

<u>Magna International, Inc</u> Canada

The Challenge of Integration into Global Supply Chains

Written by

Charles Gastle

Founding Partner Bennett Gastle Professional Corporation, Barristers & Solicitors

and

Heather Gastle¹

The case was developed with the cooperation of Magna International solely for educational purposes as a contribution to the project entitled "IPR Strategies for Emerging Enterprises — Capacity Building for Successful Entry to Global Supply Chain," conducted under the auspices of the Asia-Pacific Economic Cooperation (APEC). The case is neither designed nor intended to illustrate the correct or incorrect management of the situation or issues contained in the case. Reproduction and duplication of this case for personal and educational use is encouraged. No part of this case however can be reproduced, stored, or used for purposes other than the above without the written permission of the author(s) and APEC.

© 2010 APEC Secretariat

Introduction

In 2009 there was a limited number of major automobile manufacturers (OEMs) such as Ford, General Motors and Toyota, and the competition for their business was intense among the major autoparts suppliers. Innovation in the design of automotive parts and manufacturing processes was crucial to securing new contracts as automobile models changed and technology evolved. Innovation and design also played an important role in achieving the price milestones established in the contracts that existed "at will" with the major OEMs, which meant that they were subject to cancellation at any time. An industry marked by constant innovation required special corporate processes to recognize an innovative idea that had value and to commercialize it.

Magna International Inc. ² (Magna) was the leading automobile parts manufacturer in North America with sales exceeding \$20 billion. It had worldwide operations, and a substantial and growing presence in Southeast Asia. Innovation and the management of its intellectual assets were at the heart of Magna's corporate strategy; it had developed a culture intended to achieve it.

Nevertheless, Magna did not define itself as a technology corporation because it did not patent each and every product, attribute, or manufacturing process that its employees developed. It sought patents only for those technologies related to its core business operations.

History of the Company³

The story of Magna was that of its founder, Frank Stronach. Mr Stronach was born in Austria and immigrated to Canada in 1954. In 1957 he established Multimatic Investments Limited, which was a tool and die company (with annual sales of \$13,000), expanding into the production of automotive parts in 1960 with its first contract from General Motors. By 1968 its sales had grown to \$2.6 million. From 1976 to 1979, Magna implemented a product diversification strategy, organizing its various divisions into product groups. By 1979 its annual sales had grown to \$108.3 million.

In the 1980s Magna introduced many automotive innovations, such as co-developing the integrated child seat, which has been recognized by the Smithsonian Institute as one of the great inventions of the 1980s. By 1989 its sales had grown to \$1.2 billion.

In the 1990s Magna expanded into Europe, acquiring a number of automotive systems suppliers. It acquired Steyr-Daimler-Puch, one of the world's leading automotive technology and engineering companies with complete vehicle assembly capabilities. Magna also perfected and introduced into its manufacturing processes a form of high-pressure hydroforming technology, which used water pressure to bend and form metal. By 1999 Magna's sales had reached \$9.3 billion; it was named the world's top auto parts company by Forbes Magazine.

In the following decade, Magna evolved rapidly, expanding to \$23.7 billion in annual sales. Its growth was spurred by the formation of the Magna Steyr Group, which according to Magna, was the "world's leading supplier of niche vehicle assembly and concept development." Magna acquired the worldwide operations of New Venture Gear,

which specialized in drivetrain products, as part of a new operating group, Magna Powertrain. In 2006 Magna also acquired CTS, Porsche's car top systems subsidary and added its first two plants on the African continent. In 2008 it announced the development of an electric vehicle. In 2009 Magna reached an agreement with General Motors to purchase its Opel manufacturing division. GM cancelled the transaction after it went through its bankruptcy process.⁴

Distribution of its International Operations

As of September 2009 Magna had 242 manufacturing operations and 86 product development engineering and sales centers in 25 economies on five continents. It had a number of product divisions including body and chassis, exterior, closure, interior, seating, vision, electronics, powertrain, and roof systems. It also had complete vehicle engineering and assembly operations for automobiles such as the BMW X3, the Mercedes-Benz G-Class, the Saab 9-3 Convertible, and the non-North American versions of the Jeep Grand Cherokee, the Jeep Commander and the Chrysler 300. Magna's customers included companies such as Acura, Aston Martin, Bugatti, Cadillac, Lincoln, Shanghai Automotive Industry Corp. and Volvo. In fact, Magna had 72 different customers, representing a wide range of automobile manufacturers from all over the world.⁵

Magna's main operations were in North America, with 38, 100 employees, 123 manufacturing operations and 29 product development, engineering and sales centers. In Europe, it had 28,550 employees in 94 manufacturing facilities and 38 product development, engineering and sales centers. The highest concentration was in Germany, with 35 manufacturing operations, and 15 product development, engineering and sales centers.

