# Introduction to Intellectual Property at UTSA

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With adaptations from S. Chandler, JW LLP.

# Cory Hallam, Ph.D.

- Office of Commercialization and Innovation (OCI)
- VPR Web Site vpr.utsa.edu
- Click on bottom right side “Commercialization and Tech Transfer”

# Overview

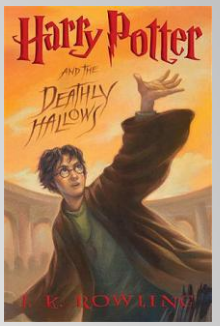
- What is Intellectual Property (IP)
- Why is it important to UTSA
- How can you help with the process of creating, protecting, and commercializing IP

# Types of Intellectual Property

- **Patents** – the inventor has the right to exclude others from making the invention, requires enforcement
- **Trade Secrets/Know How** – by keeping it secret no one else can copy it
- **Trademarks/Service Marks** – Logos, words, and/or phrases that identify a unique source of goods or services
- **Copyrights** – protection against others copying original works (i.e. music, books, software code)

# Examples

- Business name: MacDonald's……trade name
- Product marks/logos: Google images ...trademark
- Software, texts, music…….copyright
  art, creative works




- Inventions……..patent

# Bayh-Dole

- The U.S. Bayh-Dole Act of 1980 allows universities and other non-profit institutions to have ownership rights to discoveries resulting from federally funded research, provided certain obligations are met. These obligations include making efforts to protect (when appropriate) and commercialize the discoveries, submitting progress reports to the funding agency, giving preference to small businesses that demonstrate sufficient capability, and sharing any resulting revenues with the inventors. The Bayh-Dole Act is credited with stimulating interest in tech transfer activities and generating increased research, commercialization, educational opportunities, and economic development in the United State

# Patents

- **Definition**: A patent is a grant from the U.S. government allowing its owner to exclude others from **making**, **using**, **offering to sell, selling**, or **importing** into the U.S. her invention
- There are three types of patents:
  - Utility patents, which protect new and useful inventions and processes
  - Design patents, which protect new and ornamental designs for articles
  - Plant patents, which protect new and distinct plant varieties that are asexually reproduced
- Utility patents are the most common: approx. 90% in 1999

# What is Patentable?

- **Any new and useful**
  - **Process**
  - **Machine**
  - **Method of manufacture**
  - **Composition of matter**
  - ***Improvements* on existing things**
  - **Software**
  - **Methods of doing business**

# Patents

- What is protectable?
  - Can't patent laws of nature, mental processes, mathematical algorithms per se or abstract ideas
  - Utility patents are available for the invention or discovery of any new, useful and non-obvious process, machine or invention
    - Novelty means that the invention is new – even a minor difference conveys novelty. A single prior art patent that claims the same invention is enough to defeat novelty.
    - Only "useful" inventions are patentable. Must have some utility or achieve some objective. Inoperative inventions do not have utility.
    - Non-obviousness means that the differences between what is "out there" and your invention are not trivial to one skilled in the art. Somewhat subjective determination of the PTO examiner.

# Duration of Protection

- 17 years from issue date
  (pre-June 8, 1995)
- 20 years from earliest U.S. filing date
  (post-June 8, 1995)
- Outside of U.S. – typically 20 years from filing date

** Maintenance Fees must be paid to keep in force.

# Patents – Loss of Rights to File

- Bar Dates:
  - **For U.S. patent:** application will be barred if not filed within one year of the first:
    - Public use
    - Public disclosure (e.g., printed publication)
    - Sale/Offer for sale
  - **For International patent:** application will be barred if not filed before any public disclosure/public use of the invention anywhere. USPTO filing considered “filing” for this purpose
  - **Best policy**: File with the USPTO prior to any disclosure if possible to preserve foreign filing rights

# Patents - Other Considerations

- Patents are issued on a country-by-country basis
  - A U.S. patent will not stop someone in Japan, etc. from exploiting the patent (you can stop imports of infringing goods, though)
  - No “international patent”
  - International process for obtaining national patents (Patent Cooperation Treaty, or PCT)

# Provisional Patents

- Provisional Patent Applications
  - Inexpensive way to get an invention on file with the USPTO; Filing fee ($160/$80) + legal fees is typically less than $2,500
  - Must enable; no new matter in the later, regular application
  - Must file regular application within 12 months to maintain priority of filing date

# Patents – First to Invent in U.S.

- Laboratory Notebooks – What are they?
  - Technical diary;
  - Ideas, completed work, and accomplishments;
  - Chronological order;
  - Helps avoid repeated mistakes; and
  - Helps to track successes and failures.

