

A photograph of the University of Idaho's clock tower, a prominent red brick building with Gothic architectural features, including a large clock face and ornate window designs. The scene is captured at sunset, with a warm, orange and pink sky. The tower is the central focus, with other parts of the building visible to the left and right.

INTELLECTUAL
PROPERTY

IN

COMPUTER
SCIENCE



University of Idaho

LEGAL DISCLAIMER

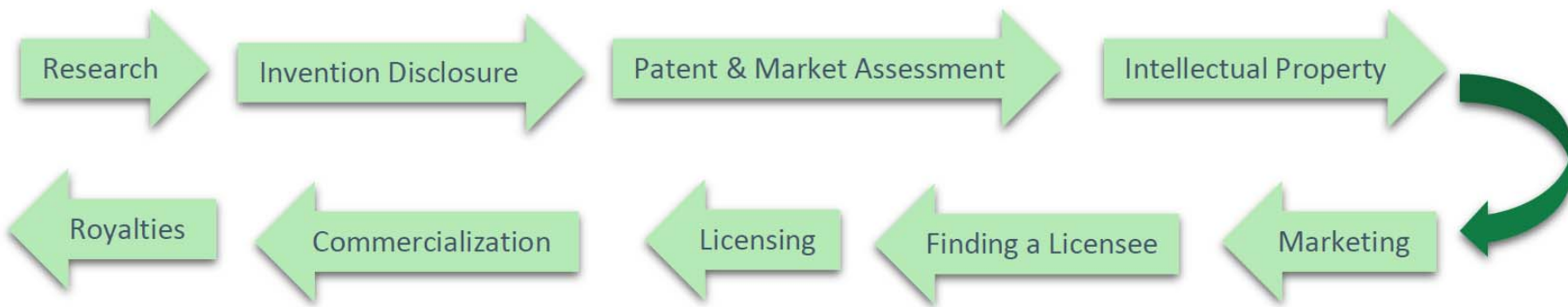
The materials available in this presentation and accompanying discussion are for informational purposes only, and **NOT FOR THE PURPOSE OF PROVIDING LEGAL ADVICE**. You should contact your attorney to obtain advice if you have questions related to your rights. Use of and access to this presentation or any of the slides or information contained within the presentation do not create an attorney-client relationship between Jeremy Tamsen and the user or browser, nor between the University of Idaho and the user or browser. The opinions expressed in this material are the opinions of the individual author and may not reflect the opinions of the University of Idaho.



■ OVERVIEW

1. Technology Transfer – who we are and what we do
2. U.S. Patents and their relationship to software
3. Technology Transfer – what we look for in software innovations





