



Disinfection of premises

homes, residential complexes, resorts, hotels, hospitals, schools & kindergartens, shopping malls, airplanes, trains, cruise liners or any other high infection risk areas



SUMMARY

Launch of a Global based brand with a production facility in UAE, Saudi Arabia or Malaysia for the production of innovative electromagnetic generator units (EMG) for the provision of services of disinfection.

The method allows a remote and free of direct contact activation or suppressing of the vital activity of microbiological objects, inhibit the activity of pathogenic microorganisms, control the flow of chemical processes, and to positive influence the vital activity of plant and animal cells.

Purpose: Technical disinfection of premises and territories for the safety of people, plants, and animals without the risk of chemical contamination.

Certification of equipment for use in high demand countries: Europe, USA, South America, China, South-East Asia, India, etc.



TECHNOLOGY

Our technology is based on the universal method of controlling the process of low-frequency electromagnetic fields of low intensity.

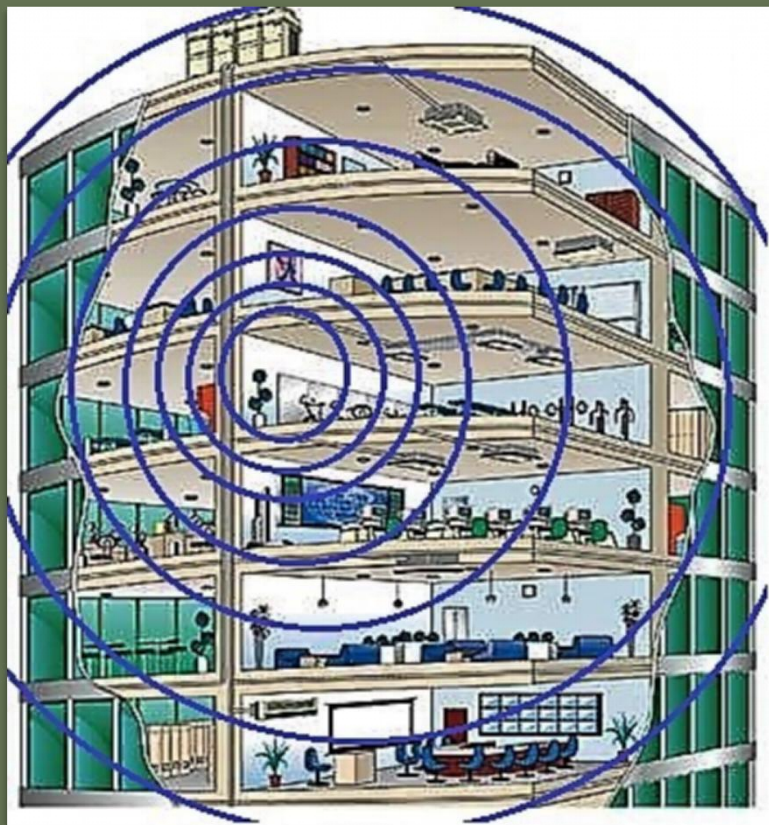
Physical properties of low-frequency electromagnetic fields allow quick processing of any premises and surfaces with low energy consumption. This determines the economic efficiency of this technology.

Our technology allows to suppress the vital activity of microbiological objects, stop the development of pathogenic microflora, for example, disinfecting industrial and public premises, accommodations, means of transportation, and any other public space.

The technology is environmentally friendly and safe for humans, it is tested in Russia and numerous other countries.

We hold a certificate of conformity for the manufacturing of the device in Russia. We also hold a sanitary-hygienic safety certificate for the device.

OPERATION



COMPARATIVE COSTS FOR ONE HOTEL (250 rooms)

1-2 times a year, treatment of the hotel room and its air conditioning system with chemical gas.

$\$ 600 \times 250 = \$150\ 000$

Warranty 3-5 months

Mandatory requirement to treat ventilation and air conditioning systems at least twice a year. If mold or pathogens are found in ventilation systems, the hotel is closed for complete disinfection. Loss of income.

against 1 EMG device

against EMG rent of \$22,812 per year

Warranty EMG 5 years

Online service and a free replacement of the device

COMPARATIVE COSTS

In the United States, Indonesia, Malaysia and China the average price for processing for a one-time treatment for one single home, conditioning systems using the classical method

Ranges from \$ 1,500 to \$ 9,000.

