Arner, **Finnegan Henderson Farabow Garrett & Dunner**, Reston, Va.

Mark T. Garrett, Partner, **Fulbright & Jaworski**, Austin, Texas

Thursday, October 29, 2009

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1 pm Eastern

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***Bilski* Update**

October 29, 2009

Presented by Erika H. Arner

***In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (*en banc*)**

- The Test: A process is patentable under § 101 only if:
 - (1) it is tied to a particular machine or apparatus,
or
 - (2) it transforms a particular article into a different state or thing

***Bilski v. Kappos* at the Supreme Court**

- U.S. Supreme Court granted cert June 1, 2009
- Supreme Court Timeline
 - Petitioners’ brief filed July 30
 - Amicus curiae briefs supporting Petitioners or Neither Party were due August 6
 - Patent Office’s brief filed Sept. 25
 - Amicus curiae briefs supporting Patent Office were due October 2
 - Petitioners’ Reply Brief due October 26
 - Oral Arguments scheduled for Nov. 9
 - Supreme Court decision expected Spring 2010

Bilski v. Kappos at the Supreme Court

- Petitioners' Opening Brief
 - Machine-or-transformation test conflicts with Supreme Court precedent holding that patentable subject matter is broad and flexible
 - Machine-or-transformation test conflicts with Patent Act's definition of business method patents in 35 U.S.C. 273
 - A claim involving a fundamental principle is patent-eligible if it recites a practical application of the fundamental principle
 - Practical application: applied to a useful result; applied in an apparatus or product; applied in an art or process
 - The Bilski claims are patent-eligible under section 101

***Bilski v. Kappos* at the Supreme Court**

- Patent Office's Opening Brief
 - Section 101 protects only industrial and technological processes
 - Machine-or-transformation test is “framework”
 - Machine-or-transformation test has been the Supreme Court's definitive definition of process for over a century
 - Petitioners' practical application test has no limiting standard to prevent bad patents
 - Case only involves non-technological business methods
 - Software, biotechnology not affected
 - Only bad patents will be disrupted

***Bilski v. Kappos* at the Supreme Court**

- 17 *amicus curiae* briefs in support of Petitioners

Accenture and Pitney Bowes	Franklin Pierce Law School
AwakenIP LLC	Georgia Biomedical Partnership
Borland Software	Houston IP Law Association
Boston Patent Law Association	John P. Sutton, Esq.
Caris Diagnostics, Inc.	Novartis
Double Rock Corporation et al.	Timothy F. McDonough, PhD
Dr. Ananda Chakrabarty	University of South Florida
Eagle Forum & Legal Defense Fund	Washington State Patent Law Association
Entrepreneurial Software Companies	

Bilski v. Kappos at the Supreme Court

- 27 *Amicus curiae* briefs supporting neither party

20 Law and Business Professors	Legal On Ramp
AIPLA	Medtronic Inc.
AIPPI and AIPPI-US	Monogram Biosciences Inc. and Genomic Health
Austin IP Law Assoc.	On Time Systems
BIO, Advanced Medical Technology Association, Wisconsin Alumni Research Foundation and Regents of the University of California	PhRMA
Business Software Alliance	Prof. Kevin Emerson Collins
Conejo Valley Bar Association	Prometheus Labs
Dolby Laboratories	Raymond C. Meiers
Federal Circuit Bar Association	Regulatory DataCorp, American Express, Palm, Rockwell Automation, and SAP
FICPI	Robert R. Sachs and Daniel R. Brownstone
IBM	San Diego IP Law Association
Intellectual Property Law Assoc. of Chicago	Telecommunication Systems, Inc.
IPO	Teles AG
	Yahoo! Inc.

Bilski v. Kappos at the Supreme Court

■ 23 *Amicus curiae* briefs supporting Patent Office

11 Law Professors and AARP	Foundation for a Free Information Infrastructure
Adamas Pharmaceuticals and Tethys Biosciences	Prof. Lee Hollar and IEEE-USA
American Bar Association	IEEE-US and Prof. Hollar
American Insurance Association, The Hartford, Jackson National Life Insurance, Pacific Life Insurance, Sun Life Assurance, Transamerica Life Insurance	Internet Retailers (LL Bean, Overstock.com, J.C. Penney, Crutchfield, Newegg, Hasbro, Talbots)
American Medical Assoc., American College of Medical Genetics, American Society of Human Genetics, Mayo Clinic	IP Section of Nevada State Bar
Bank of America, Barclays Capital, The Clearing House Association, Financial Services Roundtable, Google, MetLife, Morgan Stanley	Knowledge Ecology International
Bloomberg L.P.	Mark Landesmann
CASRIP of Univ. of Washington School of Law	Profs. Menell and Meurer
Computer and Communications Industry Assoc.	Microsoft, Philips and Symantec
Entrepreneurial and Consumer Advocates	Red Hat
	Software & Information Industry Association
	Software Freedom Law Center
	William Mitchell College of Law IP Institute

***Amicus Curiae* Briefs – Software and Computer Industry**

**M-or-T test
too restrictive,
intangibles like
software should
be patentable**

**Computer-
implemented claims
are “technical” and
should be patentable**

**Software
is
unpatentable**

Borland Software
Business Software Alliance
Computer & Communications
Industry Association
Dolby Labs.

