

Plan, Protect and Prosper

How Manufacturers Leverage IP to Create Value and Safeguard their Futures

A Report by DMH Stallard



Contents

Introduction	3
Executive Summary	4
10 Step Guide to IP Success	4
What Does IP Mean for Manufacturers?	6
The Value of an IP Strategy	7
How to Protect Your People Assets	9
How to Enforce Your IP Rights	10
A Final Word	12
Acknowledgements	13
About the Authors	15
About DMH Stallard	16



Introduction from Tim Aspinall Managing Partner, DMH Stallard



Manufacturing in the greater south east is a major contributor to the national economy and leads the world in many high value and knowledge intensive sectors. This is our first major study into the challenges faced by manufacturers over protecting data and intellectual property in the age of globalisation.

At DMH Stallard, we take pride in our commitment to our clients and building long term relationships with them. That's why we commissioned our Strategic Advisor for Manufacturing, David Seall, formerly CEO of EEF South, to work with us on this project and address the issue of leveraging IP to create value from a manufacturer's perspective.

This report is the result of in-depth interviews with many world-class manufacturing businesses for whom protecting their investment in ideas and processes is critical to their long-term prosperity. They come from various parts of the manufacturing sector, including consumer electronics, aerospace, Formula 1 motor racing, green energy, medical equipment and automotive manufacturing. All, however, share common characteristics as high value, innovative engineering and manufacturing businesses selling products across the globe.

I would like to take this opportunity to thank all the companies that we interviewed for their time and commitment to sharing their ideas and practices with us. They have provided an invaluable insight into the practicalities of protecting IP in the workplace and across the globe from many different perspectives.

I hope you find this report beneficial in highlighting various ways in which you can formulate an IP strategy unique to the needs of your company to create and protect shareholder value.

Tim Aspinall
Managing Partner, DMH Stallard

About Tim Aspinall: Tim is Managing Partner of DMH Stallard and is recognised as one of the country's leading lawyers. Tim works closely with many of the firm's larger clients and is responsible for developing long standing strategic relationships that help benefit both the client and DMH Stallard. E. tim.aspinall@dmhstallard.com

Executive Summary

Over the last six months, DMH Stallard has conducted in depth interviews with some of the leading manufacturing organisations in the South East. The interviews were conducted by David Seall, DMH Stallard Strategic Adviser – Manufacturing and Tim Ashdown, DMH Stallard Partner – Head of IP and IT.

This report is a result of our research and uncovers the most pressing Intellectual property issues amongst the industry. It identifies common themes that will help UK manufacturers leverage IP to create value and safeguard their futures.

Here is our 10-step Guide to IP Success

1. Value your IP. Work out how much your IP means to your business. How much would it cost to develop if you lost it or had to start from scratch? How much damage would be done if your competitors could access and use your IP without your consent?

2. Audit and record IP. Audit the whole company for your IP. Do not just look at product design, look at processes, trademarks, brand, even the way you deal with customers. Include IP as a subject in your management review process.

3. Use a multi-layered approach. Consider securing a number of IP rights at the same time in order to create a package of enforceable rights. Don't just rely on registered rights such as patents, registered designs and trademarks. Remember copyright and rights in databases, as well as the ability to prevent the use of your confidential information and prevent passing-off.

4. Process is important. Don't just think of products you may have designed or made. Look at your processes and the way you do things and think of protection strategies.

5. Create natural barriers. By securing effective IP rights and creating a robust trading model you can create natural barriers to market entry. Design around your brand, use bespoke components, control part numbers, design around your production processes, team with other suppliers, use tooling which may be unique to the way you do things. Work with suppliers on your capital equipment to create a barrier to entry.

6. Protect yourself from unscrupulous customers. Be careful with your customers and keep your trade secrets to yourself. Try to adapt tooling to your way of doing things. Always assume that your IP is under threat and be aware that customers may even try to patent your IP.

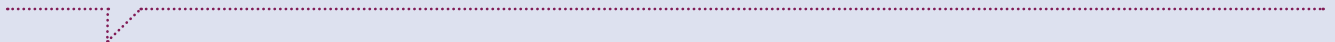
7. Collaborate and work in partnership with overseas contractors. Avoid a “colonial” approach when working overseas; invest in your partners and suppliers. Share IP if you can or consider licensing agreements.

8. Use a carrot and stick approach with employees. Although wise to restrict employees with restrictive covenants these are only a partial and temporary solution. Consider incentive schemes and recognition schemes. Invest in developing key staff and show career development opportunities.

