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Penn Center for Innovation
pci.upenn.edu

Basis of Penn's patent policy
Basics on IP (patents and copyright)
PCI Disclosure & Commercialization Process

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Empowering Ideas

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Basis of Penn's Patent Policy

- **What is a University Patent Policy?**
  - Governs ownership of inventions made with University resources, sponsored funds, federal funds
- **Why do we have one?**
  - Bayh-Dole Act
  - Federal Funding
  - Stewardship of Non-Profit Resources

http://www.upenn.edu/almanac/volumes/v63/n01/pdf/071216-supplement.pdf

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Inventions Under Patent Policy

- Inventions broader than U.S. Patent Law
  - Technical information, trade secrets, discoveries, data, other proprietary ideas
- Ownership of Inventions:

The University shall own all INVENTIONS conceived or reduced to practice by INVENTORS in the course of employment, carried out on University time, at University expense, with SUBSTANTIAL USE OF UNIVERSITY RESOURCES under grants and otherwise. (Section 2.0)

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Inventors Covered by Patent Policy

- Faculty and employees
- Adjunct and Visiting Faculty
- Postdoctoral employees
- Students who individually or jointly make an INVENTION subject to the PATENT POLICY

Inventors Covered by Patent Policy

Article 2.1.4.1 of Penn Patent Policy

INVENTIONS made by students will remain the property of the students EXCEPT when an INVENTION:

- is made in the course of employment at the University
- results from work directly related to employment responsibilities at the University
- results from work or research performed under a grant or other sponsorship
- is created with another INVENTOR who has a duty to make or has made ASSIGNMENT to the University.

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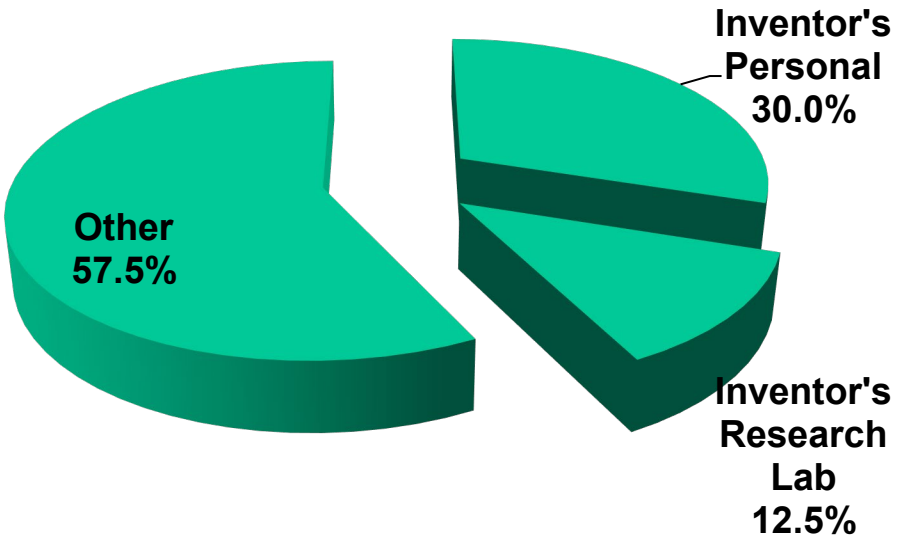
Revenue Sharing Under Patent Policy

- Annual Distribution of Adjusted PCI revenues for the invention



- "Other" includes PCI operating costs, Department of Inventor's Share, School of Inventor's Share, and University Research Share

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Other Info: Protecting Inventions—Lab Notebooks

- Lab notebook is dated and signed by an inventor and by a witness who understands the work, but is not an inventor
- Clearly identify data with the project to which it relates
- Sign daily if possible, at least weekly
- Write in ink
- Make corrections with a simple line through entry
- Provide a summary of data captured and stored electronically
- For electronic notebooks: Set the electronic signing and witnessing features. For example, for Lab Archives notebooks see:

– https://labarchives.kayako.com/Knowledgebase/Article/View/374
https://labarchives.kayako.com/Knowledgebase/Article/View/373/295/8031-sign-a-page

Value of Lab Notebooks is Corroboration

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What is Patentable?

