

Title (en)  
Speaker line inspection device

Title (de)  
Lautsprecherleitungs-Inspektionseinrichtung

Title (fr)  
Dispositif d'inspection de ligne de haut-parleur

Publication  
**EP 2229006 A1 20100915 (EN)**

Application  
**EP 08703062 A 20080110**

Priority  
JP 2008050198 W 20080110

Abstract (en)  
[Object] An audio signal from an audio signal source 2 is amplified in an amplifier 4, and the amplified audio signal is supplied through a loudspeaker line 6 to a plurality of loudspeakers 8 connected in parallel with each other. A test signal from a DSP 10 containing one or both of a frequency near the lowest frequency of the human audio frequency band and a frequency near the highest frequency, is combined with the audio signal in a combiner 13 and supplied to the loudspeaker line 6. Output signals of a current detecting circuit 14 and a voltage detecting circuit 16 disposed in the output of the amplifier 4 are supplied to a DSP 10 to analyze frequency components of the test signal, and a composite impedance of the loudspeakers 8 and the loudspeaker line 6 is computed based on the frequency component analysis. The DSP 10 compares the composite impedance with a threshold value to detect line breakage or decrease in impedance of the loudspeaker line.

IPC 8 full level  
**H04R 3/00** (2006.01); **H04R 29/00** (2006.01)

CPC (source: EP)  
**H04R 29/001** (2013.01); **H04R 29/007** (2013.01)

Cited by  
US9332343B2; CN102420711A; US2015289072A1; US9693160B2; US2014307881A1; US9119005B2; CN104221400A; US2015086028A1; US9961462B2; EP3860150A1; US9538303B2; CN103813256A; EP2728905A3; EP2871095A4; WO2013153484A1; US11263895B2; US11545026B2; US9860638B2; US9779625B2; US9565504B2; DE102013105123B4; US9247345B2

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AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 2229006 A1 20100915; EP 2229006 A4 20120808; EP 2229006 B1 20131120; EP 2229006 B2 20190227**; EP 2584792 A1 20130424; EP 2584792 B1 20140416; EP 2584792 B2 20180912; JP 5123319 B2 20130123; JP WO2009087772 A1 20110526; WO 2009087772 A1 20090716

DOCDB simple family (application)  
**EP 08703062 A 20080110**; EP 13151672 A 20080110; JP 2008050198 W 20080110; JP 2009548841 A 20080110