

Title (en)

Active noise cancellation using frequency response control

Title (de)

Aktives Lärmunterdrückungssystem mit Frequenzansprechkontrolle

Title (fr)

Système actif de suppression du bruit avec contrôle de la réponse en fréquence

Publication

EP 1308926 A2 20030507 (EN)

Application

EP 02079479 A 20021025

Priority

- US 34102601 P 20011030
- US 27144002 A 20021015

Abstract (en)

An active noise cancellation system (20) includes using a frequency domain response of a secondary path (44) of the system. The frequency domain response information provides an indication of a desired magnitude and phase of a reference signal that is used for generating a cancellation signal that drives a speaker (28) to achieve the desired amount of noise cancellation. Using a frequency domain response greatly reduces the number of computations required and the amount of memory used within the system controller. In one example, a reference signal adjustment module (40) applies the desired magnitude and phase adjustments to a reference signal having a known frequency. In another example, the referenced signal tone generator (22, 40) incorporates the desired amplitude and phase in the reference signal. <IMAGE>

IPC 1-7

G10K 11/178

IPC 8 full level

G10K 11/178 (2006.01)

CPC (source: EP US)

G10K 11/17817 (2017.12 - EP US); **G10K 11/17823** (2017.12 - EP US); **G10K 11/17855** (2017.12 - EP US); **G10K 11/17883** (2017.12 - EP US);
G10K 2210/1282 (2013.01 - EP US); **G10K 2210/30232** (2013.01 - EP US)

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

EP 1308926 A2 20030507; **EP 1308926 A3 20040121**; **EP 1308926 B1 20070221**; DE 60218265 D1 20070405; DE 60218265 T2 20070719;
US 2003079937 A1 20030501

DOCDB simple family (application)

EP 02079479 A 20021025; DE 60218265 T 20021025; US 27144002 A 20021015