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(54) **Title:** CONTEXT-AWARE PRUNING FOR SEMANTIC SEGMENTATION

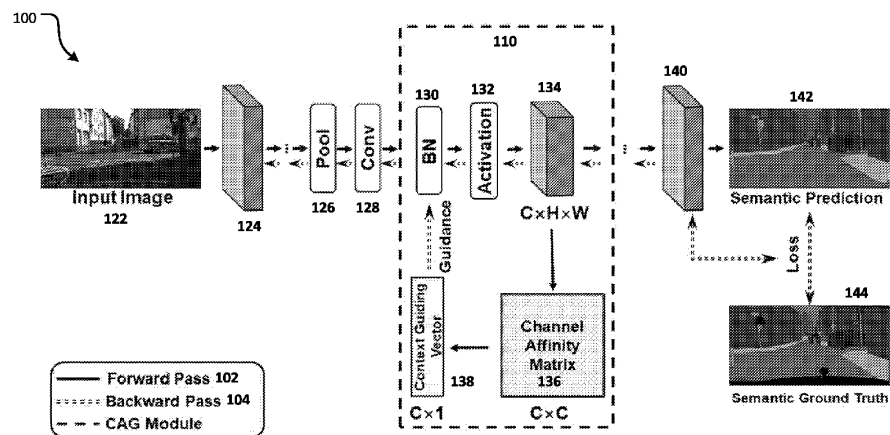


Figure 1

(57) **Abstract:** A system for image pattern recognition. The system comprising a neural network model with an input layer, an output layer and a context-aware guiding module (CAGM) between the input layer and output layer. The CAGM receives feature maps supplied by a layer of the neural network, forming a context guiding vector and directs contextually informative channel selection based on the context guiding vector. The output layer outputs the image pattern based on features of channels selected using the context guiding vector.

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