- http://vpr.utsa.edu/commercialization/LabBook.php
- http://www.rod.beavon.clara.net/lab_book.htm
- http://www.ruf.rice.edu/~bioslabs/tools/notebook/notebook.html
- http://www.chem.uky.edu/courses/common/notebook.html

# What should be entered into notebook?

- Title (what is the invention called)
- Purpose (what the invention does)
- Description (functional and/or structural)
- Sketch (informal sketch)
- Ramifications
- Novel features
- Closest know prior art
- Advantages

# A Patent May Have Huge or Little Commercial Value

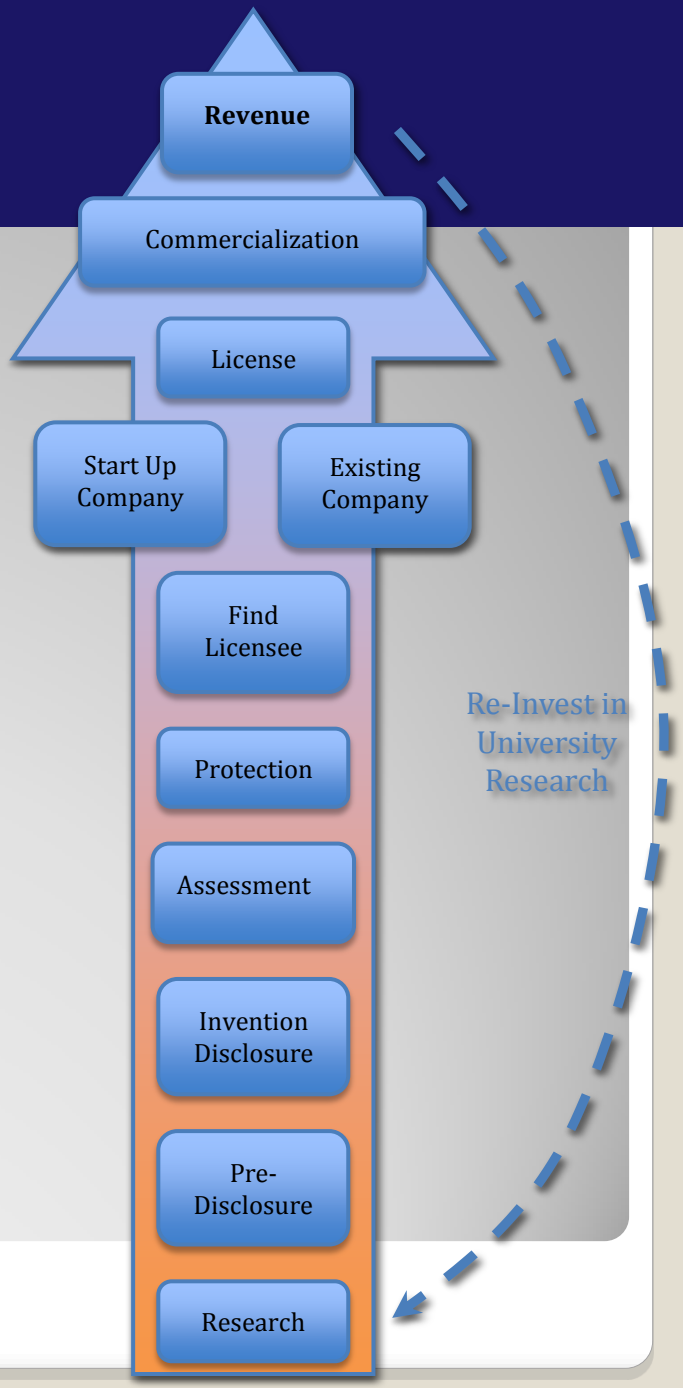
# PATENTABILITY VS. INFRINGEMENT

1. **Everything new is patentable (almost) - if you add enough elements to the claim.**

