



TECHNOLOGY

Noise Cancellation Algorithms in the Case When There are More Sensors than Actuators

OVERVIEW

A number of companies have sought to produce products that would effectively dampen or eliminate noise. Some systems have been developed which create a set of sound waves that when added to the undesired sound achieves this purpose. However, real-time changes in the undesirable sounds make the optimization of these systems a serious problem.

Researchers at the University of Maryland, Department of Electrical Engineering, have developed a system to enhance the efficiency of devices which are designed to eliminate noise. This system is applicable in environments where there is a periodic and repetitive sound and is capable of changing, in real-time, to different externally emitted sounds. This technique will be applicable in areas such as electronic mufflers, reduction in noise in office environments, airplane engine noise and potentially in suppressing noise in submarines and power generators.

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Additional Information

INSTITUTION

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PATENT STATUS

U.S. Patent # 5,091,953 issued for this technology

LICENSE STATUS

Contact OTC for licensing information

EXTERNAL RESOURCES

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