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Hoeft et al.

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(54) **PLATFORM-INDEPENDENT DATA
DICTIONARY**

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patent is extended or adjusted under 35
U.S.C. 154(b) by 509 days.

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(65) **Prior Publication Data**

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G06F 15/18 (2006.01)

(52) **U.S. Cl.** **706/12; 706/45; 706/46;**
707/100

(58) **Field of Classification Search** 707/1,
707/100, 102, 103; 706/45, 46, 12
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,418,957 A * 5/1995 Narayan 717/113

5,991,771 A * 11/1999 Falls et al. 707/202
6,377,953 B1 * 4/2002 Gawlick et al. 707/102
6,636,845 B2 * 10/2003 Chau et al. 707/1
7,051,041 B1 * 5/2006 Miller 707/102
7,058,645 B2 * 6/2006 Seto et al. 707/101
7,080,384 B2 * 7/2006 Wall et al. 719/316
7,117,215 B1 * 10/2006 Kanchwala et al. 707/100

OTHER PUBLICATIONS

Tim Bray et al., Extensible markup Language (XML) 1.0 (Second
Edition) W3C Recommendation Oct. 6, 2000, [http://www.w3.org/
TR/REC-xml](http://www.w3.org/TR/REC-xml).*

Henry S. Thompson et al., XML Schema Part 1: Structures, W3C
Recommendation May 2, 2001, Sections 3.4, 3.14 [http://www.w3.
org/TR/2001/REC-xmlschema-1-20010502/](http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/).*

* cited by examiner

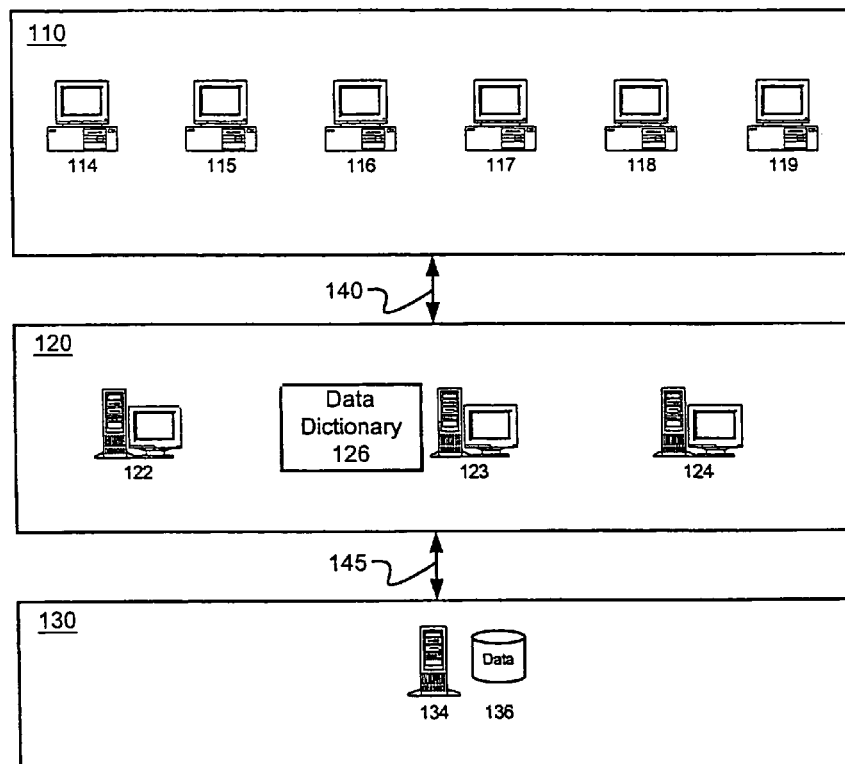
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Zafman LLP

(57) **ABSTRACT**

A server system may include a data dictionary to store
platform-independent data types. A development client may
access and modify a platform-independent data type stored
in the data dictionary. The server system may notify other
development clients using the data type that the data type has
been modified.

