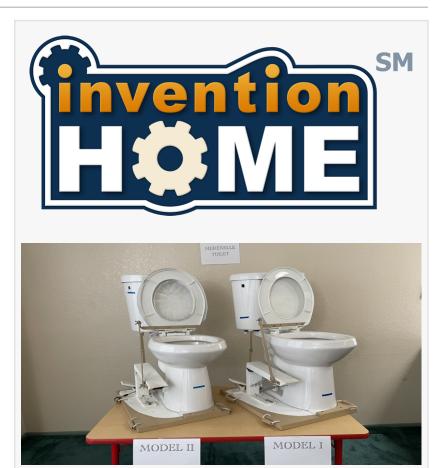


## InventionHome® Inventor Creates Toilet that Combines Hands-Free Operation with UV Light Sanitization Features

PITTSBURGH, PA, UNITED STATES, October 1, 2024 /EINPresswire.com/ --Levy B. of San Bernardino, CA is the creator of the Merenelle Toilet, an improved, hands-free toilet that enables users to adjust the seat position, flush the toilet, and clean it without risk of spreading germs and bacteria. Two independent foot pedals can be used to raise and lower the seat and flush the toilet without risking direct contact with the flusher or the seat. The flushing and seat operation features are controlled using foot pedals and springs, and the cleaning feature is completed using an electrical UV light after flushing.

There are two versions of the toilet that can be manufactured. The second model may have several additional features like UV lights, seat cover



sleeves, a switch, relay, wires, and a power converter to accommodate electrical usage. The first model accommodates residential usage while the second can accommodate both residential and public use. Both versions include a grab bar for users with poor balance, ensuring they can flush the toilet and lower the seat via the foot pedals without worrying about falling.

The two foot pedals can be located on the flush side to the tank, installed on the extended flat porcelain base of the toilet. One pedal is to lower the seat (toilet seat pedal) and the other is to flush the toilet (flush pedal). The toilet seat pedal is beside and parallel to the toilet. The flush pedal is smaller and right behind the toilet seat pedal. The pedals consist of foot lever and the lever support and are connected by a hinge. These pedals are screwed to the porcelain base.

A gas spring and extension coil spring with chains are installed under the toilet seat pedal with one end of the gas spring and the chain ends are mounted to the lever support and the other end of the gas spring and the coil spring ends to the foot lever. A spring latch is also under the toilet seat pedal but mounted to the porcelain base with the catch mounted under the foot lever. Connected to the plunger, the L-shape bolt of the spring latch, is a small wire rope that is attached to the foot lever of the flush pedal.

The toilet seat pedal has bar which is placed before the hinge, that is connected to the toilet seat. The flush pedal also has a bar, but placed after the hinge, that goes inside a pipe (that is higher than the overflow pipe), inside the water tank. This bar is connected to the toilet flapper. There is also an extension coil spring under this pedal.

The second model features the implemented UV lights for cleaning and sanitation purposes. Since UV light is known to cause eye injury, the cover has sleeves to enclose the toilet seat to prevent users from seeing the UV lights when the seat is up against the cover during sanitation. These sleeves are aligned along the exterior and interior edges of the toilet seat. The UV lights are placed along and between the sleeves. For safety, with a light push on the toilet seat pedal, the UV lights turn off immediately.

An electrical junction box is installed behind the toilet seat pedal lever support. A time delay relay is installed inside the box and wires coming from the waterproof spring button switch which is installed between the holes for the fasteners of the toilet seat are tapped to the relay together with the wires from the UV lights. To prevent electric shock, an alternating current (AC) volt to direct current (DC) volts power converter is used. It supplies the time delay relay and the UV lights. Comprehensively, all aspects of the toilet work in conjunction to eliminate the need to make any direct contact with the toilet, reducing the spread of germs, viruses, and bacteria.

The market for improved toilets with several features is part of the broader smart and hygiene-focused bathroom fixtures industry. This market is driven by increasing demand for innovative, hygienic, and convenient bathroom solutions, particularly in the wake of heightened awareness about sanitation and health. The smart toilet market, which includes features like built-in foot pedals and sanitization systems, was valued at approximately \$7-8 billion in 2022. This market is expected to grow at a CAGR of around 8-10% from 2023 to 2030.

Toilets with features like foot pedal operation, built in self-cleaning features, antimicrobial coatings, and smart toilets equipped with automated flushing, heated seats, deodorizers, etc. are common drivers of this market. Most often, toilets feature one or two of these features and lack the combination of both convenience and functionality in relation to hands-free operation and full cleaning of the toilet. The Merenelle Toilet is versatile and innovative, utilizing several smart toilet features that would significantly enhance any manufacturer's product line.

Levy filed his Utility Patent with the United States Patent and Trademark Office (USPTO) and is working closely with <u>InventionHome</u>, a leading invention licensing firm, to sell or license the

patent rights to his Merenelle Toilet product. Ideal licensing candidates would be U.S. based product manufacturers or distributors looking to further develop and distribute this product innovation.

Companies interested in the Merenelle Toilet can contact InventionHome at member@inventionhome.com. Inventors currently looking for assistance in patenting, marketing, or licensing their invention can request information from InventionHome at info@inventionhome.com or by calling 1-866-844-6512.

## About InventionHome®

InventionHome is a leading invention and product licensing firm focused on helping inventors and entrepreneurs through the invention and patent process with the goal of licensing or wholesaling client inventions. For more information, email info@inventionhome.com or visit <a href="https://www.inventionhome.com">https://www.inventionhome.com</a>.

InventionHome InventionHome +1 866-844-6512 info@inventionhome.com

This press release can be viewed online at: https://www.einpresswire.com/article/748178298 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. © 1995-2024 Newsmatics Inc. All Right Reserved.