WHAT IS INTELLECTUAL PROPERTY?

WIPO-Convention 14.07.1967 (art. 2, viii)
(viii) “intellectual property” shall include the rights relating to:
– literary, artistic and scientific works,
– performances of performing artists, phonograms, and broadcasts,
– inventions in all fields of human endeavor,
– scientific discoveries,
– industrial designs,
– trademarks, service marks, and commercial names and designations,
– protection against unfair competition,
and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.”
IPR

**LEGAL RIGHT**
- Patents
- Copyright
- Trade marks
- Registered designs
- Trade secrets

**WHAT FOR?**
- New inventions
- Original creative of artistic forms
- Distinctive identification of products or services
- External appearance
- Valuable information not know to the public

**HOW?**
- Application and examination
- Exists automatically
- Use and/or registration
- Registration*
- Reasonable efforts to keep secret
PRODUCT CARRY MANY IP RIGHTS

TRADE MARKS:
- Made by “Apple"
- Product “iPhone 6"
- Software “iOS”

PATENTS:
- Data-processing methods
- Semiconductor circuits
- Chemical compounds
- Handling methods
- …

TRADE SECRETS:
- ?
- Designs (some of them registered):
  - Form of overall phone
  - Arrangement of buttons in oval shape
  - Three-dimensional wave form of buttons
  - …

COPYRIGHTS:
- Software code
- Instruction manual
- …
IP RIGHTS PROVIDE THE OWNER THE RIGHT TO PREVENT THIRD PARTIES FROM
MAKING, USING, OFFERING FOR SALE, SELLING OR IMPORTING
INFRINGEMENT PRODUCTS
IN THE COUNTRY
WHERE THE IP RIGHTS ARE GRANTED
AND AS LONG AS THE IP RIGHTS ARE VALID

1) Allow the owner to conclude contracts (R&D collaboration, licensing, …)
2) Promote investment in R&D and generate ROI
3) Tax deduction / optimalisation
FUNDING: BRIDGING THE GAP ...

http://otm.illinois.edu/POC
TECHNOLOGY TRANSFER

TECHNOLOGY TRANSFER IS THE **PROCESS** BY WHICH NEW IDEAS, **EARLY STAGE** TECHNOLOGIES ARISING FROM THE UNIVERSITY ARE IDENTIFIED, PROTECTED, DEVELOPED AND COMMERCIALISED.

TT *assists academics* to realise knowledge transfer by:

- **identifying and evaluating** technology of potential commercial value
- **Protection**, management and development of the University’s intellectual property portfolio
- Identifying and facilitating applications to sources of **funding** for development work
- Exploitation of intellectual property, through **negotiating** agreements needed for R&D collaboration, licensing and spin-out company formation
PROTECTION & VALORISATION GO HAND IN HAND

Idea evaluation
- Disclosure + interview
- Preliminary patentability study
- Initial exploitation routes

IP protection strategy
- Patent filing + publication strategy
- PCT decision
- National phase

Valorisation strategy
- Licensing route
- Spin-out
- Status prototype / POC?
- Set-up collaboration?
- Funding sources
- Market the technology: design flyers, website, network, ...
- Negotiate, follow-up
GENERAL VALORIZATION GATEWAY

1. Literature search
2. Funding
3. Start research
4. Discovery / Invention
5. Invention disclosure
6. Initial results
7. Protection of IP & ideas
8. Loss of rights and other issues
9. Non-disclosure agreement
10. Subsequent funding
11. Create visibility
12. Publication or any other form of disclosure
13. Final research results
14. Valorization: license deals, spin-offs
15. Return monetary and/or otherwise

VUB TECHTRANSFER
A Flemish university owns research results

- VUB recognizes rights of inventors
- Inventors have the obligation to collaborate in the valorization procedure
- VUB pre-fines patent procedure and recuperates costs only if there is an income
- Income will be distributed among inventors, the research lab and the VUB
PATENT REQUIREMENTS

Art 52 (1) European patents shall be granted for any inventions, in all fields of technology, provided that they are:
• new,
• involve an inventive step
• are susceptible of industrial application.