To be patentable, an invention must be:

- patentable subject matter, directed at statutory subject matter
- novel, non-obvious, useful
- enabled, described, work of inventors

1. Novel – Not known, published, used publicly, or offered for sale more than one year prior to the filing date.
2. Non-Obvious – Not obvious to "one of ordinary skill in the art".
3. Useful – Has to have a specific and substantial utility
4. The following are patentable:
    1. Process/Methods
    2. Machine
    3. Article of manufacture
    4. Composition of matter
    5. Improvement of any of the above

Plant Patent

Covers newly invented, or discovered, asexually reproduced strains of plant and hybrids

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What is NOT patentable?

- Laws of nature
- Physical phenomena
- Abstract ideas
- Literary, dramatic, musical, and artistic works (these can be Copyright protected).
- Inventions which are:
  - Not useful (such as perpetual motion machines); or
  - Offensive to public morality

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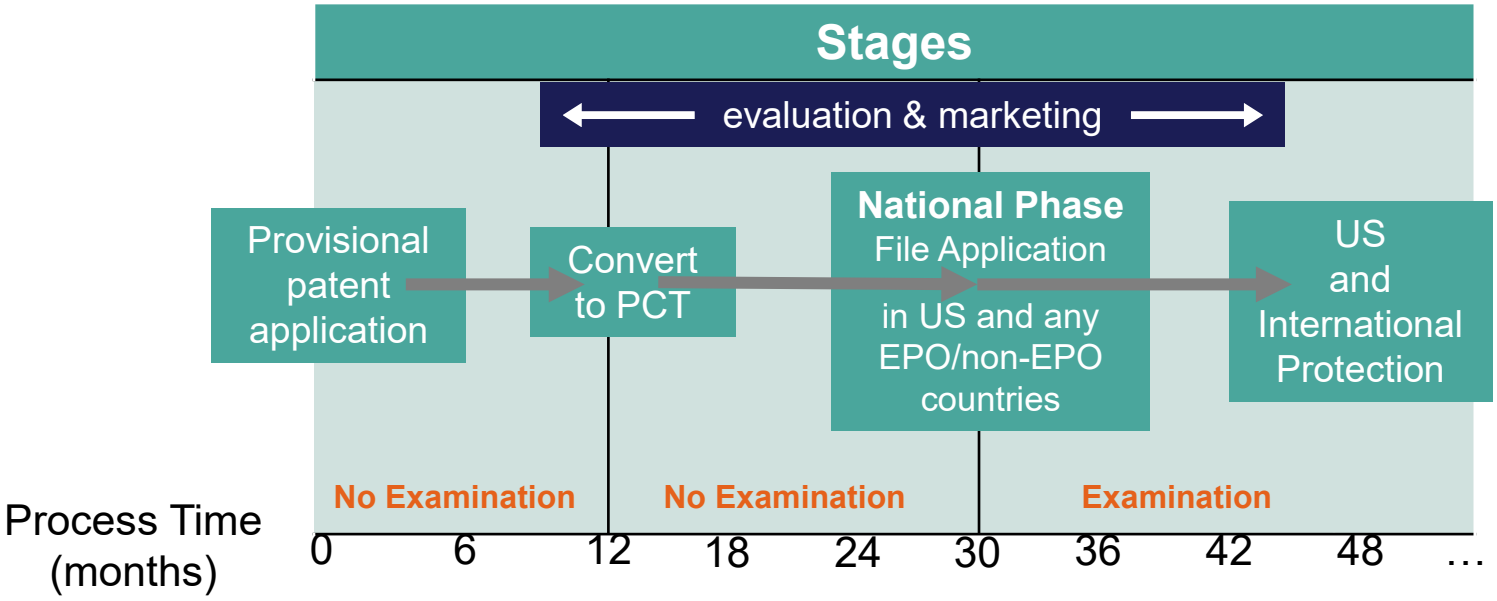
The Patent Process Timeline



Data & Manuscripts drive this process!

A patent allows the owner to exclude others from making, using, selling, importing products and methods covered by the claims for a period of **20 years from the filing date** of the first non-provisional patent.

PCT = **P**atent **C**ooperation **T**reaty EPO = **E**uropean **P**atent **O**ffice

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Copyright

Copyright is a form of protection provided by the laws of the United States (title 17, U. S. Code) to the authors of “original works of authorship,” including literary, dramatic, musical, artistic, and certain other intellectual works, (including software).

