

Title (en)

METHOD AND DEVICE FOR CONTROLLING THE OPERATING TEMPERATURE OF A LOUDSPEAKER

Title (de)

VERFAHREN UND VORRICHTUNG ZUR REGELUNG DER BETRIEBSTEMPERATUR EINES LAUTSPRECHERS

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR LE CONTRÔLE DE LA TEMPÉRATURE DE FONCTIONNEMENT D'UN HAUT-PARLEUR

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Application

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Abstract (en)

[origin: WO2013156439A1] The invention relates to a method for controlling the temperature of an electrodynamic loudspeaker comprising a membrane (140) excited by an electric motor fed by an excitation signal (221), characterised in that it comprises the following steps: a) obtaining the spectral distribution of the electrical impedance of the motor at a moment t; b) identifying an impedance peak in a pre-defined frequency range of the spectral distribution obtained in step a); c) determining the difference in frequency between the central frequency  $F_{c1}$  of the impedance peak identified in step b) and the central frequency  $F_{c0}$  of an impedance peak identified in the same pre-defined frequency range in a spectral distribution of electrical impedance of the motor, obtained at a moment  $t_0$  previous to  $t_1$ ; d) obtaining a correlation relation between the difference in frequency ( $F_{c0}-F_{c1}$ ) and the temperature of said loudspeaker; and e) determining the temperature of the loudspeaker according to the result of step c) and the correlation of step d). The invention also relates to a device for implementing said method.

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