

PRESS RELEASE

RIVER ELETEC Completes Patent Registration in All Applied Countries for its KoT-Cut® OPAW® Acoustic Wave Device

- Securing Patents in Key Jurisdictions Drives Global Expansion of High-Precision Clock Technology -

NIRASAKI, YAMANASHI, JAPAN – September 11, 2025 – RIVER ELETEC CORPORATION (TSE Standard: 6666), a leading manufacturer of crystal devices, is pleased to announce the successful completion of patent registration in China for its proprietary KoT-Cut® OPAW®* (Acoustic wave device) technology.

This grant concludes the international patent application process, finalizing registrations in all targeted key markets, including Japan, Taiwan, the United States, the United Kingdom, and now China. The acquisition of these multinational patents serves as international recognition of River Eletec's technological capabilities and strengthens the foundation for its future global business expansion.

1. Patent Overview (China)

- **Title of Invention:** Acoustic Wave Device
- **Patent Number:** ZL 202011350932.0

Key Features

River Eletec's KoT-Cut OPAW technology is a crystal unit technology that achieves both high precision and low phase noise. Through this technology, phase noise—a critical indicator of frequency stability—is successfully reduced while maintaining a high level of accuracy. The high-end clock sources provided by this technology are expected to significantly enhance system performance and reliability in fields requiring exceptional clock precision and stability, such as 5G/Beyond 5G communications, 1.6T/3.2T optical communication modules, and high-precision measuring instruments.

2. Patent Acquisition Status

The company filed applications in Taiwan, the United States, the United Kingdom, and China simultaneously with the Japanese application, claiming priority under the Paris Convention. The status in each jurisdiction is as follows:

*KoT-cut and OPAW are registered trademarks of RIVER ELETEC CORPORATION.

(Japanese trademark reg. no. 6489253 and 6489254, respectively)

KoT stands for "Kerfed Orthogonal plate waves for zero Temperature coefficient," and OPAW stands for "Orthogonal Plate Acoustic Waves."

Filing Country	Patent Number	Registration Date	Status
Japan	JP 7249055	March 22, 2023	Registered
Taiwan	I 747636	November 21, 2021	Registered
U.S.A.	US 11,258,424	February 22, 2022	Registered
U.S.A. (Related Patent)	US 12,274,173	April 8, 2025	Registered
U.K.	GB 2598165	August 24, 2022	Registered
China	ZL 202011350932.0	August 26, 2025	Registered

3. Future Outlook and Business Strategy

With the successful completion of patent registrations in the major markets of Japan, Taiwan, the United States, the United Kingdom, and China, RIVER ELETEC CORPORATION's KoT-Cut OPAW technology has gained international recognition. The establishment of these intellectual property rights enhances the protection of our technology in the global market, contributing to stable business operations.

Utilizing this patented technology, we are advancing the market introduction of high-end clock sources that combine high precision and low phase noise, providing new value to the crystal device market. Specifically, we aim to deliver reliable and high-performance products to customers in sectors such as 5G base stations, optical communication networks, high-performance computing, and aerospace equipment, thereby contributing to the advancement of these industries.

Leveraging this global patent registration, we plan to drive the development of new products utilizing KoT-Cut technology, expand our product lineup, and further promote our global expansion. Furthermore, through appropriate intellectual property strategies across various countries, we aim to enhance sustainable corporate value.

We will continue to focus on pursuing advanced technologies and leveraging intellectual property rights to provide high-value-added products, contributing to societal progress through innovation.

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