Magna had a strong and growing presence in Southeast Asia, with 5,140 employees. It had a total of 15 manufacturing operations in China, two in India, one in Japan, and four in Korea. It also had five Development, Engineering and Sales Centers in China, four in India, four in Japan, two in Korea, and one in Thailand.⁶

Innovation as a Corporate Strategy

The process of innovation is, by its very nature, chaotic in the sense that it is subject to a sensitive dependence on initial conditions. This means that small changes in the innovative process can have significant, unforeseeable consequences. For example, a highly valuable innovation might be missed because an engineer might not recognize its value. Although there is value in an idea, the true asset in the innovation process is the ability to recognize an idea's value and to sustain the innovation cycle long enough to achieve commercialization. According to Kenneth Arrow, "it is difficult, if not impossible, to predict the course of innovation." He said:

We are dealing with a complex system in which the outcome is not easily predictable. Indeed, predictions in the whole modern history of the information business have been very poor. AT&T did not realize the consequences to it of the development of the transistor, which eventually destroyed its monopoly. IBM was hesitant about entering the electronic computer industry altogether and failed to

understand the potential of PCs; otherwise, it would have made a very different contract with Microsoft. *Xerox* developed the basic ideas that developed into Apple and took no economic advantage of them. This unpredictability is precisely what would be expected of a complex self-organizing dynamic system. But it also means that the government is not in a position to predict either, and interference to pick the winner of this dynamic process is likely to be counterproductive.⁷

Magna was built on a culture of continuous innovation. This commitment was reflected in its philosophy identified as "Fair Enterprise" set out in its corporate constitution. It states that "Magna will allocate a minimum of seven percent of its before tax profit for research and development to ensure its long-term viability. In 2007 research and development spending amounted to \$725.5 million.

Magna was able to create a corporate culture of innovation in no small part by allocating seven percent of its income before taxes to innovative activity. It supported this spending with programs intended to "collect, evaluate and prioritize ideas for more independent projects, taking the corporate strategy and other factors into consideration." Magna collected ideas from the staff which were then reviewed by what might be considered an internal innovation receptor, an interdisciplinary body of experts. A preliminary study was undertaken of the most promising ideas and if successful, the business case for the innovative idea was prepared. A market survey was done to gauge the consumer's point of view and the technical feasibility of the concept was evaluated. An idea that made it this far through the innovation process was then analyzed in depth as to its technical feasibility; this involved assessing the business model in terms of the number of units likely to be sold, run time and production location. A development strategy for the innovation was then determined.

Magna also engaged in innovative activity through research cooperation with scientific partners, particularly in the European Union. These activities included research into hydrogen storage systems for automotive application, high-density power electronics for hybrid electric vehicle powertrains, fuel cell hybrid vehicle systems and highly integrated combustion electric-powertrain systems. Magna also had a series of research and development relationships with a number of partners. 12

Other sources of innovative activity were the co-development agreements between Magna and the OEMs. These were detailed agreements allowing Magna and manufacturers such as Chrysler to develop particular technologies. One example was the powered lift on the rear hatch door of the Chrysler minivan. The challenge of this technology was to ensure that it would operate over a period of years in harsh weather conditions, while closing firmly and performing effectively with the required level of safety. The design also had to manage production in a way that made the cost competitive. Once Magna had built a prototype, it was presented to Chrysler and the technology was then co-developed, with Magna given the initial contract to manufacture the parts in production.

