

Intellectual Property & Tangible Property Licensing

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Intellectual Property (IP) what is it?

- IP is Not Real Property
 - Land and buildings and fixtures permanently attached to land
- IP is Not Personal Property
 - Clothes, furniture, vehicles



Intellectual Property (IP) what is it?

IP is Intellectual Property - a Product of the human mind

IP is the following types:

- Trade Secrets
- Copyrights
- Trademarks
- Plant Breeders Rights/Plant Variety Rights
- Patents – Design, Plant, and Utility Patents

(Listed from the Easiest to the Hardest to Obtain)



Trade Secrets

The [Uniform Trade Secrets Act \(“UTSA”\)](#), enacted by 48 U.S. states, PR, VI, & WADC, defines a “Trade Secret” as:

“information, including a formula, pattern, compilation, program, device, method, technique, or process that:

- (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means, by other persons who can obtain economic value from its disclosure or use, and
- (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.



Trade Secrets

Trade Secrets Characteristics:

- (i) have Confidential Information that has actual or potential independent economic value, because that information isn't generally known;
- (ii) have economic value to other persons who can't legitimately get the Confidential Information;
- (iii) are subject to reasonable efforts to keep the Confidential Information secret.



Examples of Trade Secrets

- Chemical Formulas for Products - Dawn, Listerine, WD-40
- Lists - NY Times Bestseller List, customer lists, client lists, vendor lists
- Recipes for Food Products – Coca Cola, Kentucky Fried Chicken, McDonald's Big Mac Special Sauce
- Software Algorithms - Google search algorithm, Kayak search algorithm



Copyrights

- The U.S. Constitution provides the original motivation for protecting IP
- [Article 1, Section 8, Clause 8 Intellectual Property](https://constitution.congress.gov/browse/article-1/section-8/)
<https://constitution.congress.gov/browse/article-1/section-8/>
“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”
- [Artl.S8.C8.3.1 Authorship, Writings, and Originality](https://constitution.congress.gov/browse/essay/artl-S8-C8-3-1/ALDE_00013063/)
https://constitution.congress.gov/browse/essay/artl-S8-C8-3-1/ALDE_00013063/
- [Artl.S8.C8.3.2 Limited Times for Copyrights and the Progress of Science](https://constitution.congress.gov/browse/essay/artl-S8-C8-3-2/ALDE_00013064/)
https://constitution.congress.gov/browse/essay/artl-S8-C8-3-2/ALDE_00013064/
- [Artl.S8.C8.3.3 Copyright and the First Amendment](https://constitution.congress.gov/browse/essay/artl-S8-C8-3-3/ALDE_00013065/)
https://constitution.congress.gov/browse/essay/artl-S8-C8-3-3/ALDE_00013065/



Examples of Copyrights

U.S. Copyright law protects published and unpublished "original works of authorship, fixed in a tangible medium" such as:

- Architectural works
- Books, Poems, Rap Lyrics
- Drawings, Paintings, Sculptures
- Pantomimes, Choreographic works
- Pictures, Photographs
- Plays, Operas, Musicals
- Song, Sound Recordings
- Software, Websites, Blogs
- Theses, Manuscripts, Posters, Term papers
- Videos, Movies, Audio-visual works



How to obtain copyrights

- Claim a copyright with the US Copyright Office.
- You can also place the symbol © (the letter C in a circle), or the word "Copyright" or the abbreviation "Copr."; The year of first publication of the work; and. The name of the owner of copyright in the work.

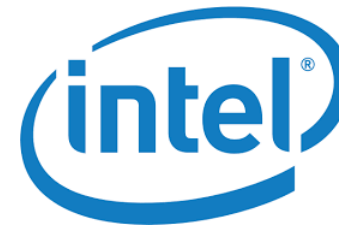


Trademarks

- A trademark:
 - can be any word, symbol, sound, slogan, scent, phrase, logo, design, color, or a combination of these things
 - identifies you, your entity, and your and your entity's, products and/or services.
 - enable your customers/clients to recognize you or your entity's products and/or services in the marketplace and distinguish them from other products and services
 - identifies the source of your or your entity's products and/or services
 - helps you or your entity guard against counterfeiting and fraud
 - gives legal protection for you or your entity's brand



Examples of Trademarks



Plant Breeders' Rights/Plant Variety Rights

- Plant Breeders' Rights (PBR), also known as Plant Variety Rights (PVR), are rights that give plant breeders of new varieties of plants, trees and/or vines the exclusive right to:
 - Propagate materials (cuttings, divisions, seeds & tissue cultures)
 - Harvest materials (flowers, fruits, & foliage)
 - Commercialize (market and license) the new varieties
- These rights are for a specific number of years:
 - 25 to 30 years for trees or vines (25 in the U.S.)
 - 20 to 25 years for plants (20 in the U.S.)



Patents

- Patent Law is designed to encourage inventors to disclose their new inventions to the world in exchange for a time-limited period of monopoly to **exclude others** from making, using, selling, offering for sale, importing, inducing others to infringe, and/or offering a product specially adapted for practicing the patented invention
- Inventors or owners of an invention must file a patent application for their invention with the [United States Patent and Trademark Office \(USPTO\)](#) or a foreign patent office in order to obtain a patent. A Patent is not automatic, unlike a copyright which is automatic.
- For the USPTO to grant a patent on an invention, the invention must be:
 - Useful
 - Novel
 - Non-obvious to a person of “ordinary skill” in the relevant art
 - Directed at patent-eligible subject matter