Average cost \$3,500

for a single service, which is also extremely inconvenient for customers. This departure from the house for 2 days and the removal of all animals and plants from the house.

<https://www.fixr.com/costs/mold-remediation>

FOR HOUSES AND RESIDENTAL COMPLEXES

1 EMG device

Our technology gives multiple savings for homeowners and the solution to this problem forever. The customer will receive a technical effect and greater cost savings from its application, and the Investor will receive a high return on investment.

The cost of our services differs from that applied today to the classic option of disinfecting ease of use, convenience for customers and multiples cheaper.

\$ 365 per year for one single houses (\$1x365 days) by subscription against \$1,500-\$9,000 single service for a treatment of an object with chemical gas. When using our technology is not required to go anywhere and anything to take out.

Warranty EMG 5 years. Online service

COMPARATIVE COSTS FOR ONE HOSPITAL

15-20 devices UVD Robot

against 1 EMG device

Costs for UVD Robot \$ 1,275,000

against EMG rent of \$ 72,000 per year

Warranty UVD Robot 1 year

Warranty EMG 5 years

Periodically requires service and replacement of lamps

Online service and a free replacement of the device

SCOPE OF APPLICATION

The method makes use of a low-frequency electromagnetic modulator. Proposed method allows for the complete disinfection of any premises from any kind of pathogenic microflora, pests, and rot smell. It is possible to decontaminate any premises, e.g:

- medical institutions
- livestock farms
- poultry houses
- bee hives
- zoo
- agricultural products storages
- industrial facilities

The technology allows to disinfect or sterilize any premises, equipment, objects, including, but not limited to:

- medical equipment
- production tanks
- means of transport
- children institutions
- schools
- eating places
- locations of soldiers in the army
- hospitals
- hotels

And numerous other public places

Consequences from mold in Malls in Malaysia during the 2020 quarantine period



This situation could have been easily avoided if only our device was used in this shopping center!

The retail network lost multi-million dollars to the mold

MEDICAL APPLICATION

Application in medicine and sanitary works for decontamination from deadly viruses and microbes from which there are no antibiotic preparations in modern pharmaceuticals (ORP efficiency of the preparation is confirmed by certified laboratories):

- Pathogenic Staphylococcus
- Escherichia coli
- Pseudomonas aeruginosa
- Candida (fungus)
- Bacillus Cereus
- Bacillus subtilis
- Botrytis cinerea
- Proteus vulgaris
- Aspergillus niger
- Legionella Pneumophila

Pseudomonas aeruginosa in the human body



Staphylococcus aureus in the human body



Black mold in the human body



Candida fungi in the human body



Processing Results and Protocol of a hotel in Moscow

BEFORE

Test area	Microorganisms	Test result
No. 1 Shower	Bacteria (<i>Bacillus subtilis</i>)	high 32 CFU/mL
	Mold (<i>Mucor</i> , <i>Rhizomucor</i>)	high 48 CFU/mL
No. 2 Ventilation	Bacteria (<i>Bacillus subtilis</i> , <i>Sarcina lutea</i>)	high 15 CFU/mL
	Mold (<i>Candida Albicans</i> , <i>Rhizopus</i>)	significant 2 CFU/mL

Result after processing the hotel room with the generator for 3 sessions during the day for 20 minutes a session (1 day)

AFTER

Test area	Microorganisms	Test result
No. 1 Shower	Bacteria (<i>Bacillus subtilis</i>)	sporadic 2 CFU/mL
	Mold mushrooms (<i>Penicillum</i> , <i>Rhizopus</i> , <i>Rhizomucor</i> , <i>Cladosporum</i>)	sporadic 1 CFU/mL
No. 2 Ventilation	Bacteria (<i>Bacillus subtilis</i>)	significant 5 CFU/mL
	Mold mushrooms (<i>Rhizomucor</i> , <i>Mucor</i>)	significant 6 CFU/mL
	Mushrooms (<i>Aspergillus</i>)	sporadic 1 CFU/mL

Completely disappeared: *Candida Albicans*, *Rhizopus*, *Sarcina lutea*. The main dangerous bacteria decreased by a multiple

PREVENTION OF LEGIONELLA PNEUMOPHILA BACTERIA IN HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

Infectious disease

Each type of infection caused by various kinds of aerobic bacteria of the Legionella species is usually given in the description with the term legionellosis.

