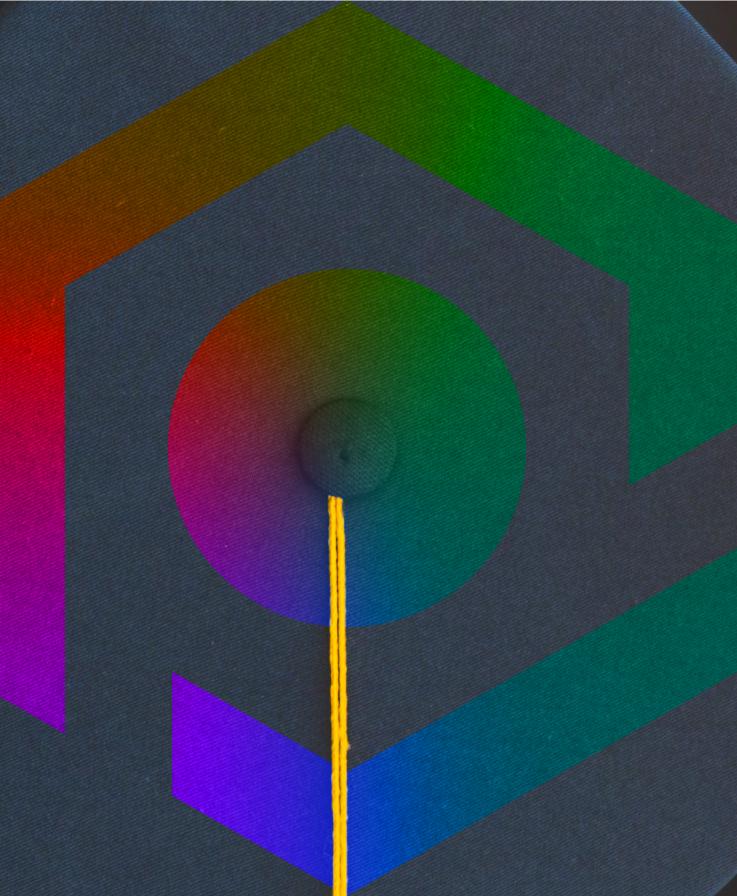
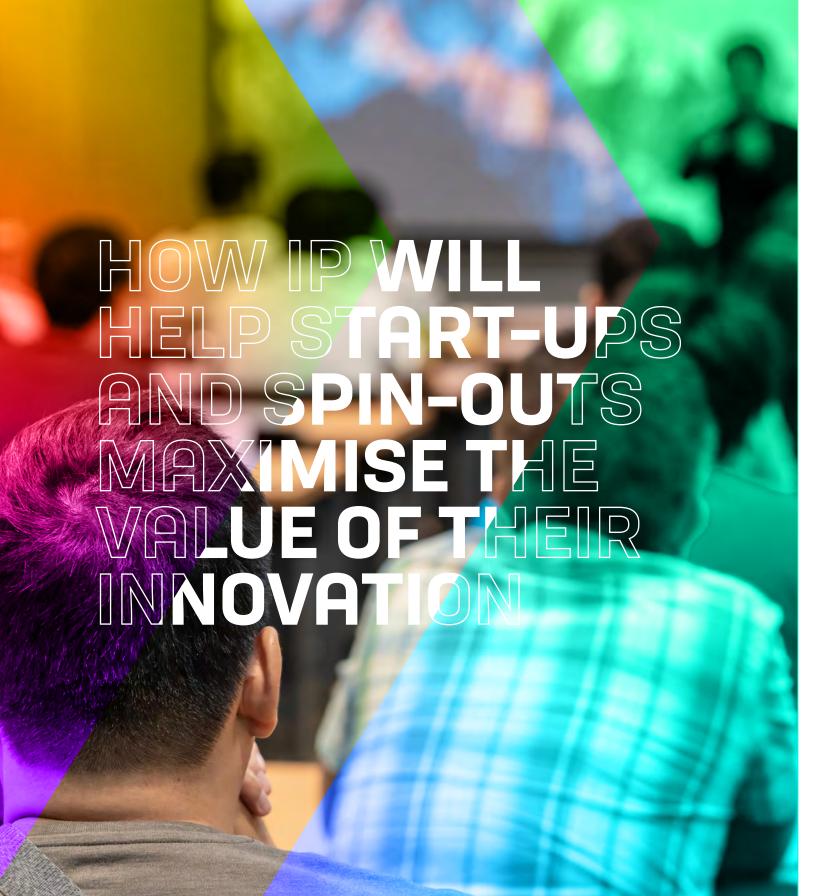