Entrepreneurial Software
Companies
IBM
IEEE-USA
Microsoft, Philips, Symantec

Red Hat
Software & Information
Industry Association
Software Freedom
Law Center

Amicus Curiae Briefs – Biotechnology and Medical Technology

M-or-T test
too restrictive,
Chakrabarty
“anything under the
sun” should apply

M-or-T test should
not apply to biotech
claims; should not
lump biotech/medical
methods with
business methods

Medical patents
raise ethical issues
for doctors;
scientific principles
cannot be patented

Caris Diagnostics,
Dr. Chakrabarty
Novartis
Univ. of South Florida
Monogram Biosciences

Biotechnology Industry Org.
Medtronic
PhRMA
Prometheus Labs.
Adamas Pharmaceuticals

American Medical Association,
Society of Human Genetics,
Mayo Clinic

***Amicus Curiae* Briefs – Services and E-Commerce Industries**

Business methods should remain patentable in today's information economy; M-or-T test is too rigid

Intangible process may be patentable if not abstract; a tie to a general purpose computer is not enough

Business methods are not patentable; novelty must be in machine or technology

Accenture & Pitney Bowes

Double Rock Corp.

Regulatory Data Corp., American Express, SAP, Palm Inc.

On Time Systems

Yahoo!

American Insurance Assoc.,

The Hartford, Pacific Life

Bank of America, Google, MetLife, Morgan Stanley

Bloomberg

L.L. Bean, Overstock.com, J.C. Penney's, Crutchfield

Amicus Curiae Briefs – Bar Associations

“Anything under the sun” except abstract ideas, laws of nature, natural phenomena

M-or-T test is sufficient but not necessary

Abstract business methods, tax planning methods not patentable but M-or-T is not the only test

Houston IP Law Assoc.

Wash. State Patent Law Assoc.

AIPLA

Austin IP Law Assoc.

Conejo Valley Bar Assoc.

IP Law Assoc. of Chicago

Nevada State Bar IP Section

Boston Patent Law Assoc.

IPO

San Diego IP Law Assoc.

Federal Circuit Bar Assoc.

ABA

***Amicus Curiae* Briefs – Academia**

**M-or-T test will
harm innovation,
application of an
abstract idea
maybe patented**

20 Law and Business Professors
(Prof. Mark Lemley)
Prof. Kevin Emerson Collins
Franklin Pierce Law Center

**Constitutional “useful
arts” excludes business
methods; must show
invention in the
application/machine**

Univ. of Washington Law
School (CASRIP)
11 Law Professors and AARP
(Prof. Joshua Sarnoff)
Prof. Menell and Meurer
Wm. Mitchell College of Law

-
- *Bilski* impact on litigation

Bilski Impact on Litigation

- *Fort Properties, Inc. v. American Master Lease, LLC*, (C.D. Cal. Jan. 22, 2009)
 1. A method of creating a real estate investment instrument adapted for performing tax-deferred exchanges comprising:
 - aggregating real property to form a real estate portfolio;
 - encumbering the property in the real estate portfolio with a master agreement; and
 - creating a plurality of deedshares by dividing title in the real estate portfolio into a plurality of tenant-in-common deeds of at least one predetermined denomination, each of the plurality of deedshares subject to a provision in the master agreement for reaggregating the plurality of tenant-in-common deeds after a specified interval.

Bilski Impact on Litigation

- *Fort Properties* (cont.)
- District Court granted summary judgment of invalidity under § 101 in light of *Bilski*
 - Claims involve only transformation or manipulation of legal obligations and relationships
 - Patentee admitted during prosecution that claimed method need not be performed by a computer
 - Even if “creation” of deedshares is transformative, the deedshares are not physical objects or substances
- Appealed to Federal Circuit; stayed pending Supreme Court decision in *Bilski*

Bilski Impact on Litigation

- *CyberSource Corp. v. Retail Decisions, Inc.* (N.D. Cal. March 27, 2009)
 2. A computer readable medium containing program instructions for detecting fraud in a credit card transaction between a consumer and a merchant over the Internet, wherein execution of the program instructions by one or more processors of a computer system causes the one or more processors to carry out the steps of:
 - obtaining credit card information relating to the transactions from the consumer;
 - verifying the credit card information based upon . . . ;
 - obtaining information about other transactions that have utilized an Internet address that is identified with the credit card transaction;
 - constructing a map of credit card numbers based upon the other transactions; and
 - utilizing the map of credit card numbers to determine if the credit card transaction is valid.

Bilski Impact on Litigation

- *CyberSource* cont.
- District Court granted summary judgment of invalidity under § 101 in light of *Bilski*
 - Both “computer readable medium” claim 2 and method claim 3 fail machine-or-transformation test
 - “Manipulation” is not the same as “transformation” required by *Bilski* test
 - Reciting “over the Internet” is not a tie to a specific machine
 - Dismissed argument that *In re Beauregard* creates a special “computer readable medium” claim exempt from machine-or-transformation test
- Appealed to the Federal Circuit; stayed pending Supreme Court decision in *Bilski*

Bilski Impact on Litigation

- *Every Penny Counts, Inc. v. Bank of America Corp. et al.* (M.D. FL. May 27, 2009)

