

Securing and Ensuring your Supply Chain and Logistics

F.A.A. Investigating How Counterfeit Titanium Got Into Boeing and Airbus

Jets The New York Times June 14, 2024

FAA issues warning over AOG Technics fake parts as scandal grows

BY IAN MOLYNEAUX 2023-09-25 2 MINUTE READ

DOJ Joins Probe of Fake-Parts Scandal Gripping Aviation Industry

- Justice Department investigators start contacting airlines
- Authorities sharing information on parts from London supplier

Florida Fraud: Faulty Aircraft Parts Sold To Canadian Airlines And U.S. Defense Contractor Using Forged Documents

BY MARISSA PAPANEK | MARCH 12, 2024 |

Even the US military has a fake parts problem

By TIM CULPAN
BLOOMBERG OPINION • October 15, 2023

Bay Area businessman accused of selling fake fans to the military, possibly risking missile systems and a nuclear sub

Story by Demian Bulwa • 2mo • 1 min read

U.S. NEWS MAY 8, 2024 / 2:35 PM

Defense contractor pleads guilty to selling inferior, Turkish-made parts for U.S. weapons systems

FAA WARNS AIRLINES OF COUNTERFEIT ROCKWELL COLLINS TCAS TRANSMITTERS CIRCULATING IN THE MARKET

August, 2023 | Americas, Regulatory | 0 | ★★★★★



ALITHEON

Securing Trust™

Industry has a Problem

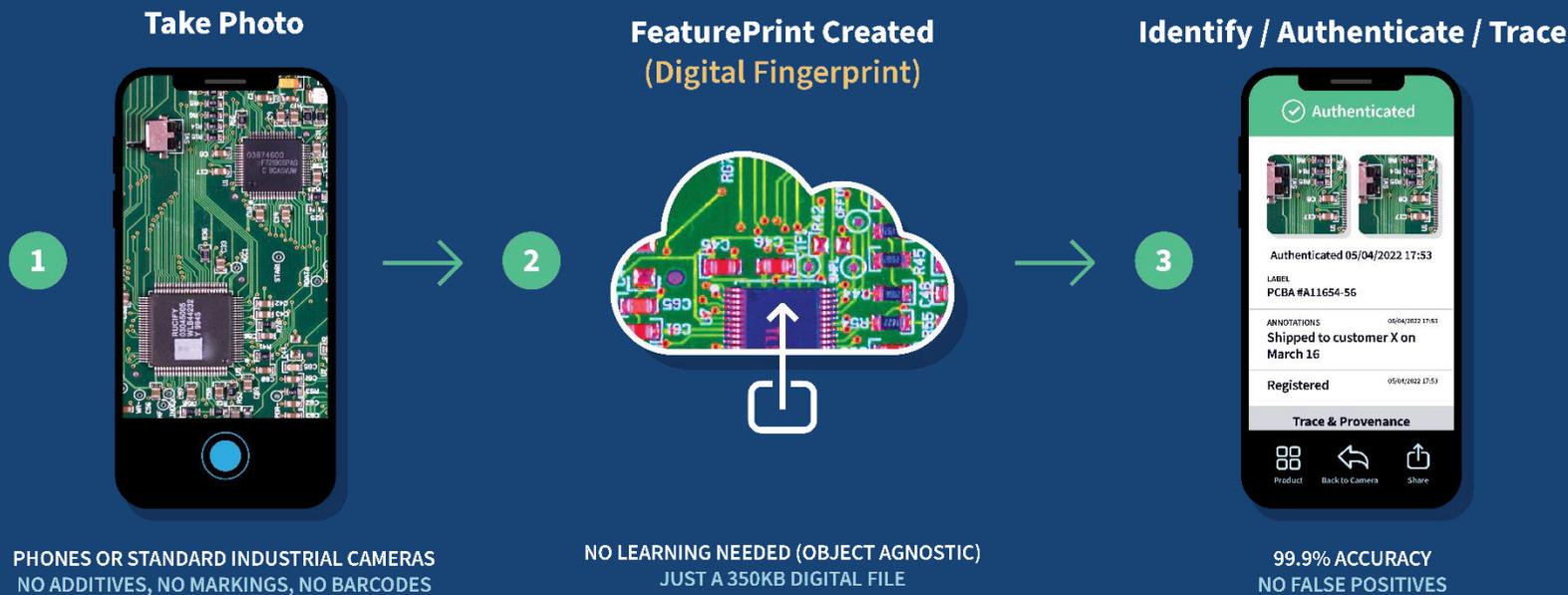
Inventory mismanagement, human error, and fraudulent parts, impact operations every year.

