



Put the identity **inside the product**, where a printer or a counterfeiter cannot reproduce it.

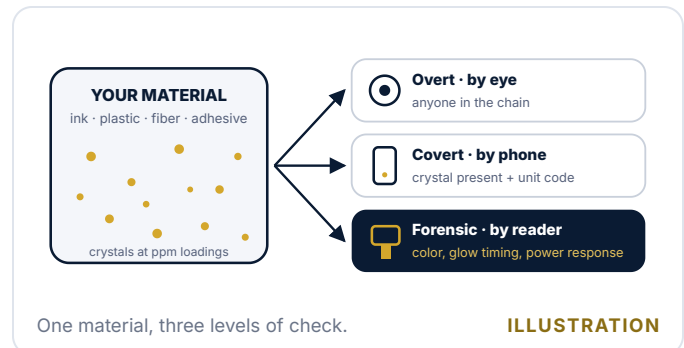
Intelligent Material is a rare-earth crystal, protected by a composition-of-matter patent, that becomes part of the ink, plastic, fiber, adhesive or label. Shine the right light on it and it answers with an optical signature.

— THE PROBLEM

- ◆ Holograms and printed codes can be copied, and labels can be peeled off and moved to a fake.
- ◆ Counterfeit and diverted goods travel through the same channels as genuine ones. A refilled bottle or a resealed package can pass a visual check.
- ◆ A central lookup database needs a connection for every check, and the database itself becomes a target.

— WHAT INTELLIGENT MATERIAL DOES

- ◆ **Goes into what you already use.** Crystals are added to your ink, varnish, masterbatch, fiber or adhesive at parts-per-million to thousandths-of-a-percent loadings. The added cost is a fraction of a cent per item.
- ◆ **Three levels of check on one product:** overt by eye, covert by smartphone, forensic by handheld reader.
- ◆ **Asks more than one question.** The reader checks color, how long the glow lasts and how it responds to light power. A material that only matches the color fails.
- ◆ **LightMap™.** The random crystal pattern in each mark is captured on the line, signed and printed over the barcode, so a reader can check the item offline with no database.



— PROOF

IN USE

About 3 billion surgical-supply units secured with Intelligent Material in 2025. The crystal sits in the lid-seal adhesive at about 0.001%, and a reader shows whether the package was opened.

IN USE

Intelligent Material is used today in **banknotes**, **apparel fiber** and **surgical supplies**, and protects packaging for a major American spirits producer.

IN DEVELOPMENT

Lab-tested on printed marks and coated boards

LightMap™ fingerprints for labels and circuit boards. Patent application US 2026/0141408 A1 published; not yet granted.

— HOW TO WORK WITH US

1 Sample

Feasibility at IMS in 3–6 weeks: we add the crystal to samples of your own ink, plastic, fiber or adhesive and show it reads reliably.

2 Pilot

1–3 months at your site: the crystal goes into your real process and pilot batches are read on your line.

3 License and supply

NovaVera Corp., the exclusive licensee, signs the supply agreement, about four months from the first meeting.

Contact: <https://www.intelligentmaterial.com/contact/?topic=Authentication#contact-form>

We reply within two business days.