A system, comprising:

a network;

entry means ... for entering into the network an amount being paid in a transaction by a payor;

identification entering means ...for entering an identification of the payor;

said network including *computing means* having data concerning the payor including an excess determinant established by the payor for the accounts;

said computing means ... for determining an excess payment on the basis of the determinant established by the payor, and

said computing means ... for apportioning, at least a part of the excess payment amount

Bilski Impact on Litigation

- *Every Penny Counts* (cont.)
- District Court granted summary judgment of invalidity under § 101 in light of *Bilski*
 - EPC did not argue transformation
 - Claim is not tied to a particular machine
 - “[I]t is beyond question that the patented process is not tied to a particular computer or other device.”
 - Machines for data input, output, calculations do not impose any limit on the process itself
 - Use of machine is “insignificant extra solution activity”
- Appealed to the Federal Circuit; stayed pending Supreme Court decision in *Bilski*

Bilski Impact on Litigation

- *DealerTrack v. Huber et al.* (C.D. Cal. July 7, 2009)
 1. A computer aided method of managing a credit application, the method comprising the steps of:
 - receiving credit application data from a *remote application entry and display device*;
 - selectively forwarding the credit application data to *remote funding source terminal devices*;
 - forwarding funding decision data from at least one of the remote funding source terminal devices to the remote application entry and display device . . . ;
 - sending at least a portion of a credit application to more than one of said remote funding sources sequentially until a finding source returns a positive funding decision

Bilski Impact on Litigation

- *DealerTrack* (cont.)
- District Court granted summary judgment of invalidity under § 101 in light of *Bilski*
 - DealerTrack did not argue transformation
 - Claim is not tied to a particular machine
 - Claimed devices were construed to cover “any device, e.g., personal computer or dumb terminal”
 - These are not particular machines; the patent does not specify how the devices are specially programmed

***Bilski* Impact on Litigation**

- *Research Corp. Technologies v. Microsoft* (D. Ariz. July 28, 2009)
 1. A method for the halftoning of gray scale images by utilizing a pixel-by-pixel comparison of the image against a blue noise mask in which the blue noise mask is comprised of a random non-deterministic, non-white noise single valued function which is designed to produce visually pleasing dot profiles when thresholded at any level of said gray scale images.
- District Court: invalid under § 101 in light of *Bilski*
 - Claims do not recite a particular machine; “comparison” could be done with pencil and paper
 - No transformation – no visual depiction or display required by claim

Bilski Impact on Litigation

- *RCT v. Microsoft* (cont.)

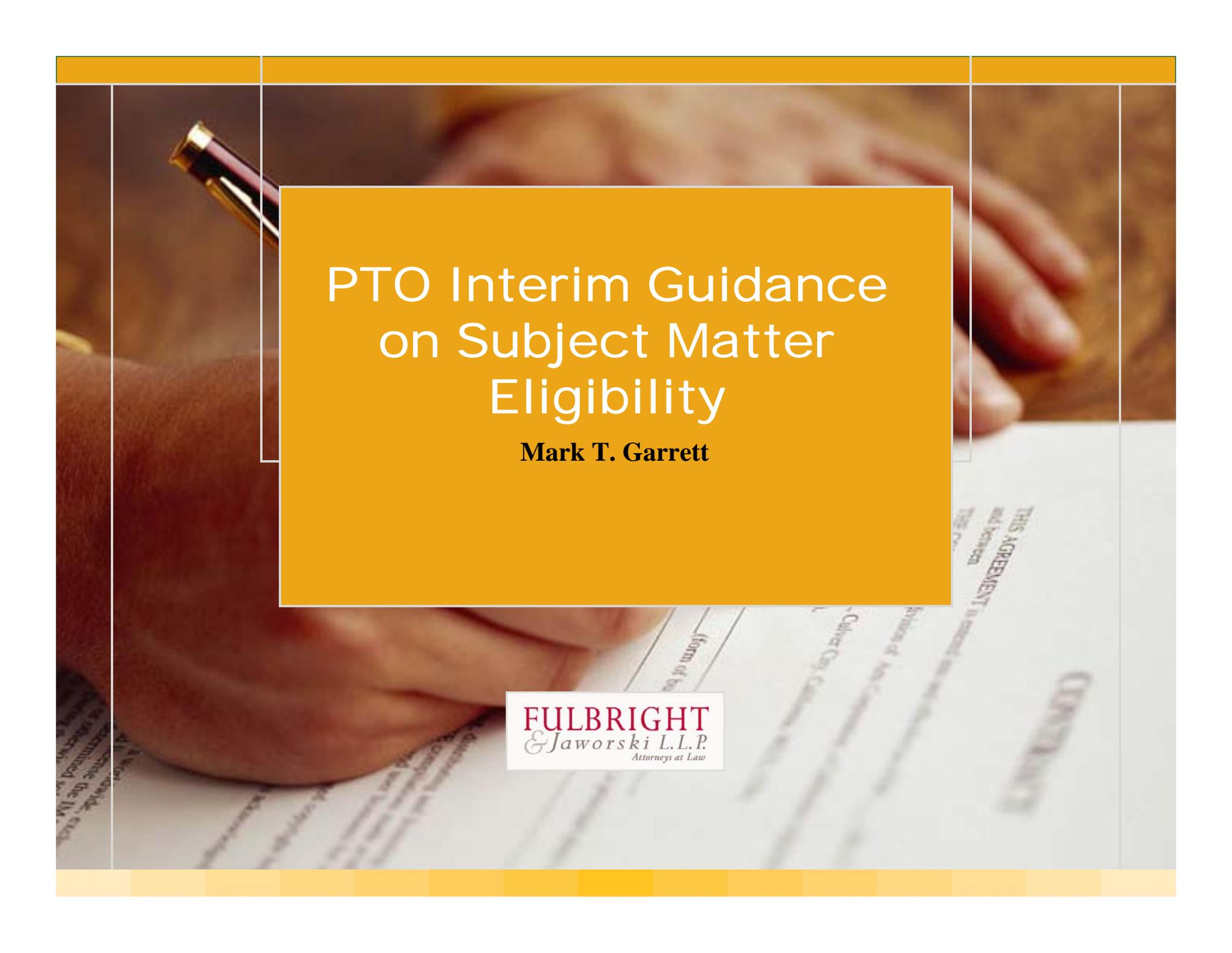
29. *Apparatus* for the halftoning of color images comprising a *comparator* for comparing, on a pixel-by-pixel basis, a plurality of color planes of said color image against a blue noise mask in which the blue noise mask is comprised of a random non-deterministic, non-white noise single valued function which is designed to provide visually pleasing dot profiles when thresholded at any level of said color images, wherein *an output of said comparator is used to produce a halftoned image*.