- Current serialization solutions (bar codes, QRs, tags, etc.) are complicated and unreliable. In many case they don't serialize at the individual item level.
 - Require marking and manipulating items and products; disrupting production lines; and specialized equipment.
 - Can be erased, lost, damaged, moved from part to part, and counterfeited themselves.
 - Counterfeiting and gray market is a \$3 trillion global problem.



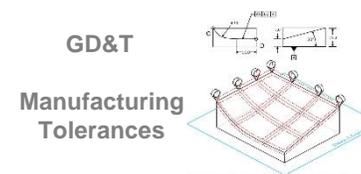
FeaturePrint® - a Proven Solution

- FeaturePrint provides for items, what fingerprints are for people – a unique and persistent identifier.
- FeaturePrint serializes items with just a photo from a standard camera, without additives, (etchings, tags, stickers, barcodes, etc.), which can be damaged, removed, transferred, or faked.
- FeaturePrint enables you to trace inventory, eliminate counterfeits and gray markets, and reduce human error.



Simplicity is Profound. Impact is Significant.

- **FeaturePrint is to an item, what a fingerprint is to a human – a unique, persistent, integrated identifier.**
- FeaturePrint recognizes and codifies the unique surface features, flaws, and variations, created by all manufacturing processes, yet are invisible to the human eye.
- FeaturePrint is not a proxy identifier (like a bar code, tag, or etching), rather the item itself is its own identifier.
- FeaturePrint is deployed with customers in aerospace, automotive, electronics, precious metals, luxury brands, and collectibles.
- FeaturePrint has ~50 Issued patents, and more pending.
- FeaturePrint uses off-the-shelf industrial cameras and/or mobile phones.
- Has calculated 99.9% accuracy, 0.1% False Negatives, 10^{-9} False Positives. In production we achieve 100% accuracy (thanks to system tuning capability).

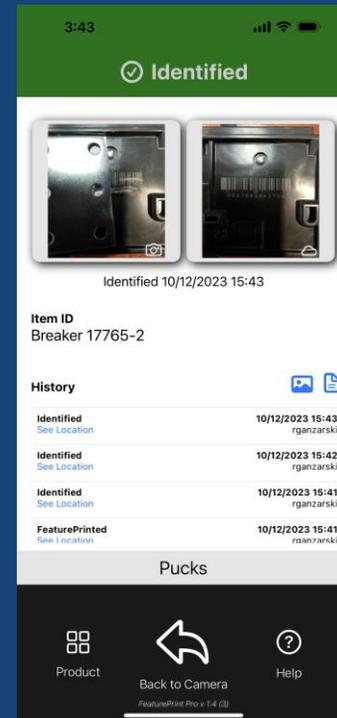
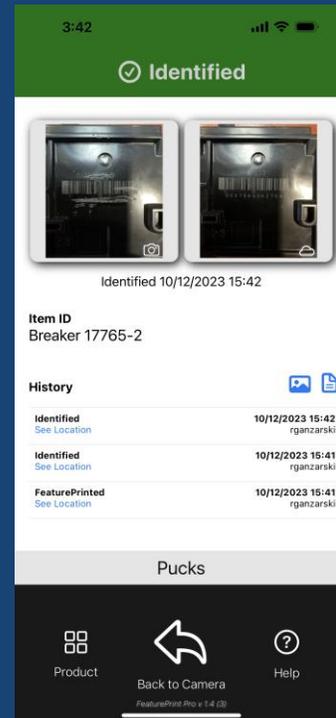


