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Company: Nidec Instruments Corporation
Representative: Toshiyuki Otsuka (Representative Director and President)
Address: 5329 Shimosuwa-cho, Suwa-gun, Nagano, 393-8511, Japan

Nidec Instruments Develops a New TiltAC, an Image-stabilizing Module for Smartphone Cameras

Nidec Corporation (TSE: 6594; OTC US: NJDCY) (the “Company”) announced today that Nidec Instruments Corporation (“Nidec Instruments”), a wholly owned subsidiary of the Company, has developed a new TiltAC®, an image-stabilizing module for smartphone cameras.



Nidec Instruments' Latest TiltAC®

At present, 1.3 billion smartphones are shipped annually in the world, and almost all of them are equipped with cameras. Since 2019, Nidec Instruments has been supplying to the market TiltAC®, an image-stabilizing module known for preventing image quality deterioration, maximizing lenses and image sensors, and working in conjunction with a gyroscope sensor installed on a smartphone.

Single-lens reflex and other cameras use the OIS (Optical Image Stabilizer), a method to shift a lens or CMOS (Complementary Metal Oxide Semiconductor) and an image sensor in a direction to cancel out their shake and keep the optical axis at the center of the image. Whereas, smartphones in general employ the EIS (Electronic Image Stabilizer), with which deterioration in image quality has been inevitable due to its mechanism of stabilizing a shot image by digitally cutting out part of it.

TiltAC®, which uses Nidec Instruments' uniquely developed technology, utilizes its entire camera module – including everything from its lens to CMOS sensor – as a movable part to detect angular displacement (velocity) with a gyroscope sensor and control the actuator's movements in a direction to cancel them out, and keep the camera module facing straight toward the subject. This technology prevents digital processing-caused quality deterioration of peripheral areas' images, and maximizes the CMOS's performance, enabling the user to take high-quality still and moving images easily.

With a revised design of its movable sections, this newly developed module enjoys **a footprint approximately 11% smaller than that of its existing predecessors, while maintaining their functions and performance.** With a growing number of high-end and other smartphone models equipped with multiple cameras in recent years, mobile phone manufacturers had been urging us to miniaturize cameras on their products.

As a member of the world's leading comprehensive motor manufacturer, we at Nidec Instruments stay committed to proposing revolutionary solutions that contribute to creating a comfortable society to live in.

For more details on the above product, please contact Mr. Matsui or Mr. Takeda of Sales Planning Department of Nidec Instruments Corporation's Sales Division at +81-3-5740-3000 (direct). Thank you.

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