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COVER STORY

## Rise of robots brings questions of liability



David Ruiz / Daily Journal

Sheppard, Mullin, Richter & Hampton LLP partner Brian D. Anderson stands at the San Francisco headquarters of Bot & Dolly, developer of the IRIS robotics systems shown behind him.

By David Ruiz / Daily Journal Staff Writer

In filming the sci-fi drama “Gravity,” about astronauts stranded in space, director Alfonso Cuarón and his team needed long, uninterrupted shots of stars George Clooney and Sandra Bullock that would allow him to fully simulate the effects of weightlessness. To do that, he enlisted the help of IRIS — a robotics and camera effects system that includes a 3,200-pound, 12-foot robotic arm and a 10,000-pound dolly.

Designed by San Francisco-based Bot & Dolly, IRIS needed proper handling, transportation and licensing before it could be trusted in the hands of a film crew. To take on those challenges, the company turned to Sheppard, Mullin, Richter & Hampton LLP partner Brian D. Anderson.

“The ‘Gravity’ deal represents a real opportunity in robotics, as there’s the perceived liability on one hand and then the amazing benefits on the other,” said Anderson, who also advises a number of other robot makers. The rise of robotics parallels the revolution in personal technology, Anderson added, in that users make certain concessions in exchange for a particular gain. In the realm of personal technology, people are willing to give up some of their privacy for better service, he said, for example by trading their location information for personalized directions on a mobile application.

In the world of robotics, on the other hand, the concessions aren’t so much about data security as they are about the risk of bodily harm, lawyers said.

“What if a drone crashes on someone’s head?” asked Los Altos-based Kooke Kubrick & Wu LLP partner Stephen S. Wu. “Physical harm could occur. There could be large bodily injury.”

The emergence of increasingly intelligent and independent machines can be seen in universities and corporate laboratories around the world. Google Inc.’s driverless cars have logged more than 500,000 miles on the road, while Amazon.com Inc. last month revealed a prototype of a flying drone that could deliver small packages. Doctors have utilized robotics in assisted surgery for more than a decade, and a number of companies are making advancements in tiny

nanorobots to aid drug delivery and early diagnosis.

Few California attorneys currently can claim to have a full-time robotics practice, but many posit that expertise in robot-specific liability issues could grow in value in coming years, similar to the recent spike in demand for privacy and cybersecurity legal specialists.

For Anderson, whose clients include KUKA Robotics Corp., Beat-Bots LLC, Dirty Robot Brew Works and others in industries spanning automotive, alcohol, and media and entertainment, the practice could grow into one centered on determining accountability for mistakes and errors. “You can’t throw a robot in jail,” he quipped.

New laws and regulations will likely emerge as the field lifts off. For one, the U.S. Federal Aviation Administration will likely be responsible for setting regulations around Amazon’s proposed drones, Anderson said. “People will also have to start asking themselves, ‘Will you be comfortable with drones flying in the air or with interacting alongside an autonomous agent at the store?’”

A. Michael Froomkin, a University of Miami School of Law professor, cautioned that treating robotics as its own specialty practice would be a mistake.

“It’s very similar to the ‘Law of the Horse,’” he said.

An idea first introduced by U.S. District Judge Frank H. Easterbrook in 1996, the “Law of the Horse” argued that still nascent cyberlaw shouldn’t be taught as a unique area of law. Rather, it should be defined by general rules and how they apply to technology.

“Lots of cases deal with sales of horses; others deal with people kicked by horses; still more deal with the licensing and racing of horses, or with the care veterinarians give to horses, or with prizes at horse shows,” Easterbrook said in a speech at the time. “Any effort to collect these strands into a course on ‘The Law of the Horse’ is doomed to be shallow and to miss unifying principles.”

Froomkin said he expects robotics law to develop in much the same way.

“The practice would be too complicated,” Froomkin said. “It would interact with so many other complex legal systems that no one could master them all.”

Wu, who has an emerging companies and intellectual property litigation practice, said that much of the work he does for robotics companies involves negotiating and understanding liability risks. He advises his companies to put safety first and show documentation of it in case of future litigation.

“I tell them, ‘Create the case today that you care about safety,’” Wu said. “Then you can have the kind of dialogue with a juror 20 years from now that shows you’ve done more than adhere to international standards.”

Anderson said he enjoys the gray areas of liability, where questions are being solved for the first time.

“If a self-driving car is driving toward people, and its operator hits the kill switch too late, who is responsible for the harm?” Anderson asked. “Is it the manufacturer or the human who tried to override the system? What about the owner? Who is ultimately responsible, and who do we want to be responsible?”

Part of that responsibility is being covered by insurers for the first time, said Digital Risk Resources co-founder David K. Beyer, who works with insurance companies to provide cybersecurity coverage to clients.

In January, Des Moines, Iowa-based Nationwide Agribusiness Insurance Co. announced that it would begin providing insurance in using drones for agriculture. Beyer said it is the first U.S. company he has seen do so, and that the risks are many.

“Right now, if there are businesses using these products, there is a lot of risk in the potential of personal injury and privacy invasion,” Beyer said. He said the lack of concrete laws can obfuscate how to move forward on the legal issues.

For drones and robotics use, the United States still hasn’t drawn clear lines on what constitutes breaking the law.

“Keeping up with the changing pace and evolving risk of technology is like trying to nail a jellyfish to a wall.”