

# Software Patents

Presented by  
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# Patentable Subject Matter

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- **35 U.S.C. § 101**
- **Patentable: a process or method**
- **Software is patentable as a process**



# Patent versus Copyright

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- **Software Patent protection would be broader than a Copyright**
- **Software Copyright protects form of expression [the code] but would not prevent someone from writing different code to perform the same steps**



# Patent versus Trade Secret

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- If your software would never become public [a proprietary process only you use] then a patent would be undesirable
- If you sell products or services using the software and the steps of the software would be discoverable by competitors, a software patent could be helpful.



# Patentable Subject Matter

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- Not patentable: laws of nature, natural phenomena, pure algorithms
- Where do you draw the line in software?



## ***In re Bilski* (Fed. Cir. 2008)**

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- **Biggest Software Case in many years**
- **On appeal to the US Supreme Court**
- **Decision due this year**
- **Likely to change the law**



# ***In re Bilski* (Fed. Cir. 2008)**

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**Invention:**

**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; ...[continued]**



## ***In re Bilski* (Fed. Cir. 2008)**

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



# **In re Bilski (Fed. Cir. 2008)**

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- **Machine-or-Transformation Test**
- **To be patentable, a process must**
  - (1) be tied to a particular machine or apparatus, or**
  - (2) transform a particular article into a different state or thing.**



## ***In re Bilski* (Fed. Cir. 2008)**

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- Is a personal computer or server a “particular machine” under *Bilski*?
- Probably not. There should be some other machine or process besides a personal computer.



## ***In re Bilski* (Fed. Cir. 2008)**

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- **Cases decided after *Bilski* holding patents invalid covering “mental steps”:**
  - computer aided method of managing a credit application
  - system for consumers to donate to charity at a point of sale terminal
  - method for detecting Internet credit card fraud
  - method for performing tax-deferred real estate exchanges



## ***In re Bilski* (Fed. Cir. 2008)**

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- **A few examples of what could satisfy the “particular machine” part of the test:**
  - **A manufacturing machine driven by a computer**
  - **An automobile navigation system**
  - **Software for controlling a medical device**



## ***In re Bilski* (Fed. Cir. 2008)**

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- Special exception in *Bilski* : *In re Abele*
- Improvement to a CT-Scanner transforming data into an image
- Electronic transformation of the data itself into a visual depiction in *Abele* was patentable
- Transformation of the underlying physical object that the data represented not necessary



## ***In re Bilski* (Fed. Cir. 2008)**

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- **Will it be sustained by the Supreme Court?**
  - **Unclear**
  - **Many believe the Supreme Court granted review in order to change the lower court ruling**



## ***In re Bilski* (Fed. Cir. 2008)**

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- **Is it correct?**
  - ***Bilski* court admitted its Machine-or-Transformation test might be too rigid**
  - ***Bilski* court invited the Supreme Court to correct it**

# ***Benson v. Gottschalk,*** **U.S. Su. Ct. (1972)**

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- **Invention at issue**
- **Converting data in binary-coded decimal ("BCD") format to pure binary format via an algorithm in software**



# ***Benson v. Gottschalk, U.S. Su. Ct. (1972)***

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- **“Because the algorithm had no uses other than those that would be covered by the claims (i.e., any conversion of BCD to pure binary on a digital computer), *the claims pre-empted all uses of the algorithm and thus they were effectively drawn to the algorithm itself.*” *Bilski***



# Benson v. Gottschalk, U.S. Su. Ct. (1972)

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- “[O]ne may not patent an idea. But, in practical effect, that would be the result if the formula for converting BCD numerals to pure binary numerals were patented in this case. The mathematical formula involved here has *no substantial practical application except in connection with a digital computer,...*



# ***Benson v. Gottschalk,*** **U.S. Su. Ct. (1972)**


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- . . . which means that, if the judgment below is affirmed, the patent would **wholly preempt the mathematical formula and, in practical effect, would be a patent of the algorithm itself.**
- **Patent Denied**

# ***Diamond v. Diehr,*** **U.S. Su. Ct. (1981)**

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- Use of Arrhenius Equation in curing rubber
- “[Steps] include installing rubber in a press, closing the mold, constantly determining the temperature of the mold, constantly recalculating the appropriate cure time through the use of the formula and a digital computer, and automatically opening the press at the proper time.”



# ***Diamond v. Diehr,*** **U.S. Su. Ct. (1981)**

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- “[The inventors] ... seek patent protection for a process of curing synthetic rubber using a ... well-known mathematical equation, but *they do not seek to preempt the use of that equation.* Rather, they seek only to *foreclose from others the use of that equation in conjunction with all of the other steps in their claimed process.*”

# ***Diamond v. Diehr,*** **U.S. Su. Ct. (1981)**

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- “[O]ne would still be able to use the Arrhenius equation in *any process not involving curing rubber*, and more importantly, even in *any process to cure rubber that did not include performing all of the other steps in their claimed process.*”



# What's Next?

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- **There are thousands of software patents, many which do not meet the Machine-or-Transformation Test.**
- **Are these all invalid?**
- **Probably not**



# What's Next?

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- **The Supreme Court will create a new rule governing patentability of software**
  - **Data Conversion to images**
  - **Software controlling a physical process**
  - **“Mental steps” – do they control a machine other than a personal computer?**
  - **Lots of Gray Areas**



# What's Next?

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- Beyond that....
- ... stay tuned



# Contact

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