# Tesla Motors: Strategizing Out of the Box *Tesla Motors*: planteando estrategias originales

María Paula Grijalva Independent Researcher

### Summary

Law school has certainly taught us that the core of an IP right relies on the possibility of enforcing that right before third parties. New trends, imposed by more than successful entrepreneurs in the business world, have definitely flown away from the IP enforcement world into the open source movement. Some of the most influential tech-leading companies, have chosen to step aside from the traditional path and have found in the creative commons world the real added value that arises from an IP right. Even though the article revolves around concepts, strategies and the real experience of Tesla Motors, it is more of an invitation. An invitation for everyone to open up their minds and defy traditional thinking. Let revolutionary ideas sink in.

## Keywords

Enforcement/ Tesla Motors/ IP rights/ Open Source.

En la facultad de derecho se nos ha enseñado que, ciertamente, el núcleo de la propiedad intelectual se basa en la posibilidad de hacer valer un derecho ante terceras personas. Las nuevas tendencias, impuestas por más de un empresario exitoso en el mundo de los negocios, se han alejado de la esfera impositiva de la propiedad intelectual, prefiriendo un movimiento de código abierto. Algunas de las más influyentes compañías en liderazgo tecnológico han escogido apartarse del sendero tradicional y han encontrado en el mundo del *creative commons* el verdadero valor añadido que proviene de un derecho de propiedad intelectual. A pesar de que este artículo gira en torno a conceptos, estrategias y la experiencia real de Tesla Motors, en realidad busca ser una invitación para que todos abramos nuestra mente y desafiemos el pensamiento tradicional. Dejemos, pues, que las ideas revolucionarias aterricen.

#### Palabras clave

Ejecución contractual / Tesla Motors/ Derechos de propiedad intelectual / Recursos abiertos.

Yesterday, there was a wall of Tesla patents in the lobby of our Palo Alto headquarters. That is no longer the case. They have been removed, in the spirit of the open source movement, for the advancement of electric vehicle technology.

Elon Musk "All our Patent Are Belong to You"

In a world where Intellectual Property (IP) and business strategy are inter-connected and interdependent, to understand how a particular strategy could lead a company, not only to maximize the value of its IP assets, but to achieve its ultimate financial goals, it is important to walk through the company's history, structure and objectives. Elon Musk's assessment of Tesla's



intangible assets proves once again that IP rights are more intertwined than ever, in the business framework. The idea lawyers have of maximizing the value of IP rights can be commonly related to protection, enforcement, and litigation. Nevertheless, under a certain perspective, maximizing the value of a company, could not be more far and away from protecting its IP. Tesla's strategy steps aside from the protection and enforcement world, and dives into an era of unconventional strategies. Even though protection of intangible assets is foundational in the tech industry, what works for one company, might not work for the other.

Tesla Motors Inc., headquartered in Palo Alto, California, was founded in 2003 by five technology entrepreneurs, amongst them Elon Musk, who graduated from the University of Pennsylvania with degrees in Economics and Physics. Before engaging in the Tesla project, Musk had been the founder of successful companies, such as PayPal, acquired by eBay Inc. for USD 1.5 billion in 2002. Musk became Tesla's CEO in 2008 and overturned the complicated financial and economic situation that had been troubling the company in the years that preceded. The underlying main objective of Tesla was to contribute to the world's transition to sustainable transport by building high-performance, affordable EV's. Tesla describes itself, not as an automaker, but a technology and design company focused on energy innovation.

Nine years after its establishment, Tesla Motors Inc., became the premier brand for electric vehicles. As of February 2012, they had already launched the Roadster, developed the Model S and were already working in the Model X, a fully electric sport utility vehicle. The Roadster was launched in 2008, at a base price of around USD 109.000, and, with a range of over 200 miles per charge and an acceleration of 0 to 60 mph in less than 4 seconds, was considered a high performance car that defied the reigning concept of EV's.

After the Roadster, the company developed Model S and Model X SUV, both high-performance cars, carefully designed, with state of the art technology, similar characteristics to its predecessors, but with affordable starting prices of around USD 50.000. Tesla became a public company through its Initial Public Offering (IPO) on the NASDAQ, on June 29, 2010, raising USD 226 million.

