**FIRE EXTINGUISHER BY VLF WAVES**

**ABSTRACT:**

The goal of this project was to use acoustic sound waves to extinguish and/or suppress a flame. Traditional fire extinguishers, such as chemical foam or water, are used successfully but pose the threat of severely damaging indoor equipment, whereas an acoustic wave fire extinguisher would protect them from further damage caused by the fire. The extinguishing device developed is intended for typical residential and commercial use. However, it can have non-typical applications such as use in a spacecraft and aircraft. New fire extinguisher looks a little like a conventional one, but instead of a compressed air tank spewing out chemicals, theirs has a loudspeaker the size of subwoofer drumming out sound waves. It's not much to listen to, just a low hum, but when pointed at flames, it makes them vanish. In a way, it's like blowing the fire out, because sound waves are basically multiple, regular blasts of air. Frequencies between 0Hz and 10Hz did not effectively extinguish a fire; but frequencies between 30Hz and 60Hz showed promising signs of suppressing a fire. Following this discovery, our proposed design intends to address the need for a new, efficient, light-weight, and innovative approach toward fire suppression.

**BLOCK DIAGRAM:**

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**BLOCK DIAGRAM DESCRIPTION:**

The first block is Signal generator or frequency generator, which can generate repeating or non-repeating electronic signals. We need a single tone frequency generator because only single frequency signal are capable of generating the larger vibrations than other multiple tone frequency. There are many different types of signal generators, with different purposes and applications. In general, no device is suitable for all possible applications.

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