FROM UNIVERSITY
TO COMMERCIALISATION:
HOW IP WILL HELP START-UPS
AND SPIN-OUTS MAXIMISE
THE VALUE OF THEIR INNOVATION

POTTERCLARKSON.COM





As a university student or academic you might be vaguely aware of intellectual property (IP) as a concept but you may still not be entirely clear on why IP is so important or where and when you should start setting out your IP strategy?

This white paper will take you through five facets of IP that are particularly important for businesses relying on IP that has originated from their time at a university or other higher education facility.

These five facets are:

- 1. Clear ownership
- **2.** Effective innovation capture
- 3. Setting your IP strategy
- 4. Market awareness
- 5. Timing

We should probably begin by looking at what we mean by IP.

When you hear the term IP you probably think of inventions and patents. IP actually covers all creations of the mind, including designs, branding and trade secrets. The different types of IP you'll need and the way you'll use them to build your business and maximise the value of your business will depend on the nature of your business and on what you want your business to achieve.

It's also important to remember that as your business develops, the way you use IP will also develop and, ultimately, change and you will need to change with it. However, as you start out you will probably want your IP to:

- Make you attractive to potential investors by giving them confidence that they will get a return on their investment.
- Support the valuation of your company which again will make your business more attractive to investors and possible technology partners.
- Make it harder for competitors to enter the market, which in turn protects your market share and your market position.
- Derive higher profit margins and additional revenue streams.
- Strengthen your brand and reputation and showcase your company in the best possible light



Establishing ownership of university-originating IP is not straightforward. It is made even more complicated by the collaborative nature of academic research and potential grant funding obligations.

However, IP ownership is not a question you can afford to overlook especially as it will be one of the issues raised by investors looking into investing in your start-up.

There are three key areas you need to address from day one:

- 1. Who owns the existing IP?
- 2. Who will own any new IP you create?
- 3. How will your ownership of your existing IP change as you create new IP?

If IP ownership isn't clear, an investor could very well walk away rather than risk investing their funds into the unknown. To prevent this from happening, you need to determine:

WHO IS ENTITLED TO THE IP FOR A NEW IDEA?

Generally the IP owner can be traced back to the creator of the IP. The entitlement to the ownership rights initially resides with the creator, although there may be an automatic transfer of entitlement arising from employment or contractual obligations.

If there are co-creators of the IP, there is the possibility of multiple parties being jointly entitled to the ownership of the IP.

WHY IS IT IMPORTANT TO IDENTIFY THE CREATOR OF THE IP?

Since an IP right can be challenged on grounds of the rights holder lacking entitlement to ownership, it is crucial to correctly identify the IP creator. This will then enable the IP owner to be identified.

The identification process can be very complex and can vary greatly depending on circumstances. This means it is best handled together with help from your tech transfer office or professional advisor.

What you should never do is take the same approach as adding authors to journal publications because someone qualifying as an author may not necessarily qualify as an IP creator in the eyes of the law.

WHAT POTENTIAL OWNERSHIP ISSUES MIGHT I FACE IN A COLLABORATION WITH A PARTNER?

With whom you collaborate in an inventive or creative capacity will impact who owns the IP, and you will need to consider their status in addition to your own.

It is always advisable to maintain an open dialogue about IP ownership and keep clear records of potential inventions and inventorship. Co-ownership in itself is not inherently a bad thing but it can give rise to a lot of problems and headaches if not handled properly.

WHO OWNS THE IP CREATED BY ME DURING MY TIME AT UNIVERSITY?

This will depend on your role in the university and any contracts governing your role.

IP generated by an employee will typically be owned by the employer (unless the employment contract explicitly states otherwise). If you are a postdoctoral researcher, technician or tenured academic, you are likely to be classed as an employee, meaning that your inventions will belong to the university.

