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SOUND FIRE EXTINGUISHER

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ABSTRACT
Everyone knows fire it is very useful as well as hazardous for human life. when we go close to it we feel warm in cold weather, fire is mostly used in industries also in automobiles to run the vehicle, in houses for cooking food or in bigger food industries chemical industries, nuclear power plants, hydrolic power plants, but if situation goes out of control then what we do, we use fire extinguisher to extinguish flames what it consist, it consist of powder material or chemical of carbon dioxide which avoids the contact of oxygen to the flames. Fire(flames) requires oxygen to burn continuously, without oxygen flames can't burn ,so that we are going do in our project. My group is going to make a device which will work as a fire extinguisher but with the help of "sound". Sure sound ridiculous but it is true. A sound which extinguish flames.

We are going to extinguish flames using sound frequency. It is all about bass as we in human life music is most appreciating thing for different emotions for express enjoyment for relaxing and for music speakers are mostly used. And we know speakers are mostly use in dj concerts in function ns or in events. Means these are basically use to listen music And that we are going to do, for proper working of model we need specific sound frequency with a bass sound which will have pulse. When we put these sound frequency of flames then the sound stops the supply of oxygen due to which flames will be extinguish. flames will be start to extinguish.

Keywords: Fire, Sound, Fire Extinguisher, Music, speaker, Frequency, Soundwave

INTRODUCTION
A fire extinguisher is an active fire protection device used to extinguish or control small fires, often in emergency situations. It is not intended for use on an out-of-control fire, such as one which has reached the ceiling, endangers the user (i.e., no escape route, smoke, explosion hazard, etc.), or otherwise requires the expertise of a fire department. Typically, a fire extinguisher consists of a hand-held cylindrical pressure vessel containing an agent which can be discharged to extinguish a fire. Fire extinguishers manufactured with non-cylindrical pressure vessels also exist, but are less common. In the United States, fire extinguishers in all buildings other than houses are generally required to be serviced and inspected by a fire protection service company at least annually. Some jurisdictions require more frequent service for fire extinguishers. The servicer places a tag on the extinguisher to indicate the type of service performed (annual inspection, recharge, new fire extinguisher

Everyone loves music, sciancetist said the music is the best medicine for pain. Music or sound has the ablity to break the glass. In that type of experiment sound frequency vibrates the solid molecules, it not even vibrates solid molecules but also vibrates air molecules or oxygen molecules and that we are means my group members are doing for this project.we are going to vibrates oxygen molecules but we are not stooping here we are going to extinguishes flames with this tequnices.

PROBLEM STATEMENT

From survey we found that the Everyone knows fire it is very useful as well as hazardous for human life. when we go close to it we feel warm in cold weather, fire is mostly used in industries also in automobiles to run the vehicle, in houses for cooking food or in bigger food industries chemical industries, nuclear power plants, hydrolic power plants, but if situation goes out of control then what we do, we use fire extinguisher to extinguish flames what it consist, it consist of powder material or chemical of carbon dioxide which avoids the contact of oxygen to the flames..

OBJECTIVE

1) To reduce wastage of water and other extinguishers.
2) To reduce hazard of direct contact to flames.
3) To improvise new technology in Extinguishers.
4) To get other areas where other Extinguishers cant go.

SCOPE

Here are a few suggestions or modifications which can be incorporated into the existing machine which would make it more user-friendly.

1) In military field
2) In jungle fires

METHODOLOGY

Frequency

This sound fire extinguisher is simple in construction but the most required thing is sound frequency for this project.it consist collimator / vortex which will store temporary atmospheric air in it. second one is amplifier which will amplifies the frequency range upto 30 to 50 Hz. Which is best for the extinguish flames. And the last and most important part of this project is speaker not normal speaker can use it required bass speaker which will be more capable to extinguish flames, because it is all about the bass.

