



COVENANT HEALTHCARE Invention and Intellectual Property Policy Guide

Foreword

In January 2012, Covenant Healthcare launched a new strategy called “Innovation” with the purpose of generating new sources of revenue that are not directly dependant upon health insurance payments. Our belief is that for Covenant to continue its mission of extraordinary patient care, in view of declining payments, we must find ways to innovate. Covenant hopes to tap into creative talent internally and externally to generate ideas that will create new products and services that have commercial viability. This effort will be managed through our newly established “Office for Innovation.”

Intellectual property, commonly referred to as “IP” in the technology world, requires protection and guidance. This policy provides the framework for defining, protecting, supporting, and recognizing the efforts toward the development of new inventions and discoveries. The policy will also govern the role of the Office for Innovation.

I am excited about this new opportunity as we have demonstrated a high level of innovation over the years in the development of many new services in the field of health delivery. From these experiences I know the potential of the very creative and talented staff and physicians at Covenant Healthcare who can assist in finding new innovations. I encourage all of us to think of innovative new ideas as valuable to you, Covenant Healthcare, our patients and our community.

Spence Maidlow
President/CEO

Index

Types of Intellectual Property	1
Protecting your Idea/Invention	2
Intellectual Property Ownership	4
Office for Innovation Process Flow	7

Types of Intellectual Property

Intellectual property is divided into two categories: technical works and creative works. Technical works include intellectual properties that are generally of a scientific, engineering, or technical nature – such as patentable or non-patentable inventions, devices, machines, processes, methods, and compositions. Creative works include all intellectual properties not covered in technical works that are of an artistic, scholarly, instructional, assessment, or entertainment nature. Examples of creative works might include musical scores, books, poems, films, video and audio recordings, and instructional materials. For purposes of this policy we will be focusing on the area of technical works.

General Areas of Intellectual Property

Patent

Right to exclude others from making, using or selling an invention in the country where registered.

Trade Secret

Confidential information that is valuable to Covenant HealthCare and thus is safeguarded from misappropriation.

Protecting Your Idea/Invention

Patent Overview

Patents allow the inventor(s) to exclude others from making, using, or selling an invention. A patent does not guarantee that the inventor is free to make, use or sell the invention. If another inventor or company has intellectual property rights that apply to your concept, they can prevent you from taking your product to market, even if you hold the patent.

To gain patent protection an invention must have some utility and fall within at least one of four categories:

- Composition of matter
- Machine
- Article of manufacture
- Process

An invention must also meet a three part test:

- An invention must be novel (not found in prior art)
- An invention must be useful
- An invention must not be obvious to a person of ordinary skill in the field (describes the scope of prior art)

The term “prior art” refers to the entire body of knowledge that predates a given invention or is considered to be in the public domain. It may include other patent applications, journal articles, slide presentations, and advertisements. It is important to keep your novel idea or invention confidential until a patent application is filed. If an idea/invention is disclosed to the public in a publication or lecture it will be considered as prior art and will be rejected in a patent filing.

Covenant’s Office for Innovation will assist in evaluating all ideas/inventions by:

1. Guiding the inventor through the patent process
2. Conducting an initial patent search
3. Assisting in the patent application preparation
4. Securing appropriate legal counsel for further review and filing

Types of Patent Applications

There are two basic types of patent applications.

Provisional patent application is a preliminary utility patent filing that is effective for one year. An additional filing is required before the expiration of the original provisional filing (12 months) or the protection will be lost. The benefits of a provisional filing positions you as the first inventor of a concept, is a low cost way to preserve and extend the right to file a full patent application, and allows time to evaluate and refine the concept.

Non-provisional patent application or full patent application may be used for utility and design patents. This approach places the application in the queue for examination by the US patent office but requires full, formal documentation and the non-provisional filing fee.

Benefits of a Patent

Claiming your intellectual property rights by securing a patent offers many potential benefits:

- Casts you as an innovator
- Becomes an asset of a business venture
- Can be licensed or sold to generate revenue
- Protects your investment in research and development
- Can create a marketing advantage
- Prevents competitors from claiming the invention

Intellectual Property Ownership

In most cases, ownership of intellectual property is either by an individual or an organization/company. It is important to distinguish between the “inventor” and the “ownership” of intellectual property (patent). An individual or individual(s) can be the inventor(s) of a particular patent while not having ultimate ownership of that patent. This case is most common when the inventor is employed by an organization or company and assigns his ownership rights to the company.

Covenant Healthcare's position (policy) is if an invention or idea results in a patent application by an individual(s) directly employed by Covenant and/or using resources of Covenant, then the ownership rightfully belongs to Covenant and Covenant should have ownership of the patent rights. The organization assumes that the background for a particular invention/idea and the many intellectual and physical resources required to verify, validate and develop the invention/idea would not be available to the inventor on their own. Because of the relationship with the organization (in this case Covenant Healthcare), those assets are available and instrumental in the creative and development process and therefore give rise to this common attribute of intellectual property development in the United States.

Also, Covenant also does not distinguish between Covenant “employed physicians” and “private practice physicians with rights to practice” at Covenant. If an invention/idea is supported in any way by Covenant, then this policy will cover the ownership of any intellectual property rights. If a physician/inventor already has an approved patent, Covenant will consider supporting the further development or refinement of the technology. In that case a mutual agreement will be reached, prior to the commencement of any support, with regard to ownership and royalty rights or revenues.

