

ABSTRACT|| HOPFIELD NEUTRAL NETWORKS

A neural network based on the Hopfield model is used to operate a high speed packet switch, particularly for use in a broad band switching system. The optimisation parameters are established in a novel methodical way, and imposed attractors are used substantially to increase the speed of convergence. To reduce the likelihood of local minima being found, noise is introduced into the system by varying a parameter of the neuron transfer function from iteration to iteration.

Fig. 1