

Rosatom obtained patents for over 140 inventions in other countries in 2024

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Rosatom applied for patent registration for over 280 inventions in more than 30 countries last year. Out of these more than 140 were successfully registered. The patents protect the rights to the technologies of nuclear power plants (NPP) with reactor units of generation III+ (VVER-1200, VVER-TOI), fast reactors, the equipment for floating nuclear power plants, and SMR-based NPPs.

Among the most promising and crucial technological advancements in the industry, which were patented abroad last year, experts distinguish the device for monitoring passive heat removal systems. This was developed by Atomenergoproekt an entity under the Engineering division of Rosatom. The device and the innovative monitoring approach have enabled rapid evaluation of the operability of the NPP's passive heat removal system, thereby improving its operation safety.

A device that produces monophasic powders of actinide salts is also patented. It is used for the synthesis of salts of actinide elements, such as uranium and plutonium. These salts serve as precursors for producing nuclear fuel pellets.

Another notable invention is a new approach to fuel assembly production. The concept was conceived by specialists from the Novosibirsk Chemical Concentrates Plant, a company of Rosatom's Fuel division. The objective of the invention is to enhance the effectiveness of the nuclear fuel production process.

Rosatom is actively pursuing new markets. Currently, the corporation's foreign orders include 39 units, both large and small, in 10 countries, including but not limited to China, Turkey, Egypt, Hungary, India, and Bangladesh.

The corporation is committed to developing its technological collaborations while protecting the intellectual property of Russian scientists through patenting abroad. In the past three years, the growth rates in this field have skyrocketed.