- District Court: **valid** under § 101 in light of *Bilski*

- Claims do not recite a particular machine; “apparatus” and “comparator” do not require particular machines
- But claims recite patent-eligible transformation of data – the color image is processed to produce a “halftoned image”

Thank you.

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PTO Interim Guidance on Subject Matter Eligibility

Mark T. Garrett

FULBRIGHT
& Jaworski L.L.P.
Attorneys at Law

Overview

- ❖ August 24, 2009 New Interim Patent Subject Matter Eligibility Examination Instructions
 - criteria for subject matter eligibility
 - examples of practical applications in the four categories
 - examination procedure
 - example claims
- ❖ The Board's treatment of *Bilski*
 - empirical data
 - inconsistencies with New Instructions

Subject Matter Eligibility Criteria

- ❖ 1) Is the claim directed to one of the four patent-eligible subject matter categories: process, machine, manufacture, or composition of matter?
 - process, machine, manufacture, composition of matter
 - NO: transitory forms of signal transmission, naturally-occurring organism, legal contractual agreement, game defined by a set of rules, computer program *per se*, company.
- ❖ 2) Does the claim wholly embrace a judicially recognized exception (abstract ideas, mental processes, substantially all practical uses of a law of nature or a natural phenomenon), or is it a particular practical application of a judicial exception?
 - “A ‘practical application’ relates to **how** a judicially recognized exception is applied in a real world product or a process, and not merely to the result achieved by the invention.”

Examples of Particular Practical Applications (PPAs)

- ❖ Eligible machines, manufactures, and compositions of matter
 - Non-naturally occurring products typically formed of tangible elements or parts that embody a particular or specific, tangible practical application of the invention
 - ❖ “often self-evident based on the claim limitations”
 - ❖ watch out for claims that imply products (“a machine comprising”) but then fail to include tangible limitations, instead wholly embracing a concept
 - examples
 - ❖ a machine that operates in accordance with $F=ma$ - **NO**
 - ❖ a non-transitory, tangible computer readable storage medium - **YES**
 - NOTEWORTHY:
 - ❖ Functional/non-functional descriptive material relates to prior art

Examples of Particular Practical Applications (cont'd)

❖ Eligible processes

● Use the M-or-T test

❖ *new guidance*

● machine

- ❖ should implement the process, and not merely be an object upon which process operates
- ❖ claim should be clear as to how the machine implements the process; “a machine implemented process” is not enough
- ❖ general purpose computer may be sufficiently “particular” when programmed to perform the process steps, thus creating a special purpose computer

● article

- ❖ must be particular, “meaning it can be specifically identified”
- ❖ data (that represents a physical object or substance” can be specifically identified by indicating:
 - what the data represents
 - particular type or nature of the data
 - how or from where the data was obtained

Examples of Particular Practical Applications (cont'd)

❖ Eligible processes

- Use the M-or-T test

- ❖ *new guidance* (cont'd)

- transformation

- ❖ new or different function or use can be evidence that an article has been transformed

- ❖ transformation of electronic data exists when the nature of data has changed such that it has a different function or is suitable for a different use

- insignificant “extra-solution” activity

- ❖ activity that is not central to the purpose of the method invented by the applicant

Examining Procedure

- ❖ Determine BRI (broadest reasonable interpretation)
- ❖ Determine if claim falls within one of the four categories
- ❖ Determine if claim is directed to PPA of judicial exception
 - for products
 - ❖ follow the flow chart
 - look for man-made tangible embodiment with a real world use that does not cover substantially all practical uses of judicial exception
 - for processes
 - ❖ follow the flow chart
 - NOTEWORTHY
 - ❖ machines and transformations can be inherent, and examiner should identify same on record if unclear
 - ❖ step (singular) or steps can invoke the machine or article