Tesla invested heavily, especially at the beginning, in licensing rights from other innovators and purchasing a great part of the components of its cars. In the development and launching of the Roadster, Tesla relied on other companies and licensed most of the key components of the car, including battery, powertrain and body. The charger and power system design was licensed from a company named AC Propulsion Inc. and the batteries and gliders were purchased from Panasonic and Lotus, respectively. Musk didn't rely on licensing as a long term-sustainable strategy and rapidly switched to in-house development of their technology; a revolutionary strategy for the automotive industry. Almost every company in the automotive industry outsourced the production of the key components of its EV segment.

From the beginning Musk was aware of the challenges and opportunities the industry presented, being the greatest one the opportunity to become the developer of new technologies, not only for building up its own cars, but to license them to other companies. Tesla's ultimate goal was to be the leader in manufacturing innovation. Its second generation car, Model S, was already designed, developed and manufactured entirely by the company. In 2012, Tesla had already issued 77 patents in the U.S. and had more than 120 pending patents. A quick search through the USPTO patent database, shows around 270 issued patents for Tesla motors, as of today. Of those 200 patents, more than 100 arise from the development of new technologies for the battery of the car. In the EV industry, performance, and duration of the battery is a determining factor.

If analyzed, the company's strategy, at least from 2003 until 2012, shows heavy reliance on the protection and enforcement of its IP rights, specially its patents. A successfully

achieved vertical integration, combined with the issuance of at least 150 patents, seemed to be driving the company until that point, into the path of success with respect to becoming the new innovation leader in the EV field. The company's Annual Report for the Fiscal Period ended December 31, 2012, supports the same conclusion. Tesla intended to continue developing new technology, filing new patent applications, and more importantly, enforcing those patents and maximizing the economic benefit inherent in them. The Report for 2012 clearly states that the company was willing to exploit its competitive advantage by enforcing its IP rights and preventing its competitors from offering similar products. The core business strategy of the company was to rely on the protection of its IP rights, not only to enhance innovation, but also to increase its revenues.

The implementation of their strategy, since the switching to in-house manufacturing and technology development, provided the company with nice numbers and a great deal of financing for its operating activities. Since 2007, Tesla started to supply battery packs to Daimler (Mercedes Benz). In 2012, the two companies entered into a second licensing agreement estimated to be worth USD 500 million. In July 2010, the company entered into an agreement with Toyota for USD 160 million, according to which, Tesla was going to supply components for an electronic version of the Toyota RAV. After the agreements, Toyota and Daimler both bought stock in Tesla. Six hundred million dollars arising from licensing technology to its competitors shows that the company's original strategy was working perfectly; wasn't Tesla the finest example of maximizing the value of an IP asset? Not only were they able to manufacture all of the key components of its cars, but also, they were profiting through the licensing of their recently developed technology, which constituted a great source of income for the company.

Surprisingly, on June 12, 2014, Elon Musk made a public announcement on the firm's portal, establishing that the firm will no longer initiate patent lawsuits against anyone who, in good faith, wanted to use their technology. The announcement had a hint of insanity, considering that the company had made it clear through its actions in the previous years, that enforcing its IP rights was an important part of its agenda. Why on earth would a company give up a temporary monopoly on any given invention into which it had invested resources? What is a patent right without enforcement? Tesla was about to proof the world that maximizing the value of an IP right was not necessarily tied to litigation or enforcement. Such a decision was definitely not exclusively backed up by altruistic motives; from Musk's perspective, opening up all of Tesla's patents was the opportunity cost the company was willing to take, to achieve a much greater objective, expanding the EV market.