Magna's need to constantly innovate was due to the negotiating power of the OEMs. A parts supplier like Magna might have had 25% to 30% of its business with a single OEM such as Ford, General Motors or BMW. A specific part might be produced for a period of five years. The process started with a Request for Quote ("RFQ") which was sent out to competitive parts manufacturers. The OEMs always wanted more than one source for the part and so the contract was split between at least two parts suppliers. The competition between the part suppliers was fierce with margins being very low, even in

the first year of production. The OEM contracts generally required that the price of the part be reduced from three to five percent each year of the contract. This forced Magna to focus entirely on process and manufacturing improvements to ensure that the reduction in price was met.

Apart from the process improvement, Magna also attempted to keep abreast of new technology and, where possible, take a leadership role. As indicated above, one of the innovations that Magna introduced was the perfection of "hydro-forming" part fabrication in the mid-1980s. Automobile parts must be fashioned out of sheets of metal. The traditional way to do so was through the use of large stamping machines to punch out the part, but this process did not meet the exacting standards of modern part manufacturing tolerances. Magna was able to perfect the forming of automobile parts through processes involving pressurized water. This technology was one of the catalysts to the growth of Magna.

Some of the key technologies that Magna was developing related to hybrid and electric vehicles. Hybrid vehicles were of particular interest because of the projected near-term widespread adoption of the technology in the marketplace. "Think of getting highway mileage downtown - it is truly remarkable." Magna was also pursuing a leadership position in electric automobiles and was producing a Ford electric car which was projected to sell only a relatively small number of vehicles over a period of five years. However, Magna hoped to break even on its investment in the project. The true return to Magna was the experience and know-how that could be used in the further development of electric automobiles. 14

The Protection of Intellectual Property

With innovation being so important to its business, Magna had a well-developed intellectual property strategy in which the filing for patents was a crucial element in this strategy. However, Magna was not a technology company and did not look for, and patent every innovation that might qualify for such protection. IBM was a good example of a technology company, reaping more than \$2 billion from its intellectual property portfolio. By contrast, Magna took a much more functional approach to the question of intellectual property protection. Magna patented those innovations that were important to its core business - the production of motor vehicle parts. It did not seek to patent innovations if they were not directly related to achieving greater efficiencies in meeting its clients' needs. While IBM might undertake basic scientific research, Magna undertook applied research which attempted to apply technology in the marketplace.

Magna held as many as 500 patents in Canada on various aspects of automobile technology. ¹⁵ Identifying innovations which should be patented was made by Magna's engineers who were involved in the innovation process and dedicated to ongoing improvement. The engineers provided reports justifying the allocation of limited resources and reporting on the successes achieved. The engineers or the legal department reviewing the engineering reports identified the technology to be patented. Once a decision had been made that the innovative technology was core to the business, patent applications were filed in those jurisdictions where the technology would be deployed in manufacturing processes. These included North America, Europe and the so-called BRIC economies (Brazil; Russia; India; and China). It was not economically feasible to patent each technology all over the world due to cost factors.

While Magna obtained patents in these various jurisidictions, it did not always mean that they could be enforced. In its 2009 Annual Information Form, Magna identified a material business risk that it faced involving the "difficulty in protecting intellectual property rights." One way Magna discovered patent infringement was through the "Request for Quote" process issued by the OEM. The Request contained a detailed description of the automotive part that was the subject of the quotation. Each request was analyzed by one of Magna's engineers to find out if a competitor might be infringing Magna's patent, that is, if Magna held a patent over the technology embodied in the part. The competitor would be infringing Magna's patent if it was already manufacturing the part or began doing so in response to the quotation. If it appeared that a Magna patent was or would be infringed, the information was conveyed to the legal department after which Magna made the decision whether to commence an infringement lawsuit or to negotiate a voluntary license.

Magna's intellectual management strategy also involved guarding against infringing third party patents to avoid paying substantial damages. This represented a business risk for Magna. Therefore, as part of the innovation process, the scope of existing intellectual property rights in the field had to be reviewed.¹⁷ This process was important because under the contracts negotiated with the OEMs, Magna was required to provide indemnities to pay for damages that might be awarded because of the supply of automotive parts that breached a third party patent.¹⁸

The challenge of managing the relationship between Magna and the OEMs impacted on the management of its intellectual property portfolio. The OEM sometimes forced Magna to license its technology to Magna's competitors because the OEM did not want to be dependent on one source of supply but to promote competition between suppliers for each automotive part. Hence, Magna was guaranteed a production volume which could be less than one-half of the total contract. On occasion, Magna was forced to provide a royalty-free license to its competitors because the OEM argued that any license fee would simply be passed on to the OEM. If Magna refused to provide a voluntary license, it risked losing the contract to produce the part in question since the OEM would likely not want to source the part from Magna if it was the sole supplier.

