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Shutt et al.

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[54] **METHOD, DATA STRUCTURE, AND COMPUTER PROGRAM PRODUCT FOR OBJECT STATE STORAGE IN A REPOSITORY**

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[57] **ABSTRACT**

In an interface-based binary object system capable of supporting multiple interfaces into objects created by class templates, a repository of stored object states is formed that can be accessed by later created objects. Such later created objects may be of the same class as the original object or may be of a new class extended from the original class and still use the same stored object state. Access to the stored object state is made through a generic repository object that emulates the behavior of a particular class of object as defined in type definitions. Requests to a particular object's properties through interface methods are serviced by having the generic repository object make reference to the type definitions in order to fulfill the request. Binary extensibility of the generic repository object along with proper class definition in the type definitions allows custom objects having greater functionality than that provided by the generic repository object to be implemented. Furthermore, class definitions that use only functionality provided by the generic repository object may be defined so as to allow instantiation of objects without the implementation of actual software code whatsoever. Finally, in a currently preferred embodiment, object state is stored advantageously in SQL database tables organized on a per-interface basis with properties common to all objects stored in a main stored object state table.

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[51] **Int. Cl.**⁶ **G06F 17/30**

[52] **U.S. Cl.** **707/103; 707/102**

[58] **Field of Search** **707/101, 102, 707/103, 202, 203**

[56] **References Cited**

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