

Intellectual Property Rights

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Outline

- Types of intellectual property rights (IPR)
- More about patents
- IPR exploitation
 - Licensing
 - Spin-offs
 - Success stories
- Knowledge transfer office
 - About
 - Services we offer

What is intellectual property?

- “Creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce” source: WIPO
- In a university, IP can be generated from:
 - Research by faculty and graduate students
 - Students’ projects
 - Literature and artistic works composed by faculty and students

Types of Intellectual Property Rights (IPR)

1. Patents
2. Utility models
3. Designs
4. Copy rights
5. Trademarks
6. Trade secrets

Patents

- Applies to technology (material, apparatus, process)
- Lasts for 20 years from filing date
- Can be sold or licensed
- What can be patented?
 - Novel or new to the world (no previous public notice)
 - Inventive (non-obvious to someone with knowledge and experience in the subject)
 - Capable of being made or used in some kind of industry



Novel



Inventive



Useful



Important facts to know

- If you publish your idea, you can not patent it (except in the US where you have one year after disclosure)
- In Europe, “First to file” owns the patent, while in the US, “First to invent” owns the patent.
- Patents expire within 20 years from date of filling.
- To keep your patent valid, you have to pay annual renewal fees.

Important facts to know

- There is no such thing as a “World Patent”. You have to protect your idea in each country
- Filing in many countries is expensive (filing fees, translation fees, patent renewal fees)
- Patents can be significant part of a company value.
- Patents are useless if you do not enforce them.
- Enforcing your patent can be very expensive in terms of legal and lawyer fees

Filing your patent worldwide



Advantages of filing a PCT application:

- Allows you to protect your idea in other countries
- Gives you additional 30 months before filing for protection in other countries
- Allows you to keep your original priority date

Utility Model

- A minor invention
- Grants protection for 5 to 10 years
- Covers products not methods/processes/material
- May also be sold or licensed
- Granted within a few months
- May be granted without examination (e.g. in Germany)
- Fees for application and maintenance are cheaper than patents

Copyrights

- Applies to:
 - literary, dramatic, musical and artistic works
 - Computer software
- Arises automatically (once you add the © symbol) and there is no need to register it (can be registered in the US)
- Copyrights lasts up to 70 years after the death of the author



Adobe Acrobat
Document

Design rights

- The appearance of the whole or part of a product (shape, lines, contours, colors, orientation)
- Must not be dictated by technical function.

Trademarks

- A distinctive sign identifying the producer of certain goods or services.
- Helps identify quality of the product or service.
 - A word (COCA COLA, MICROSOFT, GAP)
 - Letters (IBM, HSBC, BMW)
 - A logo



Trade Secrets

- Any confidential information that provides a company with a competitive edge.
- Advantages:
 - Longer protection (as long as you can keep it a secret).
 - Cheaper (no patenting or lawyer fees to pay)
- Disadvantages:
 - High risk (reverse engineering, information leakage)
 - Someone else may patent it.