For example, in Magna's lock division, the OEM would ask for new designs from a few automotive part suppliers. If the OEM chose Magna's design, the OEM would pay a certain amount to amortize the engineering costs associated with the development of the part, which was never enough to fully cover the engineering costs incurred. Magna then had to carefully negotiate with its competitors to establish the terms of the license, because the next time, it could be the competitor negotiating a license with Magna.

Magna did not own all of the intellectual property associated with the core technology in co-development agreements with OEMs. The agreements usually allocated the ownership of the intellectual property among the participants for the duration of the period of development. Sometimes the core idea originated from one of the OEMs which then approached Magna to participate in the development. In this case, Magna had less control over the intellectual property produced, with the OEM managing the intellectual property and licensing it to a number of suppliers, thus ensuring intense competition and preventing the monopoly of a sole source.

One of the key challenges for any company in the global economy was how to manage its intellectual property portfolio in China. A strategy that had been suggested for North American companies was to withhold key technology from China because of the risk of losing control of those technologies. Magna however did not withhold technologies from China, a market of growing importance. The Chinese automobile industry could soon be as large as that of the United States and growing at a faster rate. One Magna official predicted that there would be Chinese-assembled cars on North American roads within five years.¹⁹

Magna as a major parts supplier would do business with any OEM from any economy. The limiting condition for Magna in China was really the transportation costs. Small parts could be manufactured in China and shipped all over the world but Magna would not manufacture car chassis in China because of the shipping costs. It has however transferred to China the technology to manufacture these parts, as well as the research and development required to customize them for the local Chinese market.

Magna had no experience with the civil law system with respect to the commencement of private patent infringement suits against Chinese competitors. It did have cases of outright counterfeiting of products before the criminal courts. As a result, the Chinese legal system remained somewhat of an unknown for Magna.

Management of Patent Infringement Lawsuits

Magna had to determine when to commence a patent infringement lawsuit and how to respond to one commenced against it. In both circumstances, the decision was driven by the economics of the situation. Litigation costs could be staggering and could amount to millions of dollars. The question was whether the economic payoff was worth the cost and the management time consumed in such a dispute. The calculation was quite simple. What were the potential damages? What was the probability of success? If the likely damages amounted to \$3 million and there was a 50 percent chance of success, the resulting \$1.5 million payoff in damages must be compared against the costs of asserting/defending the lawsuit. The costs of such a lawsuit could be well in excess of the expected payoff in damages and so a settlement would be justified in the circumstances.

As an example, Magna filed a patent infringement lawsuit against glass manufacturers over the adhesive that it invented which was used to glue objects directly to windows instead of drilling holes in them. The technology reduced costs significantly and allowed a lower price to be offered to the OEMs. This was "bread and butter" profit for Magna because no one else had the technology. However, glass manufacturers themselves saw an opportunity to leverage this technology into profits by securing contracts to supply all or almost all of the glass requirements for the model of the automobile in question. These manufacturers earned their profit from the sale of glass and so they were quite willing to offer the adhesive technology at little or no charge, almost as a loss-leader to secure the broader contract. Magna's profit was undercut since Magna was not a glass manufacturer and had to make its profit out of the technology itself. The economics of the loss of business justified the commencement of a patent infringement lawsuit which was still ongoing in 2009. A Magna official commented that "we have an obligation to our shareholders; we literally do make these decisions (whether to commence/defend a patent infringement lawsuit) based on the economics of the infringement and its potential impact on shareholder value."

Magna had also been on the other side of such a dispute. Magna allegedly breached a competitor's patent on a fastener used in the manufacture of automobiles. Fasteners were used in huge numbers and significant saving could occur on an annual basis even with a small price break. Magna had to evaluate the economics of the use of the fastener in the light of the threat of lawsuit. The total savings using the challenged fastener amounted to less than \$500,000. This certainly did not justify the costs in excess of \$1 million to defend its rights, and so Magna negotiated a settlement with the complainant.

