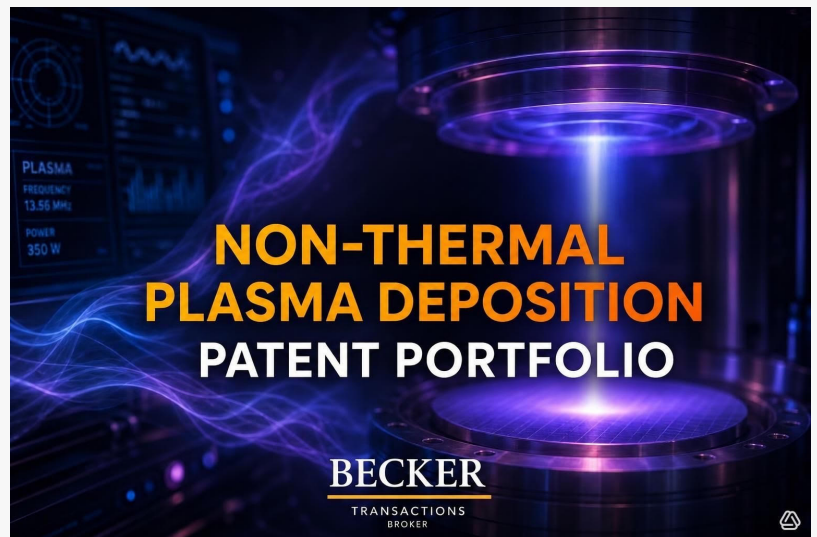


Becker Transactions to Represent Foundational Non- Thermal Plasma Deposition Patent Portfolio

SYRACUSE, NY, UNITED STATES, August 3, 2026 /EINPresswire.com/ -- A patented process that deposits material onto a substrate at a temperature dialed to suit that substrate — including temperatures low enough for living tissue — in open air, without requiring a vacuum chamber.

Frederick R. Guy, an attorney, inventor, and former General Counsel of the U.S. Agency for International Development, today announced that his non-thermal plasma deposition patent portfolio is being exclusively represented by [Becker Transactions](#) for acquisition or licensing.

The portfolio covers, among other things, the deposition of material onto a substrate by means of a non-thermal plasma stream. Process temperature is a dialed parameter, set to whatever the substrate will tolerate — and at the low end, the process operates near ambient temperature. Conventional atmospheric plasma systems run hot, which places living tissue, thin films, electronics, and many polymers beyond their capability. Conventional low-temperature deposition requires a vacuum chamber, which requires the



workpiece to fit inside a box. This process requires neither.

"Among other things, this technology promises to put the power of a plasma chamber at the tip of a handheld wand or endoscope" said Frederick Guy, the sole named inventor. "Before you could work in open air, but hot like a welder. Or you could work cold, but only inside a vacuum chamber. Anything fragile, biological, or otherwise sensitive fell between them — living tissue, thin films, sensitive electronics. This portfolio came from refusing to be limited to a torch or chamber"

The portfolio covers at least four distinct pillars:

Temperature control. A biocompatible carrier gas — which may be as simple as ambient air — is excited to form a plasma stream whose temperature is set to suit the application site, permitting deposition onto substrates that hotter systems would damage or destroy.

Breadth of deposited material. The disclosure is not confined to any single phase or class of material. Powders, solutions, aerosols, minerals, and polymerizable materials are all contemplated, the last by plasma polymerization occurring at the application site.

Cool Plasma, among other things, produces crystal growth in the treated material, forming a structure that comports with the crystalline structure of the application site. Deposits are contemplated at structural thicknesses — restoration, and surface coating.

Localized process enclosure. A conformable hood coaxial with the deposition nozzle covers the target material bringing the benefit of a vacuum processes to a portable or robot-mounted head — without the workpiece having to fit inside anything.

The technology addresses two broad domains: materials processing and restoration. Dental, orthopedic, tissue and wound uses are among those described in the disclosure — examples of where the process has been applied, not the boundaries of what it covers. Protection extends at least to 2035.

"Becker Transactions is excited to represent this groundbreaking non-thermal plasma deposition patent portfolio, which redefines the possibilities in materials processing and restoration," said Dean Becker, Chairman of Becker Transactions. "This innovation not only enables precise temperature control in open air but also expands the range of materials that can be deposited safely onto delicate substrates, including living tissue. With a clear path to impactful applications across various fields, we are eager to connect this pioneering technology with stakeholders looking to transform their industries."

The offered portfolio consists of U.S. Patent No. 10,384,069, U.S. Patent No. 11,642,542, and European Patent No. 3,417,827 (validated in Germany, France, and the United Kingdom), together with continuations, divisionals, and foreign counterparts thereof, including a pending

U.S. continuation application. Frederick R. Guy is the sole named inventor and sole owner of record; the assets are held personally and are not encumbered by any lien or security interest. The portfolio is offered subject to a pre-existing, field-limited manufacturing license previously granted to Archion Biomaterials Company, Inc. and its subsidiary Dentivia LLC, which is disclosed in full to prospective acquirers. Certain related patents, including the inventor's separate vegetable ivory biomaterial portfolio, are expressly excluded from the offering.

About the Inventor

Frederick R. Guy is an attorney and inventor based in Syracuse, New York. He formerly served as General Counsel of the U.S. Agency for International Development. He is the sole named inventor on the plasma deposition portfolio.

About Becker Transactions

Becker Transactions is a world leading patent brokerage firm expertly led by Dean Becker and Olivia Becker, a father daughter team, who bring a rich family legacy of navigating complex intellectual property transactions. Our team has collectively facilitated over \$11 billion USD in intellectual property transactions. With decades of experience collaborating with inventors, government agencies, top research institutes, universities, and major corporations, we specialize in technology monetization. We excel at identifying essential intellectual property assets and connecting them with strategic buyers seeking competitive advantages.

Media & Inquiries

All inquiries regarding are managed exclusively by Becker Transactions.

Dean Becker

Becker Transactions

+1 251-262-0000

[email us here](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/930883515>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2026 Newsmatics Inc. All Right Reserved.