Patent office conducts a search and examination before granting a patent

Strong differences (in interpretation -> case law) between countries/regions depending on different jurisdictions!!

European patent convention (EPC) -> http://www.epo.org
Sources: EPC 2000 art. 52, 54-57, 100, 138, R. 42, 43, 44
NOVELTY

Art 54 (1) EPC: An invention shall be considered to be new if it does not form part of the state of the art.

Art 54 (2) EPC: 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 the date of filing of the European patent application.

INVENTOR is BEST CANDIDATE to destroy the novelty of his invention!

Need to perform thorough prior art search!!
NOVELTY

No publication **prior to filing**
e.g. no article, press release, conference presentation/poster/proceedings or blog entry

No sale/exchange of products incorporating the invention prior to filing, be careful when showing prototypes on trade fairs, exhibitions

No lecture or presentation **prior to filing**
except under a **non-disclosure agreement** (NDA)

Contact IP office! File a record of invention.
PATENTS: INFORMATION SOURCE!

Avoid duplication of R&D efforts and spending

- 80% of all technical information in patent documentation (OECD)
- Duplication of R&D efforts: costs 20 billion EURO/year; 25% of all R&D efforts ... on inventions that have been invented yet (European Commission)
- Define technology trends: what is in a patent application now, is the product of tomorrow...
- Preparing new patent: writing/ studying patentability

Find solutions to technical problems

- 85% of all patents no longer in force
- Vast number of inventions available for free
- Patent contain reliable information due to exigency of sufficiency of disclosure, enablement, clarity (for person skilled in the art to be able to repeat the experiments)
Free patent databases:

- espacenet: http://ep.espacenet.com
- google patents: http://www.google.com/patents
- WIPO patentscope http://www.wipo.int/pctdb/en/search-struct.jsp

More detailed information in patent register: http://www.epoline.org/portal/public
IP PORTFOLIO 2019

# active patent families: 146

- 32 imec-VUB
- 27 with other partner
- 45 VIB-VUB
- 42 VUB only applicant

Granted US or EP patents: ~70% patents actively valorized
Protects any result of creative activity:

- literary works, art, drama or musical works, presentations, software code, instruction manuals, questionnaires, etc.
- movies, photographs, translations, editions, collages, adaptations etc.
- typographies, sound recordings, broadcasts, performances
- Database: (original) structure
Works must be

✓ Original:
  ✓ = must show personality of the author, ie upon creation creative choices have been made between various options going beyond mere technical requirements
  ✓ Does not require to be new / exceptional imagination / never been publicly disclosed !!!

✓ Expressed in concrete shape:
  ✓ Does not require carrier (eg presentation, choreo, ...)
  ✓ No abstract ideas
  ✓ No style (eg rap): not attributable to an author
COPYRIGHT: GOOD PRACTICES?

✓ Date your work and use copyright symbol.

✓ Gather evidence of being the original author in case needed: e.g. i-DEPOT.

✓ Other precautions:
  use watermarks, keep logbook (laboratory notebook)

✓ Use copyright notices (eg on your website / mail): cfr
next slide
“Copyright © 2018, Vrije Universiteit Brussel (VUB), Dept. ____, list of authors and contact details
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## COPYRIGHT VS PATENTS

<table>
<thead>
<tr>
<th></th>
<th>Copyright</th>
<th>Patent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection for</td>
<td>Form (source code)</td>
<td>Functionality (algorithm)</td>
</tr>
<tr>
<td>No protection for</td>
<td>Functionality (work around, reprogram)</td>
<td>Form (source code)</td>
</tr>
<tr>
<td>Ownership</td>
<td>Creator / author</td>
<td>Applicant &lt;-&gt; inventor</td>
</tr>
<tr>
<td>Registration</td>
<td>Not required, burden of proof !!</td>
<td>First to file / register</td>
</tr>
<tr>
<td>Validity</td>
<td>70y after death author</td>
<td>20 years from date of filing</td>
</tr>
</tbody>
</table>

**In both cases:**
- Transfer of right / license is required for third party use
- No guarantee for freedom to operate
- Right can be used for innovation income reduction
- Published patent application are publications
ALTERNATIVE WAYS OF PROTECTING R&D RESULTS ?
CONFIDENTIAL...

