



## Adaptive Surface Mobile Printer



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**WINDGO Granted Additive Printing Mobile Printer Patent**

*New WINDGO Technology Designed for 3D Printing*

**Columbia, MO – June 18, 2019** - WINDGO, Inc., a research and development company specializing in smart material and vibrational transfer technologies, announced today that they have been granted US Patent No. 10,325,187 for an invention designed to print onto documents and objects in the field by providing a modified printing process on top of existing printed content. The corrective printing additive processing allows texturing and modified content to be added onto existing surfaces and other unique capabilities.

Existing printing devices compatible with word processing and graphics software are standard pieces of office equipment and are also commonly found in homes. Such devices are typically large and operate by using inkjet or laser technologies—though other printing technologies (e.g., thermal technology) may also be used in printers that are more portable. However, even when printers are marketed as mobile, they typically move blank paper across the printing technology and are wider than the piece of paper to be printed upon.

The new WINDGO Adaptive Surface Mobile Printer technology is designed to create perfected print output onto objects that already contain identifiable content. An existing document or object is first viewed, scanned and decoded by a mechanized scanning peripheral (e.g., a scanner or camera). The invention may be used to create a modern automated replacement of white-out and transfer paper. Imagine if you find an error, misspelling, or a missing addendum that requires a strike-out, replaced phrase, or a signature needing to be added from a remote location.

The WINDGO Adaptive Surface Mobile Printer is smart enough to scan and view your existing document (or object) and add the corrected additive layer(s) of ink to correct the document in real-time. The entire scanning and modification process is automated, wireless and field-programmable.

Other applications include building material surface enhancements. For example, interior decorators and designers will now have the ability to transfer semi-custom artwork onto surfaces such as wallpaper. Painted color patterns including custom hues can be adjusted in the home to avoid repainting walls. If the room needs a level adjustment in color or adjusted striping density the designer can reprint the surface(s) to adjust the look of the room without removing the existing surface treatments.

The printing surface compatibility is extremely broad and allows for surfaces such as paper, lumber, building materials, industrial products or consumer goods. This means that products

could be revised with up-to-date sale pricing, histograms of traceability and safety data such as personalized prescription data that can be updated onto a medicine bottle label directly.

Perhaps of greatest interest, the WINDGO Mobile Printer may be configured to behave as a three-dimensional (3D) printer with the ability to add or adhere material to (or decimate material from) an existing component piece. When an object's existing-contour information is repeatedly analyzed, the printer can use machine learning to modify its algorithm to improve the additive printing process. In other words, the printer can learn how to improve and perfect its process as it progresses.

“Printing technology has been an open-loop process since the beginning of time which means ‘you get what you get’ based on the printer doing its best job. Our new advancement of corrective printing brings a closed-loop philosophy to printing and coating objects,” says VP of R&D, David Strumpf. “Similar to the way an artist fine-tunes his or her artwork during creation, this new printing technology watches as it works to refine the printing process until the end result achieves the desired outcome. Smooth surfaces and color corrections are just a few of the techniques that are impossible to fully automate today and will become achievable with WINDGO’s adaptive additive printing process.”

This new technology is in line with WINDGO’s emphasis on energy, resonance and vibration technologies and products. WINDGO, Inc. is focused on the IoT End-Node market expansion that is forecasted to exceed one trillion dollars by 2025. This new invention is based on technologies that evolved from the original works of inventor Fielding Staton. His invention of the Absorbud in 2013 has led to industry changing advancements in macro, micro, and nano-based technologies.

WINDGO/Newtonoid [PDF](#) US Patents Public Press Copy- Freely Distributed and found on the WINDGO website.

**Inventors:** Fielding Staton - Liberty, MO and David Strumpf – Columbia, MO

### **About WINDGO, Inc**

[WINDGO, Inc.](#) is a privately-held company based in Columbia, MO. WINDGO, Inc. has numerous patent holdings within its Intellectual Property holding company – Newtonoid, LLC which has been in the research and development business since 2013. Founded in 2016, WINDGO, Inc. has researched, developed, and produced a variety of smart products and other intelligent product subsystems in the sensory and digital markets including Absorbud, Smart Windows, Intelligent Glass Displays, Responsive Biomedical Implants, Robot Skin Membranes, the ProVector™ Measurement Projection Mapping System, the Drone Roof Chute™ Systems & Methods for Receiving Packages Delivered by Unmanned Vehicles, the Food Puck™ Assistive Cooking Device and Sensory System, the Shingle Roof Clip System and many other patents with cross-industry applications.