



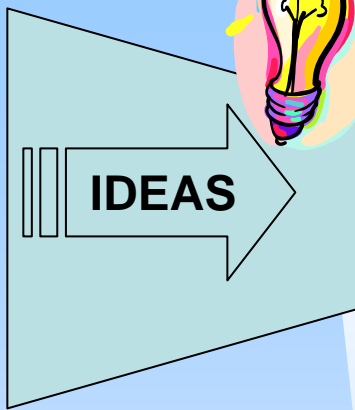
Intellectual Property and Technology Transfer

Office of Intellectual Property Administration

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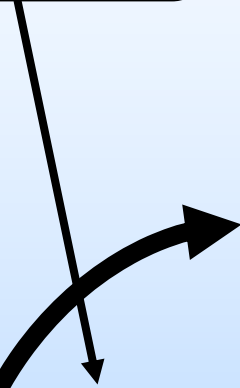
Brian Kraft, Juli Morse Stump



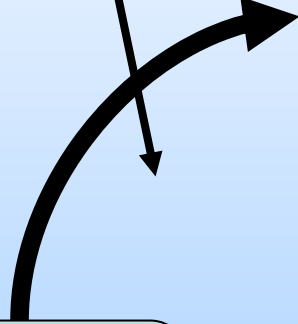
Invention
Faculty



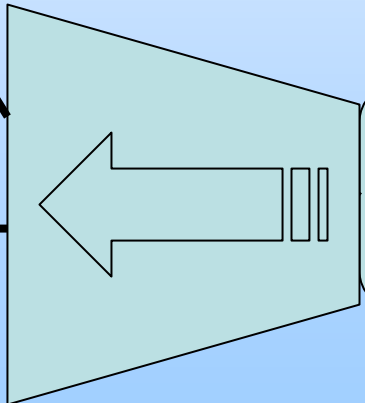
Disclosure
Evaluation
OIPA



Patenting
Patent Atty



Marketing
OIPA



Licensing
WSURF

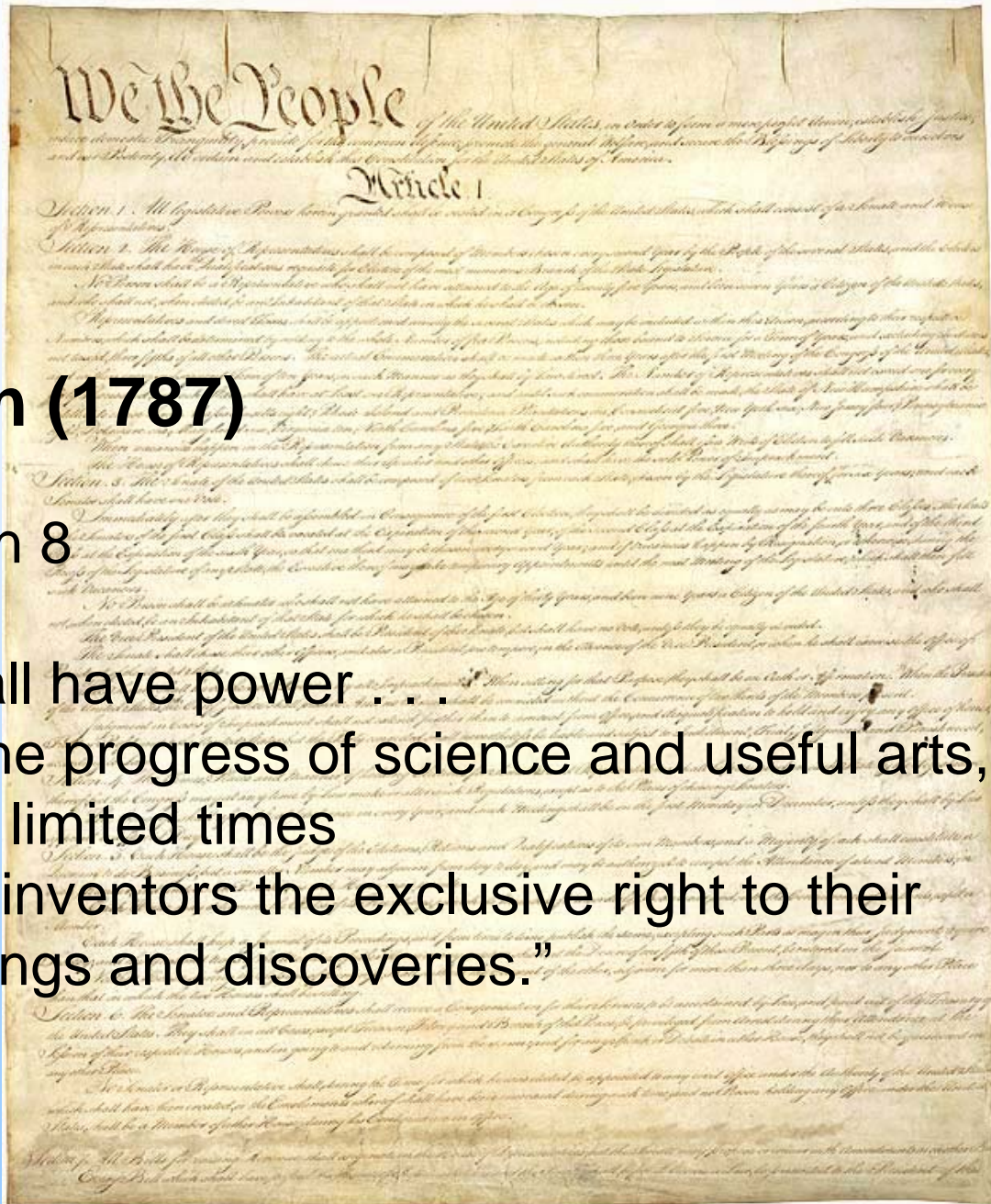
Start-up
WSURF



Constitution (1787)

Article I, section 8

“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.”



Intellectual Property (IP) “anything under the sun that is made by man”.

Categories of Intellectual Property

Patents (governed by federal law)

Copyrights (federal law)

Trade Secrets (state law)

Trademark (federal law)

Plant Variety Protection (federal law)

An Invention Results from Research

- Patentable?
 - **Statutory Class**
 - **Useful** – “utility” (35 USC 101).
 - Rear windshield for a horse?
 - Rotating birthing machine?
 - Perpetual motion machine?
 - Phenomenon of superconductivity?
 - **Novel** – “new or unique” (35 USC102)
 - **Non-Obvious** (35 USC 103).
 - **Enabled** with good written description (35 USC112)
- Patents are property ownership title documents similar to a lease on a car.

- Patentable subject matter
 - Processes
 - **Process**
 - **Art**
 - **Method**
 - Machines
 - Manufactures
 - Compositions of Matter
 - Or improvements thereof

Patentable Subject Matter

What is patentable?

- Altered bacteria
- Transgenic animals
- Asexually reproduced plants
 - (plant patents)
- Ornamental designs for articles of manufacture (design patents)
- Drugs for rare diseases
- A device

Patents

- **Nonstatutory subject matter**
 - Phenomena of nature
 - Scientific principles

What's Obvious?

- Conventional transformations and operations on objects such as:
 - Changing the size
 - Substituting a new material
 - Making a device portable