STEPS IN METHODOLOGY

Sound is a pressure wave that oscillates between regions of high and low pressure. This oscillation is capable of creating a vacuum that separates air molecules from the source of the flame. Secondly, the system follows the principle of the ideal gas law in that the pressure at the flame source decreases which turn decreases the temperature at the source of the flam to suppress the

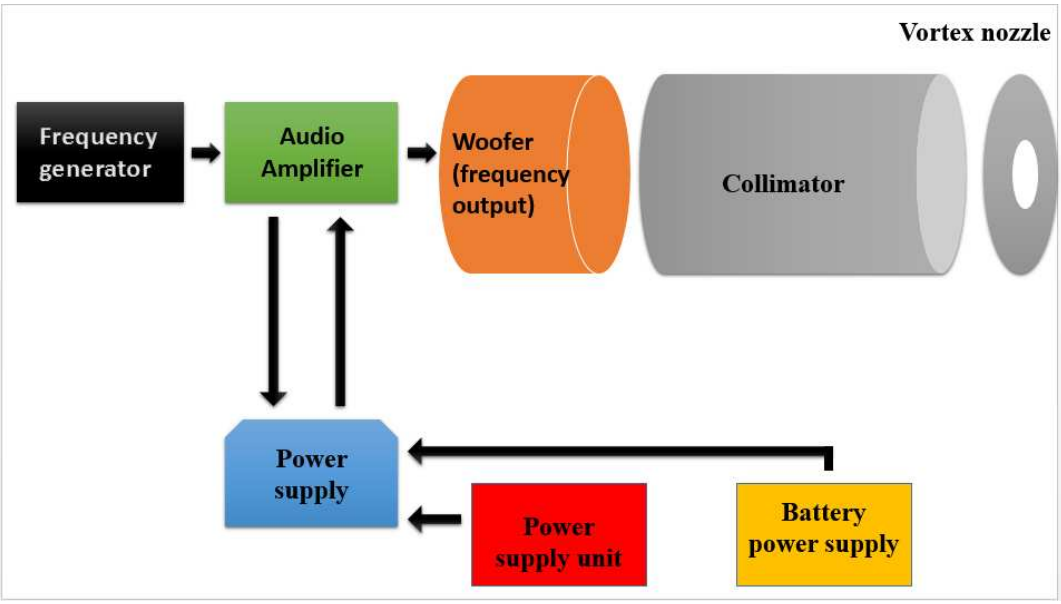
LITERATURE REVIEW

The new idea of extinguishing the fire is important. Accidents occurred by fire are dangerous and life threatening. Due to increase of danger to environment possible measures to be taken to overcome it. So the recent technique will help in extinguishing the fire and as well as protecting the environment also. The other thing is the accident caused in space, so avoid the use of extinguisher there. Sound wave extinguisher is the equipment by which fire can be extinguished. For fire extinguishing many researches can be possible and analyzing which sound frequency will give good result is necessary. As far as flame extinguishment is concern the vibration may be at high- and low-levels when coupled with high air flow velocity cause disruptions in the air-fuel ratio at the flame boundary which leads to diminishing of the boundary. Technology in firefighting has short comings like toxic to humans and leaves redues for DCP cylinder while water based extinguishers freezes in cold and conducts electricity. Soundwave extinguisher could be one of the potential alternatives as fire extinguishers.

PREFERRED DIMENSIONS

Sr.no	Name of Components	Quantity
1)	Collimator	1
2)	Vortex nozzle (raw material)	1
3)	Stereo Amplifier (BIMAL)	1
4)	Wire	1
5)	Handle	1
6)	Screws	10

EXECUTION FLOWCHART



APPLICATION

1) Jungle Fires
2) Industrial Fires
3) Domestic Fires
4) Hosptial Fire
5) Electric shortcircuit

ADVANTAGES

Weeding Machine Perform Multiple Operations.We Can Add A Trolley.
It Is Pollution Free Vehicle.
The Special Feature Of This Machine Is The Rotor Shaft Of Machine Can Adjust Between Different Size Crop Rows I.E.2.5 Ft, 3 Ft And 3.5 Ft.
We Are Arranging All These Features In Single Machine.[6]

DISADVANTAGES

The cost lithium-iron battery is more.
There is no seat for driver, so driver will have to be walking.

CONCLUSION

Agricultural development plays important role as a driver of rural poverty reduction. The effort require to develop a weeder will meet the demand of farmers. The efficiency of weeder should be satisfactory and it's easy to operate. It was faster than the traditional method of removing weed. Less labour needed and it is more

economical than hand weeding. Here do not use any fuel and power, Hence maintenance cost is very less. Cost of weeding by this machine comes to only one-third of the corresponding cost by manual labourers.

REFERENCES

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