Sample Claims



- ❖ Product example – judicial exception claimed
- ❖ Claim 2. A machine for evaluating search results, comprising: a microprocessor coupled to a memory, wherein the microprocessor is programmed to evaluate search results by:
 - sorting the results into groups based on a first characteristic;
 - ranking the results based on a second characteristic using a mathematical formula [f]; and
 - comparing the ranked search results to a predetermined list of desired results to evaluate the success of the search.
- ❖ Is the claim directed to a machine? *YES*
- ❖ Does it recite a judicial exception? *YES - mathematical algorithm.*
- ❖ Is it directed to a practical application? *YES - evidenced by the tangible embodiment of the microprocessor for evaluating search results, which is a real world use.*
- ❖ Is the claim directed to substantially all practical applications of the algorithm? *NO – the algorithm is limited to use in evaluating search results in the particular claimed machine that is programmed to perform certain steps. As there are other ways to use the algorithm, for example, with different programmed steps, not every use is covered by the claim.*

Sample Claims



- ❖ Product example – computer-readable medium
- ❖ Claim 3. A non-transitory computer-readable storage medium with executable program stored thereon, wherein the program instructs a microprocessor to perform the following steps:
 - sorting results of a search into groups based on a first characteristic;
 - ranking the results based on a second characteristic using a mathematical formula [f]; and
 - comparing the ranked results to a predetermined list of desired results to evaluate the success of the search.
- ❖ Is the claim directed to a manufacture? *YES*
- ❖ Does it recite a judicial exception? *YES - mathematical algorithm.*
- ❖ Is it directed to a practical application? *YES - evidenced by the tangible embodiment of the computer readable storage medium.*
- ❖ Is the claim directed to substantially all practical applications of the algorithm? *NO – there are other substantial uses of the algorithm than using it in evaluating search results in a program stored on the particular claimed manufacture. As there are other ways to use the algorithm, for example, with different programmed steps, not every use is covered by the claim.*

Sample Claims



- ❖ Process example – claimed tied to a particular machine
- ❖ Claim 5. A method of evaluating search results, comprising:
 - sorting results of a search into groups based on a first characteristic;
 - ranking the results based on a second characteristic; and
 - comparing, using a microprocessor, the ranked results to a predetermined list of desired results to evaluate the success of the search.
- ❖ Under the BRI, the microprocessor must be programmed in a particular manner to perform the claimed comparing step.
- ❖ Is there a particular machine? *YES – under the BRI, the step of comparing requires a particularly programmed microprocessor.*
- ❖ Does the machine impose a meaningful limit and is it more than insignificant extra-solution activity? *YES – the step of comparing is central to the method invented by applicant – it is not a mere field-of-use or insignificant extra-solution activity.*

Empirical Data from the Board

- ❖ 72 decisions in which *Bilski* played a role in the rejection:
 - No decision cites the Aug. 24, 2009 Interim Instructions
 - 35 new rejections
 - ❖ In last 7 months:
 - 17 new rejections of methods
 - 5 new rejections of computer readable media/software/data structures
 - 2 new rejections of machines/systems
 - 44 affirmed rejections
 - ❖ In last 7 months:
 - 21 affirmed rejections of methods
 - 10 affirmed rejections of computer readable media/software/data structures
 - 3 affirmed rejections of machines/systems
 - 24 reversed rejections
 - ❖ In last 7 months:
 - 10 reversed rejections of methods
 - 5 reversed rejections of computer readable media/software/data structures
 - 7 reversed (one vacated) rejections of machines/systems

Decisions that Contrast with New Instructions (Example Claim 2)

- ❖ *Ex parte Gutta*, Appeal No. 2008-4366 (Aug. 10, 2009)
 - 14. A system for identifying one or more mean items for a plurality of items, J, each of the items having at least one symbolic attribute having a symbolic value, the system comprising:
 - a memory for storing computer readable code;
 - a processor operatively coupled to the memory, the processor configured to:
 - compute a variance of the symbolic values of the plurality of items relative to each of the items; and
 - select the at least one mean item having a symbolic value that minimizes the variance.
- ❖ Is the claim directed to a machine? *YES*
- ❖ Does it recite a judicial exception? *YES*
- ❖ Is it directed to a practical application? *NO* – “*Other than [reciting] a memory and a processor . . . , we conclude that claim 14 fails to recite any tangible practical application in which the mathematical algorithm is applied that result in a real-world use.*”
- ❖ Is the claim directed to substantially all practical applications of the algorithm? *YES* – “*claim 14 encompasses substantially all practical applications.*”



Decisions that Contrast with New Instructions (Example Claim 3)

- ❖ *Ex parte Forman*, Appeal No. 2008-5348 (Aug. 17, 2009)
 - 15. A memory embodying computer program code for feature selection for a plurality of categories, the computer program code when executed by a processor, causing the processor to:
 - for each category, rank features according to feature ranking for two-category problems; and
 - until the predetermined number of features has been selected:
 - pick a category c;
 - select a feature based on the ranking for category c; and
 - add the selected feature to an output list if not already present in the output and remove the selected feature from further consideration for the category c.
- ❖ Is the claim directed to a manufacture? *YES*
- ❖ Does it recite a judicial exception? *YES*
- ❖ Is it directed to a practical application? *NO – no discussion of tangible nature of memory*
- ❖ Is the claim directed to substantially all practical applications of the algorithm? *YES – “sheer breadth of claim 15 encompasses substantially all practical applications of the algorithm.”*