Jeremy Tamsen
 Director of the Office of
 Technology Transfer



208-885-4550
 tamsen@uidaho.edu

Karen Stevenson
 Licensing Associate



208-885-4550
 karen@uidaho.edu

Lokesh Mohan
 Licensing Associate



208-885-4550
 mohanl@uidaho.edu

Teresa Dillon
 Assistant to the AVP of
 Economic Development

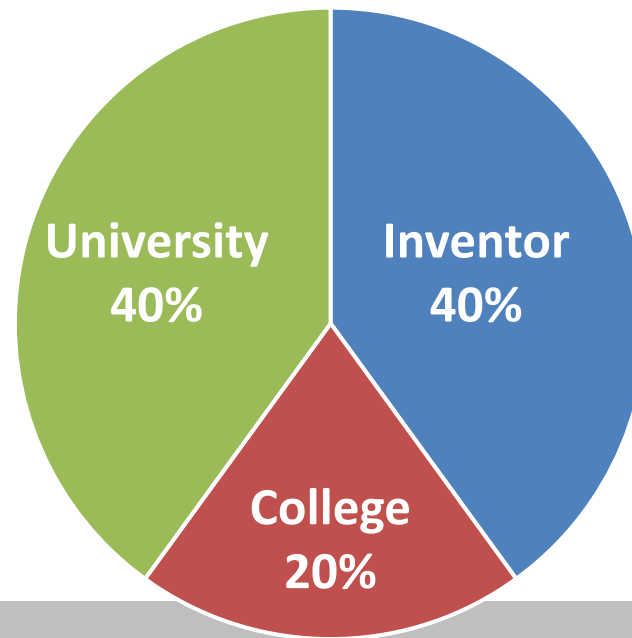


208-885-4550
 trdillon@uidaho.edu



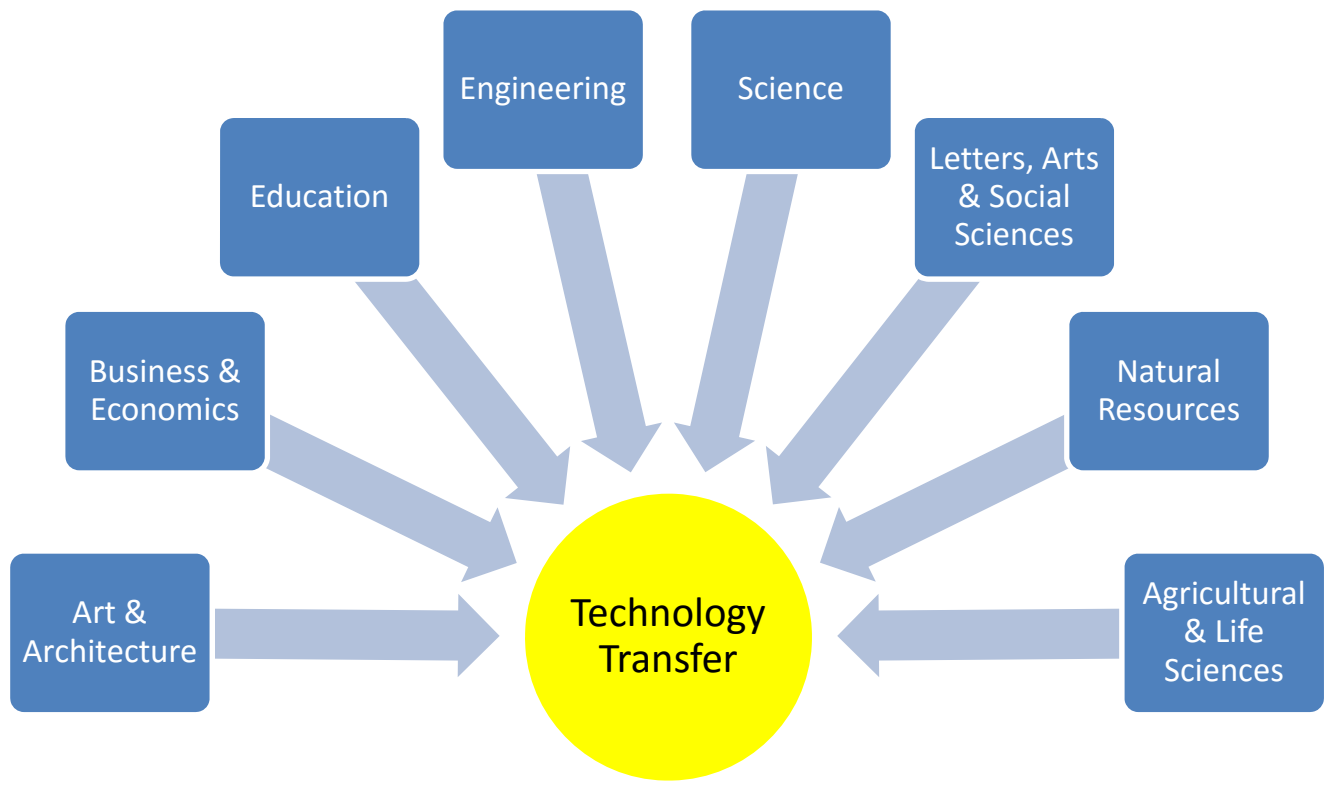