Confidential information:
- ✔ Customer list
- ✔ Marketing plan

Know-How
- ✔ ’technical’ knowledge of personnel

Trade secrets
- ✔ Formula Coca-Cola
- ✔ Process creating optimal conditions
TRADE SECRETS

Legal framework: EU trade secrets directive (Directive 2016/943)

Trade secret = piece of information that meets the following:
- It is NOT generally known or readily accessible:
- Has commercial value because it is secret:
- Has been subject to reasonable steps to keep it secret by the person lawfully in control of the information

Complementary to IP rights:
- Allow for everlasting protection (as long as the conditions remain fulfilled)
- No need for originality, does not discriminate between types of data
- No private or exclusive rights to its use: independent discovery of same information remains possible
- Cannot prevent competitors from copying and using the same solutions -> reverse engineering is lawfull!

-> most research data are trade secrets at least for some period of time!
(at least in the early stages of collection / generation and BEFORE any public disclosure / data sharing)

Trade secret are legally protected in instances where the confidential information is obtained illegitimately
This Non-Disclosure Agreement (the “Agreement”), is executed as of the ______ day of __________________________, 20____ (the “Effective Date”), BY AND BETWEEN:

VRIJE UNIVERSITEIT BRUSSEL (VUB),
with offices at Pleinlaan 2, 1050 Brussel,
herein represented by Prof. Dr. Paul De Knop, Rector,
acting on request of Prof. Dr. ____________________, Promoter,
who is responsible for VUB’s performance under this agreement and who is co-signing this agreement for acknowledgement and acceptance,
hereinafter called “Disclosing Party” or “Receiving Party” as the case may be;

AND

_________________________________
with offices at _________________________________
represented by ____________________________
hereinafter called “Disclosing Party” or “Receiving Party” as the case may be;

hereinafter jointly referred to as “Parties” or each separately as “Party”,

WHEREAS, the Parties have acquired and/or developed a substantial amount of valuable Confidential Information, as hereinafter defined, which the Parties acknowledge to be of a confidential character, requiring suitable security and protection;

WHEREAS, the Parties desire to enter into discussions and exchange information for the sole purpose as described hereunder and desire to ensure that the Confidential Information, as hereinafter defined, revealed during such discussions will be protected from disclosure;

NOW, THEREFORE, in consideration of the premises and mutual covenants contained herein, the Parties hereto agree as follows:

• Template available @ www.vubtechtransfer.be
• Unilateral or bilateral
• Be careful: definition of confidential information
• Purpose
• No IP rights licensed, assigned, ...
• Duration
• To be signed by Rector
Abstract ideas cannot be protected!
DOCUMENT / REGISTER YOUR RESEARCH!!

(Electronic) Lab notebook / data management system / i-depot provides legal documentation of ideas (as reduced to practice), research results

Helps to establish date of invention, authors, inventors, etc
GOOD IDEA? I-DEPOT!

✓ Elektronical **registration** of an idea as reduced to practice by the idea holder

✓ legal means of evidence

✓ date stamp

✓ analogous to a notary act...

I-DEPOT IS NOT AN IP RIGHT!!
WHEN FILING AN I-DEPOT?

- In case of unregistered IP rights - copyright.
  - unregistered design.
- Upon starting negotiations with potential business partners
  - In context of confidentiality
  - In the process of shaping the idea, further development needed
  - Documentation of background knowledge in R&D collaborations
More information:

- Technology transfer starter seminars
- Technology transfer newsletter
- vubtechtransfer.be
- **Booklet: “Finding your way through the jungle”**
- **Call 2207**
THANK YOU FOR YOUR ATTENTION

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