In his official declarations on a rather controversial decision, Musk confessed he had never been a fan of patent rights. Actually, the CEO considered that nowadays, patents "serve merely to stifle progress, entrench the positions of giant corporations and enrich those in the legal profession, rather than the actual inventors" (Musk, 2015). It would be appropriate to say that it was a bold and edgy statement, considering Tesla had been profiting from its patent rights for almost 11 years and had obtained most of its financing sources from licensing its inventions to other manufacturers. Apparently, Tesla regretted its original approach on IP enforcement. The EV segment at major manufacturers was almost non-existent, and therefore, Tesla's major enemy weren't its competitors but the size of the market. To maximize the value of the company, Musk couldn't rely anymore on patent enforcement or licensing fees. An open source philosophy was chosen as the company's new path to technology leadership and market expansion. On the two weeks following the announcement, Tesla's stock went up, it climbed from USD 205 per share to USD 230.

The 2014 announcement had a context. A context that poses some profound inquiries on the long-term relevance of patents for tech companies. Even though most of the factors

about to be named are largely related to the nature of this particular industry, some of them could be easily translated to most of the patent-friendly industries. Consider Kodak. In its attempt of obtaining financing, it lost all of its potential allies. From 2003 to 2010, Kodak generated more than USD 3 billion in IP revenues, but in the long term it was unable to build strategic alliances, driving the business down. Years before the public announcement of its open source philosophy, Tesla had been analyzing the turnovers an enforcement policy could have on the company's growth. Amongst the elements the company considered, these were the most relevant: the patents they were granted could be challenged because of pre-existent or similar patented or unpatented inventions; the costs associated with an aggressive enforcement policy could have been counterproductive for the company and, the most relevant, it was more important for them to encourage innovation in the industry, than to invest resources in litigation and enforcement.

An open sourcing philosophy, radical and revolutionary by itself, is always controversial. Tesla's announcement opened up the door for an interesting debate, which provided both, counterarguments to the company's new policy and also supporting statements. Open sourcing has proved to have its perks. When a company like Tesla opens up its patent portfolio, it works as a magnet and drags in the world's top-tier engineers. The moment you invite others to build upon the platform you have made available, you become the connecting point into which everything converges. Let's take the infrastructure area of the company as example. Tesla had been working for years in a project to build a nationwide network of recharging stations; the project's concretion was rather impossible without the involvement of strategic allies. Two weeks after opening up its patents, Tesla was placing all of its bets on a deal with BMW to build a common infrastructure of recharging stations. With its old strategy, Tesla had shown a constant increase in its revenues, but didn't manage to grab, not even a piece, of the massive auto market. Its new strategy was a simple as this: The more infrastructure they had in place, the more electric cars will be sold, driving manufacturing costs down. Tesla was about to let others use its technology, in the hope of boosting the EV industry.

Assuring strategic alliances, driving costs down, and the rather altruistic objective of gaining market over gasoline cars were some of the reasons that, theoretically, pushed Musk into taking the ultimate decision. Needless to say that the public was not satisfied with the justifications provided alongside the announcement. Business experts, as well as lawyers, popped up some additional interesting theories on the, rather unfruitful, attempt of answering the big question: why would a leading tech company voluntarily open its technology to competitors. These theories revealed other underlying objectives the company could have had in mind: becoming the supplier of choice for automakers for batteries and other parts they manufactured, a hope for a patent reform and ultimately, advertisement.

The public speculated around the possibility that Tesla's objective with their decision was to become trend-setters and incentivize policy reforms, establishing open sourcing as a new IP model, both profitable and community friendly, that could outshine the traditional one. On the not-so-nice critics side, the announcement was seen as a simple marketing strategy to attract customers; in their view, the company would later turn their back on their non-binding policy and adopt a litigation plan whenever they wanted.

The supplier theory needs additional comment. Since the company was born, becoming the supplier of choice for big automakers was in Tesla's agenda, not only because it provided them with additional revenue, but also because the EV industry was no Promised Land (still isn't). The electric vehicle industry is and has always been risky, especially because it accounts for only 1% of the whole automotive industry. To illustrate the point let's rely on

some numbers. Tesla sold as of 2014, approximately 8.000 Model S cars quarterly. Any given BMW model sells around 10.000 cars a month. In the hypo of the EV industry not managing to grab a bigger piece of the market in the next few years, and considering Tesla exclusively manufactures electric vehicles, would the business model be sustainable in the long run? Even though the company assured everyone that the ultimate objective of their new IP policy was to expand the EV market and therefore increase their share of the pie, maybe there was something else underneath: the need to strengthen themselves as suppliers in case their business plan as car manufacturers failed. Maybe, open sourcing was not only a way of creating value, but also a preventive strategy.