9. Be prepared to protect yourself and enforce your IP rights. Be vigilant and be prepared to show your teeth and take legal proceedings against counterfeiters and companies infringing your IP, including your customers. Be prepared to litigate if required. Familiarise with the risk of making unjustified threats of patent, trade mark or design infringement. If you get it wrong, you can open yourself up to a claim for damages from the “infringer”.

10. Do not stand still. Be aware your competitors are still improving. Do everything you can to maximise the IP in your business and protect it.

“We actively manage IP by having quarterly review meetings attended by Directors and the company’s Patent Agent. Staff are encouraged to populate the IP database with any ideas they have during their normal working day. In fact time is set aside for staff to do this.”



What Does IP Mean for Manufacturers?

Engineering and manufacturing companies in the South East of England all share one thing in common, the need to protect ideas, design and processes – their intellectual property – that make their businesses competitive.

While compiling this report, we discovered a pleasingly high degree of IP knowledge among those manufacturers we met, reflective perhaps of the healthy attention paid to intellectual property over recent years.

In 2006, the Gowers Review (commissioned by Gordon Brown when Chancellor of the Exchequer) concluded that the UK's intellectual property regime was essentially robust and accessible. It did however make a number of recommendations for development in the areas of enforcement and competition, including introducing the new Patents County Court processes which now provide for fast-track litigation with a cap on legal fees.

In November 2010, Prime Minister David Cameron launched a further review, to be conducted by Professor Ian Hargreaves, which will have a further look at how access to IP rights and enforcement can be improved for SMEs. This report is due to be published imminently.

For manufacturers, IP is often seen only in the context of designs or products. However it can also manifest itself as innovative or highly skilled processes, investment in a brand or trademark and even the knowledge and know-how unique to a specific customer or market.

While it was striking during the course of this research that many companies were rigorous in identifying, evaluating and protecting their IP, some believed, wrongly, that they did not possess IP of any value at all. In doing so, they have left themselves vulnerable and in a potentially calamitous situation in a world in which data and ideas can travel the globe in a blink of an eye.

This is particularly surprising for companies operating in the South East, where they already face a number of competitive challenges, such as high property costs, expensive labour, poor and often congested infrastructure. As the saying goes, failing to plan is planning to fail.

That said, the over-riding sentiment that emerged from the interviewees who kindly agreed to participate in this research was that manufacturers need an IP strategy that engages with every part of their business – R&D, manufacturing processes, people and products – and clarity on how to deal legally with any transgressions, wherever in the world these occur.

So what should companies do to protect their IP so vital to the future? What does best practice look like and what legal considerations need to be taken into account in creating the framework for an IP strategy?

The Value of an IP Strategy

“We use specific bespoke components... which makes it easy to detect fakes and act as a barrier to entry for our competitors.”

In the global economy, there are a myriad of threats to innovative businesses. Brand infringements are commonplace along with theft of IP. Some products are quite easily “reverse engineered” with the design being copied from products bought in the open market place. This can denigrate the brand if these counterfeits are also of poor quality and performance. There is always the threat of staff taking IP to competitors and in extreme cases customers passing IP on to competitors.

So how should manufacturers go about protecting their IP?

Traditionally the focal point for manufacturing companies has been the product they have designed and engineered. This may be a genuinely new and innovative design or it could be the result of iterative processes that have developed over years. It’s clear that successful companies have developed firm strategies to capture and protect their IP however they have reached the end result.

Across the board, we found a good general understanding of the methods available for protecting IP, both legal and non-legal. Most companies were familiar with the national and international regimes for protecting patents, trademarks, designs and copyright.

Beyond that, there had also been an intelligent review of what the business actually needed. For example, some had decided to register colours or shapes as trademarks as these were considered far more powerful as a signature or indication of origin than a trading name or style in a crowded market. Others had decided that rather than registering costly patents which needed to be enforced by expensive litigation, they would disclose key developments and keep ahead of the market.

Others would keep their processes (frequently described as “black art” or “pixie dust”) a secret rather than disclose the method in a patent specification. Some would seek to protect nothing, relying on speed of delivery to the market as its key competitive advantage. Many however saw traditional methods of registering IP as being incredibly valuable for retaining value in a business, as of course they can be.

Perhaps unsurprisingly, the sector did not seem to make as much use of design rights as other sectors, where the shape or eye appeal of articles was important (not as many were aware that certain distinctive shapes could also be registered as trademarks, thereby providing a longer period of protection over designs). However, where there was an iconic product, the design registration was seen as extremely valuable.

All of the companies interviewed for this report held patents on their products and processes. These patents were usually registered in the USA, Europe and China. In some case the patent was used as the sole method to register ownership. One company interviewed even registered the colour of its products! Another regularly published papers on new ideas with the aim of preventing competitors registering similar ideas and patenting them. Some took particular care when interfacing with their customers designs, mainly to protect software and their own IP.