UNIVERSITY FACULTY INVENTIONS

Royalty Revenue*

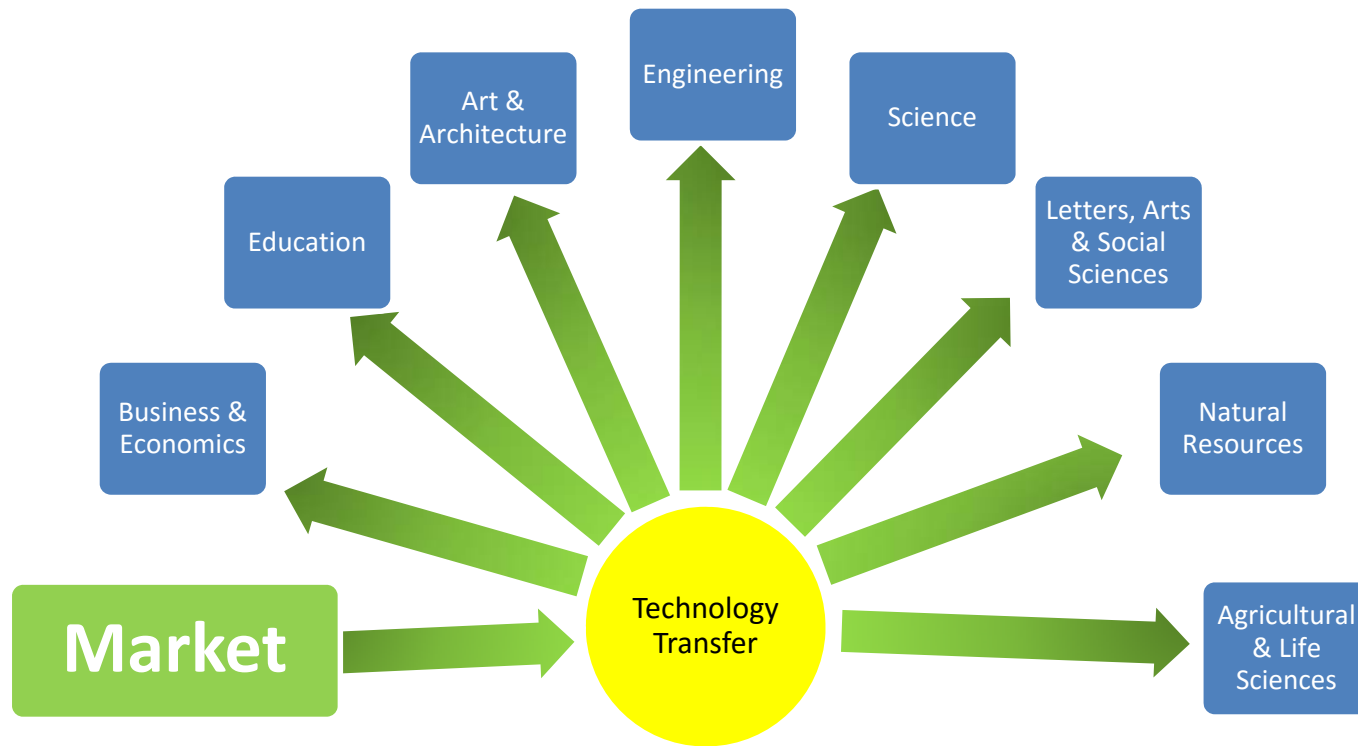


*absent a valid written agreement

University of Idaho



University of Idaho





WHAT IS INTELLECTUAL PROPERTY?



Why should I care?

\$14,684,300,000

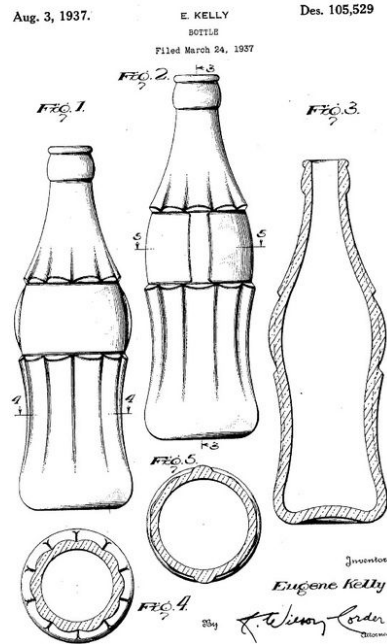
Idaho M&A



University of Idaho

FORMS OF INTELLECTUAL PROPERTY

Patents

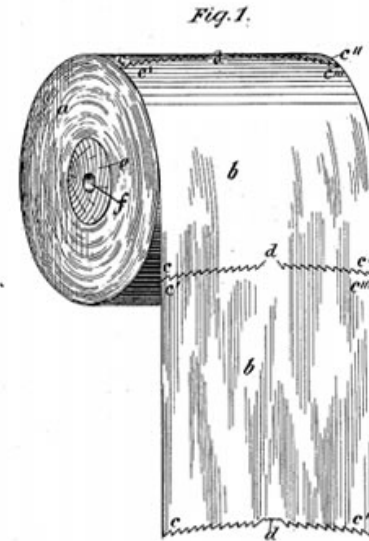


(No Model.)