3 Types of Patents

- Design Patent
- Plant Patent
- Utility Patent



Design Patents

- Whoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefor, subject to the conditions and requirements of this title. 35 U.S. Code §171.
- Expires 15 years after the date the USPTO grants the patent
 - 14 years if the patent application was filed before May 13, 2014
- Examples of Design Patents:
 - Cell Phone – Apple Inc. iPhone smartphone
 - Computer Icon such as an Emoji
 - Fashion Accessories – Hat, Jewelry Piece, Purse
 - Furniture – Chair, Lamp shade
 - Bottle – Coca Cola Bottle
 - Monuments – Statue of Liberty



Plant Patents

- Whoever invents or discovers and asexually reproduces any distinct and new variety of plant, including cultivated sports, mutants, hybrids, and newly found seedlings, other than a tuber propagated plant or a plant found in an uncultivated state, may obtain a patent therefor, subject to the conditions and requirements of this title. 35 U.S.C. §161
- Such a plant must:
 - Not be a tuber propagated plant (such as potatoes or yams)
 - be invented or discovered in a cultivated state
 - be asexually reproduced (without seeds, such as by budding, cutting, grafting or spores)
- Requires asexual reproduction to prove that the patent application can reproduce the plant
- Expires 20 years from the filing date



Utility Patents

- Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title. 35 U.S. Code §101.
- Expires 20 years from the filing date, but sometimes, the patent may have a longer expiration date
- For the USPTO to grant a utility patent on an invention, the invention must be:
 - Useful
 - Novel
 - Non-obvious to a person of “ordinary skill” in the relevant art
 - Directed at patent-eligible subject matter



Protect your IP Rights

- Execute NDAs, CDAs, DTAs, DUAs, DTAs, DSAs, or MTAs, before disclosing enabling details of your ideas inventions to anyone not on your team.
- These agreements:
 - Set the rights and obligations of all parties
 - Set restrictions on how your ideas, inventions, and physical materials will be used by the other party
 - Often require negotiating the initial terms before reaching consensus
 - Can give enhanced protections in case of disputes



There is another type of IP

- Tangible Research Property also known as TRP
 - Examples of TRP include:
 - biological samples such as liver and GI contents for which we have detected various organic chemicals.
 - interview data on topics including interviewees' experience with and connections to California's kelp social-ecological systems, perceptions of kelp forest health, and attitudes and opinions related to restoration strategies.
 - 10 snap bean breeding lines.
 - human IL-15
 - mouse squamous cell lines
 - human post-mortem samples from persons who consented to brain donation, including accompanying data such as sex, ethnic category and a summary of clinicopathological diagnosis as well as other clinical and pathological measures that may include year of death, postmortem interval, and/or age of death



Who owns specimens in a biological collection?



Association of University Technology Managers (AUTM)

List of signers to the Uniform Biological Materials Transfer Agreement (UBMTA)

- <https://autm.net/surveys-and-tools/agreements/material-transfer-agreements/mta-toolkit/uniform-biological-material-transfer-agreement/ubmta-signatories>

Link to the template agreements for sharing biological materials:

- <https://autm.net/surveys-and-tools/agreements/material-transfer-agreements>



Typical terms found in Material/Data Transfer Agreements

The PROVIDER retains ownership of the MATERIAL, including any MATERIAL contained or incorporated in MODIFICATIONS.

The RECIPIENT retains ownership of: (a) MODIFICATIONS (except that, the PROVIDER retains ownership rights to the MATERIAL included therein), and (b) those substances created through the use of the MATERIAL or MODIFICATIONS, but which are not PROGENY, UNMODIFIED DERIVATIVES or MODIFICATIONS (i.e., do not contain the ORIGINAL MATERIAL, PROGENY, UNMODIFIED DERIVATIVES). If either 2(a) or 2(b) results from the collaborative efforts of the PROVIDER and the RECIPIENT, joint ownership may be negotiated.

- The RECIPIENT and the RECIPIENT SCIENTIST agree that the MATERIAL:
 - is to be used solely for teaching and academic research purposes;
 - will not be used in human subjects, in clinical trials, or for diagnostic purposes involving human subjects without the written consent of the PROVIDER;
 - is to be used only at the RECIPIENT organization and only in the RECIPIENT SCIENTIST's laboratory under the direction of the RECIPIENT SCIENTIST or others working under his/her direct supervision; and will not be transferred to anyone else within the RECIPIENT organization without the prior written consent of the PROVIDER.



Sample Collection transfer agreements

- UC Davis Phaff Yeast Culture Collection
 - <https://phaffcollection.ucdavis.edu/terms-use>
- UC Davis Mutant Mouse Resource & Research Center
 - <https://www.mmrrc.org/catalog/mtainstructions.php>
- UC Davis Viticulture & Enology Culture Collection, an extensive collection of wine yeast and bacteria from around the world
 - https://wineserver.ucdavis.edu/sites/g/files/dgvnsk2676/files/files/page/MTA_Final24Jun11.pdf



Policies for licensing and where do fees go

- Each institution will have their own policies for licensing tangible research property.
- University of California licensing objectives:
 - encourage application of results by industry for the public benefit;
 - meet our obligations to sponsors;
 - build research relationships with industry;
 - stimulate commercial uptake and investment;
 - stimulate economic development; and
 - ensure an appropriate return of taxpayer investments.
- Each institution will have their own distinct policies regarding licensing fees.
 - UC has a variety of licensing fee options, each taking into account many factors.



Specimens licensed commercially

- DNA samples for \$15,000
- yeast strains for \$18,500
- RNA isolated for \$14,546
- clinical data for \$8,418
- a vector for \$80,000
- Agroclone for \$10,425
- a virus for \$10,000
- A chicken virus for \$20,000



Special Thanks

Kyria Boundy-Mills, Ph.D.

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Phaff Yeast Culture Collection

UC Davis, Food Science and Technology

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