

Legal Liability Involving Manufactures and Programmers of Robotic Devices

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Abstract

The robot, like the computers that we are all familiar with, is a combination of software and hardware. The body of law with respect to the liability of computer programmers is well established. The legal principles involving negligence, breach of express and implied warranties, and strict liability with respect to products including computer hardware have been likewise thoroughly vetted in the American legal system.

Article 2 of the Uniform Commercial Code applies to contracts for the sale of goods (i.e. movable, tangible, personal property). Contractual issues surrounding matters of services are within the province of the common law of contracts, not the UCC. Courts have had some difficulty determining whether the common law or the UCC applies to certain contracts. For example, is a computer a product (hardware) or a service (software programming)? The courts have mostly resolved the conflict by deciding which one predominates; that is to say, is the software merely incidental to the sale of the hardware (CPU and peripherals) and thus a contract involving the sale of goods to which the UCC would apply, or is the hardware merely incidental to the purchase of software, a service furnished by the programmer and thus governed by the common law of contracts?

The manufacturer of the robot will create the hardware on which the software will reside to program the robot. The hardware will consist of the frame or body of the robot, a Central Processing Unit (CPU), some type of hard drive (most likely a solid state drive (SSD) or other storage unit upon which the program will reside (the robotic mind), various electronics capable of directing the mechanical function of the robot (movement), speech recognition (the robotic ears) and optical recognition (the robotic eyes). One or more of the above parts could fail, and depending on the skill and the vision of the programmer to anticipate changed or changing circumstances in the robot's environment, may result in injury to and even death of the humans or pets or even property with which the robot interacts.

It is not at all unthinkable that in the very near future robots will live with us, converse with us and become a part of our families. Robots will cook for us, clean for us and greet our guests at the door, care for us, our pets and even our elderly parents and relatives. What will happen when they go bad? Will they embroil us in litigation because of misbehavior? Perhaps more frightening: as they become more sophisticated in their decision making ability -- will they turn against us?