To date, more than 30 species of bacteria have been identified, of which Legionella Pneumophila is the most dangerous, causing 90% of cases of legionellosis. Legionella infection is becoming an increasingly serious problem, to the extent that this issue is under the special supervision of the World Health Organization, as well as the European community through the European working group on Legionella-related infections (EWGLI). Bacterium Legionella Pneumophila.

The main source of Legionella damage is stagnant non-boiled water both in natural reservoirs such as ponds and canals and in artificial structures – tanks, water installations, water heaters, heating and air conditioning systems (with temperatures from 25 to 45 °C).

Problems in heating, ventilation and air conditioning systems



APPLICATION OF EMB IN HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

In the human body, bacteria get only by air due to small drops of contaminated water.

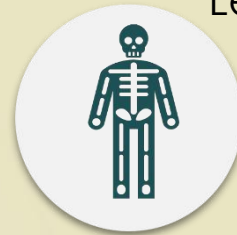
Drain holes and showers can also contain high concentrations of bacteria if they are used after a long break. In recent years, heating, ventilation, and air conditioning systems, especially centralized systems without regular maintenance, have been found to be the main medium of bacterial movement.

In particular, traditional high-efficiency direct cooling systems suffer from the transfer of bacteria in droplets of treated air.



Barely once in the body, the bacteria penetrate into the lungs, in which, unfortunately, the phagocytes of alveolar macrophages do not have the ability to either kill them or restrain their growth.

Legionellosis managed to kill killing microbes in a phagocytic mechanism, multiplying within the phagocytes to their death, resulting in new bacteria are striking in the remaining cells. The Legionnaires' disease presents in various forms.



The most severe forms of infection can be fatal, manifesting in 30-50% of cases as pneumonia, which is difficult to distinguish from other types of respiratory infections. In the US, at least 25,000 cases of legionellosis are reported annually.

Classic method of disinfection of Legionella, mold, and fungi in air conditioning systems



APPLYING EMB TO THE HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

The industrial market of disinfection services from bacteria, fungi, and mold on different types of enterprises of production and processing of products, office buildings, hotels, business centers, educational institutions, student dormitories, fitness centers, public swimming pools, public transport, etc.

Comparative analysis of prices for disinfection services of industrial processing volumes (from 1000 m².) bacteria, mold and fungi used now in the United States, the United Arab Emirates, South Korea, Europe.

In the United States, the average price for processing for a single home, conditioning systems using the classical method ranges from \$ 3,000 to \$ 6,000. Annually the demand for these services increases by 20-23%. This procedure is recommended at least 2 times in one year.

FOR HOTELS:

On average between \$10 and \$25 per 1 Sq.Ft. (1m²=10.7 Sq. Ft) 1m²=\$100>\$250.

For room, an area of 300 square feet (27.9 m²), cost from \$1,000 to \$ 2,500.

<https://www.homeadvisor.com/cost/environmental-safety/remove-mold-and-toxic-materials>

Industrial processing volumes can be significantly reduced.

Standard room 300 Sq.Ft hotel = 28m² = \$ 600-\$800. All hotels and hostels are required to carry out a monthly inspection of ventilation and air conditioning systems for mold and dangerous pathogens such as Legionella Pneumophila, as required by the supervision and health services

THE USE OF EMG IN HEATING, VENTILATION AND AIR CONDITIONING

In the United States, Indonesia, Malaysia and China the average price for processing for a single home, conditioning systems using the classical method ranges from \$ 3,000 to \$ 6,000. Annually the demand for these services increases by 20-23%. This procedure is recommended at least 2 times in five years.

<https://www.fixr.com/costs/mold-remediation>

Such services are ordered annually in the US only in the residential sector of at least 1.100,000 households, with more than 17 million new houses and apartments built in the US annually, more than half of which are low-rise houses designed for one or two families. In 2018, there was approximately 138.45 million single home in the United States.