20 Claims, 9 Drawing Sheets



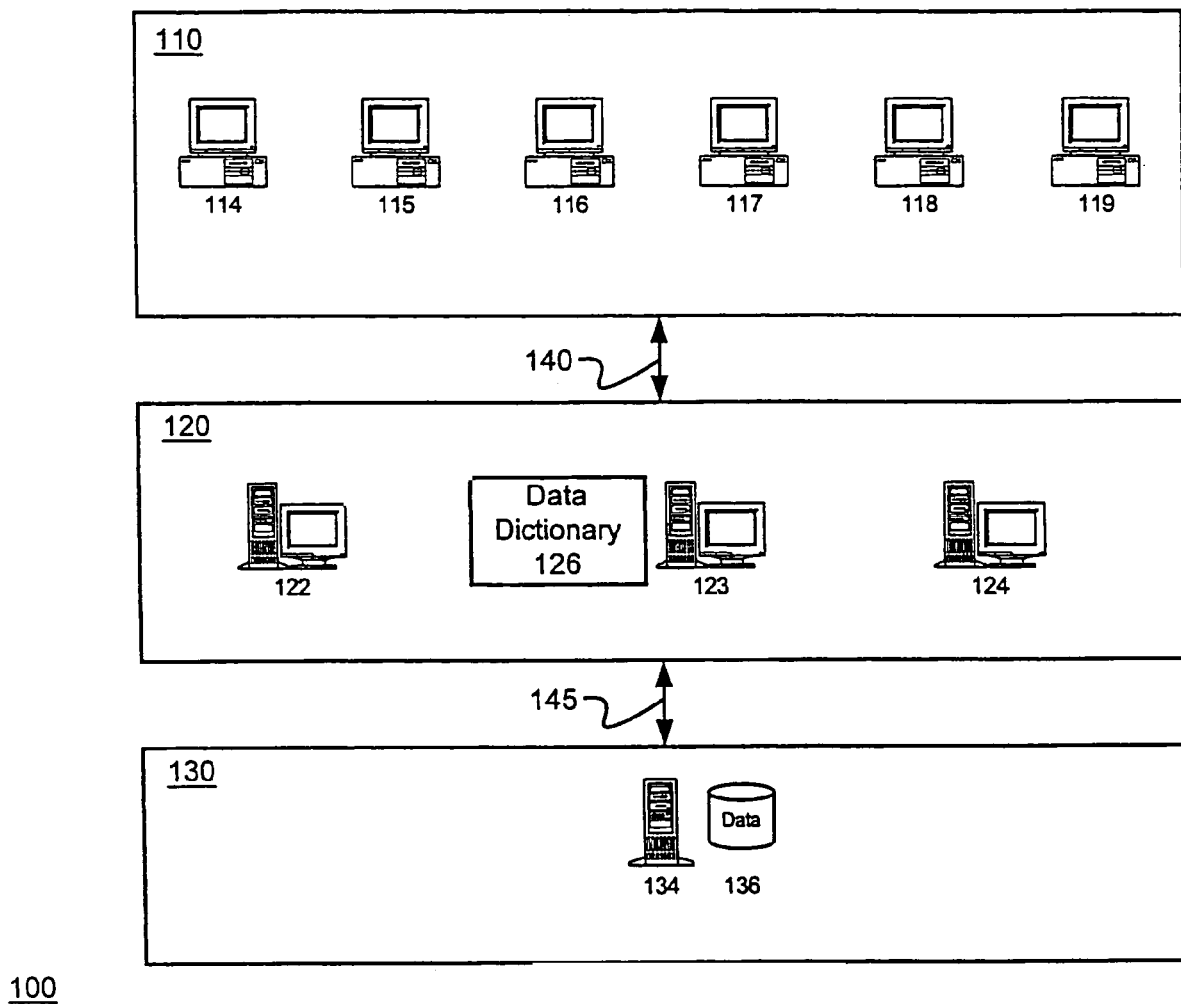


