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(57) Abstract :

ABSTRACT METHOD FOR ADAPTIVE ARTIFACT ELIMINATION FOR CLEANING BRAIN WAVES IN REMOTE PATIENT MONITORING Aspects of present disclosure relate to systems and methods for adaptive signal processing techniques for brain waves inpatient care monitoring applications. In order to achieve better performance of the artifact elimination process a combination of normalized least mean square, leaky and variable step size algorithm is utilized. This hybrid version is variable step size leaky least mean square (VSNL2MS). The method involves filtering of the collected brain waves to obtain a weight vector value and a convolution value. A feedback is provided to said filter to continuously update the value of the weight filter corresponding to the artifact component, wherein the feedback is obtained by one of the Leaky Least Mean Square value calculation and Variable step size approaches. Figure 1 Flow chart of the method for Adaptive Artifact Elimination

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