 - A new use for an old device
 - Omitting parts
 - Moving parts around

Patentable? Answer: Maybe

The inventor should explain why it is not obvious to one skilled in the technology (aka “to one skilled in the art”).

Risks of not patenting

- Legitimate re-discovery
- Reverse Engineering
- Patenting may be forever barred if application is not filed

Cons – Exposure

- Invention and research strategy exposed to the public
- Infringement is difficult to detect
- Trade secret status destroyed

How do you patent something?

- Provisional
- Non-provisional
- PCT or international applications
- National phase applications

Prior Art Searches

A critical step in research!

- Someone already had the idea?
 - 10 years of research for nothing
- Search
 - Diligently search all publications including:
 - The USPTO database
 - www.uspto.gov
 - The WIPO database
 - www.wipo.int

Typical Patent Policy

- **For a University: “An invention developed by an employee using university resources shall be the exclusive property of the university ...”**

Co-Inventorship

- 35 USC 116 – Joint inventors “shall apply” for patent jointly ...
- Failure to name all inventors may invalidate patent.
- Inventorship vs. authorship

Co-Ownership

- **Ownership begins with the inventor.**
- **Inventors share equally unless they agree to a different scheme by contract.**
- **Inventors must assign their ownership to the university.**

Plant Variety Protection

- For **new varieties of plants** that a cultivator developed through sexual reproduction (by seed) or tuber-propagation.
- The owner of a U.S. protected variety has **exclusive rights to multiply and market the seed** of that variety.

Copyrights

- Protects an author's artistic expression in a literary work, musical work, computer software, video, motion picture, sound recording, photo, sculpture, etc.
- Can register the “work” with the US Copyright Office.
- University owns all copyrightable works made within the scope of your employment.

