

Intellectual Property Rights

Mohamed Omar Abdelgawad

Assistant Prof., Mech. Eng. Dept.
Director of Knowledge Transfer Office
Assiut University

Ahmad Mohamed Dahy

Technology transfer officer
Knowledge Transfer Office
Assiut University

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

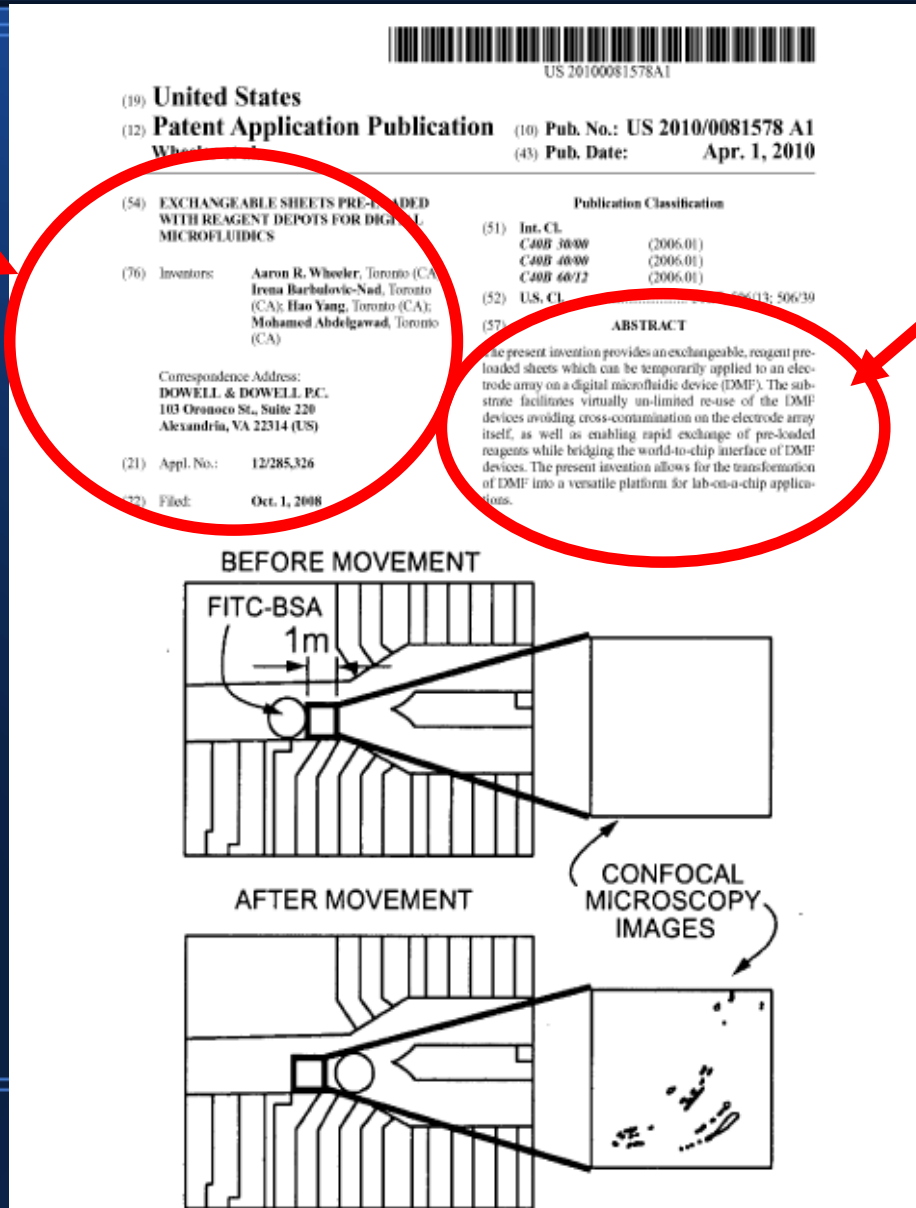
How does a patent look like?

