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GRENALAY

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I. INTRODUCTION

In today's world, pollution is on the verge of rising to greater levels posing greater risk to humanity. Air pollution is a main threat which stands out from the rest of the classes of pollution that affects life the most.

Grenalay has come up with a solution of solving the crisis by manufacturing aerosols that contain natural compressed air. Grenalay seeks to resolve the problem of scarcity of fresh natural green air in polluted cities around the world.

The aerosols come with a top that can be used as a mask which can be used to wear by the customer while using the aerosol product. Our main aim is to solve scarcity crisis of natural green air around the world in polluted cities.

In the olden day's people working in the office used to tell each other "come let us get some fresh air", but now that same people working in the polluted cities have nowhere to go. Our product can be used anywhere, is very portable and can be carried in backpacks.

II.HONOR OF OUR OWN INTRODUCTION

The people living in polluted cities need good fresh air to breathe.

Living in polluted cities has caused them to develop respiratory diseases due the high level of pollutants in the air.

Now customers are using air purifiers and masks manufactured by different companies.

Many of their products have flaws and do not provide pollutant free air and some do not filter up to the standard quality of air needed for breathing.

Our product can cause a very big impact on the life of our customers.

They get to breathe fresh natural air , which in turn rejuvenates their bodies and cure them of most Chronic Obstructive Pulmonary Disease (**COPD**).

So customers who really crave for a puff of fresh air will definitely buy our

III.OUR PRODUCT

We filter and compress natural air into aerosols.

Fig d Shelcan

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The aerosols come with a top that can be used as a mask which can be used to wear by the customer while using the aerosol product.

The mask can provide concentrated blow of air without leaking out.

One product of ours can give 200 deep breathes.

It is suitable for people of all ages.

Very Portable

Can be carried anywhere

IV. STEPS OF PROCESSING PRODUCT

It is a two-step process

Step 1. Collecting air from hills

Collection of rich and vibrant natural green air from hilly areas like Paytharmala, MunnarHills ,Oooty ..etc where the quality of air is at its best by air compressors at 135 psi as shown by fig b. The air entering the compressor is purified from moisture by filters. Then it is transferred to air cylinders shown by fig a.

Fig b Air Compressor

Step 2. Connecting air from cylinder to Aerosol filling machine

Fig a Air Tank

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Fig c Air Crimping Machine

The collected air in the cylinder shown by fig a is connected to the aerosol filling machine shown in fig c via a pipe. The required amount of air is compressed and filled into each can at 135 psi. The capacity of the tank depends on the manufacturer.

V.WHY WE MADE IT?

In present world as more and more industries are growing at high rate and manufacturing of automobiles are also the high, the unburnt carbon particles and chemical smokes from manufacturing industries pollute the air so much that it makes it difficult for humans to breathe. Our company provides fresh and natural breathable air collected from hilly areas and terrains and delivers it to customers craving for a puff of fresh air living in polluted cities around the world.

VI. EFFECTS OF AIR POLLUTION

Fig d People using bags of air

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It causes

1. Lung diseases
2. Asthma
3. Lung cancer
4. Emphysema
5. chronic respiratory disease
6. heart disease
7. Damage to the brain, nerves, liver, or kidneys.
8. 7 million premature deaths annually linked to air pollution according to WHO

VII. OUR COMPETITORS

Vitality air is our main competitor. Vitality air is a Canadian startup launched in 2016. They are now a very good recognized brand in China. They are planning to sell their products in India at a costingbetween Rs 1,450 and Rs 2,800.

Vitality Air has developed a huge consumer base over seven cities in China including Beijing and Shanghai

It has already shipped around 12,000 units to China

When asked about the manufacturing process, Vitality Air's founder Moses Lam said that the company packs around 150,000 litres of air per session in Banff, Alberta in Canada. The process takes around 40 hours

Vancouver-based business-person Justin Dhaliwal is managing Vitality Air's Indian ties. He said that around 100 bottles have arrived in New Delhi for test-marketing

Samples of Vitality Air have been sent to the Canadian High Commission here, and the company has already started online and promotional marketing.

Their website is www.vitalityair.com

VIII. PRINCIPLE OF GRENALAY

The principle is such that when air is stored inside the aerosol can, the kinetic energy of the air caused of being compressed, expands the air.

As a result the air expands and tries to escape out through the nozzle. The nozzle is one kind of regulator where it controls the speed and amount of air released from the aerosol can.

The aerosol can being built from aluminum provides great tensile strength and can withstand impact forces up to an extent.

IX.CONCLUSION

This new technology of ours is capable of decreasing the toll rate of premature deaths.

Save millions of lives.

An establishment of manufacturing plant for this technology can provide more job opportunities to many unemployed people.

This is one of its kind in Asia itself.

This new innovation can be revolutionary.

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Air gets polluted day by day.

So availability of fresh air decreases upon time to time.

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