The situation around PhD students and undergraduates is different as they are not technically employees. Some universities have a clear policy that student-generated IP belongs to the student, while in other institutions the IP may be partly or wholly owned by the university depending on whether university resources were used in generating the IP.

It may be that your industrial sponsor has rights to the IP created as part of the research programme.

WHAT ABOUT ANY IP CREATED AFTER I LEAVE UNIVERSITY?

The circumstances under which the new IP is created will be a factor in determining whether the university or your industrial sponsor continues to have an ownership stake.

IP you create independently outside the university would normally be owned by you, although having an active university employee or student in your team may complicate matters. If your start-up enters into a collaboration with the university, then you need to consider how background IP and foreground IP are treated in the collaboration agreement.

Licensing agreements in relation to IP owned by the university may have clauses that dictate the ownership of newly created IP that are 'improvements' of the licensed IP.

These improvements would be added to your licensing agreement to clearly distinguish the IP owned by the university from the IP you will own.



IP is often the strongest if not only asset owned by a university start-up in its early days. Capturing and protecting new IP are essential steps for building a solid foundation upon which you can develop your IP portfolio to attract potential investors.

Conversely, failing to put in place robust innovation capture procedures can lead to missed opportunities.

For instance, it is not unusual for academic research to spawn innovations that are not directly related to the research project's original aims. Getting your team to think about their research and results through a commercial lens helps them develop a commercial mindset and create an innovation-focused culture.

It is not always obvious what IP you have, what you might be able to protect and what you should protect.

Consulting your university's tech transfer office early on is a good starting point but the following questions will also help you identify exactly what innovation you have:

CAN MY IDEA BE PROTECTED BY IP RIGHTS?

A first step would be to identify and understand the nature of your new idea. Is it a technical invention or a brand? Is it a product or a process?

The answers will dictate the type of IP right(s) needed to provide suitable protection. Do you need registered IP rights (e.g. patents, trade marks) or unregistered IP rights (e.g. copyright, trade secrets)?

IS MY IP ALREADY PROTECTED BY THE UNIVERSITY OR MY INDUSTRIAL SPONSOR?

After identifying your IP, you need to check whether there are any existing IP rights that cover the IP.

Check your own records since, for example, relevant IP rights may be listed in your research project's scope or in previous related research projects. Then make enquiries with your university's tech transfer office or your industrial sponsor.

If IP rights are in place or are required, check who is entitled to these rights and whether these rights will cover your chosen commercial activities. This should not be overlooked, especially if your team includes academics employed by the university.

IF I DO NEED IP PROTECTION, WHAT IS THE NEXT STEP?

If the university/sponsor owns your IP, ask them about their IP protection process.

If the university/sponsor does not own your IP or is willing to relinquish their rights, you can either take the necessary steps yourself or hire a professional advisor to secure the relevant IP rights for you.

HOW DO I KEEP TRACK OF MY IDEAS AND IP RIGHTS?

Start developing an innovation capture process to record and evaluate your ideas on a regular basis. Creating an IP register and keeping it up to date is a simple place to start.

You should do this as early on as possible. This may be during your time in university before you created your start-up.

Having the information in your IP register ready will allow you to present to investors at a moment's notice and show them that you have a thorough approach to IP.

WHO SHOULD BE PART OF OUR START-UP'S INNOVATION CAPTURE PROCESS?

Everyone within your start-up should be involved at some level, regardless of whether their day-to-day role is focused on business, marketing or R&D. Having everyone on the same page right from the start will pay dividends in the long run when it comes to quickly identifying new IP and securing IP rights.

Your university's tech transfer office or a professional advisor can also play an advisory role in the innovation capture process. It is always worth seeking advice early on about developing your own process.

NOW THAT AN INNOVATION CAPTURE PROCESS IS IN PLACE WITHIN MY START-UP. IS THERE ANYTHING ELSE I SHOULD DO?

As your start-up makes the transition from the academic world to the commercial world, many things can change both internally and externally. As a result, your innovation capture process needs to be reviewed and refined regularly in order to allow you to adapt and react quickly to new or unexpected changes.



Having a sound IP strategy in place will increase the likelihood of you securing the funding you need. Having a sound IP strategy means you can answer your potential investors' questions clearly. Your answers will give investors total confidence that you have properly considered how your IP will be used to deliver your business plan.