FIG. 1

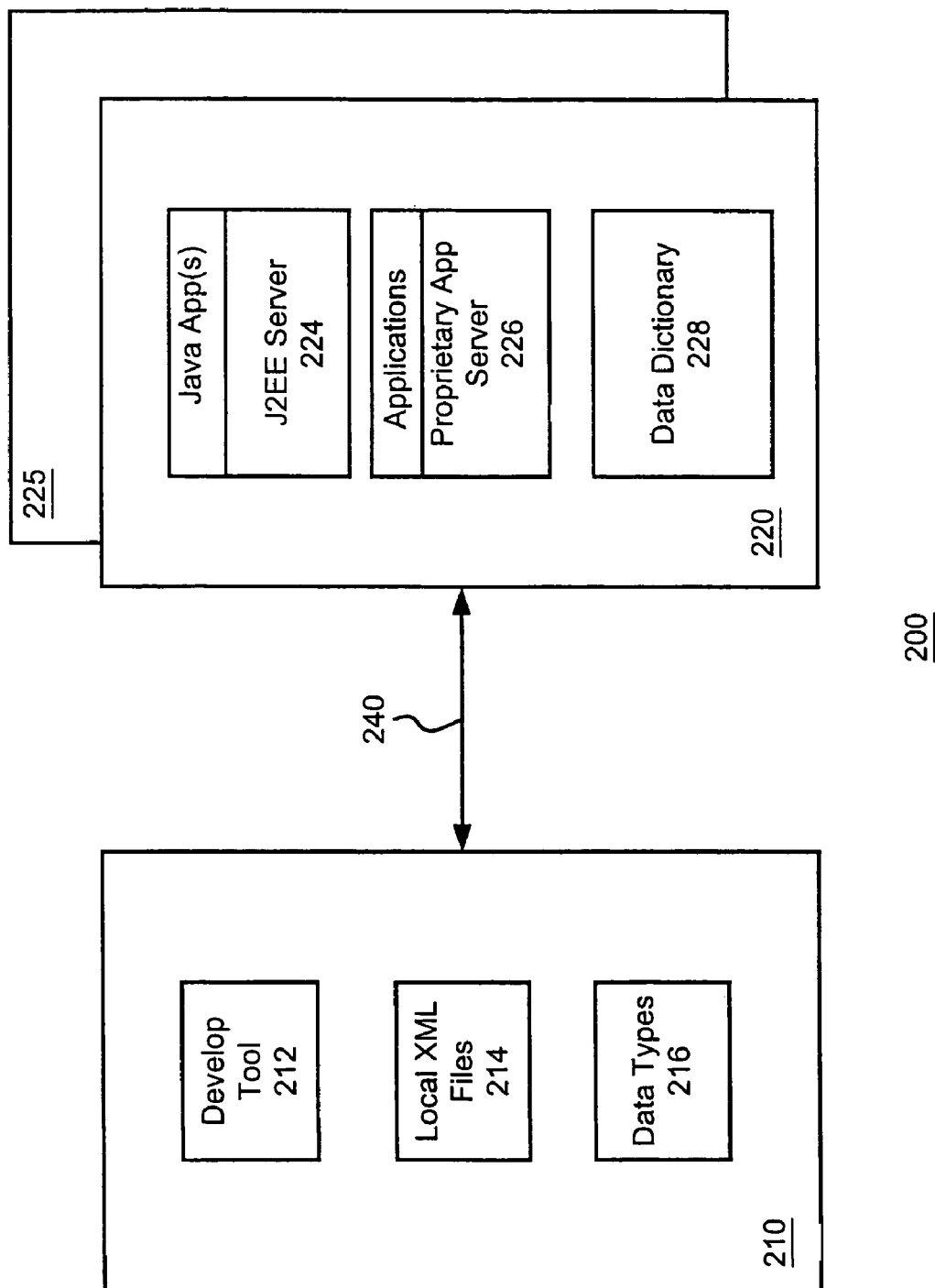


FIG. 2

