



January 13, 2026

Patentix to Make Its Debut at the 40th NEPCON JAPAN

~ Aiming for the Practical Application and Popularization of Rutile-Structured Germanium Dioxide ($r\text{-GeO}_2$) as a Next-Generation Power Semiconductor Material ~

Patentix Inc. (Headquarters: Kusatsu, Shiga; President and CEO: Toyosuke Ibi; hereinafter "Patentix") is pleased to announce its first-ever participation in the **"40th NEPCON JAPAN - Power Electronics & Devices Expo"**. The exhibition will take place from Wednesday, January 21, to Friday, January 23, 2026, at Tokyo Big Sight. As one of Asia's largest trade shows, this event brings together the latest electronic components, materials, and manufacturing technologies that drive the increasing functionality and performance of modern electronics.

In recent years, the rapid proliferation of generative AI has forced data centers to consume massive amounts of electricity. Consequently, infrastructure facilities face unprecedented challenges, such as the need for vast quantities of water to cool power supply systems. Furthermore, with electric vehicles (EVs) reportedly accounting for more than half of new car sales in China, improving power supply efficiency has become an urgent priority for both industries.

At our booth, centered on the theme of "Social Implementation of Rutile-Structured Germanium Dioxide ($r\text{-GeO}_2$)", we will showcase the extensive potential and technical advantages of this material, which is currently gaining significant attention as a next-generation power semiconductor.

Visitors will find a comprehensive presentation of our progress, including detailed characteristic comparisons with other semiconductor materials and a summary of our achievements to date, such as the successful operational confirmation of Schottky Barrier Diodes (SBDs). We will also highlight our latest R&D milestones, specifically the static characteristics (I-V characteristics) of SBDs operating at a high breakdown





voltage of >300V. Furthermore, we will display one type or more physical samples of small-piece substrates(10mm□) that are scheduled for commercial release in the near future, alongside a briefing on our upcoming development roadmap.

We sincerely look forward to welcoming you to our booth.

Exhibition Information:

- **Booth Number:** E36-58

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