S. WHEELER.
TOILET PAPER ROLL.

No. 465,588.

Patented Dec. 22, 1891



FORMS OF INTELLECTUAL PROPERTY

Patents

- The *right to exclude others* from making, using, offering for sale, or selling the invention throughout the United States. Provide protections in the event of a dispute.
- The right to exclude is a time-limited reward for public disclosure of the invention (patents are an *enabling disclosure*).
- This is a property right, it can be bought, traded, and sold.
 - Owners must enforce their own right to exclude using dispute resolution mechanisms, including the PTAB and the courts.
 - Inventor is forever recognized on the patent application



FORMS OF INTELLECTUAL PROPERTY

Patents

- * * • *Public disclosures* – 1-year grace period to file patent in the USA (and *maybe* Canada, Australia, or Japan)
 - Non-confidential communication (including photos) which an inventor or invention owner makes available to one or more members of the public.
- Patent applications are reviewed by USPTO attorneys for **novelty** and **non-obviousness** compared to “prior art”
 - printed publications included in definition of “prior art” = can destroy patentability
 - “enabling disclosure” requirement of the patent application



35 U.S.C. §101

Yes:

- Process
- Machine
- [article of] Manufacture
- Composition of matter

No:

- Discoveries, Natural Laws, Scientific Principles, Natural Phenomena, Mathematics
- Abstract ideas, ideas in general
- Atomic Weapons
- Naturally Occurring things (except plants)
- Anything encompassing a human being



SOFTWARE PATENTS – CASE HISTORY

Gottschalk v. Benson (1972)

No patent allowed:
Program was merely an abstract idea with no connection to industrial application.

Diamond v. Diehr (1981)

Patent Granted:
Since the mathematical formula was tied to a programmed (specific) computer, and since it involved discrete steps, the patent was allowed.



SOFTWARE PATENTS – CASE HISTORY

Bilski v. Kappos (2010)

No patent allowed:
the business process patent
claims were not directed to
patent-eligible subject matter.
Affirmed the “Machine-or-
Transformation Test”

Machine-or- Transformation Test

- A claimed process is patent-eligible if:
- (1) It is tied to a particular machine or apparatus; or
 - (2) It transforms a particular article into a different state or thing.



SOFTWARE PATENTS – CASE HISTORY

Alice v. CLS Bank (2014)

Software patent is only allowable **only when**:

- (1) It covers a process*, machine, manufacture, or composition of matter;

and

- (2) It is transformative (inventive).

*Most software patents are a subset of process patents.

A process is patent-eligible **only if**:

- (1) It is tied to a particular machine or apparatus;
- or**
- (2) It transforms a particular article into a different state or thing.



PATENT ELIGIBILITY

1. Utility

2. Novelty

3. Non-obviousness

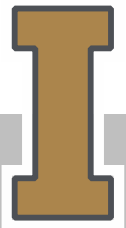
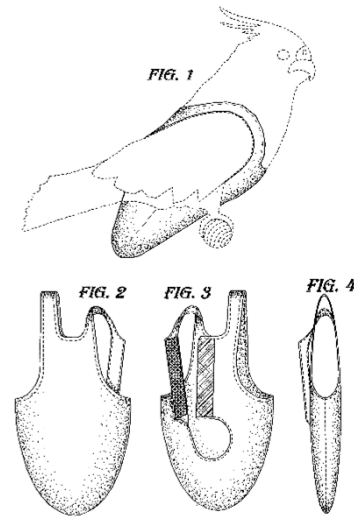