Better Than Any Alternatives

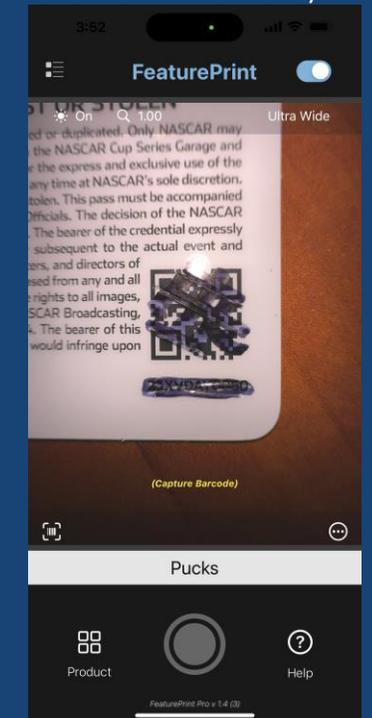
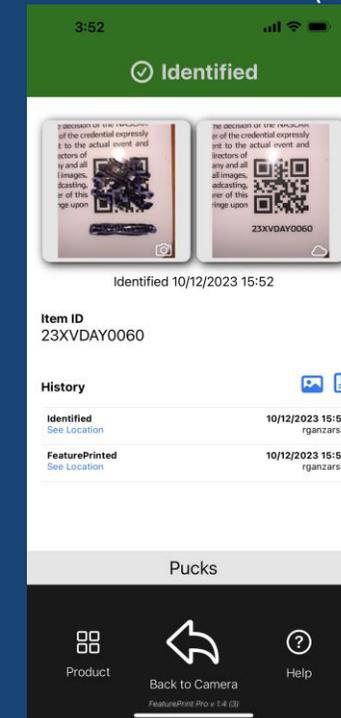
Identifies despite
Physical damage



Identifies despite erasing and hiding the
bar code and serial number



Identifies despite erasing and hiding the QR code
and serial number (QR code reader cannot read)



To Ensure A Person's Identity – Fingerprint; To Ensure An Item's Identity – FeaturePrint

SUSTAINABLE AND ENVIRONMENTALLY FRIENDLY

FeaturePrint is a machine-vision based system. It requires nothing more than a photo of the item.

There are ***no wasteful elements*** that impact the environment and landfills such as:

- Paper labels, stickers, and tags
- Plastic tags and markers
- Inks
- Glues and adhesives

With a brand promise to your customers that you are green and sustainable, don't use additives to prove it.

Demonstration Videos

FULL 10-MINUTE MIXED DEMONSTRATION

SHORT 5-MINUTE MIXED DEMONSTRATIONS

CARDBOARD

PRECIOUS METALS

METAL PARTS

BOTTLE CLOSURES

SNEAKERS

ART

CAR BRAKE PADS

NFT FROM FEATUREPRINT

AUTOMATED INDUSTRIAL LINE

WATCHES

Recent Recognitions

Oct 2023: Alitheon's FeaturePrint selected as one of TIME Magazine's 2023 Best Inventions.



Jun 2023: Alitheon named **Best Optical AI Solution** in 2023 Artificial Intelligence Breakthrough awards.



Feb 2023: Alitheon named by the **London Bullion Market Association (LBMA)**, the world's leading independent standards authority for the global precious metals industry, as one of only five companies globally (and the only US-based company) to support the Gold Bar Integrity initiative.



Dec 2022: Alitheon awarded the 2022 **Pharma Innovation Awards** for help solving pharma's current woes and pushing the boundaries on what is possible within pharma manufacturing.

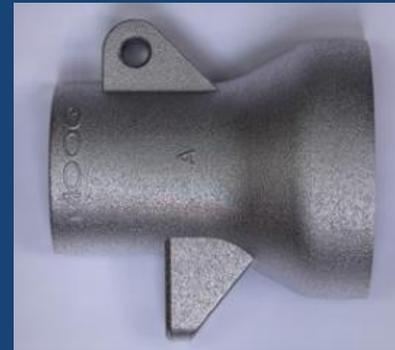


Moog Tested*

Twenty identical titanium parts were made via additive manufacturing, with identifying features on an inner component, which a camera could not see, to ensure correct identification.

After registering the parts with FeaturePrint, Moog purposely damaged nine parts from this set and subjected them to wear from:

- Drop testing onto a concrete floor
- Attacking the parts with a handled motorized grinder
- Harperizing the parts (a form of vibratory deburring)
- Grit blasting



MOOG
COMPONENTS GROUP

Moog damaged test parts, like the one in the photo, to evaluate the **FeaturePrint** system. None of this abuse foiled the identification. **FeaturePrint** achieved 100% accuracy on all parts.

Source: Peter Zelinski, Editorial Director, Modern Machine Shop. Traceability without serial numbers: Vision Technology makes every part its own identifier. (Published 2020, April 14)

Parts with over 90% of the original surface damaged, were 100% identified by FeaturePrint



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