Chemical industry innovation in the 21st century — can patents be ignored?

Innovation in the chemical industry is a fascinating phenomenon and it is a real pleasure to be immersed in it every day, to see innovation arise from an often complex mix of circumstances and driving forces. There is of course the 'chemistry' side of it, and the complexities presented simply by the subject matter alone are obvious. Then there are also the complexities that come from the 'industry' side of it.

I am talking about the regulatory, business and customer landscape; three factors that are continually challenging the status quo. These three external factors are often responsible for a large proportion of the innovation, whether due to shifting regulatory requirements, changing business conditions or new customer specifications.

These factors do not, of course, stand independently. Wide reaching themes commonly influence some or all of these factors. One major theme that continues to drive innovation is the on-going geographical shift of the chemical industry. As portions of the industry in the west continue the drift east, we are seeing western chemical companies adapt by innovating up the value chain. This shift is also leading to pressures for divestments, mergers and acquisitions as companies seek to reposition and refocus their businesses, actions that we find often spur innovation.

Another major theme driving innovation is the race toward green (/clean) technology. Regulations are being rewritten, pushed forward by strong social forces. Chemical companies are responding, and the associated innovation is accelerating. A green mandate is becoming the focus of many within the chemical industry.

It is clear then that chemical companies are being driven by a wide range of factors to continually seek new competitive edges in the market through technological innovation.

This is where patents come in. Patents are an asset class that give exclusive rights to technical innovations.

How then can patents be used to drive an innovative chemical business forward, and what are the risks associated with ignoring patents and not setting out a practical patent strategy for your business?

An effective patent strategy is all about enabling the business to make informed decisions. It is about being in a position to know which are the right innovations to protect.

In this way, a patent strategy that is aligned with business objectives can generate commercially valuable patents.

Simply by existing, the patents produced can then deter competitors from launching products that share the beneficial effects of the innovation, that share the competitive edge. They can silently steer competitors down different paths, away from the company's interests. Patents also find a lot of value as a business tool – whether that is via direct revenue generation through licencing/sale, or to attract investment. Done right, they can also facilitate collaborations by helping to manage expectations.

On the other side of the coin, an effective patent strategy can also help the business navigate the patents of competitors — to avoid wasting money on product development where the way is blocked, or to help clear the way where possible. An effective strategy can avoid the nightmare of a competitor showing up out of the blue with a strong relevant patent for seemingly old rope.

With all of that in mind, it is interesting to consider why some chemical companies appear to take a head-in-the-sand approach until it is too late.

Well, it can take time for a newly innovative business to appreciate the importance of patents, which is understandable. From the outside, patents can come across as overly complex and expensive, and the value return can be unclear. It's easy to keep knocking "form a patent strategy" down the priority list. We also find that some undersell their work, with inventors stating - "well what I did was obvious". It is true that an innovation must not be obvious to secure a patent, but this is a legal assessment, and in some ways the inventors are worst placed to make that assessment.

Capturing an innovation within an effective patent strategy may only lead to a 5-minute discussion to decide that no further action is needed, but, alternatively, it could be the break that transforms a company's prospects.

I look forward to talking about this topic at CHEMUK 2021. If you would like to hear more, please join us on Stage 2 at 10:00 for my talk: Patents – can you continue to ignore them?