One product – Many IP

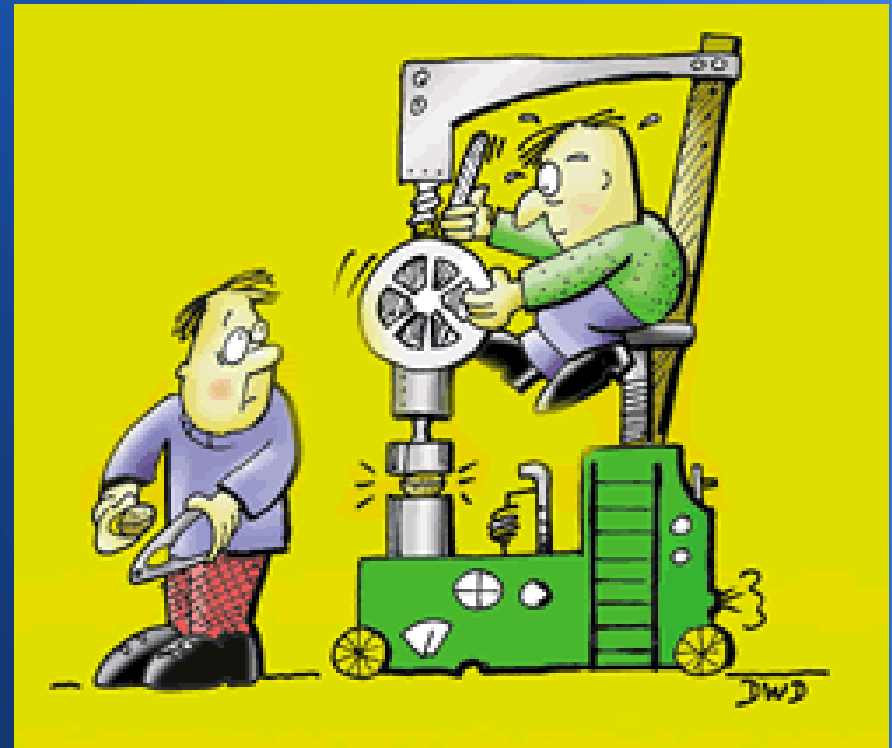
- Patents
 - Technology to produce and operate
- Designs
 - Form of the phone enclosure
 - Arrangement of the buttons in oval shape
- Copyright
 - Software code
 - Instruction manual
- Trademarks
 - Made by “Nokia”, and product “N95”
 - Software “Symbian”, “Java”
- Trade secrets
 - Some technical know how are kept with Nokia and not published



Nokia N95 Phone

Seven deadly sins of an inventor

1. The invention is more complex than the problem merits.



From the European Patent Office inventor handbook

Seven deadly sins of an inventor

2. The invention is not kept secret until the date of filing.



Europäisches
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From the European Patent
Office inventor handbook

Seven deadly sins of an inventor

3. The invention isn't new



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Seven deadly sins of an inventor

4. The inventor hasn't fully considered the problem



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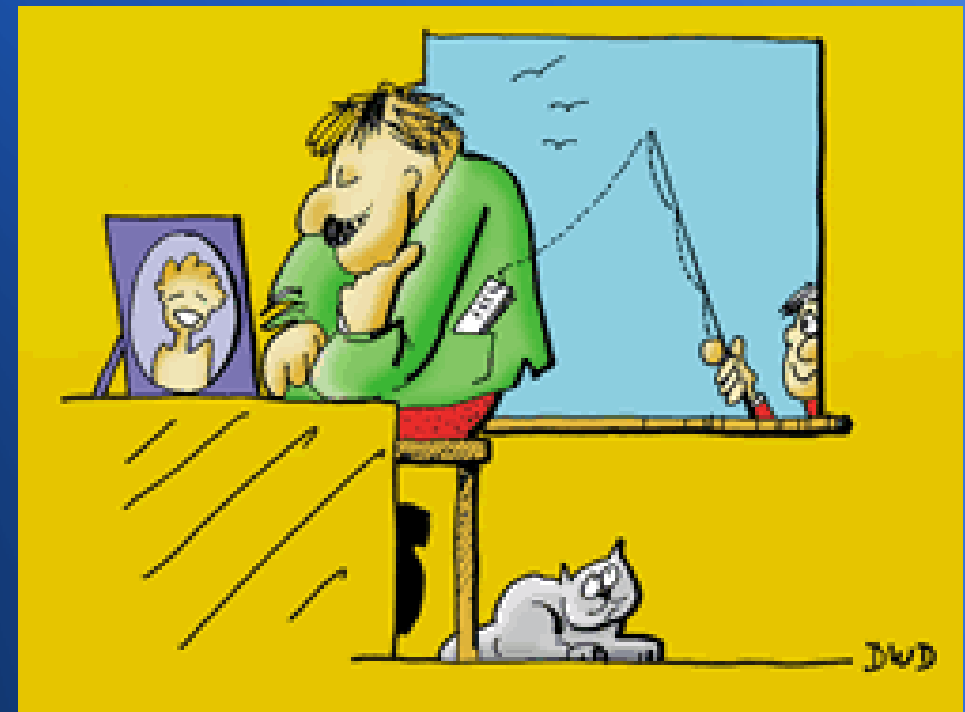
5. No-one wants it



