Brain signals recognition has been a problem that computers are not efficient at. It is difficult to find the fine variations in the signal because the signals are too lengthy. Today, efficient brain signal recognition is limited to find different brain diseases such as epilepsy, tumor, encephalitis, and sleep disorders; using hardware like Electroencephalogram (EEG) wherein the strokes are directly detected and the brain signals is recognized. But if you want to convert a brain signal document to digital text, we have to extract the EEG signals and then recognize the brain diseases using brain signals. But the problem with this approach is that there are not many algorithms that could efficiently extract signals from a brain. Therefore brain signals recognition using software is still not as efficient as it could be. Fully automated systems to overcome the above problems are proposed. In this paper, we suggest the design of software which could do this job of translating brain signals to digital text data. We propose a new approach using which the problem of recognizing brain signals can be solved. We also provide the implementation details of this software. For the implementation of ours idea, we propose a new Neural Network Architecture, which is a modified version of the conventional Back Propagation Network. The technique adopted by the Back Propagation Network (BPN) used in neural network guided and stimulated me to design this paper. Details regarding the automatic preprocessing that would be essential and the shortcomings are also included in this paper. Our research work will be in classifying EEG with a neural network based intelligent systems.

Index Terms— Electroencephalograph (EEG), Artificial neural network (ANN), Back Propagation Network (BPN).