

Science Entrepreneurs: Creating Jobs... Building a Better America

Hiroyuki Fujita

President and CEO

Founder: *Quality Electrodynamics*



Fujita (shown 5th from left) is pictured with his family and President Obama and the First Lady.

- BA, Physics and Mathematics, *Monmouth College*
- Ph.D., Physics, *Case Western Reserve University*
- Founder: *Quality Electrodynamics*
- 2010 Ernst & Young Entrepreneur of the Year

Prof. Robert Brown

Case Western Reserve
Incubated QED with Dr. Fujita



- BS, Physics, *University of Minnesota*
- Ph.D., Physics, *MIT*
- Professor, *Case Western Reserve University*

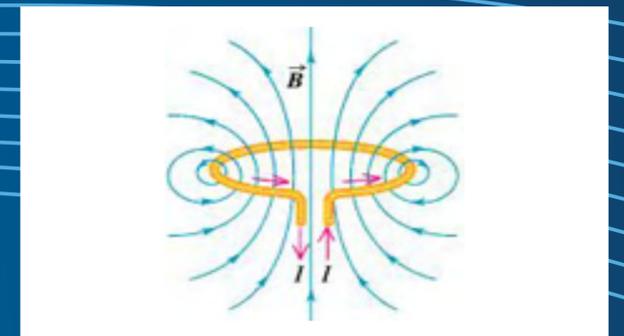
Quality Electrodynamics (QED) was founded in 2006 by Hiroyuki Fujita and his mentor, Bob Brown. Based in Mayfield Village, Ohio, the company has 75 employees and is rapidly growing. QED designs and makes advanced radiofrequency (RF) coils for transmission, reception and detection of signals, as well as RF electronics for MRI machines. Physicists at QED have gone beyond traditional electrical engineering by producing magnetic resonance imaging at very high magnetic fields and high frequencies, resulting in clearer images. QED has won many awards for technology innovation, including being named to Inc's. 500 list. Forbes named QED 11th in the Top 20 list of the magazine's most promising companies in 2009. The company has a revenue of \$12 million.

"I want to live my life based upon the belief in doing the right thing as a human being. My dream is that our efforts at QED will have a positive impact on society to help other people..."

Physicists at QED have gone beyond traditional electrical engineering to allow magnetic resonance imaging at very high magnetic fields and high frequencies, which produces clearer images due to an increase in signal-to-noise. Care has to be taken to avoid tissue heating and thus to ensure patient safety.



QED factory floor



Magnetic field surrounding a current-carrying loop of wire



QED coil for detecting the RF magnetic field inside an MRI machine

(Photo: Courtesy of Siemens AG)