

Northwestern Accuses Mitsubishi Of Infringing 'Cobot' Tech

By **Melissa Angell**

Law360 (February 3, 2021, 6:13 PM EST) -- Northwestern University has filed suit against Mitsubishi Electric Corp. and its subsidiary, accusing the manufacturer of infringing three patents related to collaborative robots and their configuration systems when it sold similar "cobot" systems.

The university claims that Mitsubishi's collaborative robot systems use Northwestern's patented systems, configuration systems and multifunction hubs by integrating similar designs into its own technology, which it purportedly is selling and importing into the United States.

Northwestern researchers Dr. Michael A. Peshkin and Dr. J. Edward Colgate are the inventors of collaborative robots, according to the complaint filed on Tuesday. The robots, known as cobots, are programmable robotic assist devices meant to work alongside humans in a shared workspace.

Cobots can be used anywhere from the automotive space to the aerospace sector, where the robot can perform a repetitive task once they are trained to do so. The word "cobot" did not exist prior to Peshkin and Colgate's invention, the complaint says.

Applications covering the first-generation cobots were filed in 1996 and 1997, according to the complaint.

Peshkin and Colgate continued their research and began working with others on a second generation of cobots. This second cohort of assist devices are outfitted with sensors, controls and motor technology that expand the cobot's range of function.

Specifically, the new devices contain programmable components that can be coordinated through "digital communication links", allowing the cobots to adapt to different applications and perform a wider array of tasks.

In Tuesday's complaint, the Illinois-based research university accuses Mitsubishi of creating and selling cobot systems that knowingly infringe on the university's patented technology.

"The Mitsubishi defendants are involved in the sale and/or importation of cobot systems into the United States, including but not limited to the systems and architecture for providing modular intelligent assist systems and hubs for modular intelligent assist systems," the complaint says.

The patents-at-issue focus on the cobot's physical system, the configuration system that controls the

cobot and the multifunction hub, which allows human operators to interact with the cobots and program them.

Some of the accused products the university points to are Mitsubishi's Assista cobots, which are geared toward enabling humans and robots to work alongside each other and "highlight the flexibility and ease of use of the robots." Northwestern also took issue with Mitsubishi's "MELFA FR" robots series and argued that the accused products are believed to include various sensors and communication links that infringe Northwestern's patented technology.

Mitsubishi's cobots allegedly have "a modular architecture" that include at least one robot arm, a controller and a human machine interface.

"The Mitsubishi defendants' affirmative acts of making, selling, and offering to sell its services and/or products, or components thereof, cause the Mitsubishi defendants' accused products to be used in a manner that infringes the patent[s]," the complaint says.

Northwestern urged U.S. District Judge Manish Shah to rule that Mitsubishi is infringing each patent and award Northwestern damages to compensate the university in an amount that is "no less than a reasonable royalty."

Rebecca Horwitz, an attorney representing Northwestern, told Law360 on Wednesday that the university filed suit because the robotics manufacturers "are practicing the University's patented technology — invented by pioneers in the field — without licensing the right to do so."

The patents in-suit are U.S. Patent Nos. 6,928,336; 6,907,317 and 7,120,508.

Counsel and representatives for Mitsubishi did not immediately respond to requests for comment.

Northwestern University is represented by Rebecca Horwitz, Meg Fasulo and Nevin Gewertz of Bartlit Beck Herman Palenchar & Scott LLP.

Counsel for Mitsubishi could not be determined on Wednesday.

The case is Northwestern University v. Mitsubishi Electric Corp. et al., case number 1:21-cv-00607, in the U.S. District Court for the Northern District of Illinois.

--Editing by Nicole Bleier.