<https://www.statista.com/statistics/183635/number-of-households-in-the-us/>

Our technology gives multiple savings for homeowners and the solution to this problem forever. Applying this innovative technology with the latest modifications, and applying in medicine, sanitation, and agriculture, the customer will receive a technical effect and greater cost savings from its application, and the investor will receive a high return on investment.

The estimated cost of our services differs from that applied today to the classic option of disinfecting ease of use, convenience for customers and multiples cheaper. \$ 300 per year by subscription against \$2,000-\$6,000 for a single service, which is also extremely inconvenient for customers. This departure from the house for 2 days and the removal of all animals and plants from the house.

When using our technology is not required to go anywhere and anything to take out, the processing time of 1 house up to 500 m² - 2 hours.

STATISTICS AND THE NEED FOR THIS SERVICE IN THE RESIDENTIAL AND BUSINESS SECTOR

The commercial cleaning industry in the USA - statistics, and facts

As of May 2017, the cleaning services industry in the United States employed more than 3.25 million people. Cleaners are mainly engaged in the maintenance of buildings and houses, as well as in primary and secondary schools.

In 2018, the revenue from commercial cleaning in the United States reached \$ 61 billion US.

(<https://www.statista.com/topics/2201/commercial-cleaning-services-industry-in-the-us/>)

In North America, at least 30,000 companies provide cleaning services in the residential and office sector, and a large number (at least 40,000) of individual craftsmen in the processing of premises.

Of the outsourcing providers in the US, ServiceMaster is by far the largest company in terms of revenue. In 2017, the company reported annual revenue of us \$ 2.75 billion and provided a franchise to about 5,000 cleaning companies and their activities are diversified, which means that this figure includes revenue from cleaning facilities as well as such as mold and pathogen control. As the largest service provider in the United States is the company Jani-King which made sales of 712 million us dollars from more than 7,000 franchising institutions. Completes the top three in revenue Coverall, which gained \$ 417 million from sales of about 8,600 franchises in 2016.

STATISTICS AND THE NEED IN THE HOTEL SECTOR

Companies involved in servicing hotel chains are aware of the constant problem in hotel ventilation and air conditioning systems. This problem is mold and dangerous pathogens, which are constantly formed in central air conditioning systems and hotel room ventilation.

This problem, with which you have to constantly fight and spend annually large budgets brand network 4★ and 5★ hotels. Every year, hoteliers incur multimillion-dollar losses from the closure of hotels at the time of eliminating the effects of mold. Only because of the negative reviews about the presence of mold with photos in hotel rooms at TripAdvisor or Facebook, hoteliers lose at least 90% of customers who see such a review.

GLOBAL HOTEL PROPERTY MARKET

Global hotel chain, Wyndham Hotel Group, leads the ranking of the top hotel companies by number properties. Wyndham accounted for almost 9,000 units in its worldwide portfolio, which ranged from economy to upscale accommodation. Its closest competitors were Choice Hotels International and Marriott International, which reported 6,857 and 6,542 properties, respectively.

The global hotel property market. The hotel industry is full of competition and continues to show growth due to a strengthening global traveler pool. The competitive nature of the industry means the number of properties a hotel company has to its name is subject to change. This is due to companies building, acquiring, or selling properties. For example, Wyndham's acquisition of La Quinta Holdings added over 900 hotels to its property portfolio in 2018.

The lodging construction. Some cities and countries, not unexpectedly, have more new hotels in the works than others. In the U.S. alone there were over 5,300 properties in the development pipeline as of September 2018. Additionally, when it came to cities, New York had the highest number of new lodging projects in the pipeline worldwide, making the U.S. one of the most productive countries in terms of new lodging construction.

STATISTICS AND THE NEED FOR THE HOTEL SECTOR

Number of rooms in the TOP 50 hotel companies. The undisputed leader in terms of room Fund is Marriott International with more than 1.1 million rooms. In second place with a noticeable margin – Hilton Worldwide, which has almost 800 thousand rooms. A little less at IHG – 767 thousand rooms. In fourth place – Wyndham Hotel Group and almost 700 thousand rooms. The TOP 5 is completed by the Chinese hotel company Shanghai Jin Jiang International Hotel Group, which has a little more than 600 thousand rooms.