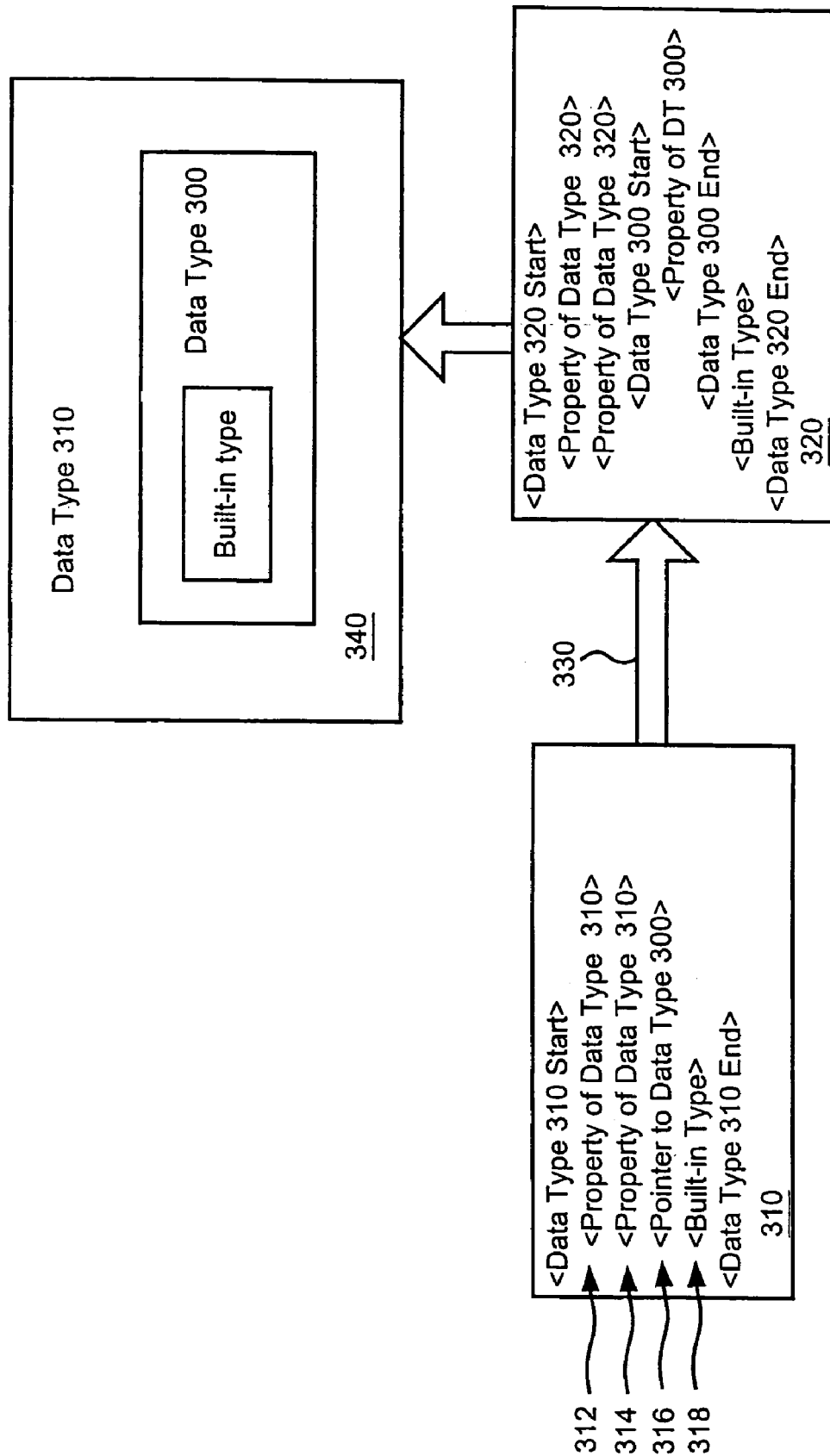


FIG. 3

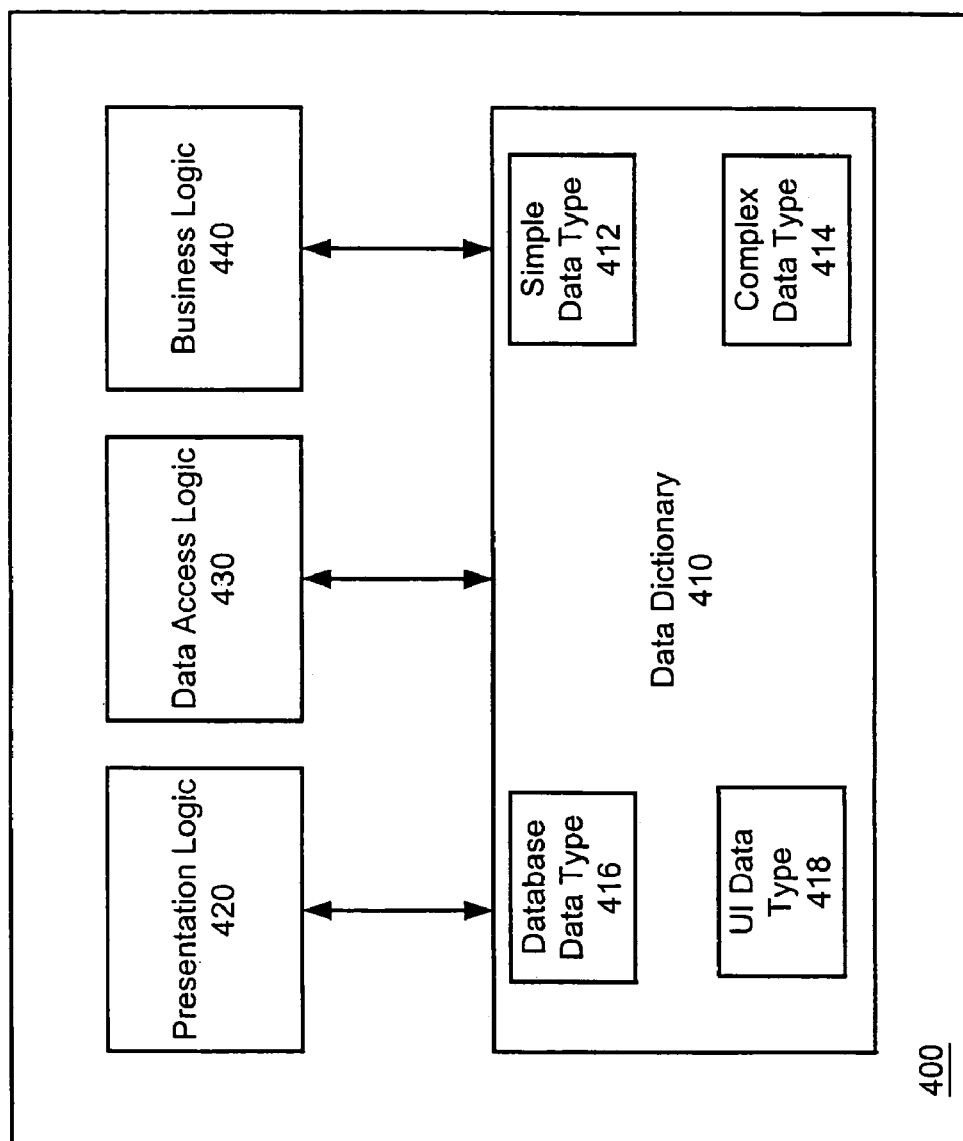


FIG. 4

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