An IP strategy should never be developed and implemented in isolation.

Your commercial plans must dictate how your IP strategy is formulated, and your IP strategy must be regularly checked to ensure that it maps directly to your business plan and your commercial objectives. This is an iterative process that requires constant communication between the two. Without commercial input, one could easily end up with an IP portfolio that is inefficient or, worse, not fit for purpose.

Here are the building blocks for a strong and effective strategy:



THE RIGHT TYPE OF IP PROTECTION

Having IP protection in itself is not enough if you are using the wrong type of right or are not protected in a certain market.

You need to ask yourself whether your IP rights cover:

- Your current objectives
- Your longer term objectives
- The opportunities you want to leverage
- All international markets of interest

An investor will almost certainly ask you about all these points as part of their due diligence.

MANAGEMENT OF YOUR CURRENT AND FUTURE IP

In addition to creating a strong IP portfolio, you need to develop a supporting IP framework that covers:

- IP generation
- Securing ownership of IP rights
- Commercially exploiting your technology through sale, manufacture or licensing
- Avoiding infringement of third party rights
- Enforcement of your IP rights
- The time, budget and resource to do all of the above

MONETISATION AND REVENUE GENERATION

There are many different ways of generating revenue from your IP. You can directly sell products and services related to your IP. You can license your IP rights. Or you can sell your IP.

Therefore, you need to make sure your IP strategy protects your revenue streams from your competitors. You also need to consider how third-party IP rights might impinge on your ability to make use of your desired revenue streams.

WILL MY IP STRATEGY STAY THE SAME AS MY COMPANY GROWS?

There is no one size fits all IP strategy.

Your IP strategy and framework can change depending on what stage of the commercialisation process you're at so you need to be prepared to revisit and evolve your IP strategy as your business progresses.

MATCHING YOUR IP STRATEGY TO THE STAGE YOUR BUSINESS IS AT

As a start-up or spin-out your focus will probably be on protecting your core technology, securing funding and growing your assets but doing all this with a close control of your IP budget to keep costs down as much as possible.

However, looking to the future, as your business enters its 'adolescence' you may want to expand your IP portfolio through creation or acquisition. Additionally, you might want to put more internal IP procedures in place, look harder at commercialisation opportunities and tackle any possible freedom to operate (FTO) concerns.

Then, as your business matures, your IP strategy will need to adopt a more multi-layered approach to managing progress, R&D, diversification, investment and even exit. Your IP strategy will keep evolving as you move through each new stage.



Understanding your market and its IP landscape will help you assess potential opportunities. It will also show investors that you have a good understanding of what third party IP rights exist and how they could impact your innovation or brand.

More pointedly, burying your head in the sand now could lead to costly and time-consuming legal problems down the road.

More often than not, companies only become aware of IP infringement after receiving a cease and desist letter. By this stage it is usually too late to take any preventive action and given the significant costs you will already have invested in R&D, the last thing you'll want is to spend even more on legal fees to defend yourself against an accusation of infringement.

Since developing market awareness from an IP perspective is crucial in steering your IP strategy in the right direction, a simple place to start would be to answer these key questions:

WHERE SHOULD I PROTECT MY IP?

Having no IP protection, or only protecting yourself in a limited number of markets, can diminish the value of your start-up in the eyes of investors.

You need to check whether you are protected in important markets. This will depend on the location of your consumers, manufacturer and competitors. These checks and any necessary corrective actions must be performed as early as possible to avoid losing IP rights due to missed deadlines and time constraints.

IF I AM PROTECTED, CAN THIRD PARTIES STOP ME FROM USING MY IDEA?

Having IP protection does not automatically confer the right to commercially test, market or sell your IP-protected innovation or brand.

On the contrary, your ability to carry out your commercial activities may be restricted by the existence of third party IP rights.

Irrespective of whether you have any IP rights in place, you need to establish whether your start-up is free to perform your proposed commercial activity in view of third party IP rights. This is commonly known as freedom to operate or FTO.

HOW CAN I ESTABLISH MY FREEDOM TO OPERATE?

Clearance searches may be performed to establish your freedom to operate by identifying third party IP rights that belong in a specific field or to a certain competitor.

