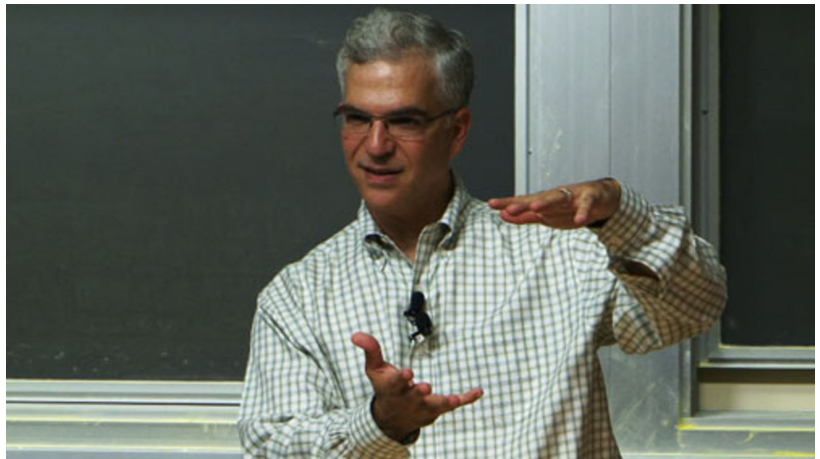


URL: <https://stvp.stanford.edu/clips/applying-the-law-to-open-source-business-models>

Using and understanding intellectual legal rights can be an asset to engineers, says former Sun Microsystems CTO Greg Papadopoulos. In this clip, Papadopoulos explains the difference between patents, copyrights, and trademarks, and what each will allow for the inventor under the law. How they govern the laws of sharing intellectual property via open source can apply to any business model - from software code, to hi-end chocolate, to mechanically-engineered prosthetic limbs.



## Transcript

So this comes back to well, why do you need to know all this intellectual property stuff? Well, how do you do this? This is where using and understanding the legal system becomes a tool and it becomes a tool that allows you to shape these communities in the way that you like.. So just sort of the one-on-one on that for most of this stuff is really in the area of copyright law.. And just for quick review, patents protect ideas, copyrights are their expression, and trademarks are what you call them.. By the way, just because I get an opportunity to say this to you and you go huh, but if you have a patent on something, you don't have the right to make that thing.. Do you hear what I said? You have a patent on it, you don't have the right to make it.. It gives you the right from exclude somebody else from making it.. That's all patent does.. It's very powerful but the reason why you don't have a right is because you may read on somebody else's patents and thus cross licenses.. Copyrights are the expression of ideas so that's like code.. That's like a bit example of an expression..

If you look at open source software, the central mechanism for creating a community around that is a license.. and the license is what you put in the preamble of the software.. It's on the comment section of the code and things.. That license is covered by copyright law.. It says basically - the license give you a set of rules like you may have to propagate this license, maybe you have to put back any changes that you've made or modifications or improvement and may or may not deal with patent, depending on which license.. It may say that if you're using this code and you want to keep using it then you can't prosecute anybody on any patents that you have.. And essentially, if you violate the license, you violate copyright law and that allows people to go after you for copyright violations.. So this is all about the freedom of sharing code and that creates communities.. One of the surprising thing is that model can be used to create communities in all kinds of ways.. We've taken our SPARC microprocessor code which is hardware but for anyone who has done hardware, you know that in fact it looks a lot like writing code, and we've taken the description of that hardware and actually placed it out, and growing and growing communities out starting with the universities in academic settings as well as companies that are adopting this code and building products from it..

Here's some other interesting examples of this.. This is a startup chocolate company in San Francisco who's on the mission of making obsessively good chocolates.. That may appeal to people in here.. They run it as an open source model, a very interesting way.. The center of this is, hey, we don't really have much understanding or insight into even what people's flavor preferences around chocolate.. All you have is like the amount of cacao in that, how dark is it, which is really like saying how much alcohol is in wine.. That may be a preference but it probably doesn't describe whether you're going to like wine or not.. So they've developed this through user feedback of beta chocolate, this flavor wheel that has six different broad flavor areas in it and you refine your palette and they refine the preferences of people about where do particular mixtures from beans from particular parts of the world end up.. So they beta test these things and now they have one chocolate and there's a bigger story there too about networks that they create.. Here's another interesting one that is in a social sense interesting..

There is a product called Open Prosthetics Project that started with how for people who have prosthetic arms, is a lot of them have this thing called a Trautman hook that was no longer manufactured but how are they going to maintain it? How can they reproduce it? How can they improve it? This is just a community of people who have come together to go share mechanical engineering designs and to move forward the whole state of the art in prosthetics.. And it's a very interesting example of building these communities and the mechanical engineering sense of things...