Bibliographic data

Title
Dates
Application number
Assignee
Inventor
Classification
Designated states

Technical content

Description
Examples
Drawings



Abstract

Most important part of a patent:

Claims



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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
- 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



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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.
- Could be an invention that does not fulfill patentability
- Advantages:
 - Longer protection (as long as you can keep it a secret).
 - Cheaper (no patent fees to pay)
- Disadvantages:
 - High risk (reverse engineering, information leakage)
 - Someone else may patent it.



One product – Many IP

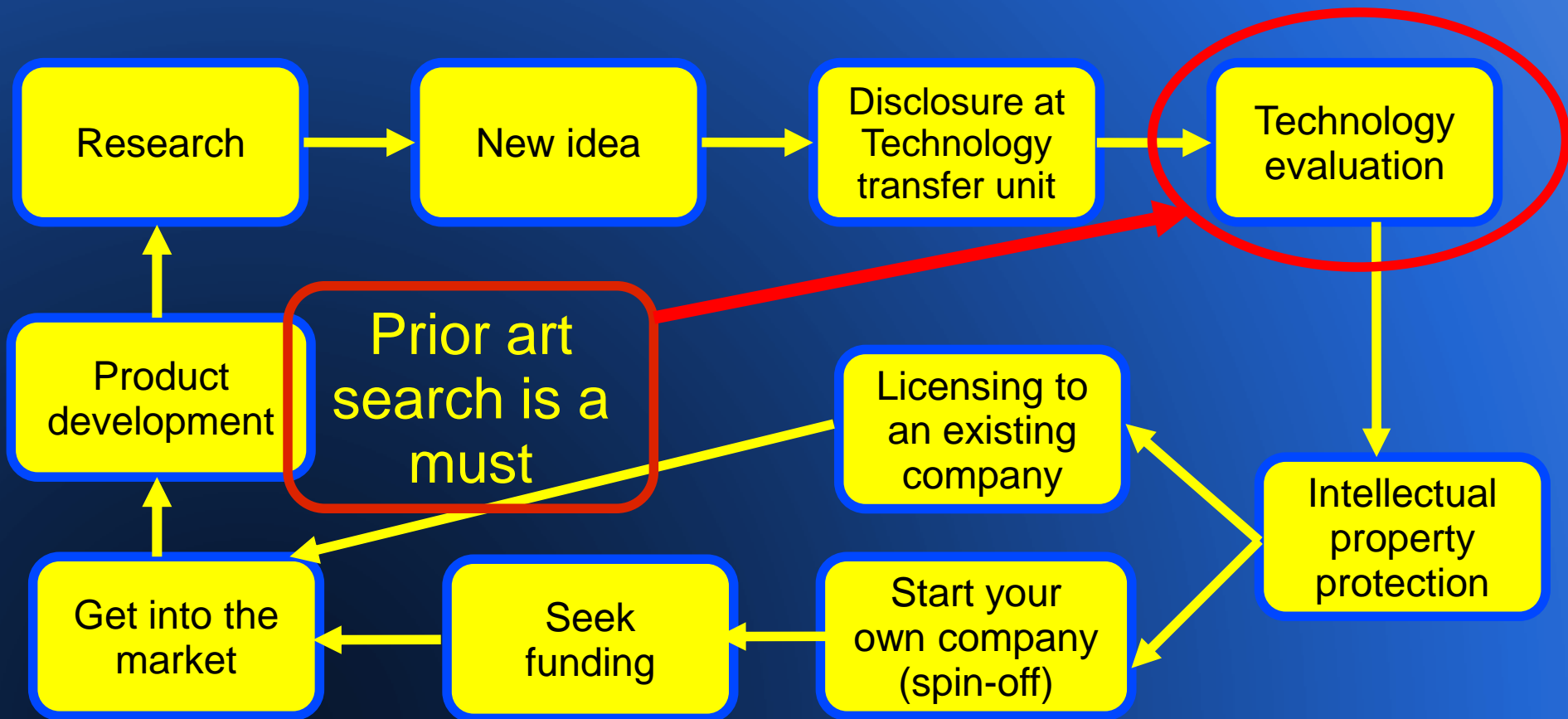
- Patents
 - Technology to produce and operate
- Designs
 - Form of the phone enclosure
 - Arrangement of the buttons in oval shape
- Copyright
 - Software code
 - Instruction manual
- Trademarks
 - Made by “Nokia”, and product “N95”
 - Software “Symbian”, “Java”
- Trade secrets
 - Some technical know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



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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

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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.