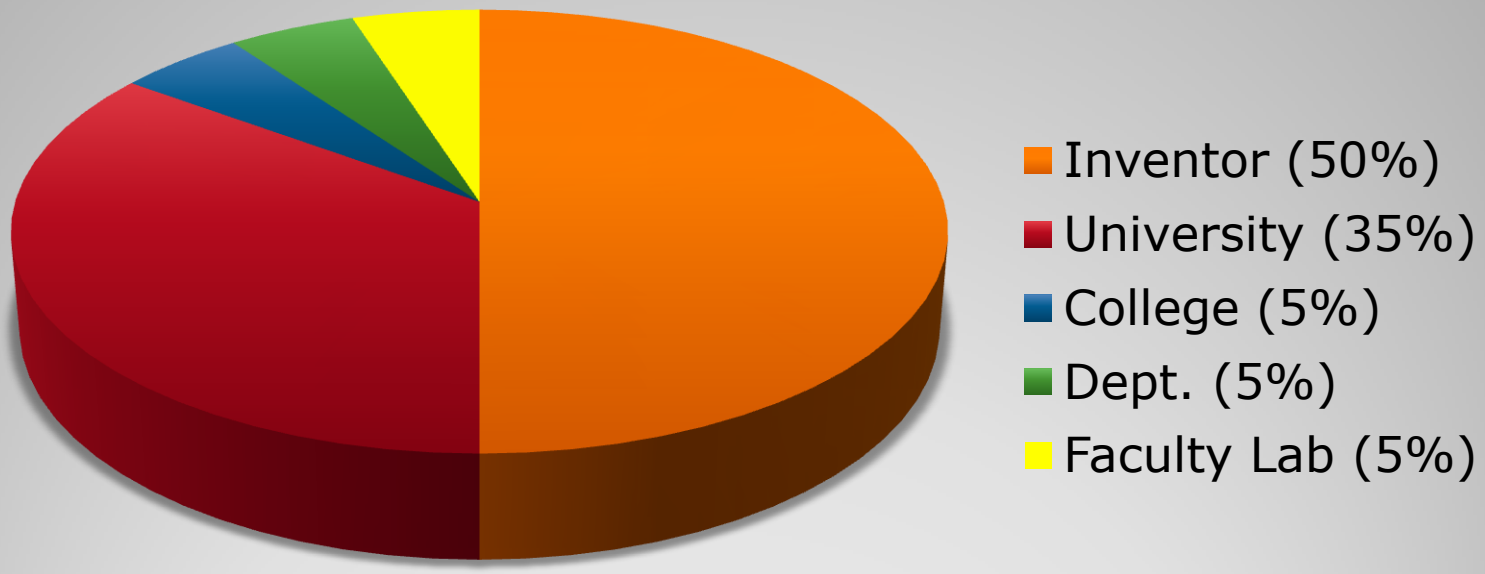
2. **But the more elements needed to get a patent, the less its value (maybe zero) - because fewer accused devices and methods infringe.**

# Patent Process at UTSA

- Beginning with Research
- Invention Disclosure
  - Formal written description to the technology commercialization office
- Non-Disclosure Agreement
  - Agreement for others to see/hear about invention without making it public
- Material Transfer Agreement
  - Between organizations
- Patent Assignment to UTSA
  - Regents Rules Series 9000 (www.utsystem.edu/BOR/rules.htm)
- License
  - Right to use/produce/sell invention
- Royalty Sharing
  - Moneys paid for license split amongst recipients (university and inventors)



# Royalty Sharing at UTSA




Faculty 50% - 1099 additional taxable income
Other – Discretionary accounts for reinvestment in UTSA