Commercialization of Intellectual Property

There are two main commercialization routes for Intellectual Property; licensing or creation of a spin out (start up) company.

With licensing, the licensor normally secures a combination of a fixed one time license fee and an agreed percentage of royalty payment on sales. With a spin out company, the commercial value relates to an equity position in the new company (share ownership).

The formation of a company may be the most appropriate commercialization route where an invention needs to be developed to a point where it can attract external funding or licensing interest. By creating a stand alone commercial entity it is possible to access public and private development funding intended for small business. A spin out company, rather than the normal route of licensing, is often appropriate where there are long term prospects of a commercial return but the short term development costs and risks deter the private sector from getting involved at such an early stage. The Intellectual Property is used as the asset to raise finance in return for an appropriate share of the equity.

In general terms licensing is the lower risk option, which also provides for an immediate return on investment. However, there are specific occasions, such as those described above when the creation of a new spin out company is more appropriate.

Covenants Support is Key

In exchange for Covenant retaining ownership rights of inventions developed by its employees and medical staff the organization is committed to support the inventor at all levels of commercialization in return for this arrangement. Furthermore, Covenant will provide a highly competitive revenue sharing model, when licensing or selling Intellectual Property, so that the inventor will directly benefit by the commercial success of his or her idea. See table #1 below. In the event where a start up company is created the equity position of Covenant Healthcare and the inventor will be negotiated prior to the formation of the company.

The cost to develop a new medical device from idea to finding a potential licensee or sale can cost anywhere from \$100,000 for a simple device to upwards of millions for larger, more complicated product patents, not to mention the time involved in the process. Covenant believes that the greatest benefit to all is that, in lieu of the inventor retaining all rights, the physical and financial support of the organization will enable the inventor to be even more creative and generate greater intellectual property with less individual effort.

Table 1 (Net Income from Licensing of IP)

<i>Lifetime Cumulative Net Income</i>	<i>Inventor(s) Share</i>	<i>Innovation Department Share</i>	<i>Covenant Share</i>
<\$100,000	50%	10%	40%
\$100,000 – \$500,000	40%	10%	50%
>\$500,000	30%	10%	60%

The structure of Covenant’s revenue sharing model creates a system that benefits the overall organization while providing significant benefits to the inventors. The cost to support an individual invention through commercial maturity requires the time and

resources of the Office for Innovation and many others internal and external to the organization. Net income is defined as the income available after Covenant recoups its direct project related costs.

Office of Innovation Process Flow

Covenants Office for Innovation is established to support the organizations creative energy and transfer ideas/inventions into the commercial market.

Initial Step

It all starts with an idea from you! The core idea is what we will work with. It does not have to be a complete idea or invention. A concept or a problem delineated is just as valuable. When you feel you have a unique idea simply submit your idea in writing (or email) to the Office for Innovation. All ideas will be logged and responded to. In the meantime, keep a diary of your thoughts without worrying about your idea being a perfect solution. It is extremely important that you do not share your idea with vendors or other professionals, especially at conferences or seminars.

Step Two

The Office for Innovation will review and log each idea that is received. In addition, each individual submitting an idea/invention will be contacted to explore the idea/invention further. If an idea is deemed to have the potential for commercialization an initial meeting will be established to discuss the idea/invention further and place the idea into a formalized process. This will start with the completion of a “Disclosure Form” that the Office for Innovation will assist in completing. An example of this form can be found in the appendix of this guide.

Step Three

The information provided in the disclosure form will be go through an in depth review and background research. A team may be assembled to review the idea/invention to determine if further enhancements or improvements can be made. It is important to know that the end product may look significantly different from your original idea. It is a process and an idea/invention may go through several iterations before a final format is reached. You will be invited to participate in these discussions as the idea/invention originator which may include design engineers, market experts, and others to prepare for the next step. If a project is passed over at this point, they typically will take one of two paths: 1) the rights are returned to the inventor so that he or she can pursue development on their own, or 2) the invention is reviewed and modified at a later date to be considered again.

Step Four

The idea/invention will be presented to the Innovation Council for review and approval. If approved, a provisional patent application will be filed. Periodically, the Office of Innovation and the Innovation Council will review all provisional patent applications to select as many best candidates as possible to proceed through the next stages including full utility patent application. The process of full patent application is expensive and time

consuming. Covenant will look to weigh the analysis of market and commercial potential of each project. This is not to imply that other benefits of the idea/invention are not considered. However, the mission of Covenant is to develop intellectual property that has strong commercial viability so that revenue can be generated and returned to the inventors and hospital to further support this process.

Step Five

Once a provisional patent filing is selected to go forward the idea/invention will move into a formal project management format. Many activity's will be initiated concurrently which include deeper analysis of market potential and patentability, working with a team to reduce the idea/invention to practice, and design engineering for a working prototype. This phase of development is complex and intensive given the 12 month horizon established with the provisional patent filing.

Step Six

A full utility patent will be filed at this stage with much of the work being completed by patent attorneys since this is a legal process. In addition, work will begin to determine the best approach to commercialize the invention. Generally, there are three common approaches: 1) licensing the intellectual property to a manufacturer, 2) sale of the intellectual property to a manufacturer, or 3) establishing a start up company to manufacture the product based on the invention.