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(54) Title: A NOVEL DATABASE

(57) Abstract: The present invention provides a non-relational transactional and analytical database. It has a novel data architecture that allows data to persist without requiring any schema definition. The database of the present invention also provides a file system with in-built versioning, reliability and security and can be deployed in a distributed environment. The approach adopted in the present invention is to break down data into its fundamental atomic components, called memes, and use a special type of graph (utilizing non-standard vertices and edges) to create logical relationships, represented by links, between these components. The database operational functionality is deployed through an application program interface (API) using the query language that is based on recursive triplets of the form (subject, verb, object). The memes and links are identified with Universally Unique Identifiers (UUIDs). The database of the present invention also provides file system manipulation functionality through the use of UUIDs. The database of the present invention also provides a built-in security mechanism with meme level resolution.



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