Many viewed IP as a key element in creating barriers to market entry for potential competitors, using patents and trademarks alongside brand reputation and market position to augment their market position. This approach was seen to play to the risk-averse nature of some OEM (Original Equipment Manufacturers) purchasing departments.

For some, their strategic approach was further aided by creating products that required specialised and complex tooling to manufacture or that were “tuned” to use bespoke in-house components that were extremely difficult to procure or develop.

How to measure value

Capturing and valuing the IP in the business is a significant challenge. Some companies created an “IP management group”, in order to encourage employees in the business to register any ideas they may have had in design or process within a central database. Engineering time was given over to the task. Senior managers and directors would then review the ideas, along with the company’s patent attorney, to evaluate the ideas and make plans for any potential patent applications. While this process may appear rather grand to most engineering businesses, it could easily be simplified and included in any formal management review being held. This makes IP part of the strategy of the business, embedded in both the business plan and in its operations.

Our research indicated that how to deal with process IP was frequently overlooked. Among some businesses, particularly those “making to print” manufacturing parts to other’s designs this was of paramount importance. Many of the large OEMs at the top of the supply chain have little detailed knowledge of the processes utilised by their suppliers but have responsibility for the procurement and capability of the end product.

Even the most diligent company had identified some risks however. For example, there was sometimes a risk of over-reliance on a supplier for some important part of a process, such that the essential ‘black art’ was no longer in the possession of the patent owner.

Whether to openly proceduralise and publish in-house processes causes concern to the specialist. Additionally some unscrupulous staff in OEMs have been shown not to be averse in sharing this data with competitors. The temptation is always there to keep the process as a “black art” and in the minds of key staff within the business.

How to Protect Your People Assets

“...it’s a great place to work and working for a world class company, staff are reluctant to leave.”

Keeping employees aligned with the IP strategy of the business and keeping their knowledge and skills within the operation are vital to success.

For our interviewees, employee knowledge was often seen as critical. There was a consistent approach to valuing confidential information and the employees who held it. In fact, there was an encouraging enthusiasm for valuing and retaining talent, which was seen as a key element of IP management, an approach which had remained consistent even throughout difficult times.

It goes without saying that every business we interviewed had sound, current employment contracts with key staff, with associated restrictive covenants to prevent them taking data and trade secrets to competitors.

However, there was a growing realisation that this was not enough and indeed that it was difficult to prosecute when push came to shove; “enforced garden leave” was seen as ineffective and pursuing staff through litigation was considered costly and undesirable.

Many chose incentives as a more positive approach. These incentives included extra training and development opportunities for key individuals and more openly communicated succession planning for business critical employees. Some offered a restricted few financial incentives such as bonuses and enhanced pension terms. Key staff were seen as a valuable asset to the business and they were made aware that their future wellbeing and development was seen as important by their employers.

One business rewarded staff with a discretionary payment when an idea was registered and thought capable of being patented. The member of staff then received further reward if a patent was granted and was given ‘inventor status’, although of course the company still registered the patent.

Additionally, some companies saw value in locating design and development staff off site into special premises where an innovative environment was encouraged. This is quite a departure from the integrated product teams (IPTs) preferred by many companies, although for some the decision to create a distinct innovation resource in a specialised environment to create IP had been successful.

An alternative strategy taken by some was actually to “devalue” the IP from an employee perspective by spreading knowledge of it widely across the operation. This was particularly relevant to businesses with a low value of technology in the operation because it significantly lowered the IP risk and vulnerability if key staff decided to leave.

How to Enforce Your IP Rights

“Our strategy is one of enforcement and constantly looking for infringements of patents, for example with internet searches.”

Enforcement was a complex issue for those we interviewed. For one company the key was brand infringement and this was managed keenly. Those fortunate to have global brands that were well known and respected by the public, were particularly vigilant in guarding against the appearance of cheap and shoddy goods masquerading as their genuine product.

Companies often used simple internet searches to identify specific IP infringements, including counterfeit products and unauthorised distribution. This included monitoring selling sites such as eBay. Generally, once such infringements had been found they were normally subject to ‘cease and desist’ letters followed by legal action if that was required.

There was a wide acceptance that creating value from IP required respected trading relationships underpinned by clear legal agreements. Many had developed successful models for trading their IP, the most sophisticated of which had evolved into a kind of eco-system, with each element of the supply chain understanding its parameters for dealing with the proprietor’s IP and with a mutual respect for the need to profit.

