

# Spin-off negotiations with technology transfer offices: who wants too big a piece of the pie?



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You have been working on a technology for years and you now consider it is time to exploit its commercial potential. And you want to be in the driver's seat. You are therefore about to launch your own spin-off.

Creating a spin-off is easy, *per se*, but your spin-off will remain an empty shell as long as it does not own the technology. This means that your company will have to license it and negotiate with the technology transfer office (TTO) of your academic institution.

This situation can be a little tricky. First, you have to negotiate "against" your former (or current) employer, often with the very same people that supported you in filing a patent to protect your technology. Second, this institution that has been nurturing you will now want a part of your start-up that has only just been created. This is akin to tearing a leg off your newborn baby. But it is YOUR baby not theirs, right? Well, not really...

## Why do I have to "pay" academia to licence my own invention?

You may well have participated to the invention of the technology, which is why you are listed as an inventor on the patent, and why you will usually receive some royalties related to it. However, the patent belongs to your academic institution.

Think of what the institution has invested in your project thus far: your salary and your collaborators', materials (including shared facilities), training, overheads, etc. Did you obtain grants to fund all this? Would you have received grant money if you had been working from your garage? Or was funding facilitated by the fact that you have been working in an institution with a reputation, infrastructure, and supervision?

While academia does not depend on the highly unpredictable (and still rather unlikely) benefits generated by your future spin-off, society and tax payers expect it to negotiate a fair market value for the assets it owns. Even a non-profit institution could make some good use of royalties, should your spin-off be successful. And do not forget that, usually, 1/3 of the benefit received by the institution will be distributed to the inventors.

Now you understand that academia deserves *something*. But how much?

## What is the benchmark?

Stating some simple straightforward benchmark for equity or royalties would be practical but pointless: it would mean that all spin-offs are equally valued (same present value and future potential), that all projects have received the same amount of support by the institution, and that the value of the licensed technology is the same. This is obviously not the case.

Additionally, negotiations usually end up with a mix of equity and royalties, sometimes upfront and milestone payments, and non-financial terms (diligence milestones, scope of the license, etc.), which will in turn influence the financial terms. Thus, looking at only one aspect (*e.g.* only equity) and comparing it with other spin-offs or discussing it with your neighbour who happened to have founded an internet company 10 years ago, might not help you get the big picture.

While many factors will influence the terms of your licensing agreement, here are the main elements that you can expect:

**Patent cost reimbursements:** usually none, as these are considered covered by equity acquired. In some special cases or in some institutions, these can be requested as an extra payment by the spin-offs within a certain timeframe (1-2 years). Note that all future patent costs will be taken over by the spin-offs.

**Upfront and early milestone payments:** usually none, as it would not be appropriate for a spin-off to spend its early financial resources on this. These payments are replaced by equity.

**Late milestone payments:** these can be included, as they are milestones occurring at a later stage (e.g. when hitting the market), usually when a larger company has taken over from the spin-off.

**Equity:** usually in the range of **10%**, with very high variability (at least 0-20%). It usually covers the patent costs and the upfront and early milestone payments that academia could have requested from another licensee such as industry. In some cases, academia can acquire an option that can be converted to equity. If in a reasonable range, percentage of equity is unlikely to be a deal breaker: whether 5 or 20%, the founders will still hold over 80% of the equity; the risk of dilution (thus demotivation of founders) will mainly depend on the funding deals coming afterward! Most important here is

not to distribute (too much) founder's equity to founders who will not have a major role (i.e. working close to full time) in the spin-off in the future (e.g. a faculty member).

**Royalties:** usually around **5% of net sales**, again with very high variability (at least 0-10%). Elevated royalties may harm the spin-offs because they will impact the bottom line in the future and make the spin-off less profitable and less attractive for an exit. Here, the industry sector is very important: single digit (or even low two-digit) royalties will not impact too much on the comfortable two-digit benefit in the pharma industry, whereas higher royalties can be a deal breaker in other industries such as distribution.

When all is said and done, what are "good" terms? While the best terms would be 0% equity and royalties (even though a patent given free of charge by academia might not indicate a high value to investors), terms that best reflect reality (value of the patent, path toward development, etc.) and do not hurt the spin-off should be considered acceptable. Remember that academia has a shared goal (and interest) in your spin-off: success. And if a fellow entrepreneur was offered "better terms", it could simply mean that their technology is not as promising as yours!