This protection is available to both published and unpublished works.

- Copyright protection subsists from the time the work is created in fixed form for the author’s life plus 70 years.
- The copyright in the work of authorship immediately becomes the property of the author who created the work.
- Only the author or those deriving their rights through the author can rightfully claim copyright.

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PCI Disclosure and Comm. Process:

INVENTION

Research paths to an invention can be supported by Penn, government grants, and corporate partnerships

DISCLOSURE

An inventor uses Inventor Portal to disclose, so PCI can protect the invention and create a plan for commercialization

ASSESSMENT

An assigned Technology Licensing Officer assesses commercial value and begins marketing efforts to industry partners

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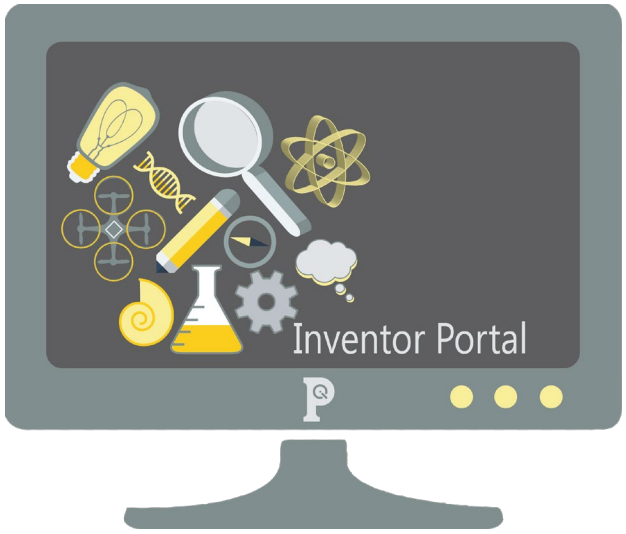
How to start the commercialization process

- **Disclosure: Inventor Portal**
  - https://pci.upenn.edu/invention-disclosure/
  - Faculty, staff, and students
  - Create, edit, and submit invention disclosures online
  - Check status of submitted invention disclosures and patent applications
  - Disclosure Form components:
    - Title
    - Description
    - Innovation
    - Contributors
    - Funding Sources
    - Critical Dates (e.g. publications, presentations)



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What should be disclosed and when?

- **Required** for research governed by Bayh-Dole and any potentially patentable invention or discovery according to the Penn Patent Policy
- **Encouraged** for all other inventions and developments that you feel may solve a problem and/or have value
- Should occur well **before any public disclosure** or presentation of the discovery through abstracts, poster sessions, conferences, publications, press releases, or other communications
- Disclose **early** if possible!

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Triage and decision-making process

Elements considered:

- Is this invention patentable? (new, useful, non-obvious)
- Would a patent be enforceable?
- Is this invention commercializable?
- Is there an addressable market?
- Is this invention solving a current need?
- Is this invention replacing existing technology with a strong need for an upgrade?

Who is at the table?

- Tech Licensing Officers, IP Team, Corporate Alliances, etc.

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Your innovation in action

PROTECTION

Disclosures with commercial potential are protected through various channels (patents, copyright, trademarks, trade secrets, and/or know-how)

COMMERCIALIZATION

PCI and the inventor determine the best strategy, which may include licensing to industry, starting a company via PCI Ventures, or pursuing a corporate partnership via Corporate Alliances

MARKETING

PCI conducts a market analysis to identify potential clients and partners, creates marketing collateral, and lists the technology on our website. PCI may also market through programs and events, print and web media, and partnerships

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Marketing your technology

- PCI's Tech Licensing Officers and its Marketing, Communications, and Programs (MCP) team work to share Penn technologies with the world

- Examples of marketing activities include:
  - Non-confidential summaries posted on PCI's tech database
  - Inviting inventors to speak at PCI events
  - Sharing technologies via social media & PCI's newsletter
  - Technology videos
  - Direct outreach to companies

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Commercialization Strategy

Value

- What does the IP add to a given market application?

State of Development

- Is further research needed to demonstrate feasibility?
- Technology Readiness Level?

New Venture

- Should a startup be created to develop the technology?
- Do the inventors want to participate in a startup?

License

- Is it of interest to established companies? Which ones?
- License exclusively or non-exclusively

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Process Summary

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