



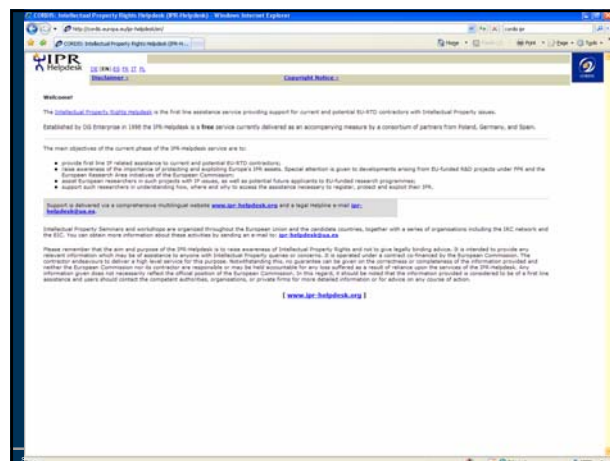
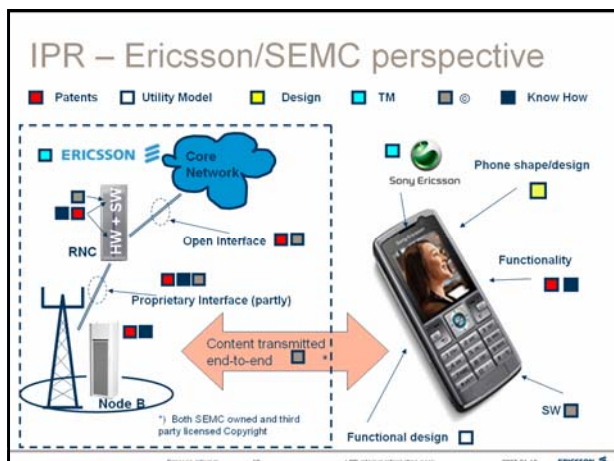
Intellectual property protection: A practical review and experience

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
Intellectual property

- Various legal entitlements which attach to certain names, written and recorded media, and inventions.
- Exclusive rights in relation to the subject matter of the IP
- Types:
 - Copyright
 - Patent
 - Trademark
 - Industrial design right
 - Trade secret

What is patent?

- A patent is a set of exclusive rights granted by a state to a patentee (the inventor or assignee)
- Exclude others from **selling, manufacturing, importing and using** a patent protected invention
- A patent is valid for a **limited period** of maximum 20 years
- A patent is a national right being valid in a **limited territory**
 - For that reason Patent rights have to be applied for in each country where a patent right is required.

What is patent?


- Public disclosure of certain details of a device, method, process or composition of matter (substance) (known as an invention) which is new, inventive, and useful or industrially applicable

Contract Between the Public and the Patent Holder

- The patent holder obtains
 - exclusive right

This right is **specified in the claims** part of the patent
- The public can obtain
 - information about the invention and how it works

This is **specified in the description** part of the patent



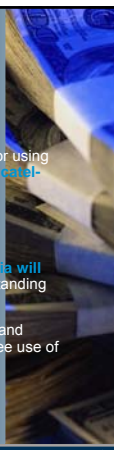
Why IPR (patent) protection?

Patent infringement

- A court in San Diego has judged **Microsoft to pay \$1,5 billions** for using MP3 technique in Windows Media. The money shall be paid to **Alcatel-Lucent**, the owners of the patent.

Royalty agreement

- Interdigital and Nokia** reached a deal in April 2006 in which **Nokia will pay \$253 millions** in **patent royalties** thereby resolving a long-standing patent dispute.
- In return, Nokia will be free to use Interdigitals TDMA-technology and infrastructure in its 2G and 2.5G cell phones. However, Nokia's free use of the TDMA-technology in its 3G units is still in doubt.



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Why IPR (patent) protection?

- Gives freedom of action in our markets
- Supports business strategies
 - Gives business advantage when blocking competitors
- Protects our technology (and investments)
- Minimizes Royalty payments
- Maximizes Licensing incomes
- Gives respect and credibility



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Innovativeness

...is determined/measured by:

- number of new products/services
- number of patents at patent offices:
 - Croatian State Intellectual Property Office (CSIPO)
 - European Patent Office (EPO)
 - U.S. Patent and Trademark Office (USPTO)
 - World Intellectual Property Organization (WIPO)
- company's return on innovation investments

Top 10 innovative companies*:

- Apple
- Google
- 3M
- Toyota
- Microsoft
- General Electric
- Procter & Gamble
- Nokia
- Starbucks
- IBM


* source: BusinessWeek (APRIL 24, 2006).



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Basic Requirements for Patentability

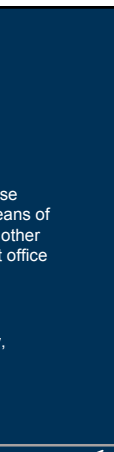
- Three patentability criterion must be fulfilled
- The examiner at the patent office examines whether the invention
 - is new
 - involves an inventive step and
 - is industrially applicable



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What can be patented?


- Invention with following characteristics:
 - Novel
 - Does not form part of the state of the art
 - The state of the art shall be held to comprise everything made available to the public by means of a written or oral description, by use, or in any other way, before date of filing to the related patent office
 - Inventive Step
 - Not obvious to a person skilled in the art
 - Industrial application
 - It can be made or used in any kind of industry, including agriculture



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What can NOT be patented?