Decisions that Contrast with New Instructions (Example Claim 5)



- ❖ *Ex parte Cornea-Hasegan*, No. 2008-4742 (Jan. 13, 2009)
 - 1. A method, comprising:
 - normalizing by a processor operands a, b, and c for a floating-point operation;
 - predicting by the processor whether result d of said floating-point operation on said a, b, c might be tiny;
 - if so, then scaling by the processor said a, b, c to form a', b', c';
 - calculating by the processor result d' of said floating-point operation on said a', b', c';
 - determining by the processor whether said d is tiny based upon that result d';
 - if so, then calculating by the processor said d using software; and
 - if not, then calculating by the processor said d using floating-point hardware.
- ❖ Board: “The recitation of a processor in itself, however, does not tie the process steps to a particular machine. In other words, the recitation of a processor does not limit the process steps to any specific machine or apparatus.”
- ❖ “The recitation of a processor in combination with purely functional recitations of method steps, where the functions are implemented using an unspecified algorithm, is insufficient to transform otherwise unpatentable method steps into a patent eligible process.”

Decisions that Contrast with New Instructions (machine must do the work)

- ❖ *Ex parte Casati*, Appeal No. 2009-5786 (July 31, 2009)
 - 1. A method of analyzing data and making predictions, comprising:
 - reading process execution data from logs for a business process;
 - collecting the process execution data and storing the process execution data in a memory defining a warehouse;
 - analyzing the process execution data;
 - generating prediction models in response to the analyzing; and
 - using the prediction models to predict an occurrence of an of an exception in the business process.

- ❖ Board: *Bilski* rejection reversed because person of ordinary skill in the art “would understand that the claimed storing of process execution data in a memory defining a warehouse constitutes patent eligible subject matter . . . because the memory/warehouse element ties the claims to a particular machine or apparatus.”

- ❖ From New Instructions: “The machine should implement the process, and not merely be an object upon which the process operates.”



*Best Practices re: Statutory
Subject Matter Rejections*

Charting a Course in Uncertain Waters

Thomas J. Scott, Jr.

October 29, 2009

Best Practices

- Conventional wisdom is that the Supreme Court is unlikely to affirm the “machine or transformation” test in *Bilski v. Doll*.
- Amending the claims to place them in condition for allowance under the current Federal Circuit’s *Bilski* standard may lead to lost coverage under the standard to be issued by the Supreme Court.

Scenarios To Consider

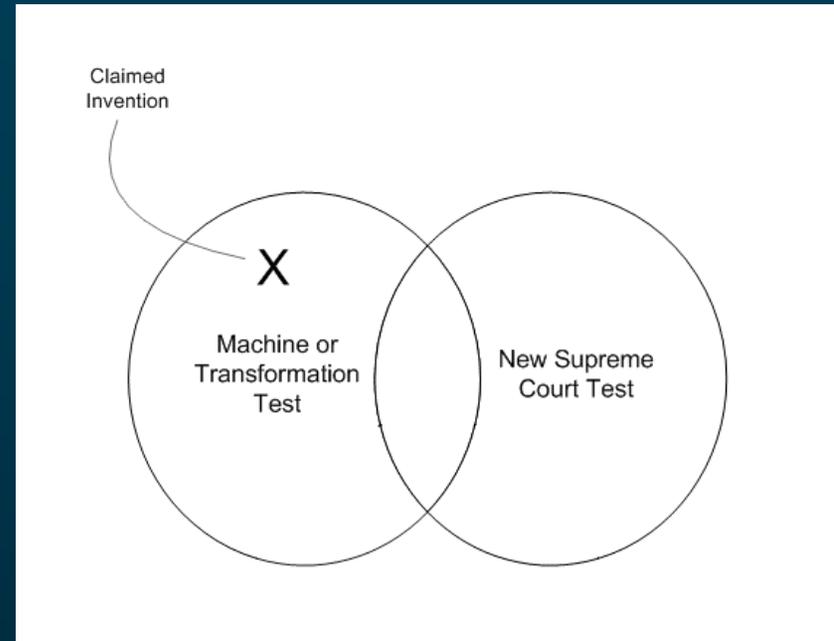
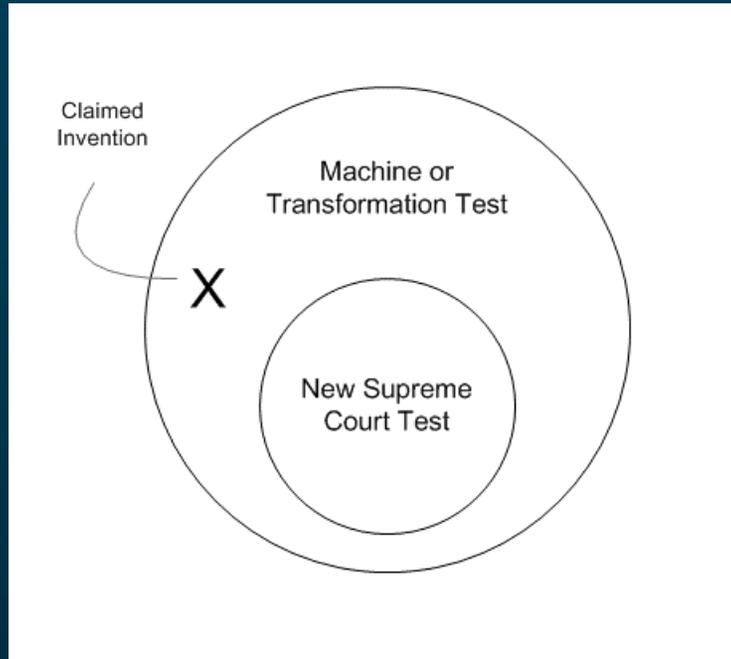
Scenario #1

Applicant receives a process patent with the claims deemed patentable under the *Bilski* machine or transformation test.