But please remember clearance searches are not inexpensive, especially as they should be conducted by experienced professionals. However, it may be money well spent as investors may be discouraged if they don't have a complete picture of the potential IP infringement risks.

HOW DO I MANAGE THE COST OF CLEARANCE SEARCHING WITHIN MY BUDGET?

Initially you can mitigate risk and manage costs by doing your own searches, maintaining watches for the publication of competitor's rights and undertaking clearance searches for any proposed brands and trade marks.

However, once you start to move closer to launch, the need to establish a clear freedom to operate becomes more crucial. This is when extensive searches and legal opinions by professionals may be required.

WHAT SHOULD I DO IF MY PROPOSED COMMERCIAL ACTIVITY IS AT RISK OF INFRINGEMENT?

After doing the searches, you can seek legal advice on infringement risk or how to avoid infringement. If necessary, approach the IP rights holder to purchase or license the right, or take steps to challenge the right.

But be mindful this can bring you unwanted attention. The IP rights holder will be alerted to the possibility you are either infringing or planning to infringe.

Alternatively, you could change your innovation or brand to avoid any restrictions imposed by the third party IP right.



Academic inventors face pressure from both sides. Should they publish their research to help with academic metrics? Or should they keep the research confidential so that a patent application can be filed?

As you begin to commercialise your business, you need to remember research publication and IP protection are not mutually exclusive.

However, knowing when to act is critical to a sound IP approach. It is even more important in an academic setting where publishing research before applying for IP rights is an all-too-common mistake.

These questions will help you coordinate your research publication and IP strategies and set the right timings for your business:

WHEN IS THE BEST TIME TO FILE A PATENT APPLICATION?

ALWAYS before you publish your research! Once you have published your work, the chances of getting any patent granted can be greatly diminished. In some cases, they might disappear completely.

Some countries (including the US) have a grace period during which any publication by or originating from the inventor(s) would not affect the patentability of your invention. However, there is no such grace period in many other territories (including Europe and China).

This means that publishing your research before filing a patent application would prevent you from securing patent protection in these key territories.

While there is often no perfect time to file a patent application you will typically need to find the best compromise between filing early before anyone else does and having the requisite data to support your invention. Your tech transfer office or patent attorney can help you identify the best compromise.

WHEN SHOULD I GET IN TOUCH WITH AN IP ATTORNEY?

Usually, your first interaction will be with the tech transfer office.

They will help you determine what you have and tell you if the university can support an IP filing. They may have an existing relationship with IP attorneys who can help you with your filing(s).

After you leave university, you will need to learn how to manage and control your IP. A close relationship with your IP attorney will be beneficial. As they know you, your innovation and what you want to achieve, they will be best placed to make sure everything is in place and in progress to ensure your IP maximises the value of your innovation.

AM I ALLOWED TO TELL ANYONE ABOUT MY IDEA?

If you do want to talk to other parties about your ideas, you should only do so under a non-disclosure agreement (NDA) or other confidentiality agreement. Your tech transfer office should have some template NDAs you can use. In addition, you should keep track of the information that was shared, with whom, when and in what context.

Although confidentiality agreements restrict the other party from using or distributing any shared confidential information without your permission, it should be borne in mind that they are not necessarily 100% effective in protecting your IP rights.

If the other party breaches your agreement by making your idea public, your chances of obtaining patent protection can still be negatively affected. Whilst you would be entitled to sue them for breach of contract, the resulting lawsuit can be costly and time-consuming.

I NEED TO PUBLISH A PAPER. WILL THIS AFFECT MY IP RIGHTS?

Yes, if you publish your paper before you file your patent application.

Talk to your tech transfer office as soon as you think that your research could be the subject of a patent application. The sooner they can put things in motion, the sooner you can get a patent application on file. Preparing and filing a patent application is a process that can take anything from a few days to a few weeks so it is imperative you plan ahead.

Once the patent application is on file, you can then safely publish your research.

MY RESEARCH IS BEING PRESENTED PUBLICLY TOMORROW, AND I JUST REALISED THERE COULD BE SOME VALUABLE IP IN THERE. WHAT CAN I DO?

First of all, don't panic! This scenario comes up fairly often and the first step is to contact your tech transfer office and get their advice – they will have experience with this!

