

Title (en)
ECHO AND NOISE CANCELLATION

Title (de)
ECHO- UND RAUSCHUNTERDRÜCKUNG

Title (fr)
ANNULATION D'ECHO ET DE BRUIT

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- US 38172506 A 20060504
- US 38172706 A 20060504
- US 38172406 A 20060504
- US 38172106 A 20060504
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Abstract (en)
[origin: WO2007130765A2] Methods and apparatus for echo cancellation in a system having a speaker and a microphone are disclosed. The speaker receives a speaker signal $x(t)$. The microphone receives a microphone signal $d(t)$ containing a local signal $s(t)$ and an echo signal $x_{₁}(t)$ that is dependent on the speaker signal $x(t)$. The microphone signal $d(t)$ is filtered in parallel with first and second adaptive filters having complementary echo cancellation properties relative to each other. A minimum echo output $e_{₃}(t)$ is determined from an output $e_{₁}(t)$ of the first adaptive filter and an output $e_{₂}(t)$ of the second adaptive filter. The minimum echo output has a smaller energy and less correlation to the speaker signal $x(t)$. A microphone output is then generated using the minimum echo output $e_{₃}(t)$.

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