

**MITSUBISHI ELECTRIC CORPORATION**  
**PUBLIC RELATIONS DIVISION**  
 7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo, 100-8310 Japan

**FOR IMMEDIATE RELEASE**

**No. 2904**

*Media Inquiries*

Public Relations Division  
 Mitsubishi Electric Corporation  
[prd.gnews@nk.MitsubishiElectric.co.jp](mailto:prd.gnews@nk.MitsubishiElectric.co.jp)  
<http://www.MitsubishiElectric.com/news/>

## Mitsubishi Electric Corporation Unveils Seven New Technologies at Annual R&D Open House

**TOKYO, February 17, 2015** - [Mitsubishi Electric Corporation](http://www.MitsubishiElectric.com) (TOKYO: 6503) announced seven new technologies, outlined below, at its annual Research and Development Open House held today at its headquarters in Tokyo, Japan.

**No. 2905**

### Mitsubishi Electric Develops DC Arc-fault Circuit Protection Technology for Solar Power Plants

*Minimizes power-generation drops by quickly detecting arc faults and isolating faulty circuit*

The company announced today that it has developed a direct-current (DC) arc-fault circuit protection technology for solar power plants that detects any DC arc fault, or high-temperature luminous electrical discharge between DC wiring, and isolates the faulty circuit in just 0.25 second. The technology enables plants both to prevent large decreases in power generation and quickly restore faulty circuits.



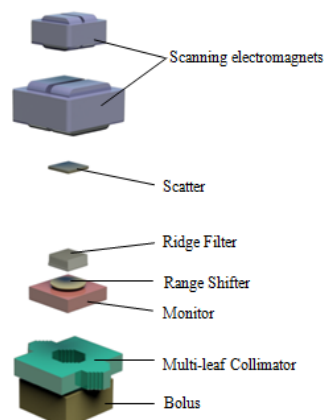
Full release text: <http://www.MitsubishiElectric.com/news/2015/0217-a.html>

**No. 2906**

### Mitsubishi Electric Develops Multi-function Irradiation Nozzle for Proton-type Particle Therapy Systems

*Single nozzle for three types of beam irradiation lightens burden on patients*

The company has developed an advanced multi-function irradiation nozzle for particle therapy systems for cancer treatment that enables quickly switching between broad-beam, layer-stacking, and scanning particle beams.



The innovative nozzle achieves flexibly varied treatment matched to tumor's individual location and shape to be performed in one treatment room, thereby lightening the burden on patients.

Full release text: <http://www.MitsubishiElectric.com/news/2015/0217-b.html>

**No. 2907**

**Mitsubishi Electric Develops Cutting Tool Position-control Method for Machine Tools**

*Facilitates high-speed, high-accuracy machining of complex geometries*

The company announced today that it has developed an advanced numerical-control method for compensating tool position error in predicted target tool paths. In five-axis machining tests, Mitsubishi Electric verified that the new method reduces machining time by 10.4% for improved productivity in machining complex geometries.



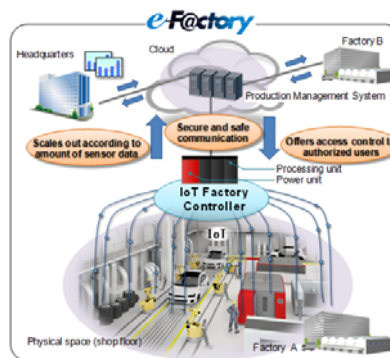
Full release text: <http://www.MitsubishiElectric.com/news/2015/0217-c.html>

**No. 2908**

**Mitsubishi Electric Develops IoT Factory Controller for Future Factories**

*Collects factory data using IoT technology and collaborates with cloud*

The company announced today its Internet of Things (IoT) Factory Controller to connect e-F@ctory, the company's factory automation (FA) solution, with the cloud for the emerging IoT ecosystem. IoT Factory Controller is now being verified in test operation, with commercialization targeted at April 2016.



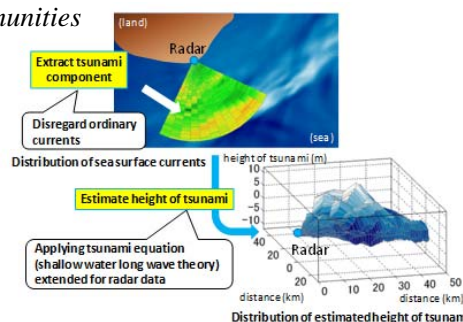
Full release text: <http://www.MitsubishiElectric.com/news/2015/0217-d.html>

**No. 2909**

**Mitsubishi Electric's New Technologies Enhance Tsunami Radar Monitoring**

*Earlier detection allows more time for evacuation of coastal communities*

The company announced today that it has developed new technologies to improve the visibility and height estimation of tsunamis by using unprecedented procedures for extracting



tsunami information from conventional radar observations of sea surfaces. The technologies, which Mitsubishi Electric will make available during the fiscal year starting in April, are expected to help observers detect tsunamis earlier and give evacuees more time to implement emergency countermeasures.

Full release text: <http://www.MitsubishiElectric.com/news/2015/0217-e.html>

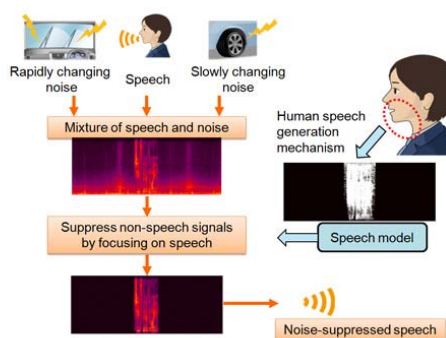
---

**No. 2910**

**Mitsubishi Electric Develops Noise-suppression Technology for Hands-free Voice Calls via Car Navigation Systems**

*Improves clarity in speech communication by drastically suppressing surrounding noises*

The company has developed breakthrough noise-suppression technology that significantly improves the quality of hands-free voice communication in noisy conditions, such as making a voice call via a car navigation system. The technology improves voice clarity by removing 96% of ambient sound, including rapidly changing noise from turn signals or wipers, which are difficult to suppress using conventional methods.



Full release text: <http://www.MitsubishiElectric.com/news/2015/0217-f.html>

---

**No. 2911**

**Mitsubishi Electric Proposes New Design Concept for Enhanced Living by the Needy in Developing Countries**

*Presenting new project led by young designers*

The company is pleased to present a group of conceptual product prototypes created by four young designers as part of the Small World Project, a design initiative aimed at improving the lives of people in the lowest income groups (“Base of the Pyramid” or “BoP”) of developing countries.



Full release text: <http://www.MitsubishiElectric.com/news/2015/0217-g.html>

---

###

### **About Mitsubishi Electric Corporation**

With over 90 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Embracing the spirit of its corporate statement, Changes for the Better, and its environmental statement, Eco Changes, Mitsubishi Electric endeavors to be a global, leading green company, enriching society with technology. The company recorded consolidated group sales of 4,054.3 billion yen (US\$ 39.3 billion\*) in the fiscal year ended March 31, 2014. For more information visit <http://www.MitsubishiElectric.com>

\*At an exchange rate of 103 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2014