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(54) **Title:** RECURRENT NEURAL NETWORK CELL ACTIVATION TO PERFORM A PLURALITY OF OPERATIONS IN A SINGLE INVOCATION

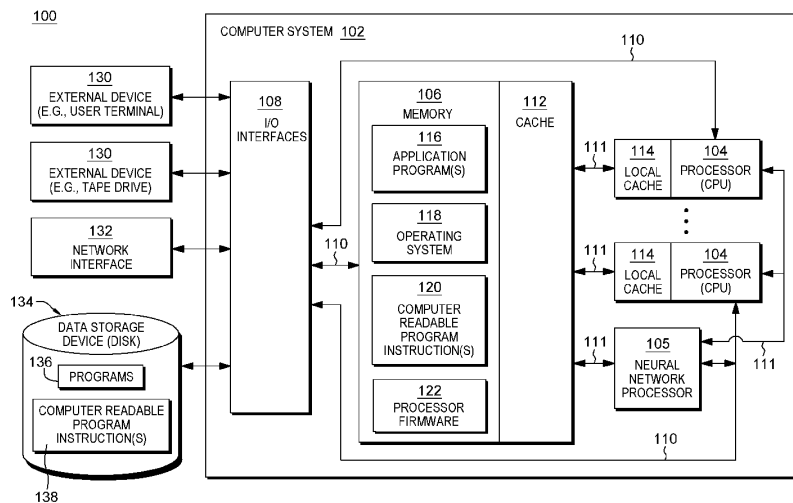


FIG. 1A

(57) **Abstract:** An instruction to perform a recurrent neural network cell activation is executed. The executing includes performing a plurality of operations of the recurrent neural network cell activation to provide a result of the recurrent neural network cell activation. The plurality of operations is performed in a single invocation of the instruction. The recurrent neural network cell activation is, for instance, a long short-term memory cell activation or a gated recurrent unit cell activation.

[Continued on next page]

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