LICENSING YOUR INNOVATION

Getting your research into the hands that matter: those who can benefit from it most.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Invention Disclosure</td>
<td>5</td>
</tr>
<tr>
<td>Patents</td>
<td>8</td>
</tr>
<tr>
<td>Copyrights</td>
<td>12</td>
</tr>
<tr>
<td>Your Innovation</td>
<td>14</td>
</tr>
<tr>
<td>Paths to Market</td>
<td>17</td>
</tr>
<tr>
<td>Attracting a Partner</td>
<td>20</td>
</tr>
<tr>
<td>Closing the Deal</td>
<td>23</td>
</tr>
<tr>
<td>Terms of the Deal</td>
<td>25</td>
</tr>
<tr>
<td>Help is Here</td>
<td>27</td>
</tr>
</tbody>
</table>

TWEET THIS!

Reading the “Licensing Your Innovation” eBook by the Innovation Institute
Any individual who spends valuable time and countless hours looking for a solution to a specific problem wants to see that work have impact. The greatest payoff is to provide this discovery to the world for it to have a societal benefit and demonstrate that people’s lives have been positively impacted or even saved. Other similarly important outcomes of this research also include regional economic benefits, such as newly created jobs, unique entrepreneurial education experiences or even an opportunity to lead a startup company.
To achieve these impacts, you have to understand how your innovation places from the lab to the market. Over the next few pages, we will explain some of the key steps needed to move your innovation closer to commercialization, including:

- Protecting your invention
- Determining if it is ready for commercialization
- Understanding the best path to market
- Marketing your invention
- Licensing

WHAT IS AN INVENTION?
An invention is “anything made by the hand of man that is a new, useful and non-obvious process, machine, manufacture or composition of matter or any new and useful improvement thereof”
Invention Disclosure

Protect your invention

Once you believe you have a potential invention as a result of your research, you should submit an invention disclosure to the Innovation Institute. The invention disclosure is a short, electronically submitted document containing items like: invention title; how it works; advantages; and other items important in protecting your idea. You should submit an invention disclosure as early as possible once you’ve established that you have an innovation with commercial potential to impact society.
The invention disclosure is important because it gets the Innovation Institute started on the process of filing an application for a patent or establishing a copyright, as well as evaluating your invention for commercial viability.

Another critical aspect of protecting your invention is to explore whether or not to protect it before you publish. The invention disclosure itself is not a patent. You should consider working closely with the Innovation Institute to make certain you do not publish the results of your research or present it at a conference prior to filing a patent. If not handled properly, this could jeopardize your chances of getting patent protection, and negatively impact the commercial viability.
Avoid doing these things prior to protecting your innovation:

1. Posting messages online describing the innovation, including websites, public forums or blogs
2. Transferring scientific materials without the use of a Material Transfer Agreement (MTA)
3. Submitting grant progress reports which are accessible to the public
4. Posting or publishing a student thesis (under some circumstances) even if nobody ever actually reads it
5. Talking with external parties about the innovation without having a Confidentiality Disclosure Agreement (CDA) in place
6. Presenting at a department seminar that includes individuals outside the University
7. Sharing the content of a patent application or any description of the invention with someone outside of the University
8. Conducting classroom presentations including distributing handouts
9. Publishing anything—an abstract or scientific journal article for example
10. Giving a talk or poster presentation at an “open” meeting

www.innovation.pitt.edu
Patents
Get the facts

A patent for an invention is the grant of a property right issued by the United States Department and Trademark Office (USPTO). The right one obtains from a U.S. patent is the right to exclude others from making, using, offering for sale or selling the invention in the US or importing the invention into the US. The patent does not provide the patent holder with the freedom to make, use, sell, offer for sale or import their claimed invention – all of these activities are aspects addressed as part of the commercialization process and go-to-market strategy. The potential for success in the market can be greatly strengthened by the support of a patent which can provide a substantial and sustainable competitive advantage.
The process for preparing a patent application starts with the submission of an Invention Disclosure to the Innovation Institute. An invention disclosure is assigned to a licensing professional who will work hand and hand with the innovator to ensure that all of the necessary information has been provided. The Licensing Manager and a patent attorney will work closely with you to ensure a patent application is completed if this is the right path forward for your innovation. A good patent application provides sufficient detail on the technology component of the innovation and strongly relates this to the potential commercialization of the opportunity.

