

Who Owns My Invention?

A conversation between Brian Treco and Nhung McLeland

Brian: Nhung, to many of us, that sounds like a very silly question. After all, the answer is "I do", isn't it? Well, we know that surprisingly often, that is NOT the case in the United States for inventors who are employees. My read is that under U.S. laws ownership vests initially in the actual inventor(s) of an invention. However, an employee-inventor may not have retained that ownership. How can it be that an employee may invent it, but not have sole ownership, or even co-ownership of the invention?

Nhung: Brian, you may cringe, but I have to give you a lawyer's answer, which means I have to be precise. When you say "U.S. laws" you probably meant "patent laws", right? U.S. patent laws say:

"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.C. 101)
(emphasis added)

So the patent laws say that if you are an inventor, you may obtain a patent for your invention. What if no one applies for a patent for that invention? The patent laws do not specify who "owns" the invention, they only say who may obtain a patent for the invention. In the absence of a patent, you would have to look to the property laws of the states, as opposed to the federal patent laws, to determine who owns the invention.

Brian: O.K. Let's talk about the most common situation for a chemist, where something that you may have invented may not be "yours". That occurs, for example, if you are an employee of an industrial chemical or pharmaceutical company in the United States, and you have signed an agreement, even before starting work, saying, among other things, that anything invented while using the company resources belongs to the company; and the company is not obligated to pay you any royalties in return. In fact, royalties are rarely paid, and any immediate reward for a patent is usually limited to a gift, a token dollar, or a plaque.

Nhung: Brian, those employment agreements typically cover inventions regardless of whether they are patentable or whether any attempt is made to patent them. So the agreements in general cover more than just patent rights. There are also some states that limit the scope of the inventions covered by the agreement. For example, I understand that Minnesota excludes inventions in a field unrelated to the business of the employer, and made entirely on an employee's own time without the use of facilities, equipment or material from the employer. It goes without saying that you have to read those agreements carefully before you sign them. If you are at the beginning of your career, you may not have much leverage to negotiate changes in the terms of the agreement, but you should at least know what you are committing yourself to do.

Brian: Let's go back to the question of reward or compensation for an employee who has developed an invention in the chemical or pharmaceutical industry. The question often asked is, shouldn't the employee get more than a plaque or a token gift? Is it equitable that an employee-inventor in the U.S. may not have retained ownership in his or her invention? Few will argue that the employee-inventor should own all of it, but many would argue that the employee-inventor should retain part ownership or receive some reasonable royalty.

Nhung: That's an age old debate in which the systems in other countries such as Germany have been held up as models. I don't see any momentum for similar legislation being enacted in the U.S.

Brian: I suppose you really have to look at the whole picture to get an idea of what is "fair." If you invented a billion dollar product for your company, you may not think it fair that you don't get a share of the profits. However, consider how many thousands of people work diligently and receive compensation for decades in industry without developing a marketable invention to show for it. Under this scenario the lack of compensation for the one blockbuster becomes a lot more reasonable and understandable.

I think the last thing we would want to do, though, is suggest that there is no reward for creativity, diligence and the inventions which may follow. Career advancement, including salary increases, is the traditional reward in the U.S. for an employee who develops an invention when working in industry, particularly in R&D. Also, while the ownership may not be yours, the rules for naming the actual inventors on patents I understand are very strict, so if you are the employee-inventor, I would expect that you can count on seeing your name in the header of the patent.

Nhung: Here, I have to be the lawyer again. You may have been an inventor as defined under U.S. patent laws, but it is still possible that you have no right to have your name recited as an inventor on a patent. Let me explain. The inventorship in a patent is determined by looking at the claims in a patent. If your invention is recited in at least one claim in the patent, then your name should be listed as an inventor.

Let's say that a U.S. patent application was filed with a set of claims for which you qualify as an inventor. Then, during the "prosecution" of the application before the Patent and Trademark Office, the decision was made to delete all the claims for which you qualify as an inventor. That may occur, for example, when the examiner at the Patent and Trademark Office continues to reject those claims over "prior art" that is very close to your invention. With those claims being deleted, U.S. patent laws require that your name be removed from the list of inventors for that patent application. The text of the application (which becomes the text of any granted patent) still describes the invention you contributed, but there are no longer any claims covering your invention. Therefore, you are not entitled to have your name recited as an inventor in that patent. This illustrates again that not all inventions are patentable. We should also remember that not all inventions are patented even if patentable, for example when the decision is made not to pursue a patent because of the costs involved.

Brian: Let me see if I understand. Could that go something like this? My coworker and I worked on a project where she produced a series of chemical analogs with a trifluoromethyl group, and I produced a series of analogs with an amine group. Our company submits a patent application with claims covering both series of compounds, and so both of us are named as inventors. If the claims for the analogs with the amine group continue to be rejected, and a decision is made to delete those claims from the patent application, then my name HAS TO BE removed from the inventors listed in the application, even though I worked shoulder to shoulder with my co-worker on the project. Could that happen?

Nhung: Yes, that would be an example. Please note, however, that just because you worked on “producing” the compounds does not necessarily make you an inventor. You have to have contributed to the “conception” of the compounds, as opposed to merely carrying out a synthesis envisioned and designed by someone else.

Another example: let’s say you came up with the idea for a method to measure the residual ozone level in a product made by a process that uses ozone. When the patent application is filed, it contains claims to the method of making that product. In addition, the application has just a few claims on the method for measuring residual ozone in the product. The Examiner at the Patent and Trademark Office imposes a “restriction requirement,” saying that in effect you have claims to two different inventions in the same application. In response to that “restriction requirement,” the decision is made to “elect” the claims to the method of making the product. Eventually the claims to the method of measuring residual ozone are cancelled from the application. Since you did not contribute to the idea or conception of the claims that are left in the application, your name MUST be removed from the list of inventors’ names in the application.

Brian: Academic scientists and students often face the same situation. While perhaps to varying degrees, an entering professor, graduate student or post-doc will also be required to assign ownership rights to inventions to the University. From what I have seen, compensation may be more common in Universities, however. As in so many cases, it is worth finding out what the terms of the agreement are and what are the University policies before making any commitment.

Nhung: Some universities may have an agreement for professors that is different from the agreement for graduate students and post-docs. And undergraduate students may be treated differently in this regard. See, for example, the agreements at Penn State University which you can find on-line:

<http://guru.psu.edu/policies/Ra11.html#C>

Brian: Whether we are talking industry or academia, the terms of such an agreement may differ markedly for any employee-inventor or student-inventor. I know some agreements claim anything invented, at any time or any place while being employed, while some agreements may only claim those as part of employment. If inventing in your

spare time is something that you see as a path to future riches, you want to be sure you understand what you are agreeing to.

This discussion offers a VERY general introduction to the issues of employee-inventor compensation. Employee-inventor compensation can be exceedingly complex and require the advice of experienced Intellectual Property counsel. However, if you consider the question “Who Owns My Invention?” now, much of what happens later will make more sense.

Brian is Ph.D. chemist working in industry. Nhung is a patent attorney with a Master's degree in chemistry.