

Title (en)  
Feedback cancellation in a sound system

Title (de)  
Rückkopplungsunterdrückung in einem Tonsystem

Title (fr)  
Suppression de rétroaction dans un système sonore

Publication  
**EP 1903833 A1 20080326 (EN)**

Application  
**EP 06121006 A 20060921**

Priority  
EP 06121006 A 20060921

Abstract (en)  
This invention relates to a sound system and method for processing acoustical sound. The sound system comprises a microphone for converting an acoustical sound to an electrical sound signal, a processor for processing the sound signal and for generating a processed sound signal, and a speaker for converting the processed sound signal to a processed acoustical sound. The processor comprises a calculating unit for calculating a threshold value based on mean magnitude and standard deviation of the sound signal, a FFT unit for transforming the sound signal into frequency domain, a peak identification unit for identifying a peak in the sound signal in frequency domain and for generating a peak signal, a comparator for comparing the threshold value with the peak signal and for generating a control signal identifying frequency of said peak, and a programmable notch-filter unit receiving said control signal and filtering out a bandwidth of the sound signal in accordance with the control signal thereby generating the processed sound signal.

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**H04R 3/02** (2006.01)

CPC (source: EP)  
**H04R 3/02** (2013.01); **H04R 27/00** (2013.01); **H04R 29/001** (2013.01)

Citation (search report)

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- [Y] EP 0843502 A1 19980520 - YAMAHA CORP [JP]
- [A] US 5677987 A 19971014 - SEKI NOBUYUKI [JP], et al
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