
R-IT3, Inc. Files Four Provisional Patents Defining Precious Metals Recovery-to-Nanomaterials Platform

Portfolio protects a proprietary green-chemistry recovery process for precious metals from electronic waste and downstream pathways into engineered gold nanomaterials for solar, industrial, and pharmaceutical-grade applications.

CHARLOTTE, N.C. — R-IT3, Inc. today announced a breakthrough in DES (deep eutectic solvent systems), offering a cleaner way to recover precious metals, synthesize nanomaterials, lower solar costs, and transform data-center economics. The domestic precious-metal reclamation company has filed four provisional patents defining an integrated recovery-to-nanomaterials platform. Patent 01, filed December 29, 2025, protects a proprietary room-temperature recovery process for gold, silver, palladium, platinum, and copper from electronic waste — a green-chemistry approach that eliminates smelting, high-temperature activation, and landfill residue. Patent 02, filed May 26, 2026, protects methods for producing engineered gold nanoparticle architectures for solar energy conversion directly from recovered feedstock. Patent 03, filed May 26, 2026, protects a bridge platform that connects the recovery process to downstream engineered nanomaterials through a proprietary intermediate pathway, opening both industrial and pharmaceutical-grade downstream routes from a single recovered feedstock. Patent 04, filed June 22, 2026, protects methods for producing pharmaceutical-grade functionalized gold nanoparticle compositions meeting rigorous purity standards for medical-grade applications.

The portfolio extends R-IT3's permitted domestic recovery operations upstream into proprietary feedstock chemistry and downstream into engineered advanced-materials applications for the solar, industrial, and pharmaceutical sectors. "These four patents describe one continuous platform, not four disconnected inventions," said Peter Jegou, Founder and President of R-IT3, Inc. "Our e-waste feedstock is prepared specifically for use in our patent-pending process, ensuring consistent composition, predictable reaction behavior, and optimal yields during sequential recovery and modular finishing. The proprietary recovery process we developed feeds directly into nanoparticle synthesis pathways that produce advanced materials for solar and, in longer-dated form, medical applications. That is what integrated domestic recovery looks like at scale — with the intellectual property to protect it. Our goal is to secure e-waste supply agreements with data centers in exchange for deploying our technology to slash their utility bills and capital expenditure on traditional power infrastructure." R-IT3, Inc. is a Certified B Corporation headquartered in Charlotte, North Carolina. Patent examination process is managed by NK Patent Law, with Ani Agrawal as lead attorney.

About R-IT3, Inc.

R-IT3, Inc. is a domestic precious-metal reclamation company operating an integrated recovery platform for gold, silver, palladium, platinum, and copper. The company combines proprietary green-chemistry recovery, zero-landfill process discipline, and documented chain-of-custody to serve refining partners, industrial buyers, and downstream materials markets. R-IT3, Inc. is a Certified B Corporation headquartered in Charlotte, North Carolina. Learn more at www.r-it3.com.

Media Contact

Media & General Inquiries:

Contact us at press@r-it3.com.

Specialized Departments:

- Investor Relations: investors@r-it3.com
- Licensing: licensing@r-it3.com
- Partnerships: partners@r-it3.com

For more information, visit: www.r-it3.com

R-IT3, Inc. 321 A Atando Ave, Charlotte, NC 28206 info@r-it3.com www.r-it3.com