



## PRODUCT DESIGN SCOTLAND TOOLKIT



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## **ABOUT US**

With a long tradition of innovation, entrepreneurship and commercialisation, the product design sector is one of Scotland's key industries. Through advances in technology, designers are providing innovative products across a number of global markets, including healthcare, energy, communications and mobility. Integration of these technologies into viable, efficient and commercially attractive products is key, and the partnership between technology and product design is becoming ever more important.

Product Design Scotland, managed by Technology Scotland, the representative body for Scotland's Enabling Technologies Sector, has been established to support the product and industrial design sector in Scotland. The network aims to be the focal point for the community, raising awareness of the critical importance of design to future growth and competitiveness and creating a thriving, collaborative network to drive innovation.

By working with companies and organisations across Scotland, we support the sector through:

- Promoting the value of strategic design to government and industry
- Raising the profile of Scotland's product/ industrial design sector
- Increasing visibility of those operating within relevant supply chains
- Improving competitiveness through collaboration and knowledge exchange
- Creating new networks to shape the future of design in Scotland.

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# TOPIC INTRODUCTION

# IP MANAGEMENT FOR PRODUCT DEVELOPMENT

When designing a new product, several questions can come to mind in relation to Intellectual Property (IP). What are the benefits of seeking IP protection? Which aspects of the product can be protected, and how? Is there anybody that could stop us from making or selling our product?

Effective management of IP answers these questions and takes steps to mitigate various risk factors and is also an opportunity to secure a unique position in your industry and grow your IP assets.

#### **KEY INCENTIVES FOR IP PROTECTION**

A patent or other IP registered right is a "property" that can be rented, sold, or bought. It can be used for several purposes:

- to prevent a 3rd party from **copying** technology and to demonstrate to **investors** that the company can protect itself.
- to build a portfolio for licencing purposes.
- to manage collaboration.
- to show innovation (marketing of patented technology).
- to build **equity**.
- to reduce tax (R&D tax credit, Patent Box).

#### **DEVELOPING AN IP STRATEGY**

IP comes in different flavours categorized as registered and unregistered IP. Unregistered IP defines IP that exists on creation and, as its name suggests, does not require to be registered. This can include copyright and unregistered design right. Unregistered rights require the demonstration of copying in order to be enforced, which in practice can be difficult. Registered rights, on the other hand, are monopoly rights that provide the right to prevent other parties from infringing specific granted rights. They may include patent applications, registered designs, and registered trademarks.

In addition to the registered and unregistered rights one can also rely on trade secret provisions, provided that a trade secret policy is put in place to identify and manage secret information. Trade secrets can be used to manage sensitive and commercially valuable information that either cannot be protected using an IP registration or that is more valuable if kept secret.

Going the trade secret route, however, should not should not be viewed as a "do-nothing" option as trade secrets also require active management. An efficient IP strategy will combine these various types of IP to suit a specific product.

IP will have to be managed in line with the different phases of product development. Four phases can be identified: 1) Idea and concept, 2) Product development, 3) Launch, 4) Product maturity. This article presents briefly which questions should be considered in relation to IP along the journey from initial concept to product maturity.

#### LINKS AND REFERENCES FOR FURTHER READING:

UKIPO Website

**WIPO** Website

**EPO** Website

**EUIPO** Website

<u>ISO 56005:2020 Innovation management</u> — Tools and methods for intellectual property management — Guidance



# PRACTICAL CONSIDERATIONS

#### STAGE ONE: THE CONCEPT

A new idea for a product may stem from personal experience or through stimulating discussions with work colleagues, in any case one should keep a note of the person or group of individuals who came up with the product concept in the first place. At this stage it is all about assessing the opportunity and keeping your options open. With this in mind it may be useful to perform a prior art search to test the novelty of the idea and identify existing players in the market. Crucially all discussions relating to this new idea should be kept confidential. Managing confidentiality is key to the future protection of the product and should be handled with the utmost care.

- Perform a landscaping exercise to establish the state of the art and identify your competitors.
- Determine which patents or other **IP rights** relating to your product could be asserted against your company and assess the likelihood of future conflict.
- Keep your idea confidential and use non-disclosure agreements (NDA).

#### STAGE TWO: PRODUCT DEVELOPMENT

You believe there is a market for your innovative concept and now is the time to turn this idea into an actual product. In some cases product development can be managed internally, but often it requires the input of third parties that will provide their specific expertise and deliver a particular aspect of the product. In that context it is important to put in place contracts and agreements with collaborators that will clearly establish who owns the IP.

It is also the time to identify which type of IP you will rely on. For technical products that can be reverse engineered, seeking patent protection is often a legitimate goal. But before committing to filing a patent application you may want to evaluate several parameters that should help you decide whether to go ahead or not.