Whether a preventive or aggressive strategy, open sourcing is now a trend. Less than year after Musk's public announcement, Toyota and Ford seem to be following the lead. On January 6, 2015, Toyota announced that it would enable cost-free licensing for 5.680 of its patents, hoping that their decision would encourage innovation and development of the hydrogen technology in the following years. Ford is walking on the same path. The corporation decided this year to open up their portfolio of electric vehicle technologies in order to accelerate the growth of the electrified-vehicle technology.

Spectators, myself included, have enjoyed themselves speculating around such interesting strategies. Some others, with valid, but somehow orthodox arguments, have raised their voice against open sourcing, arguing it discourages innovation and destroys the foundations upon which IP rights are built on. The truth is, whether we like it or not, open sourcing is now playing an important role in the business world. While Apple and Samsung are trying to bankrupt each other battling in courts, Tesla is opening up its patents to the world. Even though it is too early to determine if the strategy has worked for the company, its adoption should be enough to leave the world re-thinking about the whole IP rights-maximizing value correlation. Musk strategy invites us all to think, open our minds, and reconsider.

Opening up our minds doesn't imply first hand choosing open sourcing every time, over every other strategy; the IP enforcement approach has proved to fit the needs or some, but not all. The essence of this article relies on the importance of performing preliminary analysis intended to determine whether the needs of the company are going to be attained throughout royalties from licensing or the enhancement of new technology. It is not a basic issue of weighing the Pros and Cons of each trend, this goes further, it is more a thing of understanding each industry, and customizing your strategy to the needs of that particular industry. The EV industry needed expansion, therefore platforms of tech development and consequent market growth were the absolute appropriate answer. As of April 3, 2017, Tesla's market value has surpassed Ford's value for over 2.7 billion.

Perhaps, the question here is not what role did corporate lawyers play in this case (because they didn't play any), but what role they should have played. This case states the obvious. If lawyers want to keep up with the business world, they have to embrace new trends; new revolutionary, defying strategies. They have to start strategizing out of the box.

## Bibliographic references

Annual Report. (2012). Tesla Motors Inc. <a href="http://www.teslamotors.com">http://www.teslamotors.com</a>.

Blackler, W. et al. (2014). Tesla's Gambit: Aligning IP Strategy with Business Strategy. *bcg. perspectives.* <a href="https://www.bcgperspectives.com/content/articles/business\_unit\_strategy\_growth\_teslas\_gambit">https://www.bcgperspectives.com/content/articles/business\_unit\_strategy\_growth\_teslas\_gambit</a>.