Once submitted, the patent application undergoes examination by the USPTO. This examination process is a series of discussion that occur between the patent attorneys working on behalf of the University and a patent examiner at the USPTO that was assigned the patent case.

Ongoing discussions can occur with the examiner until the application is:

1. Accepted as is
2. Accepted after changes are made
3. Rejected through a final rejection notice
   • Even after the final rejection there are a variety of paths that can be taken to pursue patent protection for the invention
The two most common patent applications are the provisional and the utility:

A **provisional patent** application provides a short-term amount of protection (one-year) but establishes a filing priority date. At the end of the year (or before), one must convert to a utility application.

A **utility patent** application contains all appropriate embodiments and claims for the invention. Once the file is accepted as complete, the case is assigned to a patent examiner.
The duration of these discussions can vary significantly and can typically last over 3 years. The Innovation Institute remains involved with you and the patent attorney as they work towards getting the final decision. The term of a patent is 20 years from the date of filing in the US.

Since the patent rights granted by the USPTO do not cover foreign countries, the differing foreign laws for each country must be followed for protection in that country. Foreign patent applications must be filed within one year of a US application and the cost for this filing changes depending on the number of and specific countries selected for protection. Fortunately, most countries have signed the Patent Cooperation Treaty (“PCT”) which helps to centralize the process.

For something to be patentable it must meet the following requirements:

1. Reduced to practice
   Exist in a useful form and not just a theory.

2. Novel
   New to the world.

3. Utility
   Must have a useful purpose; real world value that is not just an idea for further investigation.

4. Non-obvious
   Cannot be obvious to someone of ordinary skill in the field of the invention or covered by prior-art.
Copyrights
What about them?

Not all Pitt innovations that make their way into the marketplace are patentable inventions. In fact, some of the University’s most successful commercialization efforts have been in the form of creative works content developed by Pitt faculty and staff and delivered as books, papers, CD’s, DVD, databases, etc. Software or computer programs are also common examples of copyright material. Copyrights protect your original works of authorship and prevent others from being able to reproduce your work or prepare derivative works based on your work, without your permission.
Your work is copyrighted automatically once the original work is affixed in a tangible medium, such as an article, book or CD. The copyright symbol (©) is used to remind people that the material is protected and should be visible on the work along with the entity that owns the work and the date.

What can you copyright?

**Copyright**
- Books, periodicals, manuscripts
- Software, computer programs
- Stage plans and screenplays
- Music and motion pictures
- Fine art, graphic art, photographs, prints and art reproductions
- Maps, globes and charts
- Technical drawings, diagram and models

**No copyright**
- Ideas, facts
- Titles, names
- Short phrases
- Common property
Your Innovation

Is it a candidate for commercialization?

Commercializing your innovation is the most common way to see your invention reach the masses to achieve its intended societal benefit. However, filing an invention disclosure and obtaining a patent or accruing a copyright doesn’t guarantee that your innovation will be a success in the market. There are multiple influences that impact the commercial success of a product in the market, and the Innovation Institute can take you through the process of evaluating your commercial opportunity and further developing your go-to-market-strategy.
The Innovation Institute’s Pitt Ventures program deploys a multi-phased approach involving a strong coalition of partners and an innovative multi-stage, or “Gear” commercialization process that supports Pitt innovators from idea to commercialization.

