

Title (en)

Hybrid active noise reduction device for reducing environmental noise, method for determining an operational parameter of a hybrid active noise reduction device, and program element

Title (de)

Hybride aktive Rauschminderungsvorrichtung zur Abschwächung von Umgebungsrauschen, Verfahren zum Bestimmen eines Betriebsparameters der hybriden aktiven Rauschminderungsvorrichtung und Programmelement

Title (fr)

Dispositif hybride de réduction active du bruit pour réduire le bruit ambiant, procédé de détermination d'un paramètre opérationnel d'un dispositif hybride de réduction active du bruit et élément de programme

Publication

**EP 2259250 A1 20101208 (EN)**

Application

**EP 09161866 A 20090603**

Priority

EP 09161866 A 20090603

Abstract (en)

A hybrid active noise reduction device for reducing environmental noise is provided, the device (500) comprising a microphone (102) for receiving a noise signal (118) and for transmitting a microphone signal (122), a filter unit (114) for receiving the microphone signal (122) and for transmitting a filtered microphone signal (514), the filter unit (114) comprising an analog filter part (501) and a digital filter part (112), the analog filter part (501) and the digital filter part (112) being arranged in series to one another, and a loudspeaker (110) for transmitting a noise reduction signal (120) based on the filtered microphone signal (514). A bypass line (505) is arranged in parallel to the digital filter part (112) to add the outputs of the analog filter part (501) and the digital filter part (112).

IPC 8 full level

**G10K 11/178** (2006.01)

CPC (source: EP US)

**G10K 11/17823** (2017.12 - EP US); **G10K 11/17855** (2017.12 - EP US); **G10K 11/17857** (2017.12 - EP US); **G10K 11/17881** (2017.12 - EP US); **G10K 11/17885** (2017.12 - EP US)

Citation (applicant)

US 5440642 A 19950808 - DENENBERG JEFFREY N [US], et al

Citation (search report)

- [XII] US 2007098119 A1 20070503 - STOTHERS IAN [GB], et al
- [XA] US 2004240677 A1 20041202 - ONISHI MASAHIRO [JP], et al
- [X] US 2001036283 A1 20011101 - DONALDSON MARK [NZ]
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- [Y] GB 2222733 A 19900314 - TOPEXPRESS LTD [GB]
- [Y] US 5774564 A 19980630 - EGUCHI MASAKI [JP], et al
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CN105393301A; US9807503B1; US9020065B2; US10026388B2; US10013966B2; US9955250B2; US10468048B2; WO2010140133A3; WO2013108096A1; WO2016198481A3; US9711130B2; US10219071B2; US9773493B1; US9773490B2; US9721556B2; US9824677B2; US10249284B2

Designated contracting state (EPC)

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