

Ultrasonic Sound Tunnel

Ergun, Ali

Delimustafaoglu, Alibey

Ultrasonic sound tunnel aims to create solution for sound pollution. A normal sound resources provides the sound all around it. This sound reaches to everyone around who needs to hear this sound or not . This causes sound pollution. We worked on a project that we could directly send the sound to a particular person who has to hear this sound . After our researches we decided to use ultrasonic sound waves to prevent the sound pollution. While ultrasonic sound vibrates a lot it has one hundred thousand more energy than the normal sound. Besides human being all other creatures could hear the ultrasonic sounds and disturbed . There are many ways to create ultrasonic sound . We used piezo transducers technic which makes ultrasonic sound waves by electrical current. This establishes a sound tunnel which carries the sound . The transducer piezo technic allows the sound to optimize in one particular area . When make the research about the usage of ultrasonic sound waves we saw that it is used especially in the field of medicine as a kind of cure method. And also it is used in agriculture to prevent insects from the fields. we tried to make ultrasonic sound to be heard by people and tried to transfer it directly to the person that has to hear the sound. we established a tune like a laser and let it leave the sound on the point. We managed to make this without using a device for demodulation . According to the U.S. National Research Council's declaration ultrasonic sound waves doesn't have bad effects on people.