

Are open-source patent portfolios the key to the EV revolution?

The widespread rollout of electric vehicles is viewed as a crucial part of the UK's green revolution. When discussing how this can be achieved, charging infrastructure is often cited as the key to ensuring the appeal and accessibility of electric vehicles to the mass consumer market. This was highlighted by Boris Johnson's announcement in November of last year, where he declared the "electric vehicle revolution", which would involve installing 145,000 extra charge points by 2030. The argument is that the wider availability of charging points would increase consumer certainty, and thus increase the demand for electric vehicles. Inevitably, such confidence in the market would lead to a greater stream of innovators wanting their share of it.

However, the impact of "open-source" patent portfolios in accelerating the EV industry has often been overlooked. With both Tesla and Toyota taking the decision to open-source their patents respectively, they claimed the decision was made to remove barriers, spark greater innovation within the electric vehicle industry and ultimately open up the road to sustainability. This article will examine the actions these companies have taken, the impact they have had and ultimately, whether open-source patent portfolios are the key to driving the greater expansion of the industry.

What are open-source patents?

Open-Source patents are a method of combining traditional patents and open-source models.

A patent is a type of intellectual property that gives its owner the legal right to exclude

others from making, using, or selling an invention for a limited period of time in exchange for publishing an enabling disclosure of the invention. By deciding to open-source patents, the patent owners are ostensibly allowing third parties to use such patented technologies at no cost. Depending upon the terms on which the patentees choose to “open-source” their patent rights (of which more later), the patentees will have made a commitment not to sue any people working the patented inventions and third parties therefore won’t be in danger of any legal proceeding. The move is often driven by the desire for greater collaboration between companies to develop future technology at speed.

Tesla and Toyota

In the now famous blog post, Elon Musk announced in 2014 “All Our Patent Are Belong To You”. He explained the decision was made in the spirit of innovation within the industry and the advancement of electric vehicle technology, through removing the roadblocks of intellectual property.

Five years later, Toyota similarly announced that it would allow other companies to use nearly 24,000 patents related to its hybrid car technology, which would be available to license for royalty-free use until 2030, and Toyota will also offer consultation services for a fee. Again, this was motivated by increasing the speed of the transition from fossil fuelled cars to electric vehicles.

The actions by top brands and innovators within the industry have two significant implications, in theory. To those looking to enter the market, being able to borrow from the industry-leading technology that both Toyota and Tesla have developed has the potential to provide a head start to research and development, providing an initial foundation to work from. In turn, by helping potential competitors Toyota and Tesla are speeding up the process of innovation, and increasing consumer choice, which should have long term benefits to the buyer.

Therefore, in theory, the “open-source” patent pledges are incredibly useful for new businesses looking to enter the electric vehicle market. However, those who are looking to take Toyota or Tesla up on the offers must make some important considerations before doing so.

As simple as it seems?

From a glance, such moves from Tesla and Toyota significantly simplify the patent

process. However, upon closer investigation of the conditions attached, to the extent that those conditions are publicly available, it is possible that they render these pledges “open-source” in name only.

For Tesla, the Patent Pledge states that the company “will not initiate a lawsuit against any party for infringing a Tesla Patent through activity relating to electric vehicles or related equipment for so long as such party is acting in good faith.” In explanation of this point, it explains that a party is not acting in good faith if they:

- asserted, helped others assert, or had a financial stake in any assertion of (i) any patent or other intellectual property right against Tesla or (ii) any patent right against a third party for its use of technologies relating to electric vehicles or related equipment;
- challenged, helped others challenge, or had a financial stake in any challenge to any Tesla patent; or
- marketed or sold any knock-off product (e.g., a product created by imitating or copying the design or appearance of a Tesla product or which suggests an association with or endorsement by Tesla) or provided any material assistance to another party doing so.

The first point illustrates the substantial risk that could come to companies who choose to take Tesla up on their Patent Pledge offer. The condition could stop any party that’s using Tesla’s patents from suing Tesla for any suspected infringement of their own IP rights (and not just patents). Similarly, the use of the colloquial term “knock-off” could leave companies vulnerable to future litigation, meaning a company using Tesla’s patented technology must be careful in the product design to ensure that Tesla cannot suggest it is a knock-off. Thus, some would say that Tesla’s conditions illustrate they have not given away any of his company’s patents “for free”. Rather, they gave up some rights to enforce them, and in return expected the same from their competitors.

To find out the details of Toyota’s conditions, those interested must contact the company directly to discuss specific licensing terms and conditions. Thus, it is difficult to make any judgements on their offer.

Conclusion

Whilst there are clear PR benefits, it is hard to judge the real impact of Toyota and Tesla’s decisions – but, accelerating the growth of the electric vehicle industry certainly seems to be their aim.

However, despite Tesla making the announcement eight years ago, there has been

speculation that there is actually little evidence that any major automakers have used the technology the company developed. Furthermore, while Toyota followed a similar path, the fact that other dominant players in the industry have not followed suit would suggest that is unlikely to become a wider trend in the industry.

A clear takeaway from Tesla's pledge is that companies who may wish to use similar open-source opportunities in the future must be careful to consider the small print, and the potential implications for the protection of their own technological developments in the future.

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