

Title (en)  
Improvements relating to noise reduction arrangements.

Title (de)  
Anordnungen zur Begrenzung von Störungen.

Title (fr)  
Dispositifs de réduction de bruit.

Publication  
**EP 0195641 A2 19860924 (EN)**

Application  
**EP 86301946 A 19860317**

Priority  
GB 8506860 A 19850316

Abstract (en)  
An active noise reduction (ANR) arrangement for reducing acoustic noise in an earphone structure (1) includes an automatic gain control arrangement (14-20) providing a variable loop gain dependent upon the variable noise reduction which is produced in the earphone (1) by the active noise reduction arrangement and which is effectively measured by noise pick-up microphones (5 and 13) located, respectively, in earphone structure front and rear internal cavities (11 and 12) positioned in front of and at the rear of a noise-cancelling transducer diaphragm (8,9) and providing a signal related to the measured noise reduction.

IPC 1-7  
**G10K 11/00**; **G10K 11/16**

IPC 8 full level  
**G10K 11/00** (2006.01); **G10K 11/16** (2006.01); **G10K 11/178** (2006.01)

CPC (source: EP US)  
**G10K 11/17823** (2017.12 - EP US); **G10K 11/17825** (2017.12 - EP US); **G10K 11/17857** (2017.12 - EP US); **G10K 11/17881** (2017.12 - EP US); **G10K 2210/1081** (2013.01 - EP); **G10K 2210/3013** (2013.01 - EP); **G10K 2210/3028** (2013.01 - EP); **G10K 2210/3045** (2013.01 - EP); **G10K 2210/3056** (2013.01 - EP); **G10K 2210/3213** (2013.01 - EP)

Cited by  
EP0265097A3; US5181252A; CN102257560A; EP0333411A3; JP2019004456A; EP0414479A3; EP3664466A1; CN111294708A; US10034086B2; US8948410B2; US9818394B2; US9654854B2; US8391530B2; US10878798B2; WO2010070561A1

Designated contracting state (EPC)  
AT BE CH DE FR IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0195641 A2 19860924**; **EP 0195641 A3 19881005**; **EP 0195641 B1 19930630**; AT E91189 T1 19930715; DE 3688624 D1 19930805; DE 3688624 T2 19931007; GB 8506860 D0 19850417

DOCDB simple family (application)  
**EP 86301946 A 19860317**; AT 86301946 T 19860317; DE 3688624 T 19860317; GB 8506860 A 19850316