Total: Top 50 companies have: in circulation 8,659,047 rooms in 71,224

https://www.statista.com/topics/1872/marriott-international/#dossierSummary__chapter

The cleaning market in the US is \$ 61 billion.

<https://www.statista.com/topics/2201/commercial-cleaning-services-industry-in-the-us>

Number of hotels. In the first place in the number of hotel facilities is Wyndham Hotel Group – more than 8 thousand hotels. The TOP 5 also includes Choice Hotels (6.5 thousand) International, Marriott International (5.9 thousand) and InterContinental Hotels Group (5.2 thousand). Also among the largest hotel companies in the world by the number of objects is the Chinese Shanghai Jin Jiang International Hotel Group, which has almost 6 thousand hotels.

<https://www.statista.com/statistics/197869/us-hotel-companies-by-number-of-properties-worldwide>

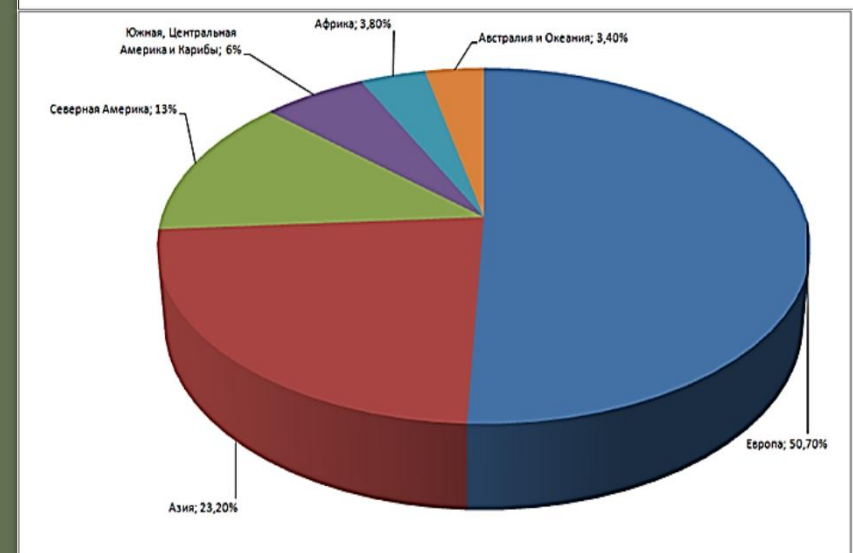
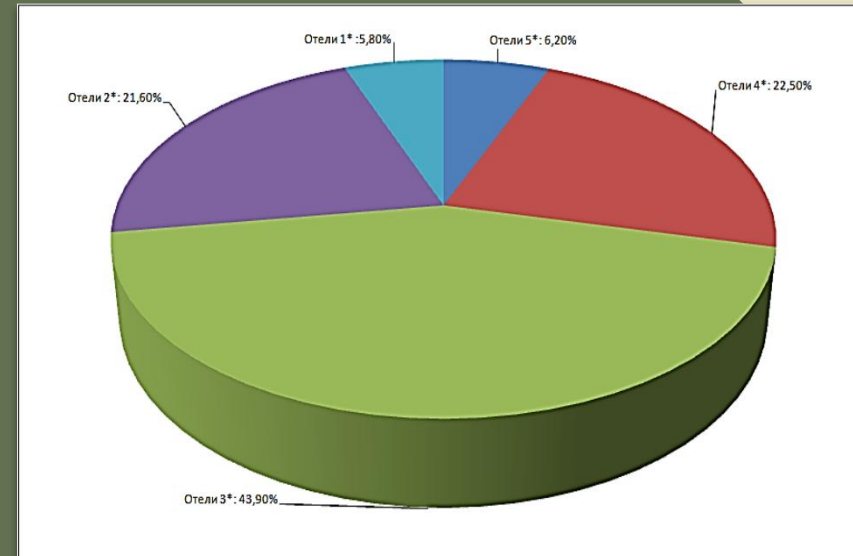
Global prospects for the use of technology in the market of hotels with the "stars"

Picture 1. Shares of world regions in the global number of hotels with "stars"

As can be seen from Picture 1, more than half of such facilities in the world (50.7%) are located in Europe, 23.2% in Asia, 12.9% in North America, 6% in Central and South America and the Caribbean, 3.8% in Africa, 3.3% in Australia and Oceania.