In addition to strict legal codes, these relationships were often overlaid with a cultural code which identified additional elements expected from the relationship. Some of these models also regulated infringement by encouraging active reports of infringement from all those in the supply chain.

There was the usual concern about the costs and uncertainty of litigating. In fact it was clear that these concerns had driven other methods for managing the risk of infringement, such as developing deep relationships with border control and trading standards.

There was however a keen interest in the new procedure established in London’s Patents County Court (a specialist court dealing with all IP disputes) where the costs recoverable from an opponent were now limited to £50,000 in most cases.

Despite the general concern about litigation, there was little reluctance to seek specialist advice from lawyers, patent attorneys and tax advisers in order to assist in the management of IP.

A word on China and the Pacific Rim

China and the Pacific Rim have been seen over the last 10 years as a major threat to manufacturers in the UK. This could be about to change.

> **As demand rises for the products that UK companies design and make there is a need to view China as a key market place.** <

Consequently, the future is more likely one of investment in Chinese companies to satisfy the growing demand for goods.

In fact, those companies that have worked closely with the Chinese in a spirit of collaboration and partnership, helping to develop IP and technology, have reaped many rewards. They found that by being seen to invest in the Chinese infrastructure, they were likely to be offered some protection and found officials far more willing to police any infringements on their behalf. Law to defend IP in China is well defined and can provide the protection required. There was a view that the countries that were seen more often to be infringing IP were those in the emerging economies of the Pacific Rim.

One company that had seen its customers off shore their work to China had developed a strategy of improving response times and adding customer service as a key differentiator. They viewed this as their "IP" and it was key in the battle against cheaper suppliers overseas. With turn-around times of three weeks for new orders from receipt of order to delivery and two weeks on repeat orders, it certainly made them competitive with suppliers in China taking up to six months to deliver a first delivery.

They also offered advice on correcting the customer's design, which was frequently of poor quality, to make the production process work and manufacture a quality product which their competitor, many thousands of miles away, found it difficult to do.

In fact the company interviewed now saw itself as much as a service business as conventional supplier and manufacturer.



A Final Word

“Innovation and intellectual property are increasingly the differentiators that drive success for UK manufacturers, so it is incredibly important that these assets are fully protected”

David Seall, Report Author

It is clear from the interviews conducted that IP means different things to companies wherever they find themselves in the supply chain. The common theme is that these companies have realised that they do possess IP that makes them special and differentiates them from the competition.

> They have identified key technologies, designs and processes and found ways to value them. <
They have set about formulating protection strategies and have followed them through.

Most importantly, they have engaged with their people in a systematic approach to enhance their competitive advantage in order to make sure they continue to succeed.

It is also clear that governments of all political persuasions will be doing everything they can to try to support innovative companies creating new IP of whatever type and we will see more schemes that offer greater R&D incentives and tangible support for science and technology.

As manufacturers and engineering businesses move forward there has never been a better time to share best practice and learn from each other when it comes to IP.

T M

Acknowledgements

Our thanks go to those senior executives who gave their time so generously to contribute to this study, either through interviews or telephone conversations.

Our contributing companies:

Bowers & Wilkins loudspeakers are designed to reproduce sound as accurately as possible. Whether it's hi-fi, home theatre or custom installation, the audio performance of any Bowers & Wilkins loudspeaker is best in class. Bowers & Wilkins has a long history of technological innovation in its pursuit of the perfect loudspeaker – the use of materials such as Kevlar and Diamond, new solutions to complex engineering conundrums, and 'eureka moments' of brilliance. www.bowers-wilkins.co.uk

Williams Hybrid Power Ltd (WHP) has developed a novel, patented electromechanical composite flywheel system that provides a high-power, cost-effective and environmentally friendly solution for mobile or stationary energy recovery and storage. The company's first application of the technology was in the highly competitive and extremely harsh environment of Formula One racing with the development of a flywheel for Williams F1's Kinetic Energy Recovery System. It is now making the technology available to meet the high-power energy storage needs in a variety of applications, including hybrid passenger vehicles, hybrid buses, construction & off-highway vehicles, electric trains and smart grid infrastructure. www.williamshybridpower.com

Aeromet make it their business to lead from the front. An unwavering dedication drives them to provide the best possible service in the production of aluminium and magnesium sand castings, aluminium investment castings and the forming of titanium parts for the aerospace and defence industries. With over 30 years experience they are continuously developing techniques and processes that enable them to form unique and lasting partnerships with the biggest names in the industry and to get the job done on time and on cost. www.aeromet.co.uk

