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Saulpaugh et al.

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(54) **MECHANISM AND PROCESS TO TRANSFORM A GRAMMAR-DERIVED INTERMEDIATE FORM TO AN OBJECT-ORIENTED CONFIGURATION DATABASE**

Majka, "Getting Acquainted with NetInfo," *Nextstep In Focus*, Summer 1993, vol. 3, Issue 3, copyright NeXT Computer, Inc. 1993.

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(57) **ABSTRACT**

A method and system for transforming an intermediate form into an object-oriented database. The intermediate form is derived from a grammatical form of an object-oriented database through the process of compilation. The grammatical form is an expression of an object-oriented database in a textual form according to a grammar. The intermediate form comprises an array of intelligent entry objects that encapsulate data with methods for manipulating that data. The intermediate form comprises entries as in the object-oriented database but lacks the infrastructure of the database. The intermediate form can be used to populate the object-oriented database with entries. Population takes place through a public API for accessing the object-oriented database; in other words, through an interface which declares methods for navigating the database and adding entries to the database. The object-oriented database is an object-oriented configuration database which stores configuration parameters pertaining to the software and hardware of a computer system, such as application programs, device drivers, system services, and other components. The object-oriented database is platform-independent and is therefore configured to be hosted on several different operating systems and computing platforms.

(21) Appl. No.: **09/253,839**

(22) Filed: **Feb. 19, 1999**

(51) **Int. Cl.**⁷ **G06F 17/30**

(52) **U.S. Cl.** **707/103; 707/100**

(58) **Field of Search** **707/103, 100**

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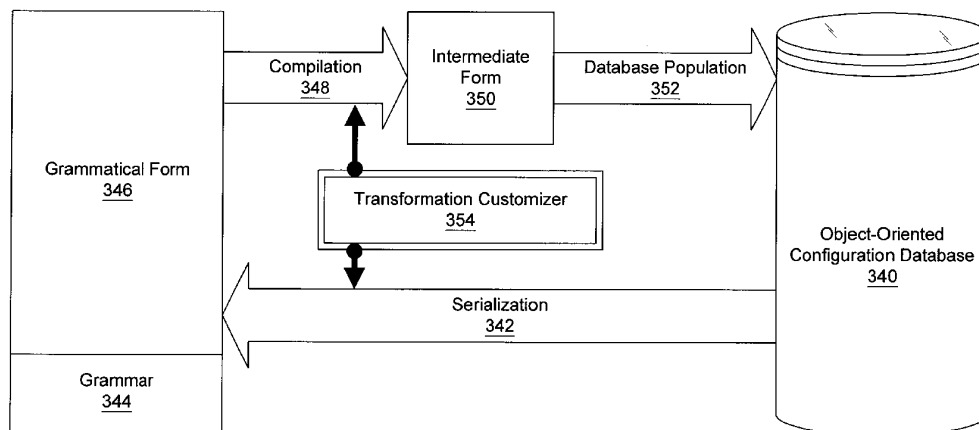
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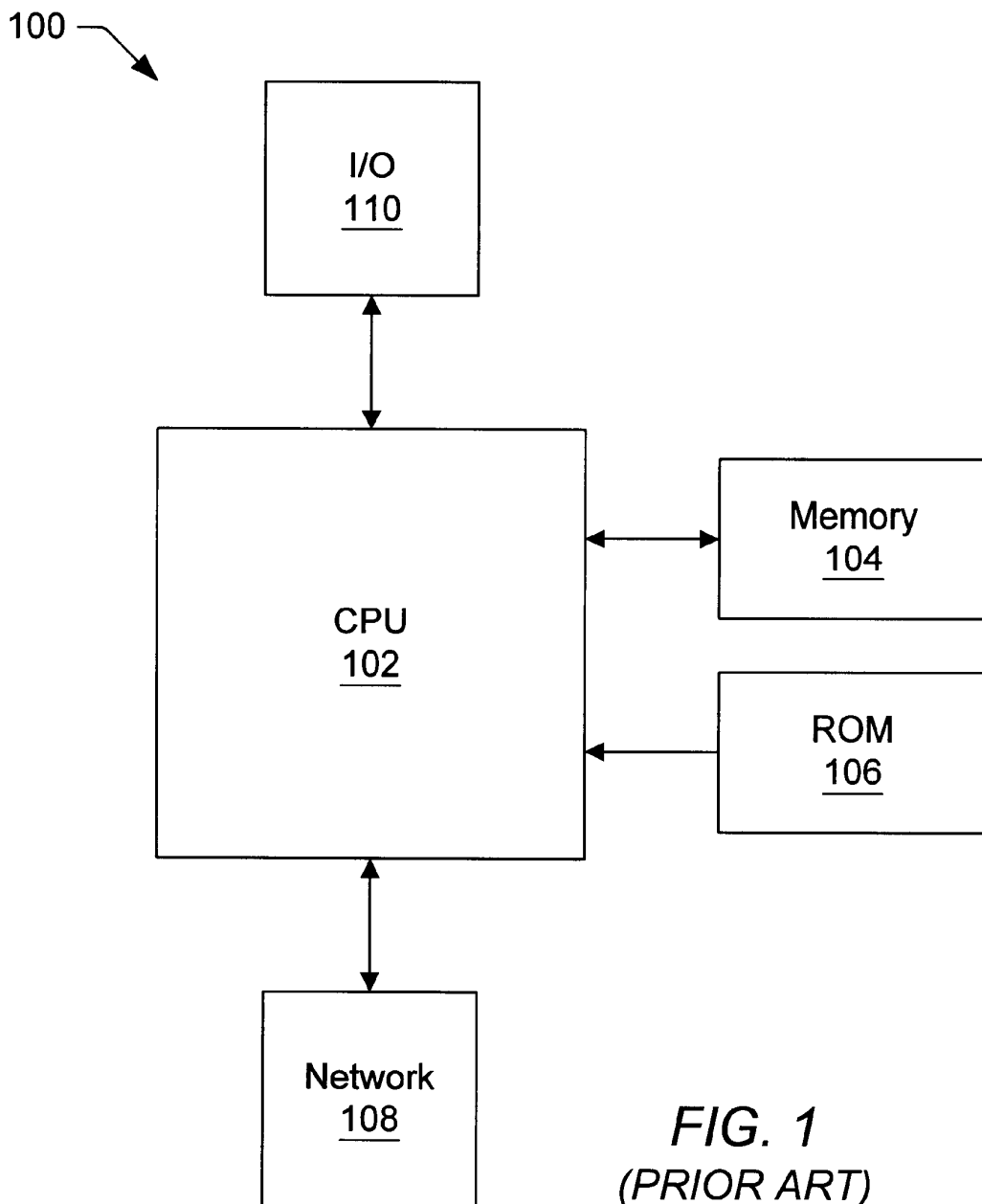
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20 Claims, 11 Drawing Sheets





