
UK Battery Industry Growth and IP Challenges

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The summer of 2022 has seen the return of in-person conferences and expos throughout many of the UK's industry sectors. The UK's electric vehicle and battery technology sectors are no exception and Marianne Privett and David Blair were excited to attend 'the Advanced Material Show and Battery Systems Expo' hosted at the NEC in Birmingham on 28 and 29 June and 'Celebrating the UK Battery Innovation Ecosystem' organised by the Knowledge Transfer Network (KTN) on 15 July 2022. We greatly enjoyed both events and it was encouraging to see the many developments in the UK in the fields of battery technologies, electric vehicles, and materials such as graphene and specialist inorganic compounds.

David Blair was fortunate enough to tour the [UK Battery Industrialisation Centre \(UKBIC\)](#) in advance of the 'Advanced Material Show and Battery Systems Expo'. The facility is impressive and has the capacity to expand its operations to meet the UK's ambitions for the battery industry. The UK battery sector is certainly in a period of growth and recent announcements such as the [confirmed funding of BritishVolt's planned gigafactory](#) in Northumberland demonstrate the UK government's commitment to battery technology. The announcement of new manufacturing centres for existing technologies, and the availability of the scale-up facilities such as the UKBIC for new battery designs, will help provide the UK with a strong foundation to further grow this technology sector in the coming years.

Despite the recent successes in developing this sector within the UK, recent reports and industry forecasting makes clear that there is more to be done. The demand for batteries within the UK currently exceeds its ability to supply and the growth in demand is predicted to outpace the growth in supply in at least the short term. The Advanced Propulsion Centre published its [Q1 2022 Automotive Industry Demand Forecast](#) in June 2022 and highlighted several areas such as cathode and anode active materials in which growth in demand has already exceeded growth in supply in the preceding months.

Rapid growth in demand in a relatively new and highly technical industry sector poses some significant challenges. During the 'Celebrating the UK Battery Innovation Ecosystem' event, both Jeff Pratt (CEO of UKBIC) and Thomas Bartlett (Head of Battery Technology at the Faraday Battery Challenge) commented on the current shortage of highly skilled labour to fill the jobs needed to grow the UK battery industry at a rate sufficient to meet predicted demand. The relative youth of the industry and the small number of recognised training routes means that individuals with the necessary expertise are highly sought after. Competition for skilled battery sector workers in the UK promotes high rates of staff movement between organisations. High salaries offered to incentivise those within the sector to consider working for different organisations combined with competition from overseas means that some companies find the retention of skilled staff to be challenging.

High rates of staff turnover and the loss of technical staff outside of an organisation or overseas to competitors poses further challenges in the area of intellectual property (IP). An individual cannot

simply 'forget' the knowledge and experience they have gained in their previous roles and so movement of staff risks the loss of trade secrets and 'know-how' to competitors in the UK and/or in other countries.

Encouragingly, UK industry is generally aware of these risks and some organisations already take measures to mitigate the unintended dissemination of IP. Employment contracts regularly include clauses relating to the dissemination of IP and non-disclosure agreements (NDAs) are also common. To return to the example of the UKBIC, technical staff assigned to client projects are internally segregated on computer systems so that project data is not accessible from project-to-project and, more importantly, between different clients. However, individual technicians will work with multiple clients over time and the knowledge they gain will inevitably be applied either intentionally or accidentally to the problems faced by later clients.

The question is then how can the unauthorised transfer or use of technical knowledge be controlled within such young and rapidly growing industry sectors?

Firstly, we would always recommend that applications are filed for any registrable IP of commercial importance. In a technical area such as battery technology then this will usually involve the drafting and filing of one or more patent applications. Registered IP provides a route by which trade secrets and 'know-how' can be formalised. If granted, registered rights provide an enforceable right and may prevent competitors from exploiting the technical knowledge while such a right remains in force.

Strong legal documents also have a role to play. NDAs and contracts with strong but reasonable terms will deter many instances of malicious or unintentional information loss. However, agreements of this nature are simply a deterrent and, although there are legal consequences for anyone breaching the terms of an NDA, the document itself cannot prevent information from being shared should an individual choose to do so.

Staff training is another important tool which should not be underestimated. Staff can be trained to better understand trade secrets, 'know-how', and the relevance of the knowledge they accrue. It is also important that staff understand and recognise the potential impact on them of inadvertently sharing knowledge covered by NDAs or other agreements.

Finally, unauthorised transfer of knowledge may be mitigated by building relationships within an industry. Strong relationships help generate goodwill and encourage collaboration. Establishing formal mechanisms for information sharing may facilitate the dissemination of knowledge and may encourage joint research programmes or further innovation. Organisations such as KTN and InnovateUK often offer funding intended to promote such collaboration as it is believed to be a means of promoting further innovation and growth in sectors such as the battery industry in the coming years.

If you are interested in seeking registered protection for your trade secrets or 'know-how' then please either contact us via the enquiry form on our [contact page](#) or contact either Marianne Privett (mlp@aathornton.com) or David Blair (dsb@aathornton.com) directly for assistance.