Office of Technology Management

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What is Intellectual Property (IP)?

A product of the mind that has commercial value

For example:

- **Patent** (inventions, discoveries, processes)
- Software
- Copyright
- Trademarks
- Trade secrets
- Know how
What is a Patent?

U.S. Constitution: Article I: Section 8, Clause 8:

- The Congress shall have power ... To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.

- ...patent law seeks to foster and reward invention... to promote disclosure of inventions... to stimulate further invention... and to permit free use of items in the public domain.

U.S. Supreme Ct. (1979)
What does a Patent do?

the *right to exclude* others from “making, using, offering for sale, or selling the invention throughout the U.S. or importing the invention into the U.S.” for a period of *20 years* from the date of filing the patent application.

Why Do We Patent?

- IP is a way to translate your research to the marketplace
- A large part or our Job is to provide public benefit
  - To help people, someone has to make and sell “your treatment”
  - Drug Development requires huge financial risk and you will need IP to secure funding.
  - If you don’t own it, you can’t sell it!
  - Provides commercial and public recognition
  - Alternative source of funding for the lab

- Federal Grant Agencies require IP to be reported not only on your grant report, but through our office (iEdison)
What is a Invention?

• An invention is a solution to a technical problem
• Inventions are important, but not everything important is an invention.
• An invention starts with an idea, but must be more than an idea
  – Conception and reduction to practice
Patentable Inventions?

• Some inventions are patentable and some are not.
  – Judicial exceptions: abstract idea, law of nature or natural phenomenon, humans
• In the U.S., a patentable invention must be claimed as either a
  • machine
  • a composition of matter
  • Method or a process
  • a manufacture
  • Must be new, useful, and non-obvious.
Can I patent this?

- Perpetual motion machine: No
- Naturally-occurring culture of microorganisms: No
- Enriched or pure culture of microorganisms: Yes
- Human Gene: No
- Word-processing application stored on a disk: Yes
- Song stored on a disk: No
- Genetically-engineered mouse: Yes
- Genetically-engineered human: No
- A new use for aspirin: Yes?
- Medical or surgical procedure: Yes, but
- Method of doing business: Maybe?
- Diagnostic assay: Maybe?
- Algorithm: Maybe?
Just because you can?
Who is an Inventor?

• A person who conceives, produces or contrives something previously unknown by the use of ingenuity or imagination

• Co-inventors if each contribute to the inventive process, even if unequally

• Not necessarily co-inventor if only following directions
  • A co-author is not necessarily an inventor
  • Inventorship is dependent on the specific claims in an application
    – Co-Inventors have equal rights (not as a percentage of contribution)

• A matter of LAW
Who owns IP?

The Board of Regents of the University of Texas System owns the IP when:

• The IP is created within an employee’s scope of employment; or

• The IP is created on UT System time, or with use of UT System facilities; or

• The IP results from research supported by Federal Funds or 3rd party sponsorship.
Why do I care about IP?

• IP is a way to translate your research to the marketplace—**OTM is your link** to commercialization, i.e. through existing or new businesses, investors ($$), etc.

• Federal Grant Agencies **require** IP to be reported not only on your grant report, but through our office (iEdison)
  
  — **Bayh-Dole Act 1980’s**
    • Created environment for technology transfer from universities
    • Government reporting requirements for inventions made using federal funds
How does the IP process start?

Technology Report Form
Copyright Disclosure Form
Software Disclosure Form
Research Material Form

OTM’s disclosure form (left), as well as a wealth of IP related information for inventors, can be found on OTM’s website:

www.uth.tmc.edu/otm
Office of Technology Management

Office of Strategic Industry Initiatives

The new Office of Strategic Industry Initiatives was jointly established by OTM and UTHealth's Office of Research Academic Affairs in order to facilitate stronger strategic alliances between UTHealth faculty and biopharma industry.

Contact: Melissa S. Thompson, Ph.D.

EVENTS & NEWS

- UTHealth Startup Decisio Health named as a finalist in this year's Fierce Innovation Awards

(Houston TX) – December 1, 2015

– Decisio Health announced today
Forms and Instructions for Reporting a Technology

Technology Report Forms:

- Technology Report Form: **Patents**
  - Additional Creator Addendum Form-Technology

- Technology Report Form: **Software**
  - Additional Creator Addendum Form-Software

- Technology Report Form: **Copyright**
  - Additional Creator Addendum Form-Copyright

- Technology Report Form: **Research Material**
What does OTM do?

- Manager Assigned
- Assess the technology
  - Prior art search
- Prosecute Patent appl.
- Market technology
- License

Obtaining a patent is expensive!

- An average of $15,000+ in legal fees just to file a US patent application, $25,000 to issue
- An average of 3-5 years to prosecute a US patent
- An estimated $480,000 in legal fees to file and maintain US and standard foreign venues
Assessment: what information do you need to submit?

- Novelty/Obviousness
- Public Disclosure
- Market
- Funding
- Sponsored Research Agreements
- Material Transfer Agreements
- Software Agreements
- Clinical Trial Agreements
- Inventors’ employment

Manuscripts
Abstracts
Posters
Seminars, including job interviews
Web Postings
Genbank
Conversations
Patents
Marketing Analysis

- Indications
- Money spent on similar products
- Competitors
- Potential licensees
Commercialization

• Valuation
• Negotiation
• Execution of Agreements
• Agreement Management
What’s the benefit to you?

At UTHealth, we distribute cash received from the licensing of your IP as follows:

- Creators 50%
- Patent fund/OTM 35%
- Your School 5%
- Your Department 5%
- Your Laboratory 5%
We Need Your Help!

• Talk to us *(as EARLY as possible)*
• Confidentiality
• **Documentation/Record Keeping**
• Assist with searching
  – Scientific Literature
  – Patents
  – Commercial potential
  – Licensee Identification
• Assist with patent prosecution
• Assist with licensing
Device Example: Portable Fluid Warmer

- 2 patents issued by the USPTO
- 1 startup company formed: EMIT Corporation
- FDA 510(k) clearance received in FY2011 to market the device as “HypothermX™ HX100”

Timeline*

2004

Contact Companies

2011
Patent Maintenance

FDA Approval

License Agreement

Product Development

Product Sales

*not to scale
Device Example: Portable Fluid Warmer

Various fluid warmer prototypes over the years, from research prototype to FDA approved product for sale
Software Example: Patient Dashboard

- 1 issued patent in the United States
- patents pending in the United States and abroad
- 1 startup company formed: Decisio Health
- FDA 510(k) clearance received in FY2014

Timeline*

- Disclose to OTM & File App.
- License Agreement
- Contact Companies
- Execute COAs

Product Development

2012

2014

FDA approval

Product Sales

*not to scale
Software Example: Patient Dashboard

Early prototype:
Software Example: Patient Dashboard

FDA approved version:

iPhone™, Android™ Display

Android Tablet™, iPad™ Display
OTM By The Numbers

$4+ million • Annual Gross Revenue
$71+ million • Licensing Revenue (cumulative)
28 • Average New License/Option Agreements per Year
475+ • Total License/Option Agreements (cumulative)
1700+ • Patents/Patent Applications (cumulative)
45 • Average # of US Patent Applications Filed Each Year
190+ • Products on the Market

Portfolio Companies
• 48 portfolio companies (cumulative); 28 active; 7 with products on the market
• More than $173M in capital raised to date
• 3 companies IPO/acquired with market cap >$2.9B: Volcano, LifeCell; PLx Pharma
• More than >1300 jobs created in private and 3 public companies
Contact Us: We are here to help YOU!

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