# Chapter 7

## -- Inventorship --

In this chapter, we will first explore what is required to qualify as an "inventor" of an invention covered by a patent. There are certain rights that come with being an inventor that we will also explore in this chapter. Because of these rights, it often becomes quite important who is and who is not legally an inventor of a patented invention.

If a person has worked on an invention alone, without any collaboration, it is clear that he or she is the sole inventor of that invention. But, perhaps a majority of the time, inventions are produced by a number of people working together. For Example, this group of people may consist of an engineering team, a research team, etc.

Under U.S. Patent Law, there is no limit on the number of people who can be considered as the inventors of an invention and who can have their names listed as the inventors on a patent covering that invention. We call a single inventor the "sole" inventor and multiple inventors are called "joint" inventors.

Where multiple people are involved in the development of an invention, questions will likely arise as to who is and is not an "inventor." One or several of the people involved may have contributed much more to the creation of the invention than the others. Some of the people involved may not have contributed anything beyond testing and validating the ideas of others in the group. The question we must answer is who should and who should not be considered an "inventor" with all the legal rights that inventorship entails.

The basic rule of inventorship requires that we look not at the invention as described in the text of the patent application, but at the invention as set forth in the claims of the patent application. If a person contributed an idea to the invention, however minor, and that idea is set forth in at least one claim of the patent application, that person is an inventor and is entitled to all the rights of inventorship.

Joint inventors do not have to have intended to collaborate in creating the invention. They may be working entirely independently until one of them or a third party realizes that their separate work can be profitably combined. Consequently, joint inventors do not have to have worked together at the same location. Joint inventors can be working on separate continents. Joint inventors also do not have to have been working on their respective contributions to the invention at the same time. Perhaps one joint inventor does some foundational work, and later a second inventor finds some particularly useful application for that earlier work or solves problems that had earlier gone unresolved.

Where there are joint inventors, each inventor has equal rights under U.S. Patent Law. If a first inventor comes up with 99% of the invention and a second inventor comes up with one additional idea that is included in a dependent claim, representing the final 1% of the invention, both inventors have equal rights in the patent application and any resulting patent.

Because inventorship is judged by what is expressed in the claims, the list of inventors on a patent application can be affected by the way the claims are presented. If in the scenario we just considered, one inventor contributes 99% and another contributes 1%, we can eliminate the second inventor by omitting any mention of that 1% in the claims of the patent application. If that 1% is omitted from the claims, the second inventor cannot be legitimately listed on the patent application as an inventor and has no legal rights in the patent application.

Again, being an inventor requires making a contribution to the invention that is included or set forth in at least one of the claims of the patent application. It may be the case that one person is the sole creator of a first invention recited in one set of claims, while a second person is the sole creator of a second, related invention recited in a second, independent set of claims. These inventors could choose to file separate patent applications, each application listing one respective inventor. By combining their claim sets in one patent application, they both become "inventors" and have legal rights to the entire patent application, including the claims that cover the other's actual invention.

Those who may assist with the creation of the invention, but do not contribute something recited in a claim, are *not* inventors. For example, someone who merely defines the problem to be solved is not an inventor of the solution. Similarly, someone who merely determines the direction a line of research should take is probably not an inventor of the results of that research. Supervising work on an invention, without actually contributing any ideas to the invention, will not make the supervisor an inventor. Performing directed experiments to identify optimal components for the invention or to determine the feasibility or validity of the invention is merely providing technical assistance and does not make the assistant an inventor. Merely, testing the operation of a prototype of the invention does not make the tester an inventor.

Many other examples could be given, but it should suffice to remember that an inventor is one who contributes an idea to the invention that is included in the recitations of at least one claim in the patent application.

It is important to correctly determine who should be listed as an inventor on a patent application. If the inventorship is listed incorrectly, any patent issued on the application may be rendered invalid.

If inventorship is incorrectly stated on a patent application inadvertently, the list of inventors can be corrected before the application issues while it is pending before the U.S. Patent Office. For example, someone listed as an inventor may, in fact, not be an inventor and must be removed from the list. Alternatively, someone that should have been listed as an inventor and who was omitted can be added to the list.

Correcting inventorship requires that the applicants provide evidence that the misstatement as to the identity of the inventors was inadvertent and was not done with any deceptive intent. If it can be shown that the applicants have intentionally attempted to conceal the identity of one or more inventors or to add an "inventor" who does not qualify as such, the patent application may be invalidated preventing any patent from issuing or any issued patent from being valid.

## -- Rights of an Inventor --

Now that we have determine who has the legal right to be listed as an inventor on a patent application or patent, we will explore the rights that go with being an inventor.

The most important right of being an inventor is original ownership. The inventors jointly own their invention at the time the invention is created. Consequently, the inventors jointly own any patent application filed on the invention or any patent issued on such a patent application. Original ownership vests automatically in the inventors.

An inventor can sell his or her rights in an invention at any time. Each inventor can hold or sell his or her rights separately. An inventor can sell his or her rights in the invention before any patent application is filed. An inventor can sell his or her rights in the patent application after it is filed, or in the patent after the patent has been issued. In fact, the inventor can sell his or her rights before the invention is even thought of.

