

# 中華科技大學

CHINA UNIVERSITY OF SCIENCE AND TECHNOLOGY

## 102 年專利

系別：工業工程與管理系

Department : Industrial Engineering  
and Management

題目：噪音抵銷裝置

Subject : Noise Reduction Equipment

計畫主持人：陳國晃

Main Planner : Kou-Huang Chen

### 研究成果：

本創作係有關於一種噪音抵銷設備，其主要包括複數個收音模組、複數個播音模組、及一訊號處理模組。其中，複數個收音模組、及複數個播音模組係分別設置於複數噪音抵銷區內，而訊號處理模組係電性連接複數個收音模組與複數個播音模組。而且，訊號處理模組控制複數個收音模組進行噪音之收音，訊號處理模組針對每一個收音模組所收到之噪音分別處理並分別產生相位相反的聲波，並透過設置於同一個噪音抵銷區內之播音模組播放。據此，本創作可針對每一個噪音抵銷區內所有的噪音進行消除，故可即時、且準確地消除噪音。

### 英文摘要：

The creation is about a kind of noise reduction equipment. It includes multiple receiving modules, multiple broadcasting modules and a signal processing module. The receiving modules and broadcasting modules are separately installed in multiple noise cancellation zones and the signal processing module are connected electrically to multiple receiving modules and broadcasting modules. Also, the signal processing module controls multiple receiving modules to receive the noise. The signal processing module processes each noise gotten from noise module and produces its anti-phase sound way separately, and then the sound way will be emitted from the broadcasting module in the same noise cancellation zone. By this way, this creation can eliminate all the noise in the noise cancellation zone immediately and accurately.

### 圖片介紹：

