



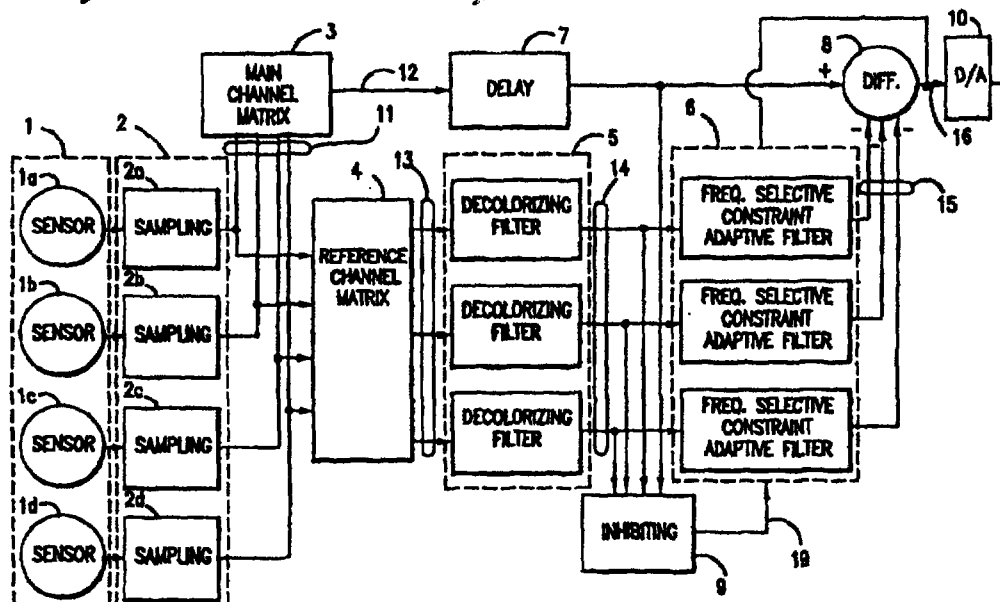
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(54) Title: SYSTEM AND METHOD FOR ADAPTIVE INTERFERENCE CANCELLING



(57) Abstract

An adaptive system and method for reducing interference in a signal received from an array of sensors. Adaptive filters are used to generate cancelling signals that closely approximate the interference present in the received signal. The adaptive filter weights are converted into the frequency domain where the frequency representation values in a selected frequency range are truncated to avoid signal leakage involving narrow band signals. Decolorizing filters are used to produce the cancelling signals having a flat frequency spectrum. Normalized power difference is used to limit the operation of the adaptive filters to the case where there is some directional interference to be eliminated.