



Patent Protection

(part of **Intellectual Property Protection
of Software II** lecture held 27th October 2010)

MVV59K Software Law

Tento projekt je spolufinancován Evropským sociálním fondem a státním rozpočtem České republiky.



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ



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- **Definition**
- **Legal Provisions**
- **US Case Law Development**
- **Current Situation in Europe**



Patent Protection

DEFINITION



*“A patent for an **invention** is the grant of a **property right** to the inventor, issued by the Patent and Trademark Office. It constitutes the right to **exclude others** from making, using, offering for sale, or selling the invention.”*

(US Patent and Trademark Office)



Patent Protection

LEGAL PROVISIONS

International

- **Paris Convention** for the Protection of Industrial Property

Czech Republic

- Act no. 527/1990 Coll. **on Inventions ...**

United States

- **U. S. Patent Act** (Title 35 USC)



Requirements for patentability

- 1) Invention
- 2) Novelty
- 3) Inventive step
- 4) Industrial application



Establishment of the Protection

- 1) Filing of the **Application**
- 2) **Priority right** emergence
- 3) **Preliminary examination**
- 4) **Publication** of the Application
- 5) Opened for **comments** and **objections**
- 6) **Full examination** of the Application
- 7) **Registration** of the Patent



Effects of the Protection

- Exclusive right to **use the invention and authorise** others to use the invention.
- The extent of the protection shall be determined by the **terms of the patent claims**



Limitations of the Protection

- Exhaustion of rights
- Independent exploitation of the invention before the emergence of the priority right

Patent as Object of Property

- **Transfer of ownership** (written contract)
- **License** (written contract)
(compulsory?)



Termination of the Protection

- In Czech Republic granted for **20 years**
- Failure to pay **administrative fees**
- **Surrender** of trademark rights (proprietor)
- **Revocation** (official authority)

Patent Protection

US CASE LAW DEVELOPMENT



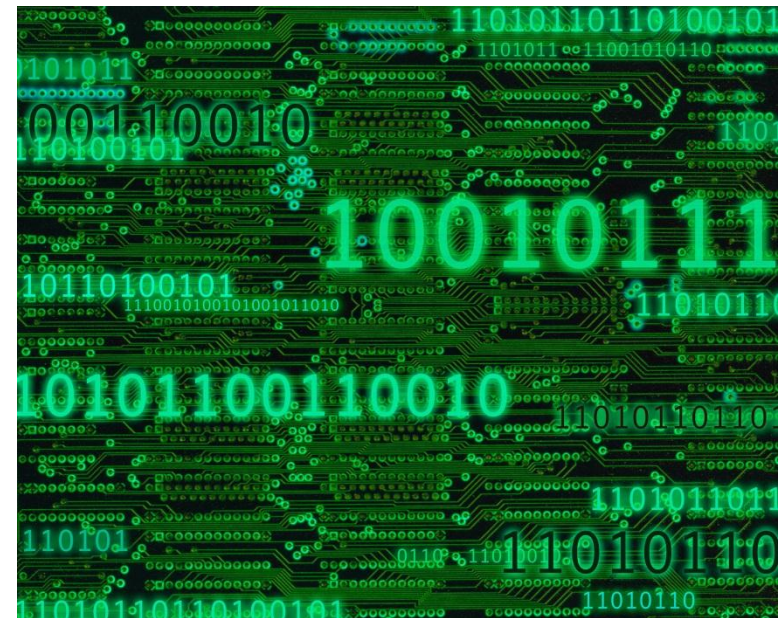
*„Whoever invents or discovers any new and useful **process**, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.“*

(§ 101 Title 35 USC)

HOWEVER ...

Gottschalk v. Benson (1972)

An algorithm for converting binary-coded decimal numbers to equivalent pure binary numbers on digital computers.





Gottschalk v. Benson (1972)

OUTCOME:

Process must be tied to a particular machine OR must operate to change materials to a different state or thing

... in order to be patentable.

Gottschalk v. Benson (1972)

OUTCOME:

So called ...

MACHINE-OR-TRANSFORMATION TEST

... established!

Diamond v. Diehr (1981)



Process for curing
synthetic rubber
which included
mathematical
formula.

Diamond v. Diehr (1981)

OUTCOME:

A process may be patentable despite the fact it includes a mathematical formula.

In re Abele (1982)

Specific method
of image processing
applied to computerized
axial tomography (CAT)
scans.



In re Abele (1982)

OUTCOME:

Introduction of Freeman-Walter-Abele test.

- 1) algorithm recited in the claim?
- 2) invention itself no more than the alg.?
- 3) applied in any manner to physical elements or process steps?

In re Alappat (1994) = Home assignment

Will be presented by ...

Mr. Jakub Harašta

Mr. Lukáš Hruša

Mr. Martin Kočí

Mr. Štěpán Stehlíček

Alpex Computer Corporation v. Nintendo Company Ltd. (1996)

Alleged infringement of patent related to microprocessor-based home video game system.