Patent Eligibility

1. USEFULNESS

35 U.S.C. §101:

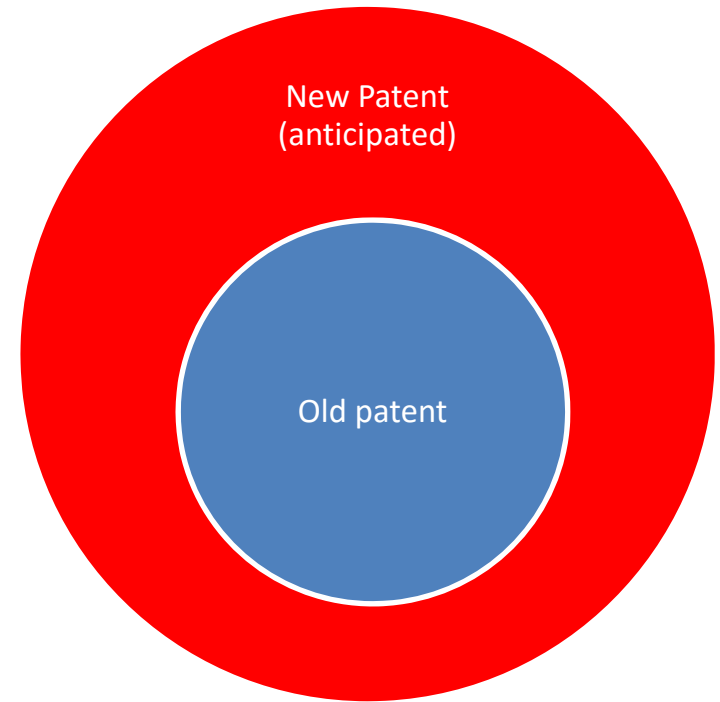
- “utility” requirement
- Must have some application for beneficial use
- “the invention should not be frivolous or injurious to the well-being, good policy, or sound morals of society” – Justice Story.



2. NOVELTY

35 U.S.C. §102:

- The invention must be demonstrably different from what is publicly available.
- “Prior art” references
- Anticipation: a patent can be denied where it claims each and every element of a single prior art reference



Patent Eligibility

3. NON-OBVIOUSNESS

35 U.S.C. §103:

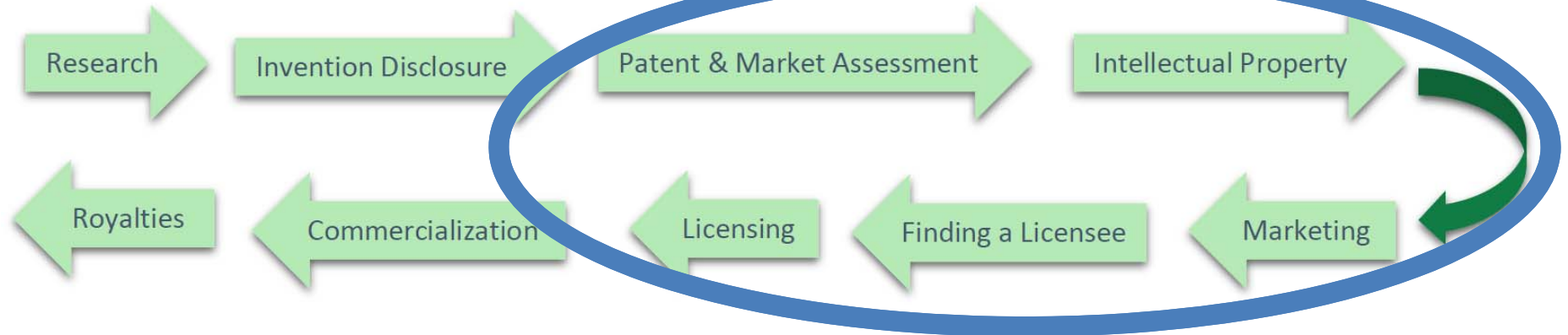
- The invention cannot be “obvious” to a person having ordinary skill in the art.
 - Broad definition
- Teaching-Suggestion-Motivation (TSM) test:
 - Was it taught by prior art?
 - Was it suggested by prior art?
 - Was it motivated by prior art?
 - If “yes” to any, the patent could be denied.



SOFTWARE UTILITY PATENTS



WHAT DOES OTT LOOK FOR?