Pitt Ventures Commercialization Process

- **Neutral = “Find It”**
  - Opportunity identification (deal flow generation)
  - Initial project assessment (deal screening)
  - Investment decision (portfolio management)

- **Second Gear = “Plan It”**
  - Business model canvas
  - Product roadmap
  - Technology validation
  - Management plan
  - Roadshow slide deck

- **First Gear = “Prove It”**
  - Customer discovery to identify value proposition and pain point
  - Initial market assessment, competitive landscape, path to market

- **Third Gear = “Launch It”**
  - Company formation/Partner identification
  - License
  - Ongoing metric reports

- **Fourth Gear = “Grow It”**
  - Identify opportunities to improve firm’s performance
  - Create customized plan to address opportunities
  - Work with company to review, modify and implement
Through these gears, “virtual startups” are created on campus and facilitated by Innovation Institute personnel. These “virtual startups” are typically composed of the innovator, entrepreneurial students involved with the innovations and outside business mentors.

Through Pitt Ventures the Innovation Institute has created a series of programs that take inventors and entrepreneurs through each gear of the commercialization process to ensure a higher likelihood of commercial success. The process helps you to define your business model and assess relevant market dynamics that will help shape your commercialization strategy. In the end, you will decide how you want to pursue the licensing of your innovation to get it to market. There are multiple ways a University innovation can be taken to market and a variety of factors that influence this decision.
Paths to Market

Getting There

University innovations can be taken to market in multiple ways. Some of the decision factors will depend on the availability of potential industry partners, your (or team members) interest in entrepreneurship and the market-readiness of your innovation. Your preferred path to market may be clear from the onset based on your personal objectives or may be determined through the course of the commercialization efforts.
The most common paths to market include:

- **Licensing the technology to an industry partner.** Existing commercial entities across all industries often times turn to Universities to help them further extend product lines or help accelerate R&D efforts. For early stage discoveries, industry partners may first invest additional funding into the research to get it closer to commercialization.

- **Licensing the technology to an existing startup company.** A startup company may be interested in taking on a technology that complements their product or strengthens their value proposition.

- **Creating a startup company to take the innovation to market.** For some innovations, it may be a great opportunity to form a company to go to market. Universities, including Pitt, spinout companies around technologies on a regular basis. This may be an excellent opportunity for a faculty or student with an interest in being an entrepreneur, or may be a good fit for a business mentor or local executive with successful startup experience.
So you want to be an entrepreneur?

If you are not interested in leaving the University but still want to participate actively in a new venture based on your innovation, you will want to pay attention to the guidelines that protect against a conflict of interest, for example:

- You may hold up to a 49 percent equity in the licensed startup company, with exceptions permitted under policy
- You can conduct research that is funded by the company
- You can be a consultant to the company
- You cannot serve as the principal investigator for sponsored research funded by the company if this research involves human or animal research
- You cannot serve in a management position at the company, with exceptions permitted under policy

*Please consult members of the Conflict of Interest Office for additional specifics*
Attracting a Partner

Industry Partnerships

The most common path to market for University innovations is through licensing to an industry partner. The Innovation Institute will work closely with you to help prepare your innovation to be marketed to potential licensees. Our programs help innovators step through the development of each marketing deliverable, then assist in getting exposure to industry partners. The Innovation Institute will work diligently to develop potential opportunities on your behalf.
To best position your innovation for licensing, you will need:

- The value proposition - a succinct explanation of what your innovation does and for whom to clearly translate the commercial value to potential partners.
- An understanding of the customers it serves and market potential
- To articulate how your innovation is differentiated and better than alternative solutions
- An explanation of the current stage of development along with specifications and supporting data

Alone we can do so little. Together we can do so much.

- Hellen Keller
Ten things to remember when attracting industry or investors to your invention

Protect your idea. Before talking to industry, contact the Innovation Institute to discuss the use of a Confidential Disclosure Agreement (CDA) to ensure that your conversation remains confidential.