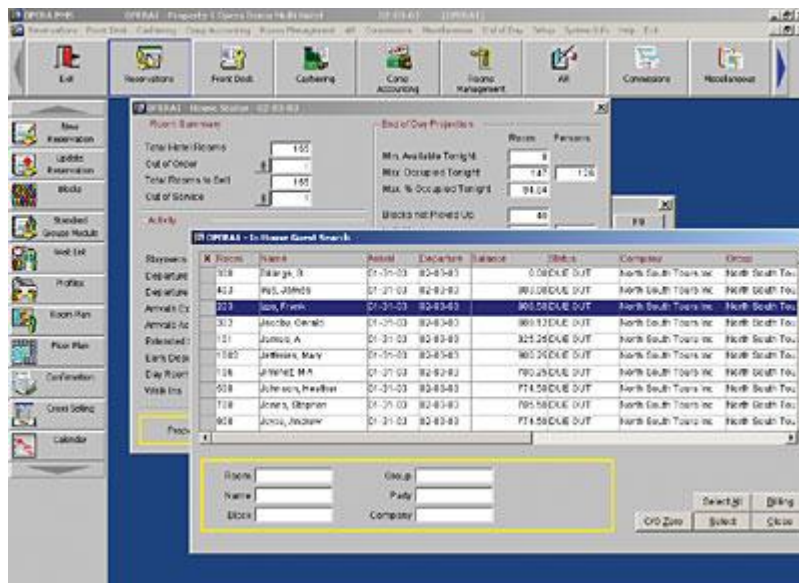


Alpex Computer Corporation v. Nintendo Company Ltd. (1996)

OUTCOME:

If a patent holder defined its claims as not covering a certain system, no patent infringement occurs if someone uses that system, notwithstanding any functional similarity.

Lockwood v. American Airlines, Inc. (1997)



Alleged infringement of three patents related to automated interactive sales terminals.



Lockwood v. American Airlines, Inc. (1997)

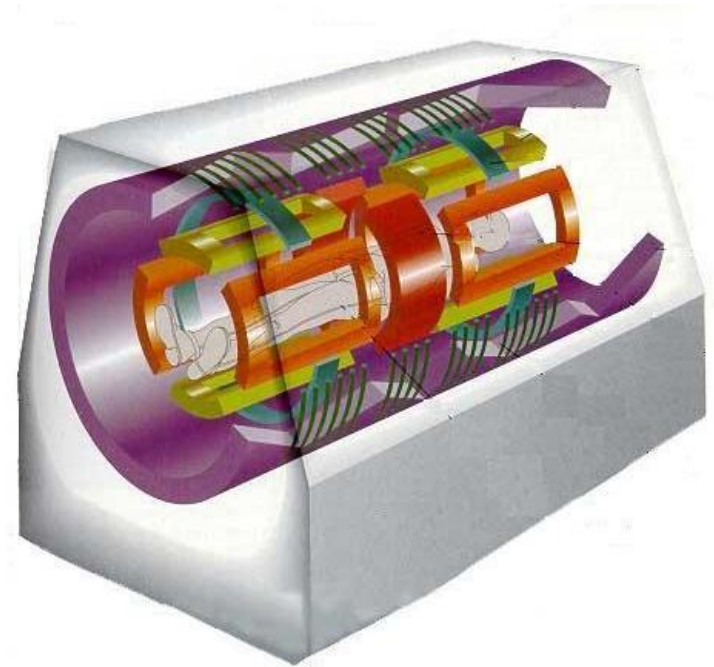
OUTCOME:

Concept of prior art has been clarified:

- Known or used by others before the date of invention
- In public use more than one year before the date of application

Fonar Corp. v. General Electric Co. (1997)

Appeal on the basis
of insufficient
disclosure of the
invention.





Fonar Corp. v. General Electric Co. (1997)

OUTCOME:

If software is a part of a best mode of carrying out an invention, the description of such a best mode is satisfied by a disclosure of the functions of the Software.

AT&T Corp. v. Excel Communications, Inc. (1999)

Alleged infringement
of a patent concerning
a process of indicating
certain information about
a telephone call recipient.





AT&T Corp. v. Excel Communications, Inc. (1999)

OUTCOME:

A method of indicating a telephone call recipient's primary interexchange carrier constitutes a patentable process.

Bilski v. Kappos (2010)

A method for
hedging risks in
commodities
trading.



Bilski v. Kappos (2010)

OUTCOME:

Business methods can be patented, **even if they do not pass the machine-or-transformation test.**



Patent Protection

CURRENT SITUATION IN EUROPE

European Patent Convention (EPC 1973)

Art. 52 para 1

*„European patents shall be granted for any **inventions** which are susceptible of **industrial application**, which are **new** and which **involve an inventive step**.“*

Art. 52 para 2

„The following in particular shall **not** be regarded as inventions within the meaning of paragraph 1:

a) discoveries, scientific theories and mathematical methods;

...

c) schemes, rules and methods for performing mental acts, playing games or doing business, and **programs for computers**; ...

- **VICOM** (T 0208/84, 1986)
- **Röntgeneinrichtung** (T 0026/86, 1987)
- **SOHEI** (T 0769/92 ,1994)
- **IBM** (T 1173/97, 1998)
- **Pension Benefit Systems Partnership**
(T 0931/95, 2000)
- **COMVIK GSM AB** (T 0641/00, 2002)
- **Hitachi, Ltd.** (T 0258/03, 2004)



- The invention consisting of computer program must create an **additional technical effect** in course of its utilization that goes **beyond its usual interaction** with a computer !!!
- The case law of EPO showed the definition as extremely **wide** (about 30.000 patents)
- Often **rejected by national courts**

Proposal for EU Directive on the patentability of computer-implemented inventions

Resulted in battle
Between Parliament
and Council.



Eventually **REJECTED!!!**



Patent Protection

CONCLUSIONS



- It is possible to grant a patent for **purely software invention** in US (softened machine-or-transformation test)
- In EU there is a crisis of patent protection for computer programs (additional technical effect beyond usual interaction)



Thank you for your attention!

Time for your questions ...

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