Inositol
Glucose
Canna
KCl

Figure 8 - Diagram of the architecture of the two-layer feedforward ANN classifier. The circles that represent the nodes of the input layer are simply storage registers for the 32 sample points of a AP. The squares on the diagram represent processing elements (PE). The hidden layer contains three PEs labeled H1, H2, and H3. The output layer contains four PEs labeled with their corresponding class. Node labeled H3 is expanded to illustrate the internal components of a PE. Each PE sums the weighted inputs from the registers of the preceding...
layer. The result (net) serves as the argument to the activation function which in our case is the hyperbolic tangent function. The output of the activation function is stored in a register for use by the succeeding layer.