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## (54) Title of the invention : AN IMAGE PROCESSING SYSTEM WITH CONVOLUTIONAL NEURAL NETWORK MODULES AND METHOD THEREOF

(57) Abstract :

[035] The present invention discloses an image processing system with convolutional neural network modules and method thereof. The system includes, but not limited to, one or more processing units connected with a memory unit for receiving an image processing data by using a state of the convolutional neural network and consisting a plurality of textures representing one or more neural network variables, wherein the plurality of textures further comprises a texture with two-dimensional addressing, and represents a neural network variable having a predetermined weight function with addressing of multiple dimensions which has been flattened into two dimensional addressing, and defining addresses of values represented in the texture with two-dimensional addressing through linear combinations of x-axis and y-axis offset coordinates from the upper-left corner of an output texture. Accompanied Drawing [FIG. 1]

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