The economic importance of an alleged infringement was of special concern if the patent in question involved a critical new technology, such as the hybrid technology, where the design and manufacture of batteries was obviously a crucial component. At this early stage of development, innovative companies involved in this market segment were scrambling to develop and patent new technologies, some of which could potentially conflict with one another. The economic case to commence a lawsuit might be met at this early stage if the new technology was strategically important and could turn out to be crucial for many years into the future. In the normal case, however, a patent infringement lawsuit usually would not occur until the technology matured, had been accepted in the marketplace and generated sufficient sales volume to create an economic condition justifying the commencement of the lawsuit. This situation differed from a mature technology long on the market that had largely become a commodity. For example, anti-lock braking was on the market for at least twenty-five years but was a commodity as it was offered on many different models of automobiles by a number of manufacturers. With such a mature technology, it was far more likely that a licensing arrangement would be negotiated.

The resolution of a patent infringement suit once commenced depended in part on the relative size of the companies involved. If the dispute was between two large, automotive giants, some form of settlement involving a voluntary license might be negotiated with the payment of a reasonable royalty. However, if the dispute was between a large automotive giant and a small, start-up company with its entire future dependent on the particular technology involved, the chance of resolution was more unlikely. The small start-up might be able to sustain a major patent infringement lawsuit because its lawyers might see tremendous value in the lawsuit and would be willing to take 35 percent of any settlement or award - which could be worth millions of dollars- in contingency fee. The lawyers would only get paid if the lawsuit was successful and they would receive nothing if it failed and was dismissed. Under such an arrangement, the small technology company could afford to maintain what otherwise would be an expensive lawsuit. In such circumstances, the start-up might not be willing to settle without a substantial royalty being paid. For example, Paice LLC ("Paice") commenced action against Toyota for infringement of a patent on technology used by Toyota in its Prius automobiles.²⁰

While a patent review was undertaken during the early stages of product development at Magna, the abstract nature of some technologies and the way in which technological claims became blurred made it impossible to prevent all possible claims of infringement. As a result, the management of Magna's patent portfolio and the defence of claims of infringement made against Magna were important functions of its legal department.

The Special Problem of Trade Secrets

Patents were only one form of intellectual property protection that Magna was concerned with. An equally important form of intellectual property related to trade secrets. The concept of a 'trade secret' was very broad and could include any information that might be used in a trade or business as long as it had economic value because it was not generally known and had been the subject of reasonable efforts to prevent it from becoming generally known. Almost any information having some degree of value might constitute a trade secret. There was no central registry for trade secrets and the protection could last forever as long as the information was kept secret. As opposed to patents, a trade secret did not provide exclusive rights to use the information in question. Any person who developed the information independently was free to use it, but if most competitors in the industry did so, no one company could claim "trade secret" status. To maintain the status of a trade secret, the owner had to take steps to protect the information in question. If reasonable steps were not taken, trade secret status was lost.

A company wishing to protect its trade secrets had to restrict access to the information in question to only those who needed to have access to the information. Information would not qualify as a trade secret if it was readily available to everyone. Confidentiality had to be maintained throughout the contractual relationship with the employee to ensure that secrecy could be enforced.

The challenge of protecting trade secrets was especially acute in circumstances when employees moved between competitors within the industry. A company had to be able to prevent its departing employees from revealing sensitive information to its competitors. Equally important was the hiring of employees from other competitors in a manner ensuring that no confidential information was disclosed which might create exposure to a lawsuit.

Magna was constantly improving the efficiency of its manufacturing processes. Much of the information was "learned by doing" and could not be patented because it did not meet the requirement of innovativeness. Magna maintained extensive trade secret protection of its important process technologies. Everyone in a managerial or professional position had to sign employment agreements that included lifetime non-disclosure agreements. Magna also published policy documents on the employees' duty of confidentiality. For instance, with respect to "Information Security," Magna established that:

Every employee at MAGNA STEYR pledges to maintain strict secrecy regarding all business and trade secrets (e.g., manufacturing processes, working methods, plant and equipment, projects, innovations, design drawings, etc.). Regardless of whether such information is available on paper, in electronic form (as e-mail or in systems, as photo or film or disclosed verbally (by telephone/at a meeting).²¹

Employees' access to trade secrets was also restricted on a "need to know" basis. In very sensitive situations, "safe rooms" for key development projects were established. In one instance, security was such a significant concern that fingerprint readers had to be installed to prevent unauthorized access.