From the European Patent Office inventor handbook

Seven deadly sins of an inventor

6. An invention is safer if it's kept secret.



From the European Patent Office inventor handbook

Seven deadly sins of an inventor

7. The inventor has an unrealistic idea of the value of his invention

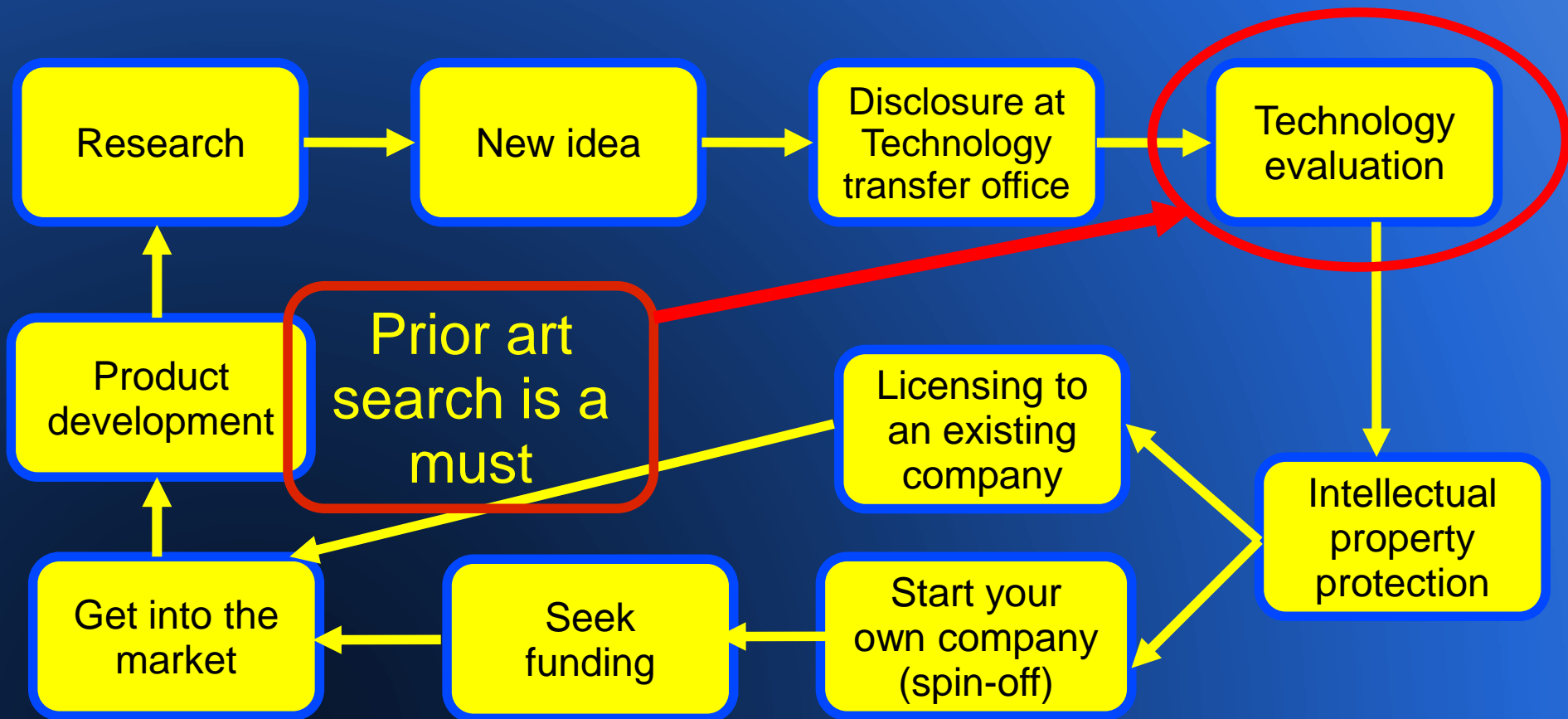


From the European Patent Office inventor handbook

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- IPR exploitation
 - Licensing
 - Spin-offs
 - Success stories
- Knowledge transfer office
 - About
 - Services we offer

Innovation cycle



How to exploit your patent

Licensing

Spin-off

Licensing

- Advantages

- They do the work, you get paid.
- Can generate significant revenues
- Usually faster time to market
- Lower cost, less risk

- Disadvantages:

- You sacrifice part of the revenue
- Relies on the licensee to do work and market product
- May need proof of concept (resources)

Spin-off

- Advantages:
 - Exciting and attracts attention and recognition
 - You can potentially make more money
 - You still retain some control
- Disadvantages:
 - Large competitors may present a barrier to entry
 - Needs Investment
 - Needs management
 - Needs a lot of your time
 - Higher risk

Success Stories

- Google
 - Started by two grad students (Larry Page and Sergey Brin) at Stanford University. They developed the first search engine with artificial intelligence.
- Research in Motion (Blackberry)
 - Started by an undergraduate student (Mike Lazaridis) at university of Waterloo.
- Insulin
 - Frederick Banting and Charles Best were two researchers at University of Toronto when they discovered insulin in 1921

Success stories

- MP3 technology
 - MP3 as an audio compression technology was developed by Karlheinz Brandenburg as a PhD student at University of Erlangen-Nuremberg, and later a professor at Fraunhofer Institute in Germany.
 - Revenues from MP3 license generated €100 million in 2005 alone.

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Knowledge Transfer Office (KTO)

- The KTO was established as part of a tempus project titled Enterprise-University Partnership (EUPART).
- EUPART aims at founding technology transfer offices in 4 Egyptian universities: AUC, Cairo, Helwan, and Assiut.
- Teams from these four universities took extensive training in Europe on IPR protection and commercialization in addition to basic knowledge on business planning and marketing.