- Brachmann, S. (2015). Toyota Motors One-Ups Tesla, Makes Thousands of Royalty-Free Patents Available. *IP Watch Dog.* <a href="http://www.ipwatchdog.com/2015/01/20/toyotamotors-one-ups-tesla-makes-thousands-of-royalty-free-patents-available/id=53744">http://www.ipwatchdog.com/2015/01/20/toyotamotors-one-ups-tesla-makes-thousands-of-royalty-free-patents-available/id=53744>.
- Bullis, K. (2013). How Tesla is Driving Electric Car Innovation. *MIT Technology Review*. <a href="http://www.technologyreview.com/news">http://www.technologyreview.com/news</a>.
- Elon Musk Biography. (2015). *Encyclopedia of World Biography*. <a href="http://www.notablebiographies.com">http://www.notablebiographies.com</a>.
- Hard, A. (2015). More Over, Tesla: Ford Opening up Portfolio of Electric Vehicle Patents. *Digital Trends*. <a href="http://www.digitaltrends.com/business/ford-to-open-electric-vehicle-patents-news-pictures">http://www.digitaltrends.com/business/ford-to-open-electric-vehicle-patents-news-pictures</a>.
- Hoffman, G. (2017). Tesla is now bigger than Ford. *Business Insider*. <a href="http://markets.businessinsider.com/news/stocks/tesla-stock-price-ford-stock-price-april-3-2017-4-1001891214-1001891225-1001891225-1001891225">http://markets.businessinsider.com/news/stocks/tesla-stock-price-ford-stock-price-april-3-2017-4-1001891214-1001891225-10018912018-10018918-10018-10018918-1001
- Mills, C. (2017). Apple is destroying Samsung where it really matters. *BGR*. <a href="http://bgr.com/2017/02/03/apple-vs-samsung-sales-2016/">http://bgr.com/2017/02/03/apple-vs-samsung-sales-2016/</a>.
- Muoio, D. (2017). Elon Musk: The new Roadster will be Tesla's fastest car- but you'll have to wait. *Business Insider*. <a href="http://www.teslamotors.com">http://www.teslamotors.com</a>>.
- Musk, E. (2014). All our Patent Are Belong to You. *Tesla Motors Blog.* <a href="http://www.teslamotors.com">http://www.teslamotors.com</a>.
- (2013). Tesla's mission is to accelerate the world's transition to sustainable transport. *About Tesla*. <a href="http://www.teslamotors.com">http://www.teslamotors.com</a>.
- Neiger, C. (2013). Tesla Nabs 8% of the U.S. Luxury Car Market. *The Motley Fool.* <a href="http://www.fool.com/investing/general/2013/08/04/tesla-nabs-8-of-the-us-luxury-car-market.aspx">http://www.fool.com/investing/general/2013/08/04/tesla-nabs-8-of-the-us-luxury-car-market.aspx</a>.
- Nunes, P. and Joshua, B. (2014). Elon Musk's Patent Decision Reflects Three Strategic Truths. *Harvard Business Review.* <a href="https://hbr.org/2014/07/elon-musks-patent-decision-reflects-three-strategic-truths#">https://hbr.org/2014/07/elon-musks-patent-decision-reflects-three-strategic-truths#</a>>.
- Scholer, K. and Lee, S. (2015). Tesla Gains 41% After 1<sup>st</sup> U.S Automaker IPO in 54 years. *Bloomberg Business*. <a href="http://www.bloomberg.com/news/articles/2010-06-29/teslamotors-raises-226-million-in-first-ipo-of-u-s-carmaker-in-54-years">http://www.bloomberg.com/news/articles/2010-06-29/teslamotors-raises-226-million-in-first-ipo-of-u-s-carmaker-in-54-years>.
- Strategic partnership: Daimler acquires stake in Tesla. (2010). *Tesla Blog.* <a href="http://www.teslamotors.com/blog">http://www.teslamotors.com/blog</a>.
- Rooney, B. (2010). Toyota to partner with electric carmaker Tesla Motors. *CNN Money*. <a href="http://money.cnn.com/2010/05/20/autos/tesla\_announcement/index.htm">http://money.cnn.com/2010/05/20/autos/tesla\_announcement/index.htm</a>.
- Vance, A. (2014). Why Elon Musk Just Opened Tesla's Patents to His Biggest Rivals. *Bloomberg Business*. <a href="http://www.bloomberg.com/bw/articles/2014-06-12/why-elon-musk-just-opened-teslas-patents-to-his-biggest-rivals">http://www.bloomberg.com/bw/articles/2014-06-12/why-elon-musk-just-opened-teslas-patents-to-his-biggest-rivals</a>.
- Voyles, B. (2014). Why Elon Musk Released Tesla's Patents. *CKGSB Knowledge*. <a href="http://knowledge.ckgsb.edu.cn/2014/07/07/china-business-strategy/why-elon-musk-released-teslas-patents">http://knowledge.ckgsb.edu.cn/2014/07/07/china-business-strategy/why-elon-musk-released-teslas-patents</a>.
- Watkins, W. (2014). Rethinking Patent Enforcement: Tesla Did What. *Forbes Opinion*. <a href="http://www.forbes.com/sites/realspin/2014/07/17/rethinking-patent-enforcement-tesla-did-what">http://www.forbes.com/sites/realspin/2014/07/17/rethinking-patent-enforcement-tesla-did-what</a>.