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(54) Title of the Invention: **Ontology-based data storage for distributed knowledge bases**  
Abstract Title: **Ontology-based data storage for distributed knowledge bases**

(57) Techniques for distributed data placement are provided. Query workload information corresponding to a domain is determined by a data orchestrator, and the query workload information is modeled as a hypergraph, where the hypergraph includes a set of vertices and a set of hyperedges, where each vertex in the set of vertices corresponds to a concept in an ontology associated with the domain. Mappings are generated between concepts and a plurality of data nodes based on the hypergraph and based further on predefined capability of each of the plurality of data nodes. A distributed knowledge base is established based on the generated mappings.

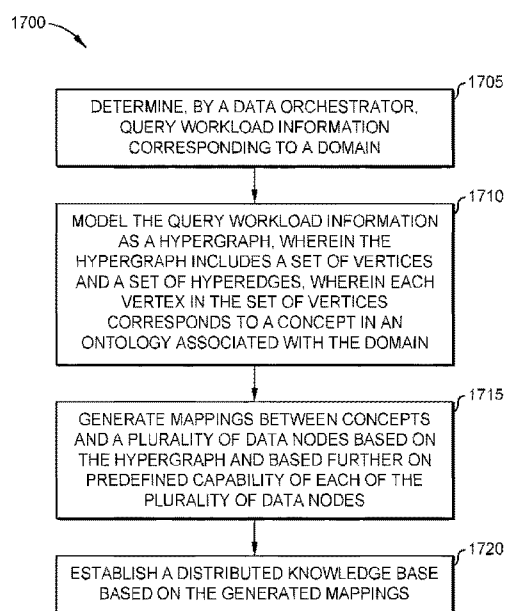


FIG. 17