Tabrez Y. Ebrahim

Data-Centric Technologies: Copyright & Patent Doctrinal Disruptions

Data-centric technologies create information content that directly controls, modifies, or responds to the physical world. This information content resides in the digital world, yet has profound economic and societal impact in the industrial world. 3D printing and artificial intelligence are examples of data-centric technologies. 3D printing utilizes digital data for eventual printing of physical goods. Artificial intelligence learns from data sets to make predictions or automated decisions for future data used in engineering applications and in physical systems. 3D printing and artificial intelligence technologies depend on digital foundations, blur the digital and physical divide, and dramatically improve physical goods or systems in some way. Data-centric technologies have crossed national borders and rapidly attained adoption, even while copyright law and patent law have been slow to respond. 3D printing and artificial intelligence have created doctrinal disruptions and presented unclear scope of protection, legal standards, and legal relationships between actors in the industrial sector. Recent litigation over data-centric technologies have repercussions for creators and inventors for protection of data-centric innovations. Data-centric technologies' doctrinal disruptions necessitate reevaluation of copyright and patent doctrines and impact innovation policy considerations.

Tracy H. Pearl

COMPENSATION AT THE CROSSROADS

AUTONOMOUS VEHICLES & ALTERNATIVE VICTIM COMPENSATION SCHEMES

Fully autonomous vehicles will become available to consumers within the next five to seven years. Experts predict that these vehicles will be drastically safer than their human-driven counterparts and will save thousands of lives each year in the United States alone. However, crashes will still occur, and when they do, they will raise unique and troubling issues about liability and fault that both negligence and products liability jurisprudence are not yet well-suited to handle.

Whether the civil justice system can adjudicate autonomous vehicle crash cases fairly and efficiently impacts (a) whether manufacturers can afford to produce these vehicles or whether the cost and magnitude of litigation surrounding them will destroy their market, (b) whether consumers will adopt this new technology, and (c) the rate at which they will be willing and able to do so. These issues, in turn, have an impact on how many lives can be saved on U.S. roads each year. It is thus imperative to design a method of compensating victims, protecting manufacturers, promoting innovation, and giving courts time and space to develop jurisprudence applicable to this technology if we wish to reap the profound benefits that fully autonomous vehicles stand to offer.

While filing a lawsuit in the civil justice system will always be an option for victims of autonomous vehicle crashes, a specially designed, no-fault victim compensation fund offers a sensible way to address the issues identified above and to resolve these cases in a faster and less costly manner. While the use of victim compensation funds is a fairly recent phenomenon in the United States, these funds have been used with great success in a variety of situations and could be used successfully here.

In the model proposed in this paper, an autonomous vehicle crash victim compensation fund would be administered by the National Highway Traffic Safety Administration (NHTSA) and financed by a tax levied on the sale of all fully autonomous vehicles. Victims who wish to seek compensation from the fund would be able to do so via a simple claim form and an agreement to waive their right to sue. Manufacturers, in turn, would be required to participate in a data-sharing and design improvement program as a condition of receiving protection from the fund. This program would both assist NHTSA in gathering the information it needs to regulate autonomous vehicles and reduce the likelihood that a victim compensation fund would reduce manufacturer incentives to improve the safety of their vehicles. Participation by both victims and manufacturers would be voluntary, but the benefits of entering the fund would likely induce high levels of participation from both.

Timothy M. Ravich

COLLISION COURSE: OF DRONES AND DECISION-MAKERS

Unmanned aerial vehicles—"UAVs" or "drones"—are increasingly becoming a mainstream commercial phenomenon and tool for a vast range of commercial consumer, prosumer, and professional activities. Given advances in automation and miniaturization generally, and flight control stability and autopilot systems specifically, anybody can now fly in any airspace, anywhere, at any time by operationalizing hand-held fixed-wing aircraft or quadcopters out-of-the-box with little more than an ordinary smartphone or tablet. As such, sales of store-bought drones number in the millions, corresponding to the number of civil applications and value propositions UAVs offer. Though civil drones are an attractive business investment, substantial regulatory headwinds confront the drone industry as startups try to get to market and scale quickly. This is so notwithstanding—or perhaps because of—the celebrated abilities of most small UAVs to fly boundlessly and to collect and record information from nearly any vantage point. Drones are a classically disruptive technology of social, economic, and legal norms. Their operations raise novel and valid concerns in many of these areas, particularly in terms of safety and privacy. Consequently, regulators have responded—and they should. But, federal, state, and local lawmakers alike have responded with policy interventions that too often are premature (or untimely) and overly rigid, discouraging the many beneficial uses of UAV technology. In fact, on the basis of ephemeral fears rather than data, regulators initially put in place overbroad, permission-based restraints that were tantamount to a de facto ban on all drone operations. This presentation evaluates the underlying thinking and approach federal regulators have taken with respect to civil drones and argues that commercial UAVs should be a "permissionless innovation." This presentation posits that a better alternative to a top down, ex ante regulatory scheme is to broadly allow commercial UAVs and to deal with careless or reckless or nefarious operators and operations on a case-by-case, ex post basis. In doing so, this presentation aims to present some lessons learned in the specific context of commercial UAVs so that inefficiencies and paternalistic rulemaking is avoided in the arena of other innovations associated with the Internet of Things ("IoT"), including urban air mobility and electric vertical-takeoff-and-landing ("VTOL") technologies—flying cars—that are just around the corner.