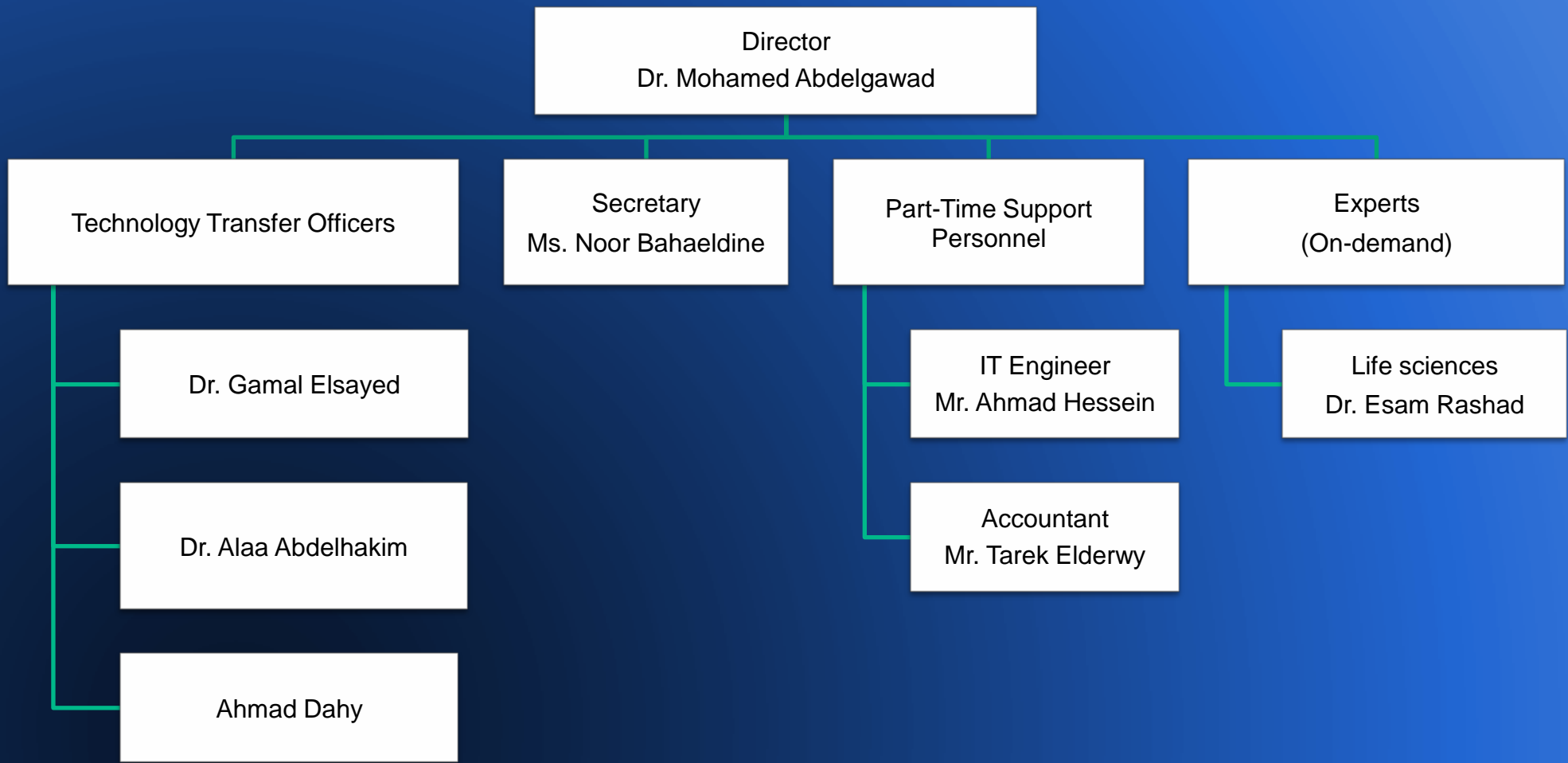
Mission and services of the KTO

- 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