

The Ear Blind Seeing

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It is approved by World Health Organization that 285 million people are estimated to be visually impaired worldwide: 39 million are blind and 246 have low vision. Neuroscientist Paul Bach-y-Rita hypothesized in the 1960s that we see with our brains not our eyes. At the beginning of the research it was assumed that each color has a specific electrical wave. But after research it was found that's wrong and every color has specific electromagnetic waves based on Alpha, Beta & Theta Rays. So that it's needed to bring these waves for each color. By using Emotiv EPOC EEG Brain Activity Mapping software these waves were stimulated on 70 humans in a dark isolated room from any sound or light or electromagnetic waves. A color sensor was put to sense any color and emit an order to the micro controller to produce the electromagnetic wave which is specific for each color captured. The project can draw the captured image in 3D Shape as there is an ultrasonic sensor which sends waves and hits the objects in front of the device then reflected to the sensor, the sensor will calculate the distance between the device and the object by the relation between time, velocity and distance, after that the two golden platinum electrodes will receive the order from the controller and send it through the ear due to the presence of the neo cortex which searches for the responsible part to analyze these waves and send the wave to the visual brain cortex. However the project faces another problem which is the effect of the external waves on the waves emitted from the device but it is solved by making a correction system which can calculate the electromagnetic waves, light waves and sound waves around the person and send direct orders to acclimate the generated waves by the waves around the person.