

Title (en)
MULTIPLE SPEAKER

Title (de)
LAUTSPRECHERKOMBINATION

Title (fr)
HAUT-PARLEUR MULTIPLE

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Application
EP 00978952 A 20000928

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Abstract (en)
[origin: US7088833B1] The invention relates to a loudspeaker combination comprised of at least two loudspeakers, of which one is preceded by a low-pass frequency filter, the other by a phase shifter in the form of an all-pass filter. The invention addresses the problem of providing with simple means a configuration simple of realization of such a loudspeaker combination, whose frequency response and whose radiation characteristic is significantly improved. The invention resides therein that the other loudspeaker or the other loudspeakers is/are each preceded by at least one phase shifter, with all phase shifters being tuned with respect to their phase setting to the phase position of the loudspeakers radiating lower tones, such that all loudspeakers radiate the low tones in like phase position. The fundamental idea is herein: several primarily identically structured loudspeakers can be employed, all or at least the major portion of the loudspeakers are allowed to transmit low tones, with the loudspeakers, which, in addition to the low frequencies, also have to transmit higher frequencies, being changed in their phase position such that the low and the particular lower frequencies are radiated in identical phase position. A large loudspeaker area therein transmits the low frequencies, a smaller the medium and high frequencies. This yields better transmission results than can be attained with loudspeakers laid out in their structural form for separated frequency ranges. Hereby the technical expenditures are low, the possibly attainable improvement of radiation characteristics, however, is remarkable.

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