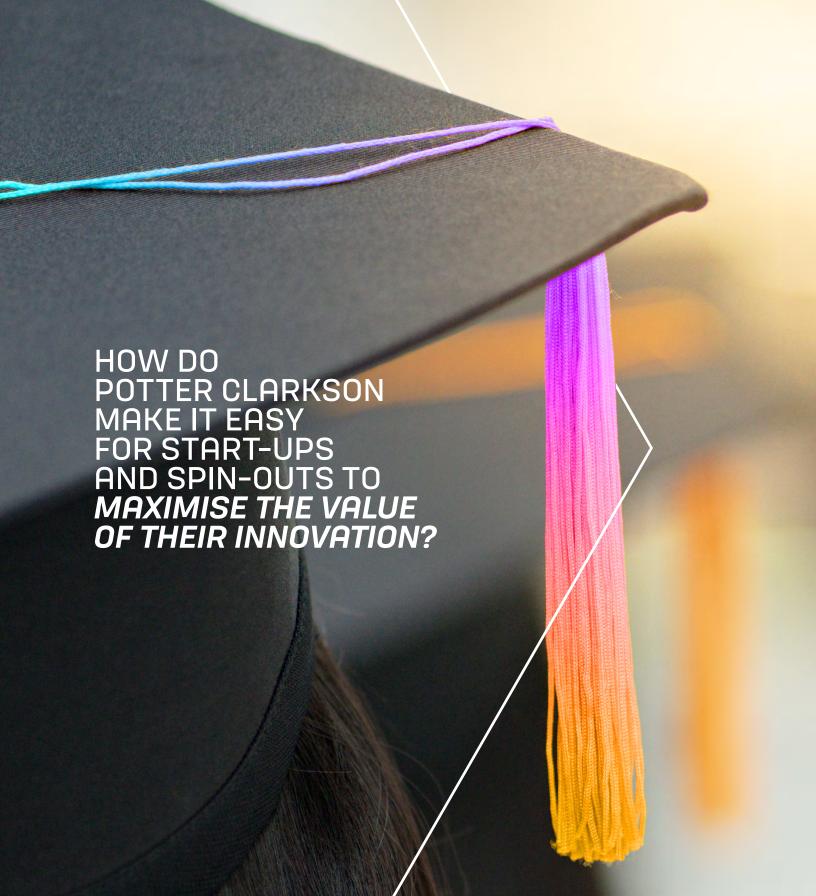
The easiest but possibly least palatable option is to simply cancel or delay the presentation. However, presenting your work is a key part of what you do and, in some situations, the presentation cannot be stopped from going ahead.

Another option is to redact key information from the talk.

It is often possible to present enough information to allow useful discussions to take place, without giving away the key inventive concept and the finer details. An IP attorney can help you determine what information should be redacted.

Finally, it is possible to get a basic patent application on file before you are due to give the presentation. Whilst such a short time frame is never optimal, there will be an opportunity to follow up with a more thorough patent application in the coming days, weeks or months.





Our large international team of IP attorneys and IP solicitors offer all the scientific, legal and academic experience a university start-up or spin-out needs to establish and implement the IP strategy that will maximise the value, lifetime and reach of their innovation.

As well as having extensive experience in the physical sciences, in digital technologies and in the health and life sciences, our attorneys have worked with a number of higher education institutions including Imperial College, Nottingham Trent University, The Royal Veterinary College and Leicester University. Many have also been in the same position as you having enjoyed long and distinguished academic careers before entering the profession.

