

University Of California Gets 5th CRISPR Patent

By **Dani Kass**

Law360 (May 29, 2019, 7:02 PM EDT) -- The U.S. Patent and Trademark Office has issued a fifth patent to the University of California and its partners covering the breakthrough gene-editing system CRISPR-Cas9.

U.S. Patent No. 10,301,651 covers a "toolset for controlling gene expression" where researchers can "tune" genes up or down, UC said Tuesday. The USPTO granted it to UC, the University of Vienna and French scientist Emmanuelle Charpentier.

"Today's patent further builds on the numerous CRISPR-Cas9 techniques covered by UC's patents and the university is committed to ensuring the technology is used to benefit society," Eldora L. Ellison of Sterne Kessler Goldstein & Fox PLLC, who handles CRISPR patent work for UC, said in a statement Tuesday. "We anticipate that UC's robust portfolio of intellectual property surrounding its CRISPR-Cas9 inventions will continue to expand."

UC said it also expects the patent office to grant it an additional five patents on CRISPR technology in the coming months.

CRISPR, which stands for clustered regularly interspaced short palindromic repeats, has been called a major breakthrough in gene editing that is much faster, simpler, cheaper and more efficient than previous technologies. CRISPR systems occur naturally in prokaryotic cells such as bacteria, but not in eukaryotic cells such as plants and animals.

UC and the Broad Institute — a research institute associated with Harvard University and the Massachusetts Institute of Technology — have been fighting over who owns the technology, leading to a key Federal Circuit decision in September that, despite UC's protests, the Broad Institute is entitled to same patents.

The appeals court was affirming a 2017 Patent Trial and Appeal Board ruling, finding that UC and the Broad Institute each applied for distinct patents on the technology. UC's claimed invention therefore does not render Broad's patents obvious, and the university is not entitled to be issued the patents that went to Broad, the Federal Circuit said.

The technology was first disclosed by a team that included Charpentier and UC's Jennifer Doudna, in a provisional patent application in May 2012 that described how it can be used in any environment,

according to court filings. The team then published an article about the technology in the journal Science the following month.

In December 2012, the Broad Institute, along with Harvard and MIT, applied for patents on using CRISPR in eukaryotic cells. The Broad team, led by MIT's Feng Zhang, was issued patents after seeking them on an expedited basis.

UC is represented by Eldora L. Ellison, Eric Steffe and Jorge Goldstein of Sterne Kessler Goldstein & Fox PLLC, and Carol Francis and Kyle Gurley of Bozicevic Field & Francis LLP.

--Additional reporting by Ryan Davis. Editing by Stephen Berg.