

News Release

March 14, 2023

Sojitz Corporation
DAIHEN Corporation
Dai Nippon Printing Co., Ltd.

Sojitz, DAIHEN, and Dai Nippon Printing First in Japan to Obtain Vehicle Registration for Commercial EV with Wireless-Charging Functions and Begin On-The-Road Performance Tests

Sojitz Corporation (“Sojitz”), DAIHEN Corporation (“DAIHEN”), and Dai Nippon Printing Co., Ltd. (“DNP”) have concluded a business alliance to realize practical application of commercial electric vehicles (EVs) equipped with wireless charging functions. This commercial EV has become the first of its kind in Japan to obtain vehicle registration from the Light Motor Vehicle Inspection Organization. On-the-road tests have begun as part of system performance verification.

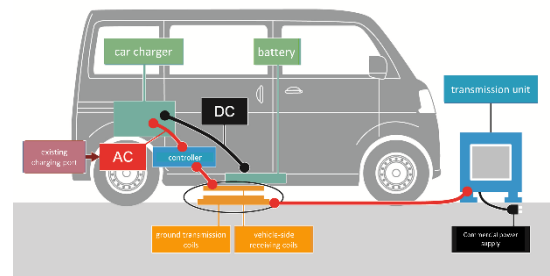
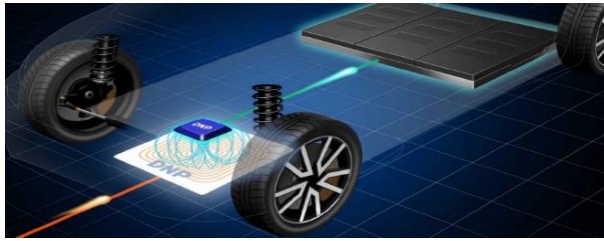
[Background & Overview of the Business Tie-up]

In recent years, as the global movement towards zero greenhouse gas emissions to prevent global warming has become more active, wireless charging technologies are attracting attention as means to accelerate the shift from existing gasoline vehicles to EVs.

Sojitz is engaged in EV-related businesses and peripheral equipment as part of its green EV infrastructure business that utilizes renewable energy-based electricity for charging. Sojitz has partnered with DAIHEN, a developer of Wireless-Charging systems, and DNP, which has developed a thin, lightweight*¹ sheet coil for wireless charging that reduces magnetic field leakage.*² All three companies have succeeded in the systemization and development of equipment including vehicle-side receiving coils (“VA side”) and ground transmission coils (“GA side”) that utilize DNP’s sheet coils. In order to conduct verification tests of wireless charging for vehicles using this system, Sojitz provided a commercial EV for the three companies to work on for joint development of a prototype vehicle.*³ The conversion and model tests were completed last November for the developed commercial EV equipped with wireless charging functions.

Following safety inspections,*⁴ the commercial EV developed by Sojitz, DAIHEN, and DNP acquired registration as a converted vehicle from the Light Motor Vehicle Inspection Organization, and test drives on public roads have begun.

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Wireless charging EV (left) System overview*⁵ (right)

URL(Movie):

[https://urldefense.com/v3/_https://youtu.be/AjEZssXfn1U_!!BKtBCdlgRQ!eWOKUMSfhS2rZZNZLKFEmSOxVZ6si-4TV1brHuvfsMwVW-6TqMWGJGVAPsygGCRZOtVY-Zuko2YIyh8BSg0\\$](https://urldefense.com/v3/_https://youtu.be/AjEZssXfn1U_!!BKtBCdlgRQ!eWOKUMSfhS2rZZNZLKFEmSOxVZ6si-4TV1brHuvfsMwVW-6TqMWGJGVAPsygGCRZOtVY-Zuko2YIyh8BSg0$)

[Value and Future Expansion of the Business Tie-up]

Wireless charging does not require a cable to connect the charger and car body, and this technology is therefore expected to reduce the charging burden and increase convenience. As companies strive to realize a decarbonized society and EV usage increases, wireless charging is anticipated to mitigate trouble caused by charging cables and related maintenance fees, as well as reduce space required for charging vehicles. Additionally, wireless charging has the best combination with automatic parking technology and allows drivers to be freed from the burdens of manual charging. Fully automated charging will become possible,*⁶ and there is high demand anticipated for widespread access.

Through this business alliance, Sojitz, DAIHEN, and DNP will promote practical implementation of a variety of wireless charging EV models in order to contribute to the realization of a decarbonized society.

*1: A thin, lightweight sheet coil approximately one-fourth of the weight and thickness of previous technologies.

*2: Magnetic field leakage: Magnetized space occurring outside the coil

*3: Prototype vehicles were developed in cooperation with Sojitz's subsidiary, Sojitz Pla-Net Corporation.

*4: Safety inspections: One-month of tests on private property including charging tests, weather resistance tests, and basic charging performance tests.

*5: Existing vehicle-side equipment (green), new equipment installed includes DNP coils (orange) and DAIHEN wireless charging equipment (blue)

*6: Commercial EV drivers spend over 20 to 120 hours a year charging their vehicles. Wireless charging is expected to be a new technology that can significantly reduce charging times.

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[Company Overview – Sojitz Corporation]

Representative Director	Masayoshi Fujimoto Representative Director, President & CEO
Head Office	1-1, Uchisaiwaicho 2-chome, Chiyoda-ku, Tokyo
Main Business	Sojitz Group is engaged in a wide range of businesses globally, including manufacturing, selling, importing, and exporting a variety of products, in addition to providing services and investing in diversified businesses, both in Japan and overseas.
Established	April 1, 2003

[Company Overview – DAIHEN Corporation]

Representative Director	Shoichiro Minomo Representative Director, President
Head Office	2-1-11 Tagawa, Yodogawa-ku, Osaka
Main Business	Manufacture, sale, and repair of power products, welding equipment, industrial robots, RF power supply for semiconductor manufacturing equipment.
Established	December 1, 1919

[Company Overview – Dai Nippon Printing Co., Ltd.]

Representative Director	Yoshinari Kitajima Representative Director, President
Head Office	1-1-1, Ichigaya-Kagacho, Shinjuku-ku, Tokyo
Main Business	Information Communication; Lifestyle and Industrial Supplies; Electronics (including printing businesses)
Established	January 19, 1894

*Information announced in this news release is as of March 14, 2023. Please understand that information may be updated.

*Company and product names listed are trademarked or registered trademarks of each company.

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