The hiring of employees from other suppliers also had to be managed carefully to avoid exposure to a civil action by their former employers which could take the form of

a request for an injunction and/or for damages. An injunction would prevent the prospective employee from working for Magna for a period of time and impose an outright restriction on the disclosure of any trade secrets; it could also prevent the former employee from working for a period of time in the same field as that of her or his former employment.

The commencement of an action was an unwanted distraction for Magna. The company had been involved in lawsuits in different regions where the courts applied varying rules especially in jury trials with respect to departing employees and the issue of trade secrets.

Managing the documentary issues did not eliminate the problem when hiring an employee from a competitor. The question was what knowledge and experience the employee brought to the new position. The law on trade secrets balanced the interests of the employer and employee. This posed a significant problem with respect to the experience or knowledge that a person had. An employee should have the right to use the skills that he or she had developed over the years. For instance, the ability to use a complicated and unique computer program should not be constrained in a new job. The issue became more difficult in circumstances where the information concerned specific aspects of the product or service in question. For instance, if the employee was designing a computer program, the copying of specific functionality would likely be a breach. If the employee was in sales, the specific recollection of key sales contact within a small industry could also be actionable and be prevented by court order. However, once one moved beyond these obvious cases, the case for intervention by the courts became weaker and would turn on its individual circumstances.

Conclusion: The Challenge of Managing Intellectual Assets

Magna was dependent on innovation, and the creation and management of its intellectual assets was core to its corporate strategy. The structure of the automotive industry was such that competition was intense among automotive parts suppliers because of the limited number of OEMs. New and improved products and manufacturing processes and techniques gave Magna a competitive advantage, however fleeting. The forced licensing of technology by the OEMs to prevent a sole supplier from holding a monopoly though frustrating for Magna, was a consequence of doing business with an OEM that might represent as much as 25% to 30% of corporate sales.

Magna had successfully developed a culture of innovation with a series of mechanisms including an innovation intermediary necessary to receive, evaluate and commercialize ideas that provided a competitive advantage within the core Magna product groups. It was selective in the protection of its intellectual property and its trade secrets. The potential loss of secrecy over trade secrets was controlled through contractual restrictions on the disclosure of the information during and after employment with the company.

As long as Magna could effectively control and protect its intellectual assets, it would find markets for its products all over the world and increasingly, in Southeast Asia.

Endnotes

¹ Dr. Charles M. Gastle is a principal at Bennett Gastle P.C., Barristers & Solicitors, has his Doctorate in International Trade and Competition law and is an Adjunct Professor at Osgoode Hall Law School. Heather Gastle is completing her Bachelor of Arts degree at the University of Toronto.

² www.magna.com (last visited January 31st, 2010).

³ This section is based on the "Our History" web page included at the Magna website: http://www.magna.com/magna/en/media/facts/history/default.aspx (last visited 24 January 2010).

4 Magna-Opel Deal dies, GM Shatters Stronach's auto-Dream,

http://www.canada.com/business/story.html?id=2182678 (last visited 24 January 2010).

⁵ http://www.magna.com/magna/en/about/customers/default.aspx (last visited 24 January 2010).

http://www.magna.com/xchg/SID-0A200004-3EF6D647/group_sub-sites/XSL/standard.xsl/-/content/1168_1172.html?rdeLocaleAttr=en (last visited 13 October 2010).