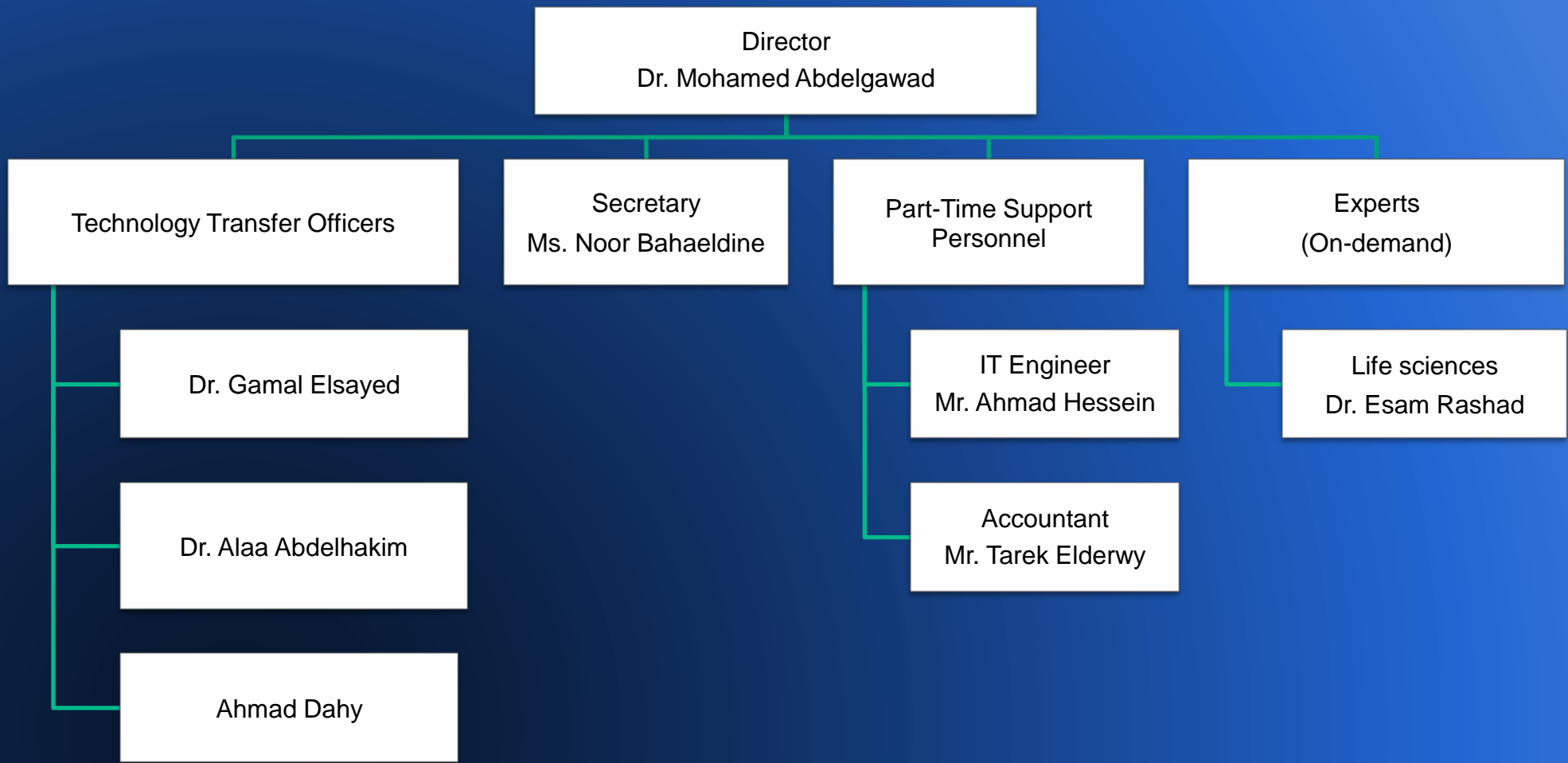
Mission and services of the KTO

- Educating faculty members and researchers on IP protection and entrepreneurship
 - Give series of lectures to provide faculty members with the basic knowledge they need to protect their ideas.
- Attracting and assessing invention disclosures.
 - Help faculty members assess novelty and patentability of their research results.
- Patenting and other forms of intellectual property protection.
 - Guide faculty members through the different steps of filing their patents in collaboration with the Egyptian patent office representative at Assiut University.

Mission and services of the KTO

- IP commercialization
 - Direct researchers and students to the most suitable method to commercialize their ideas whether through licensing or creating spin-offs.
 - Point researchers to available resources that can help them commercialize their research (e.g. Industry Modernization Center (IMC), Social Fund for Development (SFD), TIEC...etc).
- Help inventors secure seed funds
 - Using the extensive industrial network of the ITTU here in the university to hook the researcher with potential investors
 - IMC, SFD, TIEC
- Help faculty members secure grants to fund their research
 - Notifying faculty members of available funding opportunities from different granting agencies (STDF, FP7, International)
 - How to write proposals and apply for grants

KTO team



Thanks for your attention

Free patent search databases

- www.espacenet.com EPO
- www.wipo.int/patentscope/en/ WIPO
- www.uspto.gov/patents/process/search USPTO (Usa)
- www.depatistnet.com DPMA (Germany)
- www.ipdl.inpit.go.jp/homepg_e.ipdl JPO (Japan)
- www.sipo.gov.cn/sipo_English SIPO (China)
- www.engl.kpris.or.kr/eng/main_eng.jsp KIPRIS (Korea)