Picture 2. Reflects the distribution of categories among the hotels with "stars" in the world.

Picture 2. Shares of hotels of various categories in the total number of hotels with "stars" in the world



Possible industrial level examples of EMG



CHARACTERISTICS OF THE INDUSTRIAL DESIGN OF THE MODULATOR

Production in anti-vandal execution is possible.

Stationary version (for open air and large spaces)

- * The radius of action in the room is from 10 m². up to 2,000,000 m². (regulated)
- * Power consumption – Max/up to 10 watts per hour.

Mobile version (for indoor use)

- * The radius of action in the room is from 10 m². up to 200 000 m². (regulated)
 - * Powered by a rechargeable battery installed
- The term of operation from the accumulator is 1 year.
- Environmentally friendly - no waste, impact on the environment. 100% safe for people and animals and the environment.
- * Technically safe. * Easy to operate.
 - * Maintainable - quick replacement if necessary.
 - * Service life 5 years.

Possible EMG modulators for the home use

The need for these devices in the US and Europe, excluding the Asian market, is the most modest number - at least 10 million devices per year



The reality and the Decision

UNFORTUNATE REALITY TODAY



AVAILABLE TOMORROW



Prospect of application in the business

Showed great interest in the use of technology in their businesses when packing tea, the company Unilever. This technology is applicable to business use in the packaging of all types of food products.

It helps to protect products from mold and rotting in any volume of warehouses and during the transportation of goods.

Many companies involved in the storage and transportation of fresh fruits and vegetables, want to have such devices and ask to help preserve products and protect them from mold, all kinds of fungi and parasites.



PRODUCTS AND SERVICES

The project involves the implementation of a full cycle of work on staffing and bringing to the planned capacity of its own workshop for the production of generators of low-frequency energy fields, EMGs

Production of EMGs and their use in fighting agricultural crop diseases, effective and low cost weed and pest control, disinfection of animal husbandry to obtain environmentally friendly products

Studies conducted in laboratory conditions with isolated colonies of various microorganisms, as well as the impact of the electromagnetic field (MEP) on environmental objects (air, water, etc.), indicate consistent decrease in colony-forming units of *Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, various types of *Proteus*, fungi of the genus *Candida*, *Bacillus Cereus*, *subtilis*, fungi *Penicillium*, *Mucor*, *Rhizopus*, *Aspergillus*, *fumigatus*, etc.

MARKET AND CUSTOMERS

Market capacity:

Since 2020, a new federal law has come into force in the United States, according to which, when selling any residential or commercial premises in which people may live or work, disinfection is mandatory to destroy mold, pathogens, etc., and the new buyer is also required to provide a document on the disinfection carried out, the validity of which cannot be more than 6 months. This law increases the number of clients many times over, since the cost of services is cheaper and more convenient for the user.

U.S. housing market - statistics & facts

The United States is home to one of the biggest and most dynamic housing markets in the world. In 2025, the market was valued at 1.5 billion U.S. dollars in residential real estate transactions—a figure only comparable with the Chinese market. House prices in the United States have grown steadily since 2012, with the annual house appreciation hitting nearly 18 percent during the housing boom in 2021. Nevertheless, price growth has been muted by the deteriorating housing affordability – a complex interplay between insufficient housing supply, income growth, and growing housing costs.

<https://www.statista.com/topics/1618/residential-housing-in-the-us/#topicOverview>

Number of existing homes sold in the United States from 2005 to 2024, with a forecast until 2026 (in million units)

<https://www.statista.com/statistics/226144/us-existing-home-sales/>

MARKET AND CUSTOMERS

Market capacity:

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Total: Top 50 companies have in circulation 8 659 047 rooms in 71 224 hotels

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Such services are ordered **annually in the US only in the residential sector of at least 1.100,000 households, with more than 17 million new houses and apartments built in the US annually, more than half of which are low-rise houses designed for one or two families. In 2018, there was approximately 138.45 million single home in the United States.**

<https://www.statista.com/statistics/183635/number-of-households-in-the-us/>

1% of the market estimates a minimum of 1.300.000 EMG demand

MARKETING

There are three options for monetizing the project.