A good knowledge of the prior art will help you identify the level of innovation of your proposed product. When it comes to patents, a distinction should be made between novelty and inventive step. A claim must be both novel and inventive to be patentable, however some claims can still be granted with a relatively small inventive step, a "scintilla" of innovation that is!

The detection of infringement is also an important factor. In some cases the detection of infringement of your claim may be straightforward, for instance by simply looking at the competing product, while in other cases this might require extensive reverse engineering.

Commercial considerations will of course play an important role in your decision to go ahead with a patent filing including how many units are expected to be sold and what is the expected product lifetime. Looking at these parameters will help you quantify the business case for filing a patent application and seeking other IP rights.

#### **EVALUATION SCHEME**

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Level of technology	Not new	Is the proposed innovation a genuine advancement or merely an alternative to an existing approach?	Disruptive technology
Detection of infringement	Impossible	How easy would it be to detect infringement?	Would see it straight away
Commercial opportunity	Small	How many units are expected to sell?	Big

If you decide to file a patent application, you will need a detailed description of your invention. You should envisage how your product might evolve and which features could be incorporated in the future. You should also think about your filing strategy. Separate patents are needed for each country of interest. Often a balance must be struck between the ambition for world domination and financial costs. A pragmatic approach is often to seek protection in your key markets, the countries where your products will be manufactured and the countries where your competitors are operating.

#### STAGE THREE: BEFORE PRODUCT LAUNCH

All the hard work has paid off and your product is ready for launch. But have you considered all your options for protecting your new product?

An important aspect of product design is the way the product looks. The appearance of a product can be protected by registering one or more designs. This should not be overlooked as design protection can add a valuable layer of protection to your product.

Designs have a requirement for novelty and "individual character," that is, the impression that it produces on the user has to be distinctive. In the UK and the EU there is a 12-month "grace period" from first disclosure, however such a grace period is not universal and does not provide protection against a third party developing a similar design independently before the filing date. Therefore the best time for filing your design application should be at the end of the design process once the product is finalised, shortly before launch.

You may also consider your branding strategy by giving a name to your product. Before committing to a particular name it is recommended to perform a clearance search in the countries of interest to check if similar names are not already protected in the relevant classes of goods and services. Your product name can then be protected by filing your own trade mark application. A trade mark is registrable if it is "distinctive", that is, recognised as a sign that differentiates your goods or services as different from someone else's, and not descriptive, so a little imagination should be invested in the product name!

#### STAGE FOUR: PRODUCT MATURITY

Your product is flying off the shelves, but this is not the end of the journey. Your product is likely to evolve over time. It is important to check that your patents and design registrations still cover your product. For key new innovations, consider the registration of additional IP rights. Patent protection can last up to 20 years from the date of filing. Filing new applications means you can keep ahead of the game. Keep monitoring the activity of your competitors both existing and new entrants and watch the marketplace for potential infringement of your own IP rights.

#### **KEY TAKEAWAYS**

- An IP portfolio should be managed actively, and aligned with the business objectives of the company, which may change over time.
- Good idea to start a technology and a competitor watch process.
- IP should be managed as an integral part of the R&D effort. This
  requires the management team, the inventors, and legal experts to
  work together.
- Manage collaboration and IP ownership.
- Create a financial plan that takes IP into consideration.

# SCINTILLA

### **SCINTILLA PROFILE**

Scintilla is a firm of UK and European Patent Attorneys and UK Trade Mark Attorneys based in Glasgow, Scotland. We help innovative companies get a grip on their intellectual property. Our unique commercial approach combines registration of patents and trade marks with strategic input so that IP can be a springboard for business growth.

#### **AStrategicPartnerforyourIP**

#### **In-depth Technology Expertise:**

You are in safe hands with our technical specialists. Our patent attorneys have qualifications and in-depth technical expertise in the fields of electronics, photonics, software, semiconductors, IoT, artificial intelligence, energy and renewables.

#### A Commercial and Strategic Approach:

We provide real recommendations that are pragmatic and commercial, providing clarity and direction for your IP strategy. We have a range of services that can help advise on IP strategy and management, freedom to operate, portfolio management, due diligence, investment support, and IP valuation. We also have software tools for logging IP assets, managing trade secrets,

and supporting other strategic corporate IP functions.

#### In-house Searching and Competitive Analysis:

Get ahead of curve with our comprehensive search and competitive analysis services. You can gain actionable insights from our novelty and freedom to operate searching, competitor watching, technology analysis, IP landscaping, and brand monitoring services. We have access to leading commercial search tools and can offer in-house attorney-led searching services.

#### **Fixed Fee Pricing Structures:**

Say goodbye to surprise invoices and get to grips with your IP budget with our innovative fixed fee services. We offer our clients tailored financial packages to suit budgets and cashflow, and provide proactive case management to make sure that you are always in control of your IP budget.

We are growing because of our professional attitude and responsive client service. This is made possible by our team of talented and motivated people. Discover our team.



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