You have an invention...

- For eg., a monoclonal antibody
- A pathogen detection test
- A new disease resistant variety
- A new device
- A new compound

Mandatory Invention Disclosure

- University requires IP disclosures.
- Disclosure is usually done through an “Invention Disclosure Form.”

WSURF Case No. _____
For Office Use Only

Washington State University
Office of Intellectual Property Administration

INVENTION DISCLOSURE (STANDARD)

PURPOSE: In order to determine whether to pursue patent protection and seek licensees for your invention(s), Washington State University needs certain information regarding the results of your research and the potential commercial value of your invention(s). The University also is required by the federal government to report all inventions created with federal funding whether such inventions are patentable or not. The purpose of this form is to obtain the information needed by the University to fulfill its obligations to you as an inventor and to the entities that fund university research.

CONFIDENTIAL: This Invention Disclosure may contain information proprietary to Washington State University and may not be disclosed to anyone not bound to the University or its assignee under the terms of a written confidentiality agreement.

1) CONTRIBUTOR(S). Contributors to an invention are individuals who may have contributed to the conception and/or reduction to practice of the invention. Please list all individuals who may belong in this category. A patent attorney will determine if one or more of the listed individuals fulfill the legal requirements to be named as an inventor on a patent application if an application is filed.

Name (last, first, middle)	Department	Mail Code	Campus Telephone	E-mail Address	Position

Invention Disclosure Form

- 1) Inventors
- 2) Description (Novelty and Utility)
- 3) Important dates (conception, reduction to practice, public disclosure etc.)
- 4) Commercial potential
- 5) Financial support
- 6) Signatures

Complete form at www.wsu.edu/~oipa

Technology assessment

- Stage of Development
- Patentability and Patent Coverage
- Development costs and time
- Technical merit
- Market Breadth
- Market size
- Inventor(s)'s participation

Licensing

- Can license patents, copyrights, trade secrets, know-how, trademarks.
- Ultimate goal is to transfer the technology into the marketplace and gain recognition (usually in a University setting).
- This Process is called “Tech Transfer”.

Traditional Licenses

- Novel fungicidal use for registered herbicide
- Fat Marbling genes in beef
- Transgenic plants
- Improved food quality tools
- Separations technologies
 - Mass spec
 - Liquid phase ion mobility spectrometry

Licensing

- Non-exclusive
- Exclusive
- Field of use
- Geographies
- Evaluation Agreement with Option to License
- Sponsored Research Agreement may have an Option to License

The Parameters of a License

- Royalties
 - License Issue Royalty
 - Annual Minimum Royalty
 - Earned Royalty
 - Equity
- Development Milestones
- Reimbursement of Patent Costs
- Diligence provisions

Licensing Royalty Revenue

- Typical University's IP Policy provides for a split between the University and Inventors.
 - At WSU-
 - \$1-\$10,000: Inventor 100%
 - \$10,000-\$200,000: Inventor and University split equally
 - Above \$200,000: Inventor 25% and University 75%

This process is affected by...

- Sponsored Research Agreements
- Confidentiality and Publications
- Lab records
- Material Transfer Agreements etc.

Keep good Lab Notebooks

Example

**Two Patents filed 1 week Apart
Who has rights to the invention?**

Inventor A

Filed September 20, 2004
Invented January 2002

Inventor B

Filed September 13, 2004
Invented March 2002

US--- “**first to invent**”

Foreign countries--- “**first to file**”

Material Transfer Agreements

- All Material needs to have an MTA attached to it.
- **What is Material?** Clones, cultures, oligos, proteins and anything you developed!
- Two Kinds:
 - In-coming (via OGRD)
 - Out-going (via our office)
- Only for research purposes and no commercial use allowed
- Usually no further transfer allowed
- Careful how “Modifications” are defined so you protect your invention

Material Transfer Agreements

For eg., a Company wants to sponsor research and wants to discuss first---

What to do next?

- Set up a non-disclosure agreement via OGRD
- Discuss research; Submit Proposal; Grant
- SRA negotiated by OGRD
- **Incoming MTA** negotiated by OGRD
- Conduct research and an Invention results
- Submit Invention Disclosure to OIPA
- OIPA evaluation and agreement negotiation with Company with attached **outgoing MTA**

Thank You!

Web site : www.wsurf.org
www.wsu.edu/~oipa

**WSU Business Policies and Procedures
Manual @ www.wsu.edu**

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