

Murata Manufacturing and Epson Agree on Joint Development of “Wireless Quick Battery Charger System”

[Summary]

Murata Manufacturing Co., Ltd. (“Murata Manufacturing”) and Seiko Epson Corporation (“Epson”) have agreed to jointly develop a “wireless quick battery charger” capable of a substantially shorter charging time.

Prototypes of this product are scheduled to be exhibited at Murata Manufacturing’s booth at CEATAC JAPAN 2007 (on October 2nd to 6th at Makuhari Messe) and at Epson’s booth at Embedded Technology 2007 (from November 14th to 16th at Pacifico Yokohama).

[Background and Purpose]

Mobile devices, such as mobile phones, portable audio players, and notebook PCs have become extensively widespread and their growing sophistication has caused them to consume greater quantities of electric power. As a result, developing ways to increase the length of time such devices can be operated after each charging has become a critical issue. Moreover, it is anticipated that the frequency with which charging must be done will increase in the future.

The thin, compact “wireless quick battery charger system” being jointly developed by Murata Manufacturing and Epson will be a revolutionary product that will shorten the charging time from the one to two hours required by currently existing charging systems down to approximately ten to fifteen minutes. Furthermore, a wireless charger makes it possible for devices that would ordinarily require their own dedicated charging units to share a single charging unit. In the future, when batteries will need to be charged more frequently, this system has the potential to greatly improve the ease and convenience of charging batteries.

Murata Manufacturing has a wealth of experience with compact, thin modules, and with power supply circuits. In addition, it has been working on developing a lithium-ion secondary battery, which it is pursuing as a new business. A lithium-ion secondary battery is capable of the quick charging of a large amount of electrical energy.

Epson has long been engaged in developing a non-contact, high-efficiency

power transmission system and possesses certification system and IC technologies. The two companies have agreed to carry out joint development, with the goal of producing a commercially viable product within three years.

- [Division of Development Responsibilities]**
- (1) Murata Manufacturing
 - 1) Development of quick charge battery
 - 2) Development of secondary (battery) module
 - 3) Applied ceramic technology
 - 4) Electromagnetic field and thermal simulation technologies
 - (2) Epson
 - 1) Development of IC for wireless quick battery charger system
 - 2) Provide device for high-efficiency power transmission coils and systems
 - 3) Development and support of systems
 - 4) Development of primary (charger) module

[Company Profile]

- Company name : Murata Manufacturing Co., Ltd.
Incorporated : 1950 (founded in 1944)
Head office : 10-1, Higashikotari 1-chome, Nagaokakyo-shi, Kyoto
Capital : 69,376 million yen
Number of Employees : 5,832 (consolidated basis: 29,392)
Fields of business : manufacturing and sales of monolithic ceramic chip capacitors, ceramic filters, ceramic resonators, surface acoustic wave filters, multilayer ceramic devices, dielectric filters, isolators, circuit modules, various power suppliers, EMI suppression filters, sensors, coils, thermistors, trimmer potentiometers, resistor networks, high voltage resistors, etc.
Sales : 566,805 million yen
Subsidiaries : 56 (23 in Japan and 33 overseas)

- Company name : SEIKO EPSON CORPORATION
Established : May 18, 1942
Head office : 3-3-5, Owa, Suwa-shi, Nagano

Capital : 53,204 million yen

Number of : 13,039 (consolidated basis: 87,626)

Employees

Fields of business : development, manufacturing, sales, marketing and servicing of information-related equipment (computers and peripherals, including PCs, printers, scanners and projectors), electronic devices (semiconductors, displays, and quartz devices), precision products (watches, plastic corrective lenses, and factory automation equipment) and other products

Sales : 1,416,000 million yen on a consolidated basis; 837,100 million yen on a non-consolidated basis (as of March 2007)

Subsidiaries : 117 (33 in Japan and 84 overseas) (as of March 31, 2007)