

FOR IMMEDIATE RELEASE

Nidec Corporation

Tokyo Stock Exchange code: 6594

Contact:

Masahiro Nagayasu General Manager Investor Relations +81-75-935-6140 ir@nidec.com

Released on June 9, 2023, in Kyoto, Japan

Nidec Develops New Electric Power Steering Motor Power Pack

Nidec Corporation (TSE: 6594; OTC US: NJDCY) ("Nidec" or the "Company") today announced that it has successfully developed a new electric power steering motor power pack*1 ("EPS-PP").



Nidec's New Column-Type EPS-PP

Since the 1990's, Nidec has been developing and manufacturing EPS motors, which are embraced by auto manufacturers around the world today.

There are two types of EPS: the "column type," which is chiefly installed in compact vehicles; and the "rack type," a product widely used for luxury models. Recent years have witnessed column-type EPS units required to possess smooth steering capability equal to that of rack-type units, while further price reduction is being demanded by the market. In addition, as the use of ADAS*2 functions spreads, voices are growing for less friction and torque ripple*3 within the entire steering system to ensure a smooth execution of the lane keeping assist system and other ADAS functions.

Conventionally, to improve steering capability, design-phase-level improvements, such as reducing friction and torque variation in the motor and the EPS mechanism, have been conducted. Compared with these costly methods, Nidec's newly developed EPS-PP detects and corrects the motor's and the EPS unit's friction and torque ripple as they are generated, to successfully solve the lingering issue of artificial steering feeling. This achievement has enabled Nidec to spend less money on addressing the aforementioned friction and torque ripple issues, and to reduce cost while maintaining the power pack's performance. This new product has also made it possible for the Company to spend less on motor materials by, for example, replacing electromagnetic steel sheets, which have been used to lower friction-causing loss torque, with low-grade materials.

With these above features, Nidec's latest EPS-PP is attracting attention from many EPS manufacturers, and the Company is already receiving inquiries from a number of its customers.

- *1. Power pack: A general term for products that combine a motor and an electronic control unit (ECU).
- *2. ADAS (Advanced Driver-Assistance Systems): A general term for functions to support, for example, enabling an entire vehicle to understand information on its surroundings to display a message or issue a warning to its driver, or controlling the vehicle in his/her stead, to ensure safety and comfort for the driver.
- *3. Torque ripple: The amount of variation in torque that a motor outputs while rotating. Torque ripple causes a motor to generate noise and vibration.

For more details on the above product, please contact Nidec Corporation's Sales Division (tel.: +81-3-3494-0839). Thank you.