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(54) Title: METHOD AND PROCESSING UNIT FOR ADAPTIVE WIND NOISE SUPPRESSION IN A HEARING AID SYSTEM AND A HEARING AID SYSTEM

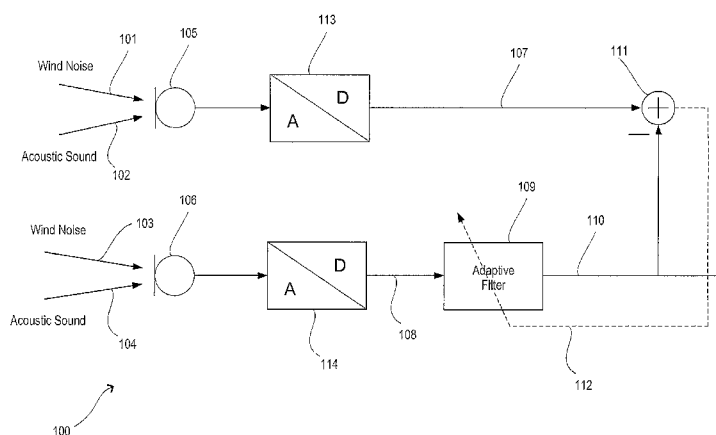


Fig. 1

(57) **Abstract:** A processing unit that adaptively suppresses wind noise in a hearing aid is provided. The processing unit (100) comprises a first microphone (105) and a second microphone (106). The analog signal from the first microphone is converted to a first digital signal (107) in a first A/D converter (113) and the analog signal from the second microphone is converted to a second digital signal (108) in a second A/D converter (114). The output of the first A/D converter is operationally connected to a first input of a subtraction node (111). The output of the second A/D converter is operationally connected to the input of an adaptive filter (109). The output of the adaptive filter (109) is branched and in a first branch operationally connected to the second input of the subtraction node (111) and in a second branch operationally connected to the input of the remaining signal processing in the hearing aid. The output from the subtraction node (111) is operationally connected to a control input of the adaptive filter (109). The invention also relates to a hearing aid system having such a processing unit and a method of adaptive wind noise suppression in a hearing aid system.