

Non-Toxic Water Disinfection Technology



Applications

- Household Mist Humidifier
- Handheld Travel Humidifier
- Medical device, e.g. CPAP, respirator, ventilators

The global household humidifier market size was valued at USD 2.77 billion in 2018 and is projected to register a CAGR of 4.6%.¹



Technology

A low voltage (<5V) Pulse Electric Field system with a coating that can quickly and efficiently to kill microorganisms* in water.

* *E. Coli*, *Legionella pneumophila*, *Pseudomonas aeruginosa*, *Aemonas sp* and *Mycobacterium sp*



Fig 1. Prototype of the m-PEF system

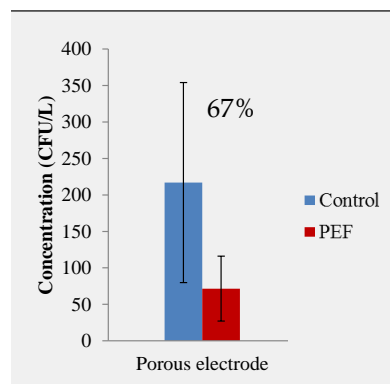


Fig 2. > 98 % of reduction in total bacteria was achieved with less than 35 % bacteria found on electrode.



Advantages

- No toxic UV & chemical
- Compatible with hard/soft water
- No change of taste and odor
- Operate by low-input voltage (5V)



Fig 3. Some examples of household and medical applications



Intellectual Properties

- USPTO US Patent 10,577,264 (patent granted)
- CNIPA Chinese Patent No ZL201380060604.9 (patent granted)
- HK Patent no. HK1211015 (patent granted)
- USPTO Full application 15/241430 (patent pending)



Talk to Us

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1. According to market research report, "LiHousehold Humidifier Market Size, Share & Trends Analysis Report By Product (Portable (Ultrasonic, Cool Mist, Warm Mist), Whole-house), By Distribution Channel (Offline, Online), And Segment Forecasts, 2019 - 2025", ID: GVR-3-68038-462-8, published by Grand View Research, Inc. in 2019