# Dossier: APPLIED THIN FILMS, INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,783,275.90

**Award Date:** 2024-07-22

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

APPLIED THIN FILMS, INC (ATF) is a technology company focused on developing and manufacturing advanced thin-film coatings for various applications, with a strong emphasis on defense, aerospace, and energy industries. Their core mission is to provide innovative solutions that improve the performance, durability, and functionality of materials and components in harsh environments. They aim to solve critical problems related to corrosion, erosion, wear, and electromagnetic interference (EMI) by offering customized thin-film solutions tailored to specific customer needs. ATF's unique value proposition lies in its ability to apply high-performance coatings to complex geometries and challenging materials, including polymers and composites, using advanced plasma-based deposition techniques. This allows them to offer solutions where traditional coating methods are ineffective or impractical.

**Technology Focus:**

* Plasma Enhanced Chemical Vapor Deposition (PECVD): ATF utilizes PECVD to deposit conformal thin films, enabling precise control over film composition, thickness, and properties at relatively low temperatures, making it suitable for temperature-sensitive materials. They specialize in depositing functional coatings like diamond-like carbon (DLC), silicon dioxide (SiO2), and metal oxides (e.g., Al2O3).
* Electromagnetic Interference (EMI) Shielding Coatings: ATF develops and applies thin-film EMI shielding coatings that provide effective suppression of electromagnetic radiation across a broad frequency range. These coatings are crucial for protecting sensitive electronic equipment in defense and aerospace applications from interference and cybersecurity threats.

**Recent Developments & Traction:**

* In April 2022, Applied Thin Films announced it was awarded a $1.6 million U.S. Department of Energy (DOE) grant to develop a new coating that can improve the efficiency and durability of solar cells.
* In 2023, ATF expanded its production facility in Skaneateles Falls, NY, to meet the growing demand for its advanced thin-film coatings. This expansion included the installation of new deposition equipment and increased capacity for research and development activities.
* ATF has consistently highlighted its work with government entities through case studies on their website demonstrating applications of their technology in defense applications.

**Leadership & Team:**

* Dr. Thomas B. Batt, CEO: No readily available information about prior relevant experience can be found.
* Dr. Nathan Kemner, CTO: Dr. Kemner has extensive experience in materials science and engineering, with a Ph.D. in the field. His expertise lies in the development and characterization of thin-film coatings.

**Competitive Landscape:**

* Kurt J. Lesker Company: A global provider of vacuum equipment and thin film deposition materials. While Lesker supplies equipment and materials, ATF focuses on providing applied coating services.
* Plasma Technology Systems (PTS): PTS provides plasma-based coating solutions. ATF differentiates itself through its specialization in complex geometries, diverse materials (including polymers and composites), and customized solutions tailored for specific defense and aerospace applications.

**Sources:**

1. [https://appliedthinfilms.com/](https://appliedthinfilms.com/)

2. [https://www.syracuse.com/business/2022/04/skaneateles-falls-company-gets-16-million-federal-grant-for-solar-panel-coating.html](https://www.syracuse.com/business/2022/04/skaneateles-falls-company-gets-16-million-federal-grant-for-solar-panel-coating.html)

3. [https://www.newyorkengines.com/site/news/story/applied-thin-films-inc](https://www.newyorkengines.com/site/news/story/applied-thin-films-inc)