

Identifying and Managing Risks of New Technology Vehicles and Other Products

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Technology around the globe has been advancing at record-breaking speeds. The ideas and creativity of inventors knows no bounds and the media has been quick to report on the latest technological developments, sparking the public's imagination and driving consumer interest and demand for new technology products, especially vehicles.

Manufacturers, seeing this enormous demand, have focused their efforts and huge resources on developing these new technology products to reap the considerable rewards that can come to companies that create these wonderful and useful new products.

But together with great rewards go great risks that must be identified and managed. Failure to do so can lead to enormous losses and expense, diluting the value of the technology and canceling much of the potential profits to be made. Consequently, the risk management process requires the same attention and a comparable marshalling of resources to control losses, thereby preserving the profits generated by the new technologies being developed.

Below is an overview of some of the risks and issues related to developing and selling new technology vehicles and other products.

Regulatory Risks and Issues

While rushing to be the first to develop and release a new technology product can have a great benefit in terms of the product name recognition and market share that can come to a first technology supplier, there are also significant regulatory risks.

With fast-moving technology, it is not unusual that government regulators lag behind the technology developers when determining what regulations should apply to new technologies.

Manufacturers commit enormous resources for R&D to create new technology products on a leap of faith that the products they are developing will comply with regulations that often do not yet exist. There are also potential product standards issues that may come into play as different manufacturers may propose different technologies with only one of them prevailing as the industry standard – think about the Betamax vs. VHS video “format war.”

Careful manufacturers should take steps to work together with other industry players to agree on future industry standards and to educate themselves and regulators about the developing technology so that they can help guide the regulators to develop appropriate regulations that are technologically feasible and that protect the public without quashing the development and creativity of the technologies and products being developed.

Product Liability Risks and Issues

There are manifold product liability risks related to new technology products. Many new technology vehicles and other products may be utilizing technologies that are novel and have no long track record. This may result in some unanticipated failures based simply on the lack of experience with the technology. Furthermore, many new technology products such as autonomous vehicles bring an unprecedented blending of hardware, software, sensors and other components that must interconnect with other products and many uncontrollable elements in the environment where they will operate, creating numerous opportunities for product performance to be problematic, even in the absence of a defect.

New technology vehicles that are heavily software dependent in their operation face the additional risk of hackers being able to electronically take control of vehicle components from afar. Ironically, lawsuits have already been brought based on both the failure to prevent others from electronically hacking into products as well as based on the failure to allow products to be accessed and controlled electronically from afar.

Unfortunately for product manufacturers, plaintiffs' lawyers delight in new technology products because those products create new opportunities to bring product liability lawsuits. Unlike with legacy products and longstanding litigation against those products, manufacturers may not properly prepared to defend novel lawsuits against new technology products. Additionally, companies new to manufacturing vehicles, such as software, logistics and electronic sensor manufacturers, may have little or no experience defending product liability suits. They may be considered "easy pickings" by seasoned plaintiffs' product liability lawyers, leading to more lawsuits being filed in the plaintiffs' lawyers hopes of easy settlements.

With new technology vehicles and other products, it is important for manufacturers to prepare in advance for the inevitable litigation that will follow. Defense strategies and evidence should be considered in advance, along with likely fact witnesses, expert witnesses and defense counsel that will be needed. Where technology is being developed by partner companies from different industries, contracts should define responsibilities, indemnity, etc. in advance.

There are also novel issues of proof to consider and manufacturers should brace for new types of discovery. In the past, product liability claims generally focused on hardware and

mechanical problems that could be seen and/or measured, and those types of systems were often the main focus of discovery. With new technology vehicles, there are likely to be even greater “fishing expeditions” by plaintiffs’ counsel, focusing not only on hardware systems but also electronic systems, sensors and software. Product developers should anticipate computer software engineers to be part of the plaintiffs’ cadre of expert witnesses criticizing the product. New types of experts will be needed on the defense side and thought given to how to prove or disprove what caused an accident when the alleged failure was in the software system?

Consideration also must be given to global litigation because new technology vehicles and products will be sold all around the world and accidents will not be confined just to one country or region. Copy-cat cases in other countries are likely to follow successful litigation or settlements in the US or other major countries. Discovery provided in the US is also likely to migrate to other countries – particularly civil law system countries that do not provide for extensive discovery in their procedures. Manufacturers must be prepared to defend their products around the globe. A cost-efficient system and team should be developed to coordinate defense initiatives around the world, ensure consistency and avoid having to “re-invent the wheel” in every location.

Privacy Risks and Issues

New technology vehicles and other products today harvest and store vast amounts of data and personal information, biometric data, data on where vehicles have been and how used that could impact insurance and other matters, etc. That data and information can also be transferred across national boundaries and stored. How is that data going to be used? Who will have access to it? How long will it remain available?

The General Data Protection Regulation (GDPR), a personal information protection law that applies collectively to EU member states and has other extra-territorial effect is perhaps the most well-known and rigorous law regulating data protection. But the majority of countries and many local governments, including states in the US, also have exacting data protection laws that need to be considered. Violation of such laws can lead not only to investigations, but also to civil and criminal penalties. Moreover, civil litigation and class actions filed by opportunistic lawyers frequently follow government investigations and regulatory penalties.

Manufacturers of new technology vehicles will need to consider the applicable data privacy laws where their products will be sold and implement measures to comply with the laws. As such laws change periodically, it will be important to monitor the laws and address changes as they occur.

Ethics, ESG, Reputational and Competition Risks and Issues

There are also issues to be considered related to artificial intelligence decisions programmed into new technology vehicles. The dilemma of how an autonomous vehicle should maneuver when faced with two equally undesirable outcomes is one problem where the manufacturer faces a “no-win” situation as with either choice civil litigation is likely to ensue.