Jeremy Tamsen
Director of the Office of
Technology Transfer



208-885-4550
tamsen@uidaho.edu

Karen Stevenson
Licensing Associate



208-885-4550
karens@uidaho.edu

Lokesh Mohan
Licensing Associate



208-885-4550
mohanl@uidaho.edu

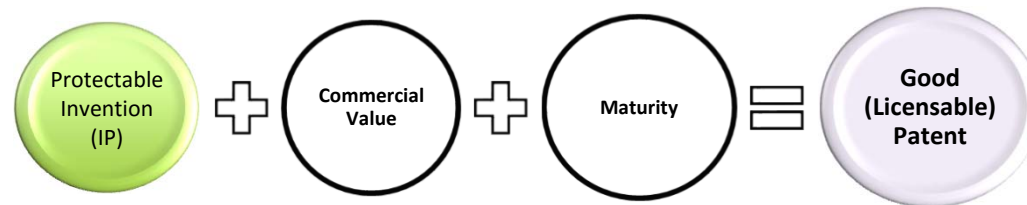
Teresa Dillon
Assistant to the AVP of
Economic Development



208-885-4550
trdillon@uidaho.edu



OTT FACTOR 1: PATENTABILITY

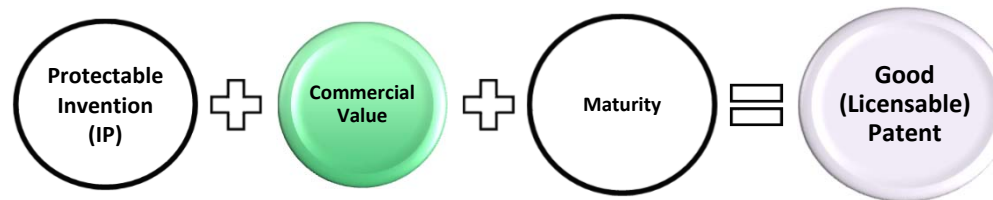


- To what extent has the invention already been disclosed to the public? (i.e. is it novel)
- Obviousness - TSM test, an invention is obvious (and therefore un-patentable) only if there is a teaching, suggestion or motivation to combine prior art references.
- Anticipated scope of claims? How useful is this patent? Does the patent rely upon others?



Rate: Broad or Narrow

OTT FACTOR 2: MARKETABILITY

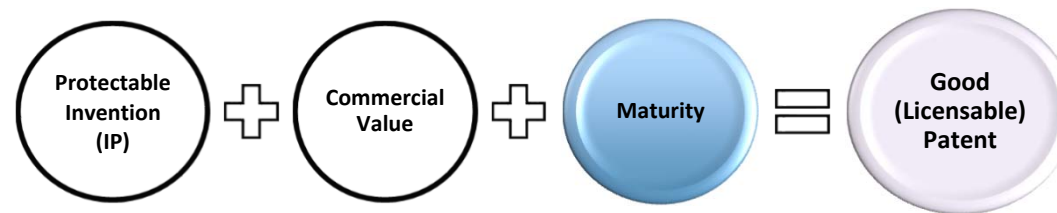


- Nature of the technology in the market: breakthrough or incremental improvement?
- Competitive products: currently available in the market?
- Market Assessment: size, fields of use, company players?
- Value Proposition: Does the added value exceed the cost of development?



Rate: High or Low

OTT FACTOR 3: MATURITY



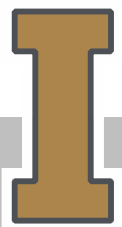
- How close is this invention to being instantiated in a commercial product or service?
- Anticipated time to license?