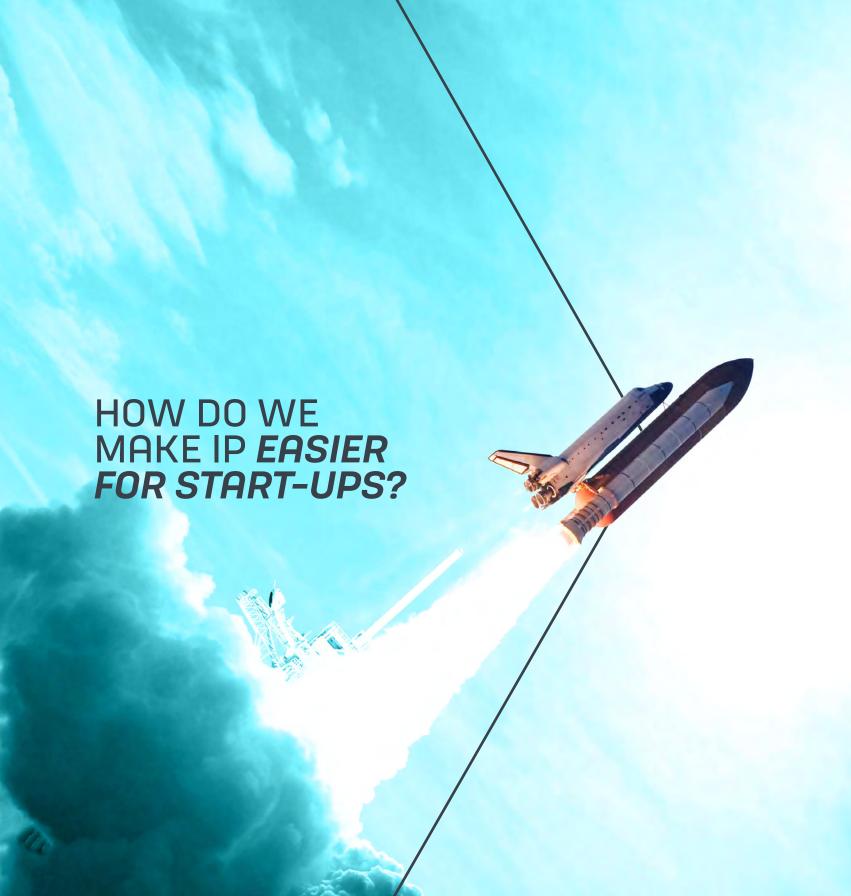
We understand exactly what is required to secure the best possible commercial future for businesses born at university.

And when it comes to securing funding, our specialist investor team know exactly what

is needed to construct an IP strategy and IP portfolio that will make your business as attractive as possible to a potential investor.

This means we know how to help you create the right long-term IP strategy for your new venture.

This is particularly vital if you have just or are about to spin out. You will urgently need to build on what you have done with your tech transfer officer and make business critical decisions as to what and where you need to file now, what you should keep secret and what needs to be done to ensure you have the freedom to operate and freedom to create the revenue streams your business will need to succeed.



When we're working with a new university start-up or spin-out, our first step is usually **Kick-Starti***P*.

Kick-Start*iP* is a fixed price/fixed outcome audit specifically designed to help a young business understand, identify, develop and document their IP strategy.

Kick-StartiP examines your company's innovation from the perspective of your business plan, its commercial objectives, its market and its competition so we can create exactly the right IP strategy for your business – the IP strategy you'll need to achieve your desired outcomes.

Although every audit is as different as the businesses involved, at the end of the audit we guarantee that by the end you will have:

- An explicit IP strategy (in writing) that will help you make the right IP decisions and manage your rights responsibly, commercially and cost-effectively
- A report that confirms your inventive concepts, the relevant IP rights and the ownership of your inventions and summarises the other legal or commercial issues you should address
- A set of slides that provides an executive summary of your IP strategy that you can add to your deck for use in presentations to prospective investors
- An accurate budget for your future IPrelated costs

If you'd like to find out more about our hugely experienced university team and/or **Kick-Starti**P, please contact Jason.Teng@potterclarkson.com or Sara.Holland@potterclarkson.com

SPEAK TO OUR EXPERTS



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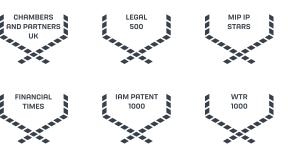
A PROVEN APPROACH

OUR ACCOLADES

You can be truly confident in our abilities

- we are recognised as a top-tier firm in

Europe, having received accreditations from
the IP profession's leading benchmarking
organisations and programmes.





An excellent firm to deal with. They have invested in gaining a thorough understanding of our approach to projects, their communication is timely and concise, and their advice is easy to understand."

Chambers & Partners, 2022

A key strength of Potter Clarkson is their combination of expert attorneys with solicitors, which gives comprehensive advice on highly technical matters using patent attorney expertise and solicitor know-how, as well as commercial and branding matters with trade mark attorneys and solicitors working together."

Legal 500, 2022

