

PRESS RELEASE

September 20, 2023 ALPS ALPINE CO., LTD.

Contributing through high-definition, low-power thermal transfer printing technology Alps Alpine Employee Receives the 2023 Johann Gutenberg Prize

Alps Alpine Co., Ltd. (TSE: 6770; President & CEO: Hideo Izumi; Headquarters: Ota Ward, Tokyo; hereinafter referred to as "Alps Alpine") is pleased to announce that an employee, Hirotoshi Terao, has been awarded the prestigious 2023 Johann Gutenberg Prize by the Society for Imaging Science and Technology (hereinafter referred to as "IS&T"). The award was presented at a ceremony on September 20 at Advances in Printing Technology 2023, an international conference hosted by IS&T.

The Johann Gutenberg Prize is a worldwide award named after Johann Gutenberg, who invented letterpress printing in the 15th century. Sponsored by Hewlett-Packard Laboratories in the US, the prize is awarded annually to one or two engineers or scientists who have made significant contributions to printing technology. The award was presented jointly to Terao and Takashi Fukue, an associate professor in Mechanical Engineering at the Kanazawa Institute of Technology, who are conducting joint research.



Medal presentation by Atsushi Tomotake, Director of the Tokyo Chapter of IS&T (left: Hirotoshi Terao)

The Recipient and His Achievements

Since joining Alps Alpine in 1991, employee Hirotoshi Terao (Ph.D. in Engineering) has been consistently involved in research and development of thermal transfer technology and thermal printheads. Thermal transfer technology is a technology for printing on regular paper or labels using ink that melts

and sublimates when heated by a thermal printhead. Terao is a pioneer in the development of thermal printheads providing a higher definition and faster printing. He also led the world in inventing a battery-operated mobile photo printer, something that was considered difficult to make in the past, by improving the thermal efficiency and reducing the power consumption of printers.

In addition, he developed an on-demand printer that produces highly decorative designs, such as metallic or wood grain accents closely resembling the real thing, on film. This technology is attracting increasing attention as an environmentally friendly decoration technology that does not require plating. In combination with stealth illumination technology that illuminates displays and switches only when necessary, that decoration technology is expected to be used in products such as advanced control panels in the interior and exterior of next-generation automobiles.

Terao has been a research fellow of the Imaging Society of Japan since 1998, and he was awarded the title of Fellow by IS&T in 2014 and the Imaging Society of Japan in 2017 for his significant contributions to printing technology.

Terao has been awarded the Johann Gutenberg Prize in recognition of these longstanding achievements. The results of his research will be used by Alps Alpine to improve the definition and reduce the power consumption of printers based on thermal transfer technology and to enhance the added value of products using this technology.



On-demand decorative printing on film

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