- Laws of nature
- Scientific discoveries
- Presentation of information
- Business methods
- An artistic creation
- Surgical/therapeutic diagnosis or treatment on people or animals
- Mathematical methods as such
- Computer programs as such



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Software patent debate

- In USA:
 - Computer software and data structures can be considered patentable
 - If the invention utilizes the computer to manipulate numbers that represent concrete, real world values then the invention is a process relating to those real world concepts and is patentable.
 - There is explicitly stated that business methods can form patentable subject matter
 - Mathematical algorithms implemented in software cannot be patented
 - Main restrictions are that software or data structure is operated upon by a computer processor and that it is stored on a computer readable media
- In Europe:
 - computer-implemented inventions which only solve a business problem using a computer, rather than a technical problem, are considered unpatentable as lacking an inventive step
 - invention which makes a non-obvious "technical contribution" or solves a "technical problem" in a non-obvious way is patentable even if a computer program is used in the invention.
 - the fact that an invention is useful in business does not mean it is not patentable if it also solves a technical problem

Legal proceedings

- Application
 - Patent application consists of:
 - a request for grant
 - a description of the invention
 - Claims
 - drawings (if any)
 - an abstract
- Filing and formalities examination
 - This involves checking that all the necessary information has been provided so that the application can be assigned a filing date
- Publication of the application
 - In normal case the application is published 18 months after the date of filing

Legal proceedings

- Substantive examination
 - After the request for examination has been made, the Patent Office examines whether the patent application and the invention meet the requirements and whether a patent can be granted
- The grant of a patent
 - If the examining division decides that a patent can be granted, it issues a decision to that effect.
- Opposition
 - After the patent has been granted, it may be opposed by third parties (competitors) if they believe that it should not have been granted
- Appeal
 - Decisions of the Patent Office, refusing an application or in opposition cases, are open to appeal

The Description of a Patent

- Title
- Technical Field of Invention
- Description of Related Art
 - Prior Art
 - Technical Problem with Prior Art
- Summary
 - How the invention solves the problem
 - The claims in a readable manner
 - Advantages of the invention
- Brief Description of the Drawings
- Detailed Description of Embodiments
 - Enablement
 - Interpreting the Claims
 - Referring to drawings

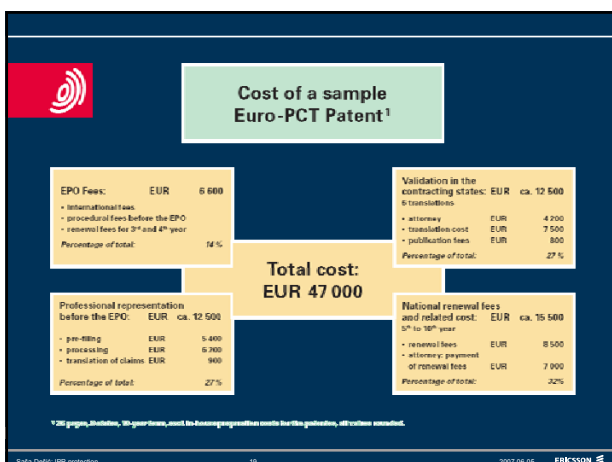


Types of examination

- Full examination
 - There is examined whether the patent application satisfies basic rules regarding novelty, inventive step and industrial application
- Based on given results of full examination
 - If the same patent application is submitted in some other country with which the patent office has agreement about cooperation
- Without full examination (consensual)
 - No full examination is performed
 - Cheaper and quicker approval
 - Patent rights are given for period of up to 10 years
 - When somebody finds proofs of invalidity of the patent, he is entitled to charge an examination fee from the patentee

Costs and fees (full examination)

- Cost and fees can vary a lot depending on number of countries the patent is submitted, number of claims, number of pages, legal cost (patent attorney)...
- Here are just some basic calculations for typical case when full examination of a patent is requested:
 - Local (Croatia)
 - Procedural costs ~ 5.400 kn
 - Renewal fees (320 – 6.900 kn per year) – for 20 years ~ 40.000 kn
 - The fees and costs are reduced by 75% if submitter of a patent is also inventor of the patent

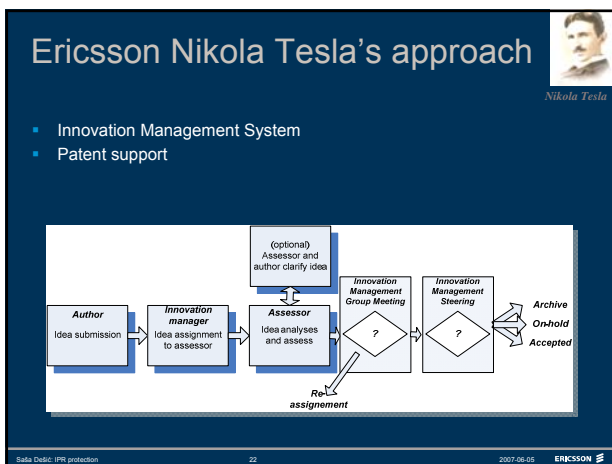


Ericsson and Intellectual property

- World's leading innovator in telecommunications
 - the world's strongest 2G, 2.5G and 3G essential IPR portfolio
- Ericsson's policy to protect and capitalize on its R&D investments by creating, securing, protecting and licensing a portfolio of patents in support of our overall business goals
- Ericsson has one of the industry's strongest intellectual property portfolios, which includes more than 22,000 granted patents worldwide
- Licensing & Patent Development
- Patent Licensing - FRAND

Patent Licensing - FRAND

- Fair, Reasonable & Non-Discriminatory terms and conditions
- Majority industry view: FRAND means *accumulated reasonable rates* (moderate level) where licensor demand must reflect its *proportional* contribution of patents to the standard



Links to More Information About Patents

- PCT information:
 - <http://www.wipo.int/patentscope/en/patents.html>
- European Patent Office (EPO)
 - <http://www.epo.org>
- US Patent and Trademark Office (USPTO)
 - <http://www.uspto.gov>
- The Swedish Patent Office
 - <http://www.prv.se/patent>

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