

Title (en)

A BOUNDED SIGNAL MIXER AND METHOD OF OPERATION

Title (de)

EIN GEBUNDENER SIGNALMISCHER UND BETRIEBSVERFAHREN

Title (fr)

MELANGEUR DE SIGNAUX BORNE ET PROCEDE DE FONCTIONNEMENT

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2007024468A2] A method and apparatus are provided for mixing a plurality of signals within a predetermined dynamic range without clipping. In the method and apparatus, first (x1) and second (x2) signal samples are added (12) together to obtain a first intermediate result. Then the first signal sample (x1) is multiplied (14) with the second signal sample (x2) to obtain a second intermediate result. In one embodiment, the second intermediate result is subtracted (16) from the first intermediate result to obtain a third intermediate result, and the third intermediate result is discarded (20) if the third intermediate result is less than zero. In another embodiment, the second intermediate result is added (36) to the first intermediate result to obtain the third intermediate result, and the third intermediate result is discarded (40) if the third intermediate result is greater than zero. An output signal sample (M) is provided based on the third intermediate result.

IPC 8 full level

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