Supreme Court overturns *Bilski*, and recites a different test to be used in determining patentability.

The patentee's claims are INVALID under the new test and must reexam or reissue the claims to protect the invention going forward.

Patent Invalidated



- Either the Supreme Court test is narrower than the machine or transformation test
- Or the Supreme Court test includes some, but not all, patentable material under the machine or transformation test

Scenarios To Consider

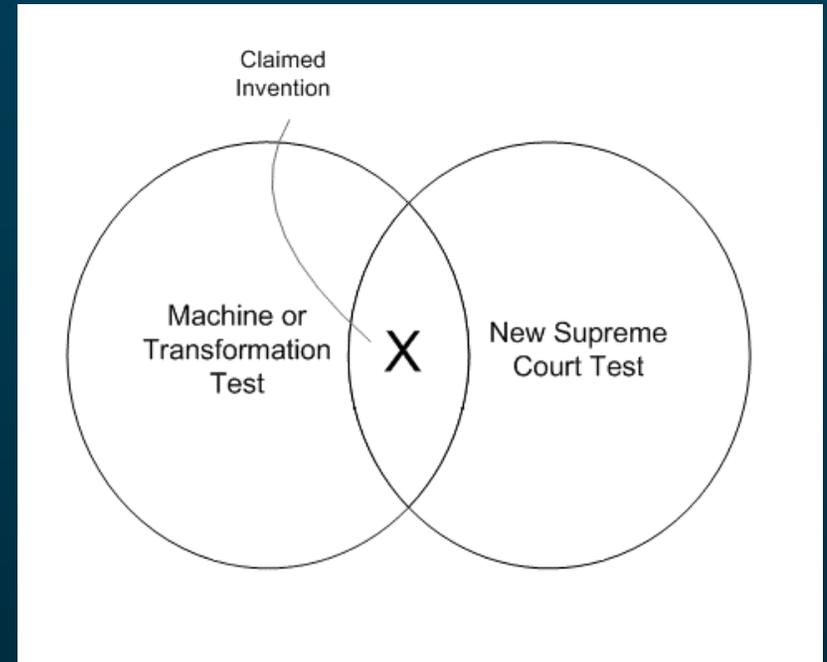
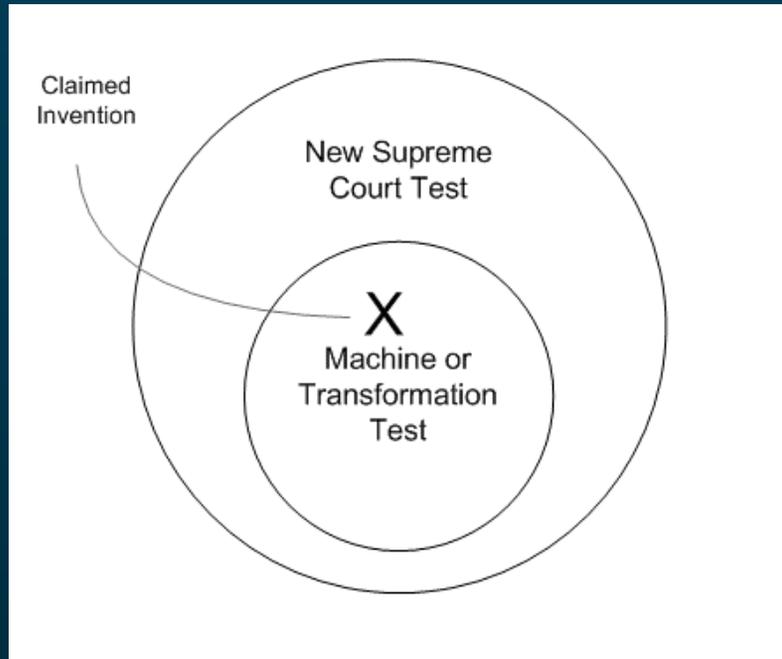
Scenario #2

Applicant receives a process patent with the claims deemed patentable under the *Bilski* machine or transformation test.

The Supreme Court overturns *Bilski*, and recites a different test to be used in determining patentability.

The patentee's claims remain VALID under the new test, however, some patentable subject matter may not be covered by claims.

Patent Remains Valid



- Either the Supreme Court test is broader than the machine or transformation test
- Or the Supreme Court test includes some, but not all, patentable material under the machine or transformation test

Practice Tips

- Draft claims likely to remain patentable under any standard that the Supreme Court may determine to be the correct standard

Many suggest that the “machine or transformation” test is the narrowest of possible process claim interpretations, and that by meeting the “machine or transformation” test, the claims will naturally meet any other test.

