Two Spaniards create DuctFIT®, an air purification technology that eliminates the virus in companies and hospitals

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Two Spaniards have created **DuctFIT®**, an air purification technology that eliminates 99.99 percent of viruses in closed environments such as companies, hotels and hospitals around the world, according to a study conducted by the P3 safety laboratory of Microbiology of the Virgen de las Nieves University Hospital in Granada.

Miguel Angel Garat and Pablo Fernández, two Spanish entrepreneurs based in Shanghai, created the company Clean Air, to take advantage of the high demand for this type of products that exists in China in the face of the high concentration of pollution and pollutants in the country.

Since 2016, they focused on creating technologies to improve people's well-being and developed **DuctFIT**® CAS (Catalytic Antiviral Superoxidation), a patented technology – whose germ is at NASA – that allows for the effective and definitive eliminate of viruses and bacteria, both in the air and on surfaces (woods, metals, fabrics or plastics) and compatible with the presence of people in disinfected areas as they do not use chemicals harmful to health such as ozone, chlorine or even ultraviolet rays of direct incidence.

This virus removal system, certified by international laboratories and universities, is currently installed in more than 28 million square meters of offices, colleges and health centres, where more than 1.6 million people visit, work or live.

In the midst of the pandemic, the Microbiology department of the Virgen de las Nieves University Hospital in Granada (P3 biosecurity laboratory of reference level of the Andalusian Health Service), conducted a microbiological study with the **DuctFIT®** system to check its antiviral effectiveness against coronavirus, enterovirus (which affects the digestive system and is one of the most resistant that exists) and the influenza A H1N1 virus (influenza virus).

The result of the study, based on the international standard ASTM E1053, signed by Dr. José María Navarro (https://www.researchgate.net/profile/Jose Navarro4) , head of the Microbiology department and member of the COVID-19 scientific committee of the Government of Andalusia, concluded that in six hours the DuctFIT® system eliminated 100% of the coronavirus, 99.75% of the H1N1 virus and reduced the enterovirus by more than 99.99%.

This patent is the only virus removal technology that has passed the examination of a reference laboratory of this scientific level with human viruses.

With these results, the company will soon start clinical trials with humans, to check whether in addition to eliminating viruses in air and surfaces, and therefore preventively drastically reduce contagion, can also help patients already infected with covid-19 and influenza, favoring and accelerating their recovery and reducing hospitalization times, and thus helping to reduce collapses in hospitals and UCIs, saving lives and reducing contagions in medical personnel.

DuctFIT® is based on continuous H2O2 ion generation. With a simple and low investment installation the products are placed in the air ducts and from there the highly disinfectant hydrogen peroxide ions are spread throughout the space, eliminating viruses and bacteria 24 hours a day, being 100% safe for people, animals and food, as they claim.

When the process is activated, the water vapour from the air becomes H2O2 ions that surround the virus affecting its lipid membrane or its proteins. In this way, viruses become inactive, losing their infectious capacity until they eventually die. In addition to eliminating viruses, this **DuctFIT®** technology purifies the air and allows the constant removal of bacteria, mites, pollen, mold, carcinogenic chemical compounds and odors 24 hours a day of the week, as the equipment can stay on and leaves no untreated spaces as the ions reach all areas.

Once installed, it is monitored with a software that allows you to view and control all the devices, as well as a mobile application to be able to manage the entire system in real time, and incorporates an artificial intelligence platform that remotely and intelligently controls the computers. Clean Air can be installed in existing ducts without affecting airflow or used independently to air conditioning systems with mobile or wall devices with their own fan and the same efficiency.

According to the company, hospitals, including the Virgen de las Nieves de Granada, and multinationals, companies and hotels around the world such as Bayer, Novartis, Inditex, H&M, El Corte Inglés, Hyatt, Intercontinental Group, Ferrari, Gestamp, Cisco, Tesla, Coca Cola, BBVA, HSBC or Citibank, have opted for this technology with Spanish seal.