

Title (en)  
DEVICE FOR CONTROLLING A LOUDSPEAKER

Title (de)  
VORRICHTUNG ZUR STEUERUNG EINES LAUTSPRECHERS

Title (fr)  
DISPOSITIF DE COMMANDE D'UN HAUT-PARLEUR

Publication  
**EP 3111669 B1 20190918 (FR)**

Application  
**EP 15706746 A 20150218**

Priority  
• FR 1451563 A 20140226  
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Abstract (en)  
[origin: CA2940980A1] The invention relates to a device for controlling a loudspeaker (14) in a loudspeaker enclosure, comprising: - an input for an audio signal (S audio\_ref ) to be reproduced; - an output for supplying an excitation signal from the loudspeaker; - means (26, 36, 38, 70, 80, 90) for calculating the excitation signal of the loudspeaker (14) at every moment in time according to the audio signal (S audio\_ref ). Upstream, the device comprises means (26, 36, 38, 70, 80, 90) for calculating the excitation signal, means (24, 25) for calculating a desired dynamic value (A ref ) of the loudspeaker diaphragm according to the audio signal (S audio\_ref ) to be reproduced and the structure of the enclosure, the means (25) for calculating the desired dynamic value (Aref) of the loudspeaker diaphragm being suitable for applying a correction that is different from the identity, and taking into account structural dynamic values (x o, v o ) of the enclosure that are different from the mere dynamic values relative to the loudspeaker diaphragm, and the means (26, 36, 38, 70, 80, 90) for calculating the excitation signal of the loudspeaker being suitable for calculating the excitation signal according to the desired dynamic value (A ref ) of the loudspeaker diaphragm.

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Citation (examination)  
• US 2006104451 A1 20060518 - BROWNING RAYMOND [US], et al  
• EP 2717599 A1 20140409 - PARROT [FR]  
• WOLFGANG KLIPPEL: "Modeling the Nonlinearities in Horn Loudspeakers", J. AUDIO. ENG. SOC., vol. 44, no. 6, 1 June 1996 (1996-06-01), pages 470 - 480, XP055452128  
• "Loudspeaker enclosures", 1 January 2001, FOCAL PRESS, ISBN: 978-0-24-051578-6, article GRAHAM BANK ET AL: "Loudspeaker enclosures", pages: 297 - 324, XP055114195

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