Rate: Early or Late

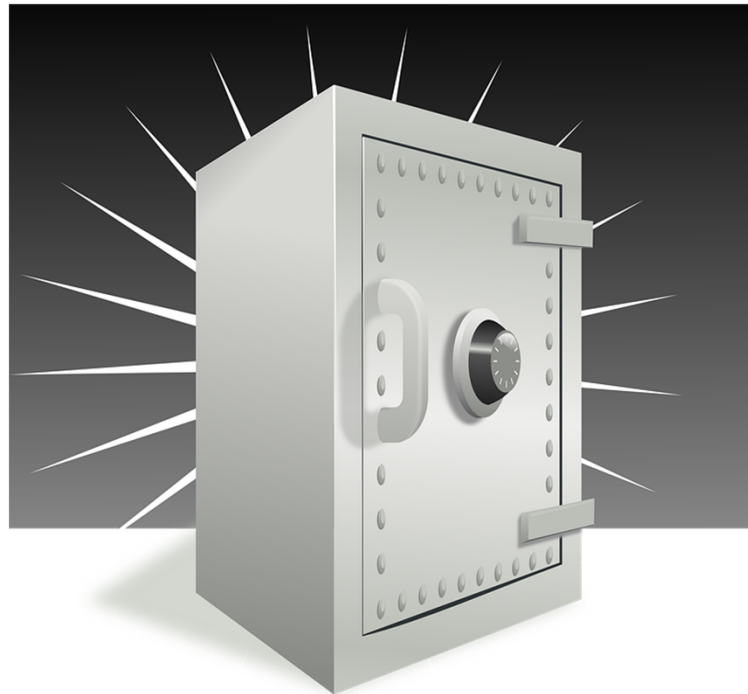
OTT DECISION MATRIX

Category	Patentability	Marketability	Maturity Stage	Go/No-Go	Activity
1	Narrow	Low	Early or Late	No-Go	Abandon or Assign rights back to inventors
2	Broad	Low	Early or Late	No-Go	Abandon or Assign rights back to inventors
3	Narrow	High	Early	Further diligence required	Seek collaborators for sponsored research
4	Narrow	High	Late	Go	Seek Licensee with non-exclusivity terms
5	Broad	High	Early	Go	Actively seek licensee with option terms
6	Broad	High	Late	Go	Actively seek licensee for exclusivity



FORMS OF INTELLECTUAL PROPERTY

Trade Secrets



FORMS OF INTELLECTUAL PROPERTY

Copyrights



TJ(1)

FORMS OF INTELLECTUAL PROPERTY

Copyrights

- Protects the expression of an original work of authorship, and elements of that expression.
- * • **Does not protect your underlying ideas, only the particular expression of those ideas**
- Rights affix at the time the expression is “fixed in a tangible medium.”
- Federal registry is available, provides enhanced protection in the event of a dispute.
- Put others on notice by using the symbol with the date: © 2017.



FORMS OF INTELLECTUAL PROPERTY

Trademarks



Google



University of Idaho

FORMS OF INTELLECTUAL PROPERTY

Trademarks

* **TM** **®**

- Rights affix as soon as you use the mark to identify you as the source of goods or services
- Using the TM symbol puts others on notice that you intend to use the mark as an identifier
- Filing a registration with the state or federal office establishes a place in time for your claim
- State and federal registries provide enhanced protection in the event of a dispute
- **Using the circle-R symbol indicates that you have obtained a registration for the mark**



FORMS OF INTELLECTUAL PROPERTY

Contracts

IMPORTANT-READ CAREFULLY: BY DOWNLOADING, INSTALLING, OR USING THE SOFTWARE, YOU (THE INDIVIDUAL OR LEGAL ENTITY) AGREE TO BE BOUND BY THE TERMS OF THIS END USER LICENSE AGREEMENT ("EULA"). IF YOU DO NOT AGREE TO THE TERMS OF THIS EULA, YOU MUST NOT DOWNLOAD, INSTALL, OR USE THE SOFTWARE, AND YOU MUST DELETE OR RETURN THE UNUSED SOFTWARE TO THE

- I accept the terms in the license agreement
 I do not accept the terms in the license agreement

< Back

Next >

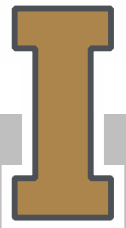
Cancel



FORMS OF INTELLECTUAL PROPERTY

Contracts

- Set the rights and obligations of parties relative to one another
- Set restrictions on how your assets, including intellectual property, are used by third parties
- Usually require advice, understanding, and negotiation to complete
- Provide evidence and enhanced protections in the event of a dispute






POTENCY OF PROTECTION

- **Trade Secrets**
 - **Copyrights**
 - **Trademarks**
 - **Contracts**
 - **Patents**



DIFFICULTY TO OBTAIN





THANK
YOU!



Jeremy Tamsen

Director | Office of Technology Transfer
Tamsen@uidaho.edu

University of Idaho