Leading to higher equity and/or royalties	Leading to lower equity and/or royalties
<ul style="list-style-type: none"> <li>Large amount of funding received by academia</li> <li>Well advanced project</li> <li>High potential value of the technology</li> <li>High estimated current value of the spin-off</li> <li>Very large market</li> </ul>	<ul style="list-style-type: none"> <li>Limited market</li> <li>Highly risky project</li> <li>Anti-dilution clause for academia</li> <li>Early project</li> <li>Limited scope of the license</li> <li>Weak patent: limited scope, limited freedom-to-operate, low chances of being granted, etc.</li> <li>Need for further in-licensing from 3<sup>rd</sup> parties to be able to use technology</li> </ul>
Other factors to consider	
<ul style="list-style-type: none"> <li>The amount of equity will be inversely proportional to the level of royalties</li> <li>Other financial and non-financial terms will influence equity and royalties: sublicensing conditions, upfront payments, milestone payments, diligence milestones, etc.</li> <li>Expectations of the TTO of your institution: need for success stories, short term financial goals, etc.</li> <li>Level of preparation of the negotiation (figures, business case, etc.)</li> </ul>	

**Figure I:** factors that can influence the negotiation on equity and/or royalties

## How to prepare for negotiations?

First, do your homework! As for any negotiation, you have to come prepared. Write a short business plan (a few pages/slides are enough) explaining why your team is the best to further develop the technology (otherwise academia could out-license it to another company). It should also include a clear development plan (indications, costs, timelines, etc.) and a realistic financial plan. If you are well prepared, negotiations will be quicker, as they will be based on facts rather than on emotions. It will be well documented and easier to renegotiate at a later stage, if need be. If you want to go one step further, you can present a financial model showing expected costs and revenues for the coming years, explaining why the terms that you are proposing for this technology are fair; you can for instance include real figures drawn from the commercialization of similar products in the past.

Second, chose the right negotiator. This can be essential to obtain a fair deal in a reasonable amount of time (your time should be invested on the technology, not negotiations). Some TTOs will refuse to negotiate with faculty members or current employees of the academic institution to avoid conflict of interest, as they would be negotiating “against” their current employer. Ideally, the negotiator should be a business-oriented person involved in the spin-off creation but not (too much) with academia. You may also consider being supported by a professional such as a start-up lawyer or an entrepreneur with extensive experience in this kind of negotiation: it might smoothen and accelerate the process, providing they are not given the mission to elaborate on every single clause in the agreement! Investors might also be less critical on the terms if they know that a well-known professional has been involved.

## What else should I look out for in the licensing agreement?

**(Due) Diligence milestones.** They are what you have to achieve and by when. If these milestones are not achieved, the license agreement can be terminated by academia. It can be perceived as a threat by the spin-off and investors, but it is a must for academia that has to make sure that the technology is advanced properly (otherwise academia may give the technology to someone else). Therefore, ambitious yet achievable milestones should be included.

**Scope of the license.** It should, intuitively, cover everything mentioned in the patent. However,

remember that in the spin-off, you will soon be diluted by successive funding rounds, and might even be kicked out of the board and/or management team. You will have no more decisional power on the company that owns your technology. If the spin-off is performing poorly or has no capacity to do more, you – as an inventor – might want to partner with another company for a part of the patent not covered by the licensing agreement (*e.g.* a new indication that would be better developed by a company specialized in the field), rather than leaving it on the back burner.

**Non-royalty sublicense income.** It represents the part of the benefit that the spin-off will get from further sublicensing the technology to a larger company (beyond the royalties that are due anyway). This part is usually high at the beginning (to avoid immediate sublicensing which is not the goal of a spin-off) and decreases with time.

**Possibility to renegotiate.** The licensing agreement can be renegotiated at any time by the founders or the investors directly, as long as the TTO agrees to do so. TTOs are usually open, but the need to renegotiate should be well justified (“Our investors think royalties are too high” is usually not enough). You should present good reasons why the situation is different from what was negotiated initially, *e.g.* the development costs have significantly increased since negotiation, or the assumptions in the business plan turned out to be wrong. Remember that it is still a negotiation, so you should be ready to propose something in exchange (*e.g.* more equity for less royalties).