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(54) Title: ENTITY LINKING USING SUBGRAPH MATCHING

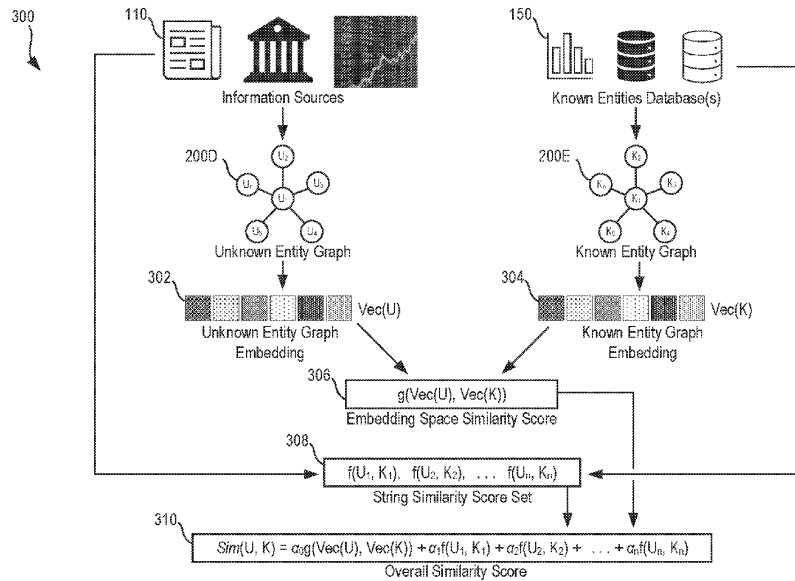


FIG. 3

(57) **Abstract:** Systems and methods for entity linking using a graph neural network are disclosed. In one aspect, a method for entity linking can include extracting a first attribute set of an unknown entity from an information source and retrieving second attribute sets of known entities from a database, wherein each of the second attribute sets corresponds to one of the known entities. The method can further include generating an unknown entity graph based on the first attribute set, generating known entity graphs based on the second attribute sets, generating an unknown entity graph embedding by applying the unknown entity graph to a graph neural network, and generating known entity graph embeddings by applying the known entity graphs to the graph neural network. The method can further include assigning the information source to one of the known entities based on the unknown entity graph embedding and the known entity graph embeddings.

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