



INTELLECTUAL PROPERTY FOR SYNTHETIC BIOLOGY

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A NEW WORLD OF ***POSSIBILITIES***

Synthetic biology is a truly transformative technology. It has the power to revolutionise every sector from construction to cosmetics and food to pharmaceuticals.

Synthetic biology's potential has already prompted McKinsey to claim synthetic biology could not only contribute \$4 trillion per year to the global economy over the next 10–20 years, but also address 45% of the world's current disease burden.

Just as excitingly, as synthetic biology is designed to create renewable, biodegradable and safe materials, its applications are also likely to play a huge part in satisfying the world's environmental concerns and demands.

However, if synthetic biology is to reach its full potential and make the impact it should, it is critical the innovation driving its development is fully supported and made commercially available to as many users as possible throughout the global bioeconomy.



HOW CAN INTELLECTUAL PROPERTY *HELP CATALYSE* *THE COMMERCIALISATION* *OF SYNTHETIC BIOLOGY?*

Despite being one of the most exciting and fast-growing sub-disciplines of the life sciences (a position the UK Government has underlined by calling it “one of the eight great technologies of the future” when it pledged £40m to developing three new synthetic biology research centres in the UK) there is still a misconception synthetic biology is tricky to commercialise and monetise.

We would argue that as with all strands of the life sciences, devising the right intellectual property (IP) strategy is the best way to progress and achieve your commercial objectives.

The first step is to identify which IP rights map best to your business plan and your proposed business plan.

Your IP rights will play a critical role in your future success, establishing market and/or investor confidence and ensuring you can preserve your unique competitive edge. Patents are probably the IP right most synthetic biologists will immediately think of.

While a patent will give you monopoly ownership of your invention, it is worth bearing in mind that filing a patent will also propel your ideas into public view.

As this disclosure may impact on your plans, you need to be very careful as to how, when and where you file your patents. If disclosure is not in the best interests of your business, you may want to consider trade secrets, at least as an initial interim option.

A trade secret can cover any information that has commercial value but is not known outside your business. For example, within the synthetic biology field your trade secrets could include the processes involved in your synthesis or your supporting data.

WHAT ARE THE OTHER KEY ISSUES EVERY SYNTHETIC BIOLOGIST SHOULD ADDRESS?

While your IP strategy will take care of the protection of your synthetic biology innovations, there are other issues to tackle you begin to convert your ideas into market share and revenue. These include;

1. COLLABORATION

Whether collaboration exists in the founding science or when partnerships begin to form across the various layers in the synbio stack, they need to be properly formulated so there are no questions around your ownership of the ideas involved.

2. REGULATORY COMPLIANCE

Regulatory frameworks vary wildly across the world; an engineered crop that can be marketed in one country could be banned out right in another. You need to be totally sure your products are saleable in the territories you have targeted.

3. CONSUMER ACCEPTANCE

While the public is most definitely becoming more accepting of synthetic products, tolerance still varies between applications, sectors and markets. Consideration must be given to how best to tackle consumer acceptance and, indeed, if possible non-acceptance will influence your future plans. This is where your IP strategy will need to evolve into a more rounded IP and legal strategy.

To put your business plan into action, your IP rights will need to be supported by the required commercial agreements and licensing strategies. You not only need to protect the ownership of your ideas, you also need to protect their route to market and protect their ability to have the positive impact you want them to.

We have the knowledge, understanding and experience to help you to design and implement a fully formed and fully integrated IP and legal strategy whether you are in development, seeking investment or already on the market.

HOW DO WE HELP OUR SYNTHETIC BIOLOGY CLIENTS MAXIMISE THE COMMERCIAL VALUE

At Potter Clarkson, we have one clearly defined purpose. We create value from innovation. While this is always our starting point, the route we take will depend on the area of synthetic biology in which you operate, the industrial sectors you are targeting, the type and how much support you need, and on your key commercial objectives.

By combining our deep understanding of the full range of ways synthetic biology is benefiting industry with a genuine interest in our client's ideas and aims, we will devise the complete IP and legal solution you will need to unlock every opportunity, overcome every challenge you face and ensure your innovations reach their full commercial potential.

WE DO THIS BY:

- Understanding the science; this may sound like a given but as this is such a specialist and fast-moving area, it isn't.
- Identifying what you can protect, what you should protect and how best to protect it given your commercial objectives.
- Helping you create the right IP strategy and securing the IP rights you need to implement your strategy.
- Continually searching and watching for any patents and trade marks that may impact your business.
- Enforcing your IP rights across the world
- Defending your rights if you are attacked via a patent office opposition or in court proceedings.
- Supporting your business plan by drafting the commercial, collaborative, IP and licensing agreements you'll need.
- Advocating for your in-licence negotiations.
- Safeguarding your revenue and market position in the event your rights are challenged by competitors.

AND BY:

- Managing your IP and legal strategy so you can focus on building your business and progressing your next round of ideas.
- Providing a wider business perspective including advice on investment, regulatory matters and trade secrets.
- Actively advising you on the most strategic use of your IP rights so your synthetic biology always achieves its maximum commercial value.



AS A SYN BIO BUSINESS, WHY SHOULD YOU TALK TO POTTER CLARKSON?

While we genuinely care about the work that we do in helping our clients succeed in this exciting and evolving field, we pride ourselves on the international reputation we are building within the field of synthetic biology.

Because we understand synthetic biology, we understand how to protect and grow a synthetic biology business. However, our position as specialists is supported by three vital additional components:



A TAILOR MADE TEAM OF EXPERTS

Our biotech department is one of Europe's largest and most highly regarded.

Our team includes attorneys with direct experience of working across every type and application of biotechnology.

Moreover, our dedicated sector teams understand how the principles of synthetic biology are applied to life sciences, healthcare, cleantech, foodtech and agritech and FMCG lines including cosmetics, clothing and food and drink.

We know how to create multi-disciplinary teams that include the attorneys with the most relevant scientific and sector experience so you always receive the very best technical and commercial advice.



A BROADER RANGE OF SUPPORT

We offer much more than patent and trade mark services.

Our in-house solicitors will provide the wider commercial law advice you may need from the earliest stage of the deal-making process, through to the negotiating and drafting of commercial IP agreements and, if necessary, the robust enforcement of your IP rights.

Our team also includes experts who can provide the more specialist expertise you may require including regulatory advice, trade secrets, SPCs, and digital innovation strategy.

And if you need further advice, we can refer you to the best qualified person in our trusted global network.

We will also make taking the next step as easy as possible. Our innovative suite of



OUR STRATEGIC APPLICATION

The most important thing for a client isn't the advice we provide; it's how our experience and expertise in the field is applied when we provide that advice.

The depth of both our scientific and sector experience means we can analyse all the issues you are facing from the IP, business and synthetic biology perspective.

This means you'll enjoy an unparalleled level of strategic and commercial direction, direction that will enable you to achieve your commercial objectives in the most effective way.

SUPPORTING THE SYN BIO SECTOR

It's always easy to use words like 'passion' and 'commitment' when you're talking about the areas you operate in.

We prefer to let our actions speak for themselves.

We are heavily involved in the world of synthetic biology, not just through our client work but also through our participation in key initiatives like the eureKARE SynBio Day, Forest City SynBio and the SynBioUK Catalyse Programme.

Along with Built with Biology (formerly Synbiobeta) and the Industrial Biotechnology Innovation Centre we co-founded the Women in Synthetic Biology network, and have been involved in the Scottish Industrial Biotechnology policy refresh.

And we regularly publish our views on our website and on LinkedIn and are asked to contribute articles and blogs to the leading trade publications and to appear on synbio podcasts.



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