Commonly, inventions are made by engineers and others who are employed by a company or other entity that invests in research. As a condition of employment, such potential inventors typically sign an employment agreement at the time they are hired. These employment agreements usually specify that any inventions made in the course of their employment will be signed over to the employer.

Under such an agreement, the employee-inventor must transfer his or her rights in the invention to his or her employer. If the employee-inventor fails to do so, the employee-inventor can be sued for breach of the employment agreement. Additionally, the U.S. Patent Office will recognize the right of the employer, based on the employment agreement, to pursue a patent on the invention, with or without the assistance of the inventor(s).

If an employee comes up with an invention and there is no employment agreement, it may be complicated as to whether the employer has any claim to the invention. The general rule is that if the invention results from the employee-employer relationship, the employer may have an ownership interest in the invention. If the invention is created wholly outside the employee-employer relationship, the inventor is the sole owner. For example, if the invention is related to the employee's duties at work, was created using the employer's facilities or resources, or was created during working hours, the employer may have an ownership interest in the invention. If, however, the invention was made on the employee's own time and has nothing to do with the employees responsibilities at work, the invention likely remains the sole property of the employee.

If there is no employment agreement that specifies the owner of an invention made in the course of an employer-employee relationship, the question of ownership is governed by state law. Thus, the answer may vary depending on whether the invention was made in one state or another.

The other principal right of an inventor that should be mentioned is the right to profit from his or her ownership of the invention. The inventor or inventors can sell the invention and any patent protection obtained for it. The inventor or inventors can license the invention for commercialization by others and charge royalties for the license or licenses. The inventors can also produce and sell the invention or otherwise market the invention through their own enterprise.

These rights remain the same whether there is a sole inventor or joint inventors. If there are joint inventors, the inventors can enter into an agreement among themselves as to how they will exploit the invention. This agreement may specify how the inventors will share in any revenues generated from sale, license or commercialization of the invention.

Absent such an agreement, each inventor has an independent right to exploit the invention without the authorization of the other inventors and without accounting to the other inventors. For example, any inventor can sell his or her individual interest in the invention without the authorization of the other inventors. Any proceeds from such a sale belong solely to the inventor selling the interest. How such a sale is handled will be discussed in a subsequent chapter.

Similarly, absent an agreement governing the inventors, any single inventor can grant a non-exclusive license to the invention. A non-exclusive license simply means that other licenses can also be granted. An exclusive license can be granted, but must be granted by all the inventors. If one of several joint inventors grants a license and collects royalties from that license, that inventor has no obligation to share the royalties with any of the other inventors.

> 35 U.S.C. 262 Joint owners.
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> In the absence of any agreement to the contrary, each of the joint owners of a patent may make, use, offer to sell, or sell the patented invention within the United States, or import the patented invention into the United States, without the consent of and without accounting to the other owners.

This can result in some very interesting scenarios. For example, suppose a group of inventors produces and patents a very valuable invention. The group then forms a company and begins exploiting the invention. The company is initially quite successful because of the exclusive right to the invention provided by the patent. Future forecasts expect the company to grow quickly and do very well.

Because of the current and predicted success of the company, other companies become interested in the invention. The patent owners refuse to license the invention, preferring instead to maintain their exclusive rights to the invention and avoid competition.

Then, the pressures of success build and hard feelings develop among some of the inventors. Eventually, one of the inventors leaves the enterprise and grants a license to the patent to another company. That other company, having a license from only one of the inventors, can now begin producing the patented invention and compete directly with the company run by the remaining inventors.

The way to have avoided this situation would be for all the inventors to sign their patent rights over to the company they have formed. Following such a transfer, no single inventor retains the right to grant a license to the invention.

Another example: a research team at Company A is working on a particular problem. The team makes significant progress and gets close to solving the problem. If a solution to the problem can be found, the likely result will be a very valuable new consumer product.

As the team struggles with the last hurdle, one of the team members calls a friend at Company B, also a researcher, and describes the problem faced by the Company A's research team. Based on confidential research being conducted at Company B by the friend, the friend is able to describe a solution to the last hurdle in the project being conducted by the team at Company A. Company A is now in possession of a complete solution to problem they set out to solve and expect to convert the research into a valuable new product line.

However, the friend at Company B is a joint inventor of the final solution. Consequently, if a patent is obtained, the friend will have to be listed as an inventor. Otherwise the validity of the patent would be in jeopardy.

While the original research team is probably obligated to sign over their invention to Company A under their respective employment agreements, the friend at Company B has no employment contract with Company A and no such obligation. Therefore, if the anticipated new product is successful, and Company B becomes aware of the involvement of its employee in the invention of the product, Company B can obtain part ownership of the invention or the patent through its employee.

Consequently, both Companies A and B will be able to enter the market. Company A has lost its chance for exclusive control of the new product line. It is to avoid scenarios such as these that employment agreements also usually bind researchers to keep their work confidential.

In conclusion, an inventor is anyone who contributes an idea to the invention that is recited in the claims of the corresponding patent application. Inventors have inherent rights which can importantly impact the possibilities for exploiting the invention. Consequently, the rights to patents and patent applications are usually carefully controlled through contracts and ownership transfers.