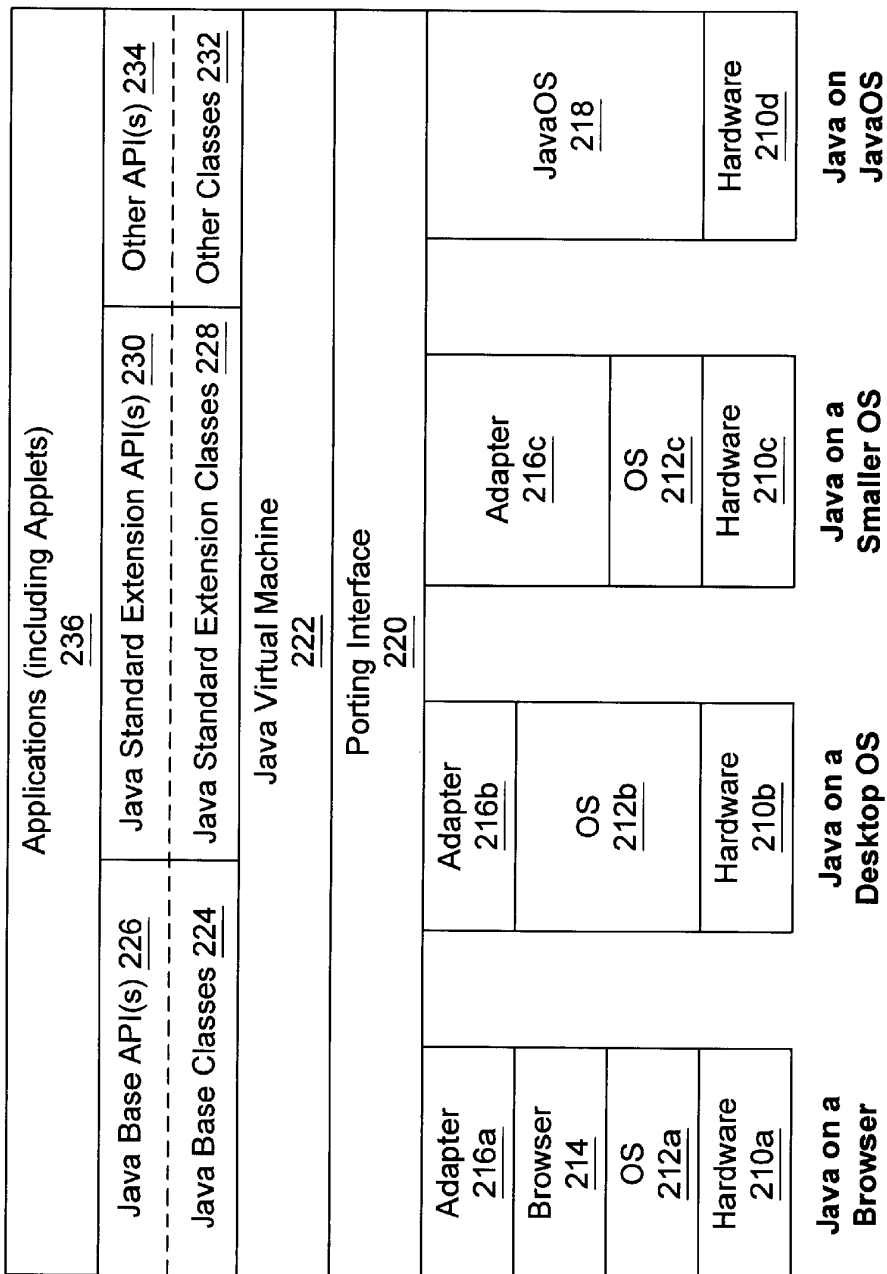


FIG. 2
(PRIOR ART)

