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

Designated contracting state (EPC)

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