Proactively seek opportunities. Interact with companies at conferences, technology showcases, partnering events, venture fairs, and via publishing papers. Most technology licenses result from an innovator’s networking efforts with companies.

Keep it simple. Don’t get too technical when discussing your innovation, regardless of how complex and captivating the science may be. Never assume that the potential partner will understand such technical concepts.

Prepare a compelling elevator pitch. Explain your idea simply in less than a minute. Include the problem it solves and how it’s significantly faster, smaller, cheaper, or more effective than current solutions. The Innovation Institute will help you prepare one.

Show enthusiasm. It’s your idea and you believe strongly in it. Share that enthusiasm and confidence with others. They expect it.

Find out what they want. Listen to their needs, desires, and frustrations, any of which could lead to new opportunities.

Keep your marketing materials handy. An opportunity may arise at any time to discuss your innovation with someone. Be prepared with manuscripts, marketing briefs, articles, etc.

Exchange business cards. Get their information and promise to follow up with them soon. While they may not be interested in your latest innovation, they may become valuable future contacts.

Keep the Innovation Institute in the loop. Share contacts and other information which can be used to follow up on potential partnering opportunities on your behalf.

Stick with it. The commercialization process can take considerable time and commitment, requiring patience and perseverance. The Innovation Institute is here to closely support your efforts.
The ultimate goal of the University’s technology commercialization endeavor is to find an industry partner or startup company willing to license your innovation and take it to market. Keep in mind that the University does not sell its intellectual property. Rather, it negotiates a licensing agreement that gives the industry partner, or licensee, the right to make, use and/or sell your innovation in the marketplace.
How to expect a typical licensing agreement negotiation to proceed

1. First
   Get Interest

2. Second
   Sign Confidentiality Agreement

3. Third
   Take a closer look

4. Fourth
   Meet and look “under the hood”

5. Fifth
   Formal due diligence

6. Sixth
   Negotiate terms and license

What’s an option agreement?

An option agreement gives the partner a specific period of time in which to further evaluate an innovation prior to making the commitment to license it. During the option period, the partner cannot commercialize the innovation and the University cannot license the innovation to another party.
Terms of the Deal

Dividing up the Pie

Each licensing deal is negotiated and can vary in its terms. However, most licensing deals typically include the following for the University:

- Patent cost reimbursement
- Up-front fees
- Royalties on product sales
- Minimum maintenance/royalties fees
- Specific agreed upon development milestones
- Equity or partial company ownership for new startups only

The agreement will define the rights and exclusivity the partner receives by geography, fields of use and applications.
Your share of the proceeds

You and your academic department will share in the financial benefits of successful commercialization of your innovation. For patented innovations, the proceeds distributions are as follows:

- You, the innovators, receive 30 percent of the proceeds (divided among all the innovators connected to the licensed innovation)
- Your academic department receives 15 percent
- 10 percent is applied to a University Development Fund
- 30 percent is placed in a Patent Rights Fund
- The Innovation Institute receives 15 percent

For copyrighted innovations, the proceeds distribution is:

- You, the innovator, receive 50 percent of the proceeds
- Your academic department receives 25 percent
- The remaining 25 percent is applied to a Copyright Development Fund maintained by the Provost’s office
The process of commercializing and licensing a technology involves challenges that are often very different from those common in academic research. This is where the University of Pittsburgh’s Innovation Institute can help. The Innovation Institute can provide access to a staff of trained licensing and commercialization professionals and business mentors. These individuals are well-versed at what it takes to protect your invention, commercialize it and identify a suitable path to market. As an active partner with you, the Innovation Institute will step in and help facilitate the commercialization effort.
What’s Next?

The Innovation Institute has a variety of ways it can help you take the next step towards commercializing your innovation. You can have an informal meeting with a business mentor, get help completing an invention disclosure or enroll in one of our commercialization programs and develop your business or licensing strategy. Our team is here to meet your needs.

Find Out More

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