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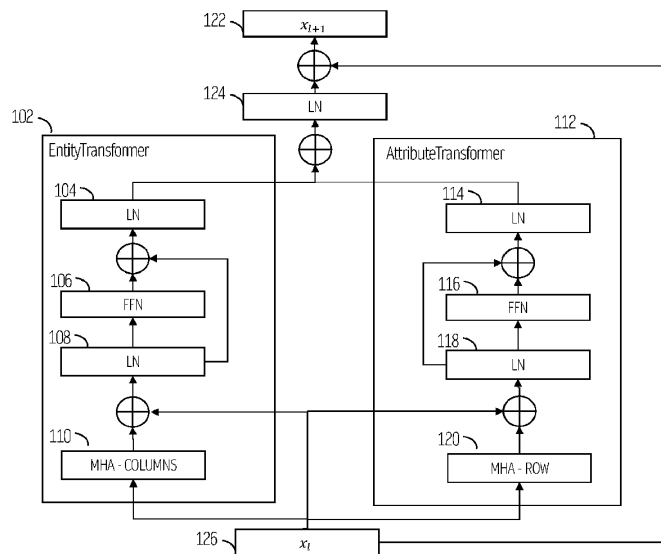


FIG. 1

(57) Abstract: A method may obtain a table of data, wherein the table includes a plurality of cells arranged in rows and columns. A method may generate an output value for a cell of the table with a transformer-based model, wherein the model includes a three-dimensional attention mechanism and wherein the model generates the output value by. A method may determine a first self-attention score across cells of the table in the same row of the cell. A method may determine a second self-attention score across cells of the table in the same column of the cell. A method may determine a third self-attention score across all rows of the table. A method may calculate an embedding based on the first self-attention score, the second self-attention score, and the third self-attention score. A method may determine the output value based on the embedding.

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