



## Managing Intellectual Property

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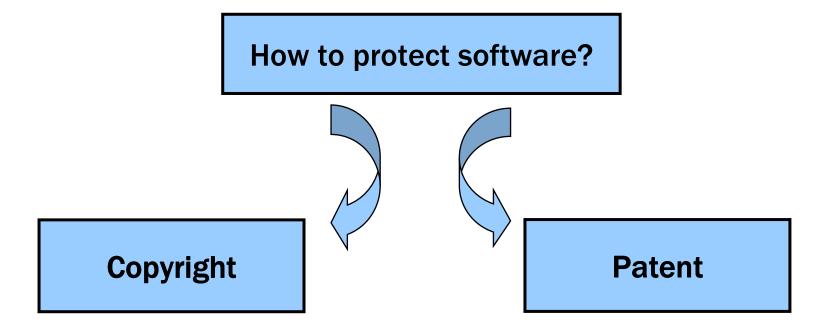


## Intellectual Property

- Intellectual property refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce.
- Examples: methods (how to do or 'know-how'),
   software, developments, etc.



### Protecting Intellectual Property







## Copyright

- Copyright is based on international agreements
- Any software written is automatically covered by copyright
- Prevents from copying the source code
- If the code is copied without a license, the author has the right to claim compensation





#### **Patent**

- Different from Copyright
- Patents are not granted automatically
- Patent prevents others from copying a claimed invention (broader scope than in copyright)
- Patent protection is geographically limited
- Different countries have different patent laws
- Patent protection generally lasts for up to 20 years



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# Is Software Patentable? EU/UK View

**Invention** 

Susceptible of industrial application, new and involve an inventive step?

Of a technical character?

Concerned with a technical problem?

Has technical features?

**Patentable** 

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# Is Software Patentable? EU/UK View

#### Not to be regarded as inventions:

- methods for doing business
- mathematical methods
- presentations of information
- programs for computers

However...





However, a product or a method which is of a technical character may be patentable, even if the claimed subject-matter defines or at least involves a business method, a computer program, etc.

A computer program is considered to have a technical character, if it causes, when run on a computer, a technical effect which may be known in the art but which goes beyond the "normal" physical interactions between program and computer.





- Initially not, because by statute patents can only be granted to "processes, machines, articles of manufacture, and compositions of matter".
- Changed in 1981 after the Supreme Court case, Diamond v. Diehr. The Supreme Court stated that in this case, the invention was not merely a mathematical algorithm, but was a process for molding rubber, and hence was patentable.





The invention, which is only a mathematical algorithm, such as a computer program designed to convert binary-coded decimal numbers into binary numbers, cannot be granted a patent.

If the invention utilizes the computer to manipulate numbers that represent concrete, real world values (such as a program that interprets electrocardiograph signals to predict arrhythmia or a program that analyzes seismic measurements), then the invention is a process relating to those real world concepts and is patentable.



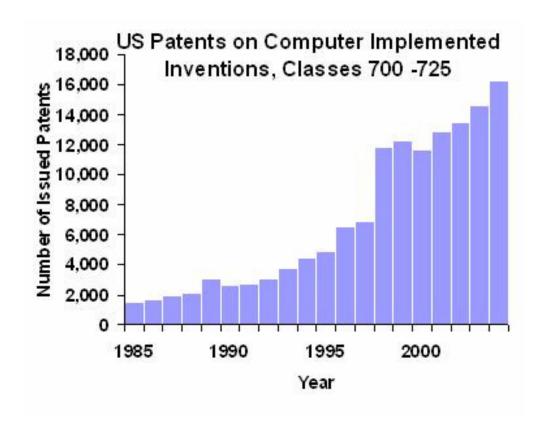


State Street Bank v. Signature Financial Group (1998)

"(...) the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces 'a useful, concrete and tangible result' – a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades."







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### IPR Ownership

- Who does it belong to?
  - According to CERN SRR: all IP generated by CERN personnel (all categories) belongs to CERN.
  - However, agreements and collaborations with institutes/companies may stipulate different IP sharing provisions. See with TT Group!





## Rights and obligations of CERN personnel

#### In CERN SRR:

- 'A member of the personnel shall declare to his/her division leader any work or inventions, including those realized outside his/her specific tasks'.
- 'Applications for protection (i.e. patents) require prior approval by the DG' (TAB).
- 'These obligations shall continue to apply for 3 years after termination of the personnel's contract'.