1. selling the device to the population as a home device

For this, you can quickly obtain a safety certificate as for a low-frequency generator to solve mold problems. This will be a household device, and therefore obtaining certification is simple and quick.

When starting the production of such a compact low-power device for an apartment, house, residence, the selling price can be from \$ 350 to \$ 500, which corresponds to an annual subscription service (similar to paying for home Internet)

2. Production of medium-power generators that operate stationary and can service a residential complex or hotel, resort, or cruise ship, shopping center, food storage warehouses, etc.

Production of semi-industrial devices can be organized in any country, and exported. In many countries, the production of high-tech devices receives support from the state in the form of grants, subsidies, etc.

It is better to monetize the project for the release of a medium-power device by leasing such a device to customers.

MARKETING

The diagram and calculation:

\$1 per day for 1 room in a hotel (on a cruise) or 1 apartment in a residential complex.

An average hotel with 250 rooms will give a year from renting the device $(\$250 \times 365) = \$91,250$, in countries where there is a constant problem with mold and pathogens (Indonesia, Malaysia, China, USA, India, Thailand, etc.)

Even providing a 75% discount to the hotel owner, we get an income of **\$22,812 per year** from one hotel anywhere in the world.

Which gives us 2-3 X from the cost price.

For companies, we can sell devices on credit, on lease.

At the same time, the cost of the device will decrease with each new client.

3. If we certify it as a medical device for use as a device for combating hospital-acquired infections (this is a global problem all over the world, on which billions of dollars are spent annually), then certification takes 1 year, an expensive process, but the profitability will be multiple from the use of our device, since there are no analogues in the world.

IMPLEMENTATION AREAS

The technology allows disinfection or sterilization of any premises, equipment, objects, for example:

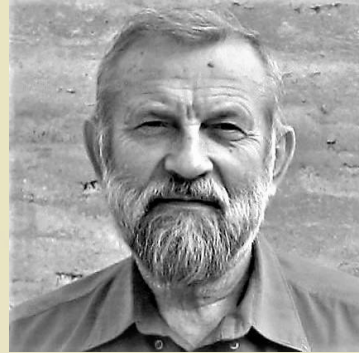
- Houses
- Residential complexes
- Resorts
- Hotels
- Hospitals
- Schools and kindergartens
- Cafes and restaurants
- Shopping centers
- Business centers
- Airplanes
- Trains
- Cruise liners
- Transport (Ships, car carriers, containers)
- or any other areas of increased risk of infection
- Any public places
- Medical instruments and equipment

KEY PEOPLE



ROBERT KAUSARIVICH

Partner.
The first education: Medical Engineering / extensive experience as an Medical Equipment Engineer, Service Diagnostics, and Laboratory Equipment / the second education: Economics / work with investors and investment funds / project evaluation specialist for financing, mergers, and acquisitions / SPO, IPO, NYSE / Audit of investment projects / financial modeling of projects, evaluation of investment attractiveness of projects. Commercialization of innovative projects / the output of projects from Start-Up into a real industrial structure / organization of representative offices of companies and distribution network. More than 25 years of experience



MIKHAIL ANDREEVICH

Partner.
Specialist in engineering and technology of basic organic synthesis. Engaged in the development of new technological processes in various fields of science and technology. Author of 38 Russian and foreign patents and patent applications. Energy, agricultural, gerontological, medical, and environmental programs have been created with the use of low-frequency electromagnetic fields, as well as the manufacture of special generators for them. All programs have been tested last 20 years (acts, protocols) and are ready for industrial implementation.



ILYA GRIGORENKO

Partner.
Specialist with experience in investment and financial structuring of transactions with Russian and foreign investors and financial institutions (more than 15 projects). Extensive experience in the banking group Societe Generale. Productive experience of cooperation and project interaction with PricewaterhouseCoopers, Russian direct Investment Fund, RT-business Development, Oakes Capital Fund, Mubadala Investment Company, Euler Hermes/Trade Credit Insurance, UFG Asset Management and others.