But such ethical decisions also may reflect on the reputation of a company. There can always be disagreement as to what is the right choice. Adverse publicity concerning technology choices made and the basis for such choices can lead to wide-ranging reputational damage. Planning for that and being able to articulate a rational basis for ethical decisions made will be important. While minds still may differ as to choices made, being able to demonstrate a rational basis for the choices may help to alleviate liability and reputational harm.

Manufacturers also must be aware of global initiatives surrounding Environment, Social and Governance (ESG). Governments, industries and society in many countries are paying much greater attention to corporate activities and the impact they have in these three areas. Manufacturers of new technology vehicles and other products should be aware of ESG initiatives around the globe and should consider how their new technologies and the products derived from the technology may impact the environment, society and a company’s governance.

There can be numerous ESG implications to ponder. For example, will the manufacturing of a new technology vehicle add to global pollution? Will its operation contribute to pollution of the environment? On the social side, will a manufacturer’s suppliers use child labor to mine raw materials needed to produce the vehicle? From a governance perspective, does a company’s public corporate disclosures accurately reflect how its business is being run and the risk assessment for the new technology products it is developing?

Not only may new technology manufacturers face potential civil and criminal liability from government regulators for a company’s activities that run afoul of ESG-related laws, but companies may face civil litigation as well from people claiming to be victims of the activities. For example, securities laws violation allegations may claim that a new technology vehicle manufacturer failed adequately to assess and advise shareholders of risks connected with its new technology product being developed. Such government action and litigation allegations also may negatively impact a company’s reputation.

Another related risk concerns competition and antitrust. A company or group that is first to develop a ground-breaking new technology has the potential ability to dominate the technology and the new market for that technology, excluding other smaller companies that are trying to enter the market. Regulators remain vigilant to market domination when new technologies are being developed and it is not unusual for regulatory investigations and inquiries to occur as such technologies are developing. Manufacturers developing new technologies should be cognizant of global competition laws and be careful to operate within

the confines of such laws and try to avoid activities that might reflect any anti-competitive intent or effect.

Intellectual Property and Trade Secrets Risks and Issues

Companies devote enormous resources to the development of new technology vehicles and other products because of the tremendous rewards that are expected from selling those new products. This new technology can be very valuable intellectual property which companies need to protect. Well-publicized litigation over alleged theft of trade secrets related to autonomous vehicles reflects the value of the IP and the demand for such information.

Because new technology vehicles are often being developed jointly by partner companies, some of whom are traditional vehicle manufacturers and others who are software and other developers with little or no prior vehicle experience, a number of different IP issues can arise.

For example, who will own the jointly developed technology in the new technology vehicle? Will it be shared? Who will own new derivative works that are later developed from the jointly developed technology? Is some of the IP, such as software or AI-derived technology even protectable through patenting? If licenses for the technology are to be issued as between the JV partners, how should it be priced? Software licensing business models may be far different from licensing business models used in other industries, such as with motor vehicles.

Questions also need to be decided concerning protection of the IP. Will it be protected with patents or will the technology be protected as trade secrets? If the latter, steps need to be taken to ensure that the technology is protected properly and in accordance with applicable legal requirements to enable enforcement actions to be successful if it is stolen. This generally requires proof that the technology is secret and that appropriate steps have been taken to maintain and protect its secrecy.

If the technology will be patented, who will be responsible for preparing and obtaining the patents? In which countries? Who will enforce the patents? These and other IP protection issues must be thought through as the new technologies are being developed.

Insurance Coverage Risks and Issues

No matter how careful a product manufacturer is and how carefully it identifies and manages risks, there will always be risks that cannot be controlled by a new technology product manufacturer. Moreover, it is inevitable that as the volume of products in use in the real world grows, the number of products that will be involved in some type of accident or failure will also grow, leading to litigation.

For those risks and exposures that cannot be controlled directly by a product developer and manufacturer, there needs to be appropriate insurance coverage in place.

New technology vehicle manufacturers should not assume that their existing insurance policies provide coverage for these new products. To avoid unhappy surprises later, manufacturers and developers must review carefully their existing insurance policies and confirm whether those policies will cover the new technology products being developed, or will they be subject to exclusions.

Just as a new technology vehicle manufacturer may have very limited real-world experience with its new products, its insurers likewise may have little or no loss history with those products from which to assess the risk and price their insurance policies. Therefore, not only may existing policies exclude new products that are being developed, but there may be no alternative insurance products yet available from a particular insurer to provide coverage for such new products.

Manufacturers may need to work with their existing insurers to satisfy them that the risk is acceptable, enabling the insurer to provide coverage under an existing policy, or under a newly created bespoke insurance contract that will provide the necessary coverage. Manufacturers also may shop for contracts with other insurance providers to obtain the coverage they need.

Even after obtaining the initial coverage, it behooves a new technology vehicle manufacturer to keep a close watch on the performance of its new technology products and the loss history to see if the cost of coverage can be reduced in the future. It is expected that new technology vehicles, such as autonomous vehicles, will reduce accidents and serious injuries over time, thereby lowering the indemnity and defense costs incurred by insurers related to some of these products. Manufacturers can try to use such favorable results to negotiate lower premiums for insurance coverage or save money by accepting more of the cost themselves through higher self-insured retention or other arrangements.

Conclusion

While manufacturers developing new technology vehicles and other products have every right to be optimistic about the rewards that will come from developing and selling new technology products, it is equally important to protect the profits that can be made by developing appropriate risk management practices to identify risks and manage them successfully to prevent losses that reduce those profits. Companies that do this will also have a competitive advantage over competitors that choose not to make that risk management investment upfront because in the long-run, the liability, defense and other costs are likely to far exceed the cost of proactively planning ahead and preventing such liability from ever occurring.