- ⁷ Affidavit of Kenneth Arrow, 17 January1995, U.S. v. Microsoft Corp., 56 F.3d 1338 (D.C. Cir., 1995), affidavit available on Department of Justice website re Microsoft complaint, at 4.
- ⁸ http://www.magna.com/magna/en/employee/foremployees/corporate/default.aspx (last visited 24 January 2010).
- ⁹ http://www.newswire.ca/en/releases/archive/October2008/23/c8768.html (last visited 24 January 2010).
- ¹⁰ http://www.magna.com/xchg/complete_vehicle/XSL/standared.xsl-/content/223_1078.html (last visited 24 January 2010).
- ¹¹ http://www.magna.com/xchg/complete_vehicle/XSL/standard.xsl/-/content/223_1123.htm (last visited 24 January 2010).
- ¹² These partners include but are not limited to, Austrian advanced automotive technology (tank systems for hydrogen and CNG, battery systems), Centers of competence, Acoustic competence Center (Graz, Austria), Frank Stronarch Institute, Leoben University of Mining, Graz University of Technology, Vienna, University of Technology, Dresden University, Graz University, Salzburg University, Joanneum University of Applied Sciences,

http://www.magna.com/xchg/complete_)vehicle/XSL/standrd.xsl/-/content/223_1123.thm (last visited 24 January 2010).

- ¹³ Interview with Magna employee, 22 January 2010.
- ¹⁴ Interview with Magna employee, 22 January 2010.
- ¹⁵ Search of Canadian Intellectual Property Office,

http://brevets-patents.ic.gc.ca/opic-cipo/cpd/eng/introduction.html (last visited 24 January 2010).

- ¹⁶ Magna International Inc., Annual Information Form, 27 March 2009, at 33 [web page required]
- ¹⁷ http://www.magna.com/xchg/complete_vehicle/XSL/standard.xsl/-/conteent/223_1092.htm (last visited 24 January 2010).
- ¹⁸ For example, Magna imposes such an obligation on any third party products it purchases and such provisions are standard in the industry. The standard purchase order provides with respect to intellectual property:

"17(a). Seller shall indemnify and hold Buyer, its subsidiaries and affiliates, their respective successors and assigns, the OEM Customer and users of products containing the Goods or the Services, harmless from and against all liabilities, demands, claims, losses, costs, damages and expenses of any nature or kind (including court costs and legal and other professional fees) arising from or as a result of the infringement or alleged infringement of any patent, trademark, copyright, industrial design or process of manufacture for or on account of the manufacture, sale or use of the Goods or the Services, or of the products containing the Goods or the Services. Seller expressly waives any claim against Buyer that any

such infringement or alleged infringement arises out of compliance with Buyer's specifications. Buyer shall notify Seller of any suit filed against Buyer, its subsidiaries an affiliates, their respective successors and assigns, the OEM Customer or users of products containing the goods or the Services, on account of any such infringement or alleged infringement and, at Seller's request, shall give Seller control of the defense of such suit, insofar as Buyer has the authority to do so, and reasonable information and assistance in connection therewith, all at Seller's expense. Buyer and other indemnified parties shall have the right to be represented by their own counsel and actively participate in any such suit, and the reasonable costs of such representation shall be paid by Seller on demand."

- ¹⁹ Interview with Magna employee, 22 January 2010.
- ²⁰ Paice describes the lawsuit on its website in the following terms:

"While Paice approached Toyota on a number of occasions to explore such an arrangement, Toyota declined to work with Paice. However, Toyota later developed hybrid vehicles that rely on Paice's technology to make them commercially viable. A 2005 jury in federal court found that Toyota had infringed Paice's '970 patent. The jury's decision was affirmed on appeal in 2007.

Toyota continues to introduce new hybrid vehicles that rely on the same technology that has already been found to infringe Paice's patents. However, Toyota has chosen not to pursue a licensing agreement with Paice regarding these vehicles. As a result, Paice filed a complaint with the International Trade Commission (ITC) asking that the infringing Toyota hybrid vehicles be banned from entering the U.S. Paice believes that companies like Toyota should not be able to take U.S. technology without authorization and not be held accountable. The research and work of Paice and companies like Paice depends on licensing revenue from those who use the fruits of that labor. If Toyota is allowed to freely take Paice's discoveries, Paice's groundbreaking research cannot continue. As the U.S. economy struggles to maintain progress and good jobs, Toyota cannot be allowed to destroy critical research engines like Paice. A trial in the ITC case has been scheduled in Washington D.C for the week of April 19, 2010."

http://www.paice.net/about-paice/paices-hybrid-vehicle-technology-a-tale-of-american-invention-patent-infringement, last visited 24 March 2010).

²¹ http://www.magna.com/xchg/SID-0A200004-12E73FF0/complete_vehicle/XSL/standard.htm (last visited 24 January 2010).