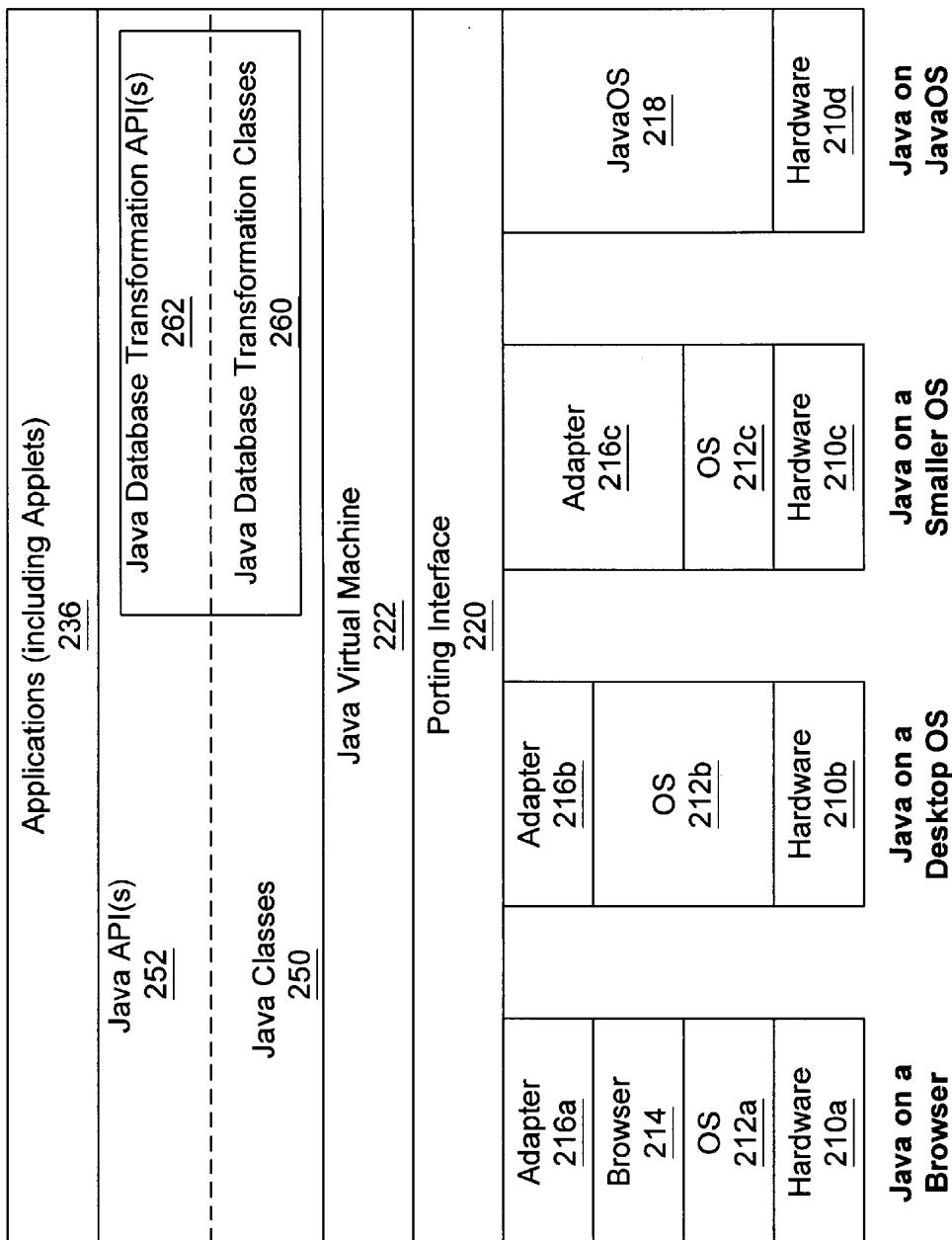


FIG. 3

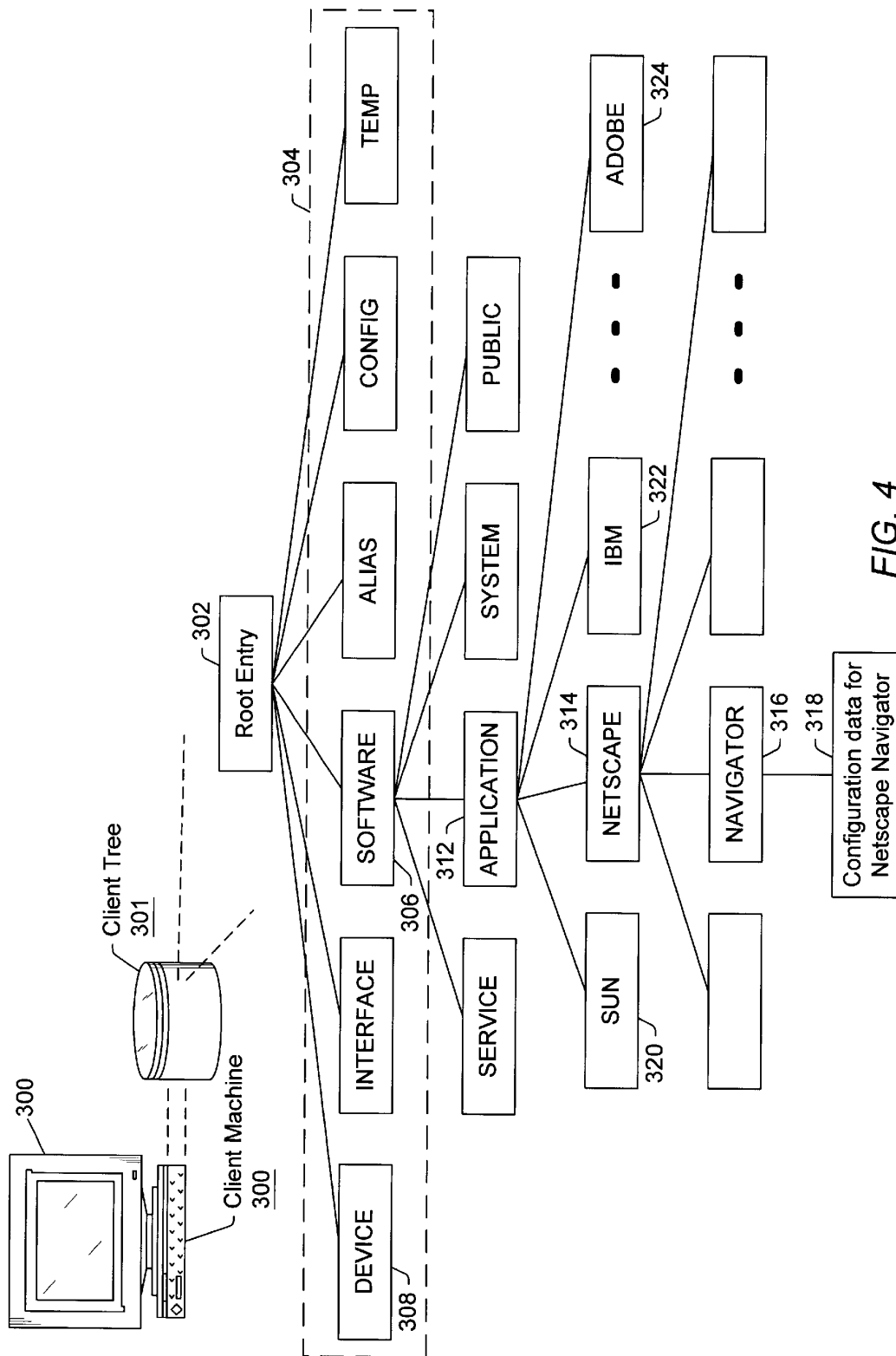


FIG. 4

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