# I think I have an Invention, What should I do?

- Call licensing office when you believe you have created or discovered something unique with potential commercial or research value. (210) 458-4458.
- Complete and submit the Disclosure Form (See http://research.utsa.edu/commercialization/ ) before publicly disclosing your technology or submitting a manuscript for review and publication. Include companies and contacts you believe might be interested in your invention or who may have already contacted you about your invention.
- To avoid risking your patent rights and possibly hindering the opportunity to market your invention, contact the Office of Contracts Grants and Industrial Agreements (OGCIA) (http://vpr.utsa.edu/contracts/) to ensure you have the appropriate agreements in place.
- Some aspects of the patent and licensing process may require significant participation on your part. You will be required to participate with the lawyers and licensing staff in drafting the patent material and responding to information requests as part of the patenting and licensing process.
- Keep licensing staff informed of upcoming publications or interactions with companies related to your intellectual property.

# How long does the process take?

- From disclosure to a patent filing decision should take a minimum of 1 month to several months.
- Once the patent has been filed, the patent process however, might take years, as the United States Patent and Trademark Office (USPTO) currently has a 3-5 year backlog of patents to review.
- The commercialization process may take months to years depending on the level of development of the invention and the approval timeline for the invention. For example, new drugs take 7-10+ years to develop and achieve FDA approval before sale, compared to software that may be developed and sold in a matter of months with no regulatory approval.

# FY 2006 U.S. Licensing Activity

- $45 billion in R&D expenditures were received by U.S. academic centers
- 697 new products introduced into the market in 2006 – 4,350 introduced from FY98 through FY06
- 553 new startup companies launched in 2006
- 12,672 licenses and options were managed, yielding active income (each single license represents a one-on-one relationship between a company and a university, hospital or research institution that earns income on products that benefit our communities)
- 5,724 new spinouts from FY80 through FY06

# License Income

(Average FY 2004 - Source: Association of University Technology Managers )

| | |
|---|---|
| $ New York University | $80,908,972 |
| $ Baylor College of Medicine | $ 6,758,000 |
| $ University of Texas - Austin | $ 5,057,647 |
| $ UTHSCSA | $ 2,211,194 |
| $ UTHSC-Houston | $ 1,998,947 |
| $ University of Houston | $ 534,053 |
| $ University of Tx Med Branch | $ 222,994 |
| $ Texas Tech | $ 157,365 |
| $ Rice University | $ 122,000 |
| $ UTSA` | $ 0 |

# Field of Use vs. Territory

- Use Limitation
  - Allows multiple licensees to exploit different uses of the same technology
  - Should Smallco limit the Field of Use? Should Bigco demand unlimited rights (limited only to the scope of the Patents and Know How)?
- Geographical Limitation on the rights to exploit Patent Rights and Know How

# Inventor is Key to Commercialization

- Inventor knows field
- Inventor knows potential licensees
- Inventor can continue to invent to fill product pipeline for new ventures
- Get to know the Licensing Associates
- Get to know the University policies – this can be very lucrative for a professor

# What You Should Remember

- Creating and commercializing new Intellectual property is a goal for the university and is mandated by federal law (Bayh-Dole) for federally funded research. The Code of Federal Regulations provides information on patent rights and responsibilities currently applicable to universities under the federally sponsored projects.
- Protecting intellectual property requires filing an invention disclosure and working with an licensing associate **PRIOR** to making the invention public knowledge (i.e. publication).
- Sponsored research might require and MOU, NDA, MTA, or other contractual agreement that defines the IP and conditions for use. Make sure these have been done with the OCI prior to contract signing.
- Protecting IP may take the form of trademarks, copyright, trade secrets, and patents.
- UTSA is committed to world-class research leading to new innovation, invention, and commercialization.

# Questions?

- Dr. Cory R. A. Hallam
  - 210-458-6985
  - cory.hallam@utsa.edu
  - Web Sites of Interest
  - VPR: http://vpr.utsa.edu/ - click on commercialization and tech transfer
  - UT System IP Rules (Series 9000 IP): http://www.utsystem.edu/BOR/rules.htm
  - US Patent and Trademark Office: http://www.uspto.gov/