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(54) **Title:** REVERSIBLE DATA TRANSFORMS

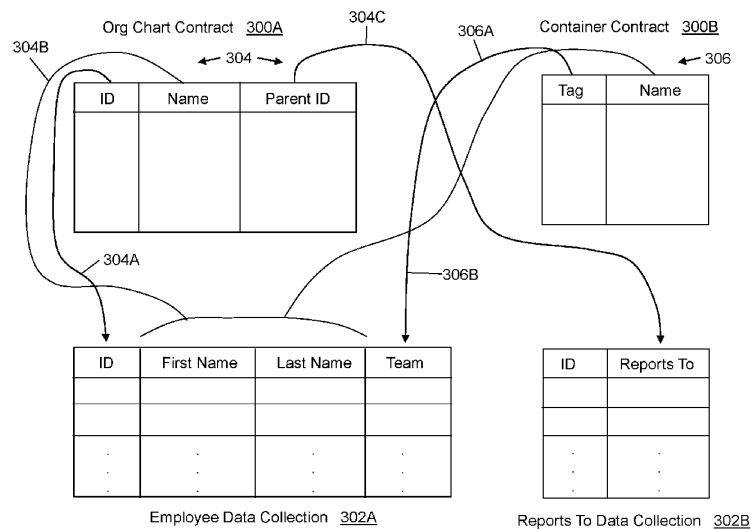


FIG. 3

(57) **Abstract:** In an example, a method may include receiving input effective to select a visualization type to apply to a visualization of data. The selected visualization type is associated with a contract. Each contract includes a corresponding schema that specifies a set of data fields and one or more relationships between the data fields in the set to generate and display a corresponding visualization having a corresponding visualization type. The method may include mapping at least some data of a data source to the contract such that the contract is satisfied, including applying one or more transforms to the data to generate one or more intermediate data structures without modifying the data of the data source. The method may include displaying the visualization of the data based on the contract, the displayed visualization having the selected visualization type.

[Continued on next page]

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