Brighton Sheet Metal has remained at the cutting edge of precision CNC presswork, fabrication and assembly by consistently investing in the latest production equipment, manufacturing methods and control software. They believe that providing customers with more than sheet metal allows them to source complete products and assemblies from a single source, and allows them to maintain an edge over increasingly globalised competition. They see the service they offer as being as important as their manufacturing skills. www.brightonsheetmetal.co.uk

Eschmann's expertise and superior quality equipment is trusted by medical professionals the world over. Eschmann design and manufacture a range of market leading products, including: powered operating tables, operating table accessories, specialist operating tables, operating theatre lighting systems, surgical suction units, benchtop autoclaves, electrosurgery units and accessories such as smoke evacuation units, monopolar and bipolar forceps, scissors and electrodes. www.eschmann.co.uk

Rolls-Royce Motor Cars strive for perfection in everything they do. Ghost, the most technologically advanced Rolls-Royce ever built, now joins the Phantom family in redefining not only Rolls-Royce but also the luxury car market. These two pinnacle products are hand built at their headquarters and manufacturing plant at Goodwood in England where cutting edge technology and traditional craftsmanship skills come together.

www.rolls-roycemotorcars.com

Zotefoams plc is the world's leading manufacturer of cross-linked block foams. Its products are used in a wide range of markets including sports and leisure, packaging, transport, healthcare, toys, building, marine and the military. Through a unique production process, the company produces foams that have controlled properties and are of a strength, consistency, quality and purity superior to foams produced by other methods.

www.zotefoams.com



About the Authors



David Seall C.Eng FRAeS MiMMM, DMH Stallard, Strategic Adviser, Manufacturing

David Seall is a leading authority on the UK manufacturing sector and is DMH Stallard's Strategic Advisor, Manufacturing. He was previously Chief Executive of the Engineering Employers Federation for London and the South East (EEF South) for over 10 years, working with hundreds of companies. Prior to this he enjoyed a successful career in the Aerospace and Defence industry.

David is an expert in strategic management and business planning and is an exponent of Lean Manufacturing and Lean Enterprise. He is an adviser to national, regional and local government on manufacturing, business support, skills development, science and technology and innovation. He is a Chartered Engineer and Fellow of the Royal Aeronautical Society.

This project is the first of a number being led by David on behalf of DMH Stallard of particular relevance to the manufacturing sector.

E. david@davidseall.co.uk



Tim Ashdown, Partner and Head of IP & IT

Tim Ashdown has vast experience in all areas of IP and IT law and works closely with a number of high profile organisations across a broad range of sectors including manufacturing.

He is ranked as a leader in the fields of IP and IT by the independent research directories, Chambers & Partners and Legal 500:

Chambers and Partners quotes, "The marvellously knowledgeable Tim Ashdown tops the bill in DMH Stallard's technology and IP department. His clients keep returning for his commercial and concise advice and unerring accuracy when it comes to predicting likely outcomes. He is at the top of his game."

Tim is also a Panel Lawyer for Anti-Copying in Design www.acid.uk.com and is a member of Institute of Trade Mark Attorneys, Intellectual Property Lawyers Association, Society for Computers and Law and Law Europe IP Practice Group (Chair).

E. tim.ashdown@dmhstallard.com

About DMH Stallard

DMH Stallard is dedicated to making our clients the centre of our business and delivering technical excellence, so we can work together as legal and commercial partners. The firm invests in building long term relationships with its clients, so we can support their strategic objectives and deliver solutions that are needs driven.

Our practice has been developed to provide users of traditional City firms with a genuine alternative. To put it simply, our clients benefit from technically excellent advice led by senior partners whilst enjoying sensible and transparent pricing structures.

We are proud to work with some of the most innovative and successful organisations in the country and have a long history of advising the manufacturing and technology sectors. We are also delighted that the firm continues to be recognised with prestigious awards.

www.dmhstallard.com

“We require high service levels and an innate understanding of our business. DMH Stallard has brought together a team of lawyers with specialist sector knowledge to advise us. I have no hesitation in recommending the firm.”

Managing Director, Pan-European Hi-tech Manufacturing Company

DMH Stallard Offices

London

6 New Street Square
New Fetter Lane
London
EC4A 3BF
Tel: 020 7822 1500
DX: 344 Chancery
Fax 020 7842 2333

Gatwick

Gainsborough House
Pegler Way
Crawley
West Sussex RH11 7FZ
DX: 57102 Crawley
Main switchboard: 01293 605000
Main fax: 01293 543760

Brighton

100 Queens Road
Brighton
East Sussex
BN1 3YB
DX: 2703 Brighton 1
Main switchboard: 01273 329833
Main fax: 01273 747500