- Prudent to file a continuation in applications where the claims were amended to overcome a *Bilski* rejection, so that if the Supreme Court broadens the standard you may add broader claims
- Useful to draft claims clearly directed to different standards, as the Office may examine application after the Supreme Court decides *Bilski*

Practical Tips for meeting “machine or transformation”

- Tie the process to a particular machine. However, unnecessary to do for every step.
 - A general purpose computer becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from software.
- Tying process to a particular machine not guaranteed to make the claim patentable under *Bilski* – also must show that the claim does not preclude other uses of algorithm.
 - Take care not to establish detrimental prosecution history.
- Modify claim to “transform an article” into a different state or thing. Consider how to modify data to achieve representation of physical entity.
- Establish practical application. See PTO Guidelines.
 - Do not tie the limitation to a “field of use” or to insignificant “extra solution” activity.

Claim Example

Claim 1. A method for factoring a number comprising:
Receiving an integer n to be factored;
Receiving a pseudo-random function $f(x)$ modulo n ;
Setting a first value to be 1;
Setting a second value to be 2;
Setting a third value to be 2;
While the first value is equal to 1, repeatedly performing:
 Setting the second value to be the output of the pseudo-random function $f(x)$ with the second value as input;
 Setting the third value to be the output of the pseudo-random function $f(x)$ with the third value as input;
 Re-setting the third value to be the output of the pseudo-random function $f(x)$ with the third value as input;
 Setting the first value to be the greatest common denominator of the integer n and the absolute value of the second value minus the third value; and
Returning the first value as a factor of the integer n .

Claim Example

- The claim example on the previous slide would be rejected under the *Bilski* standard because the claim is drawn to an abstract idea (using a mathematical algorithm to factor a number – Pollard’s Rho algorithm 1975).
- Some suggest that the claim can be amended to make it statutory under *Bilski* by claiming a device/machine instead of a method, and therefore removing the need to undergo the *Bilski* process analysis.
 - In theory, this would prevent the claim from being an abstract idea with no practical application.
- Confusion over this issue has manifested itself throughout the patent community.

“Machine” Equivalent Example

Claim 1. A [[method for factoring a number]] device using a computer processor and executing the steps comprising:

Receiving an integer n to be factored;

Receiving a pseudo-random function $f(x)$ modulo n ;

Setting a first value to be 1;

Setting a second value to be 2;

Setting a third value to be 2;

While the first value is equal to 1, repeatedly performing:

 Setting the second value to be the output of the pseudo-random function $f(x)$ with the second value as input;

 Setting the third value to be the output of the pseudo-random function $f(x)$ with the third value as input;

 Re-setting the third value to be the output of the pseudo-random function $f(x)$ with the third value as input;

 Setting the first value to be the greatest common denominator of the integer n and the absolute value of the second value minus the third value; and

Returning the first value as a factor of the integer n .

Claim Example

- However, this logic remains suspect, because, although claim is directed to a machine, still effectively preempts use of the algorithm. See PTO Guidelines.
 - One could theoretically compute the algorithm by hand, but for some cases a computer must be involved because of the number of steps necessary.
- Another approach is to tie method to a particular machine.

Tied to a Machine Example

Claim 1. A method performed on a general purpose computer incorporating sub-modules deployed within the computer performing the following steps for factoring a number comprising:

Receiving an integer n to be factored by an input module;

Receiving a pseudo-random function $f(x)$ modulo n by the input module;

Setting a first value to be 1 by an execution module;

Setting a second value to be 2 by the execution module;

Setting a third value to be 2 by the execution module;

While the first value is equal to 1, repeatedly performing by the execution module :

Setting the second value to be the output of the pseudo-random function $f(x)$ with the second value as input;

Setting the third value to be the output of the pseudo-random function $f(x)$ with the third value as input;

Re-setting the third value to be the output of the pseudo-random function $f(x)$ with the third value as input;

Setting the first value to be the greatest common denominator of the integer n and the absolute value of the second value minus the third value; and

Returning the first value as a factor of the integer n by an output module.

Tied to a Machine

- *Questions to Consider*
- Does tying to a machine example effectively preempt the use of the algorithm on a general purpose computer?
- Does general purpose computer become specific purpose computer now that it is performing the specific method?
- Another approach is to “transform an article.”

Transformation of an Article Example

Claim 1. A method for [[factoring a number]] converting a ciphertext to a plaintext by solving for a key by factoring a number, the method comprising:

Receiving an integer n to be factored;

Receiving a pseudo-random function $f(x)$ modulo n ;

Setting a first value to be 1;

Setting a second value to be 2;

Setting a third value to be 2;

While the first value is equal to 1, repeatedly performing:

Setting the second value to be the output of the pseudo-random function $f(x)$ with the second value as input;

Setting the third value to be the output of the pseudo-random function $f(x)$ with the third value as input;

Re-setting the third value to be the output of the pseudo-random function $f(x)$ with the third value as input;

Setting the first value to be the greatest common denominator of the integer n and the absolute value of the second value minus the third value; [[and]]

Setting the key to be [[Returning]] the first value [[as a factor of the integer n .]]; and

- Using the key to covert the ciphertext to plaintext.

Transformation of an Article

- *Questions to Consider*
- If exclusive known use of the algorithm is to convert a ciphertext to a plaintext, does the previous example effectively preempt use of algorithm?
- Is ciphertext an article within the meaning of the machine or transformation test?

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Thank You

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