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(54) Title: APPARATUS, METHOD OR COMPUTER PROGRAM FOR ESTIMATING AN INTER-CHANNEL TIME DIFFERENCE

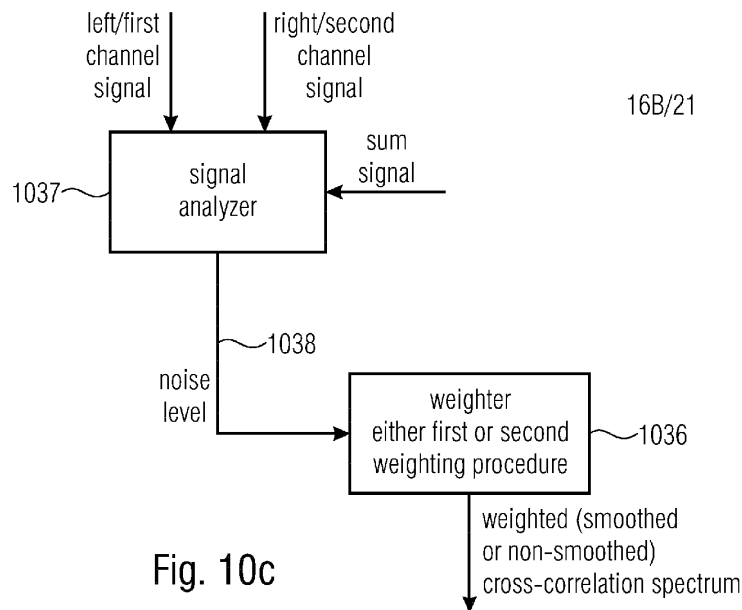


Fig. 10c

(57) Abstract: An apparatus for estimating an inter-channel time difference between a first channel signal and a second channel signal, comprises a signal analyzer (1037) for estimating a signal characteristic (1038) of the first channel signal or the second channel signal or both signals or a signal derived from the first channel signal or the second channel signal; a calculator (1020) for calculating a cross-correlation spectrum for a time block from the first channel signal in the time block and the second channel signal in the time block; a weighter (1036) for weighting a smoothed or non-smoothed cross-correlation spectrum to obtain a weighted cross correlation spectrum using a first weighting procedure (1036a) or using a second weighting procedure (1036b) depending on a signal characteristic estimated by the signal analyzer (1037), wherein the first weighting procedure is different from the second weighting procedure; and a processor (1040) for processing the weighted cross-correlation spectrum to obtain the inter-channel time difference.

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