



US007191160B2

(12) **United States Patent**
Hoefl et al.

(10) **Patent No.:** **US 7,191,160 B2**
(45) **Date of Patent:** **Mar. 13, 2007**

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

(75) Inventors: **Kerstin Hoefl**, Walldorf (DE); **Michael
Tsesis**, Heidelberg (DE)

(73) Assignee: **SAP AG**, Walldorf (DE)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 509 days.

(21) Appl. No.: **10/705,046**

(22) Filed: **Nov. 10, 2003**

(65) **Prior Publication Data**

US 2005/0203938 A1 Sep. 15, 2005

(51) **Int. Cl.**
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 Kanchwalla 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

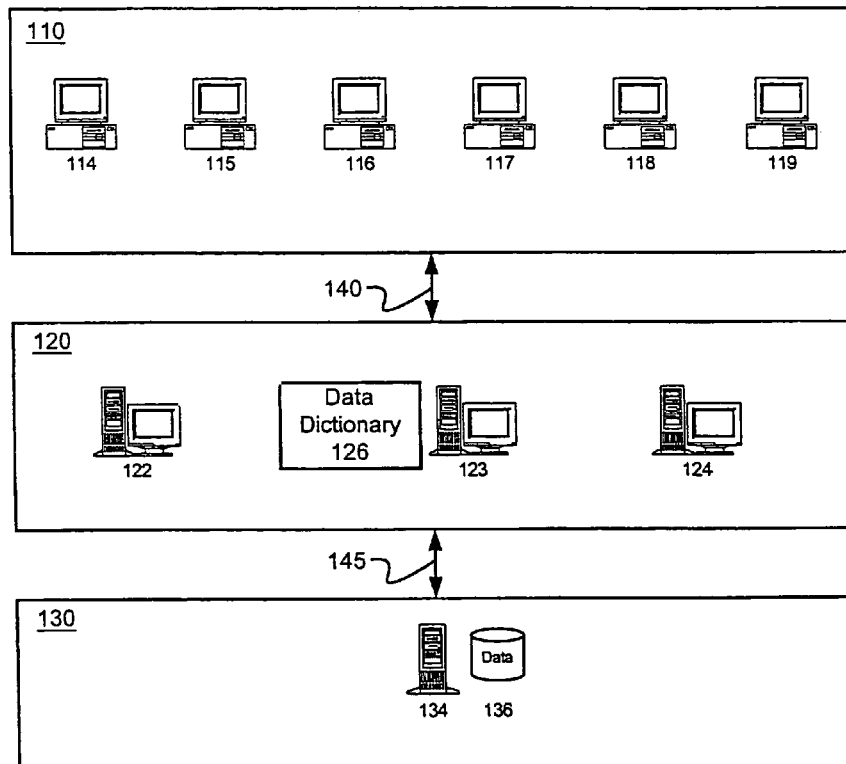
Primary Examiner—Joseph P Hirl

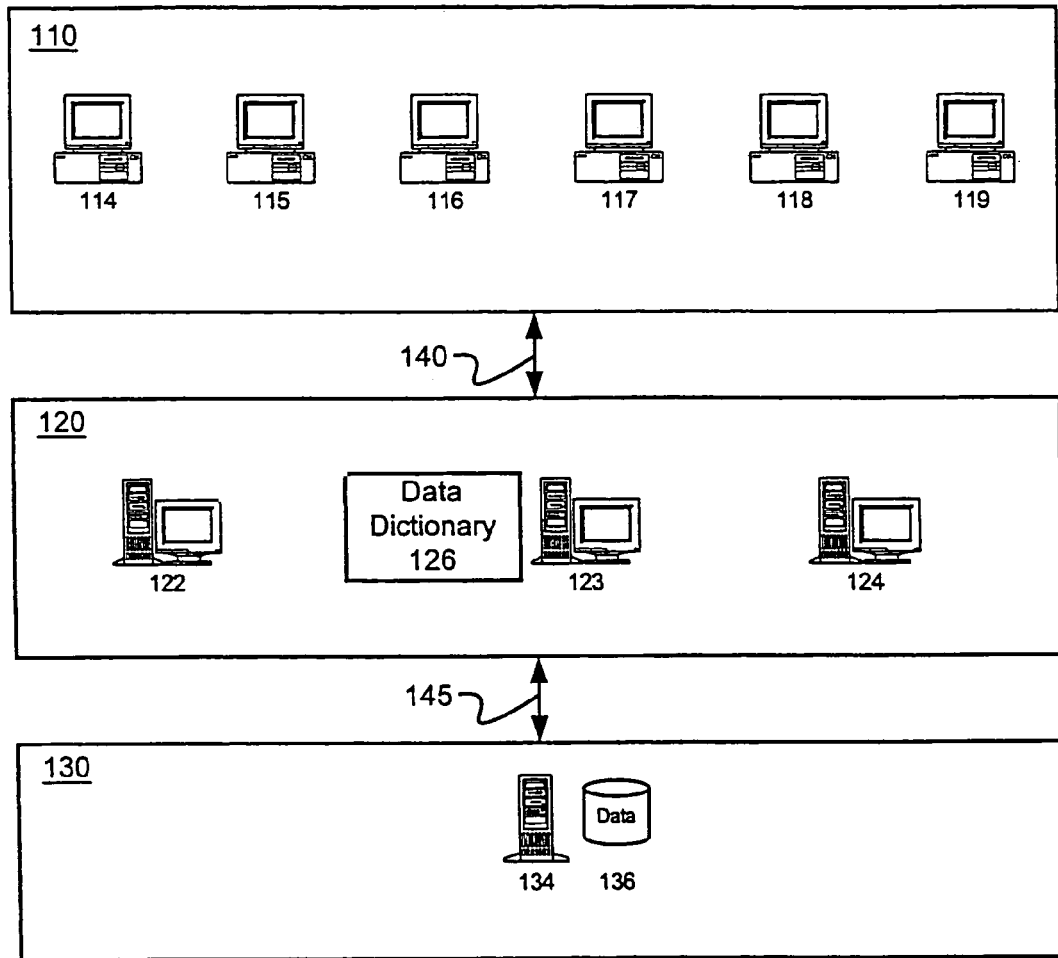
(74) *Attorney, Agent, or Firm*—Blakely, Sokoloff, Taylor &
Zafman LLP

(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





100

FIG. 1

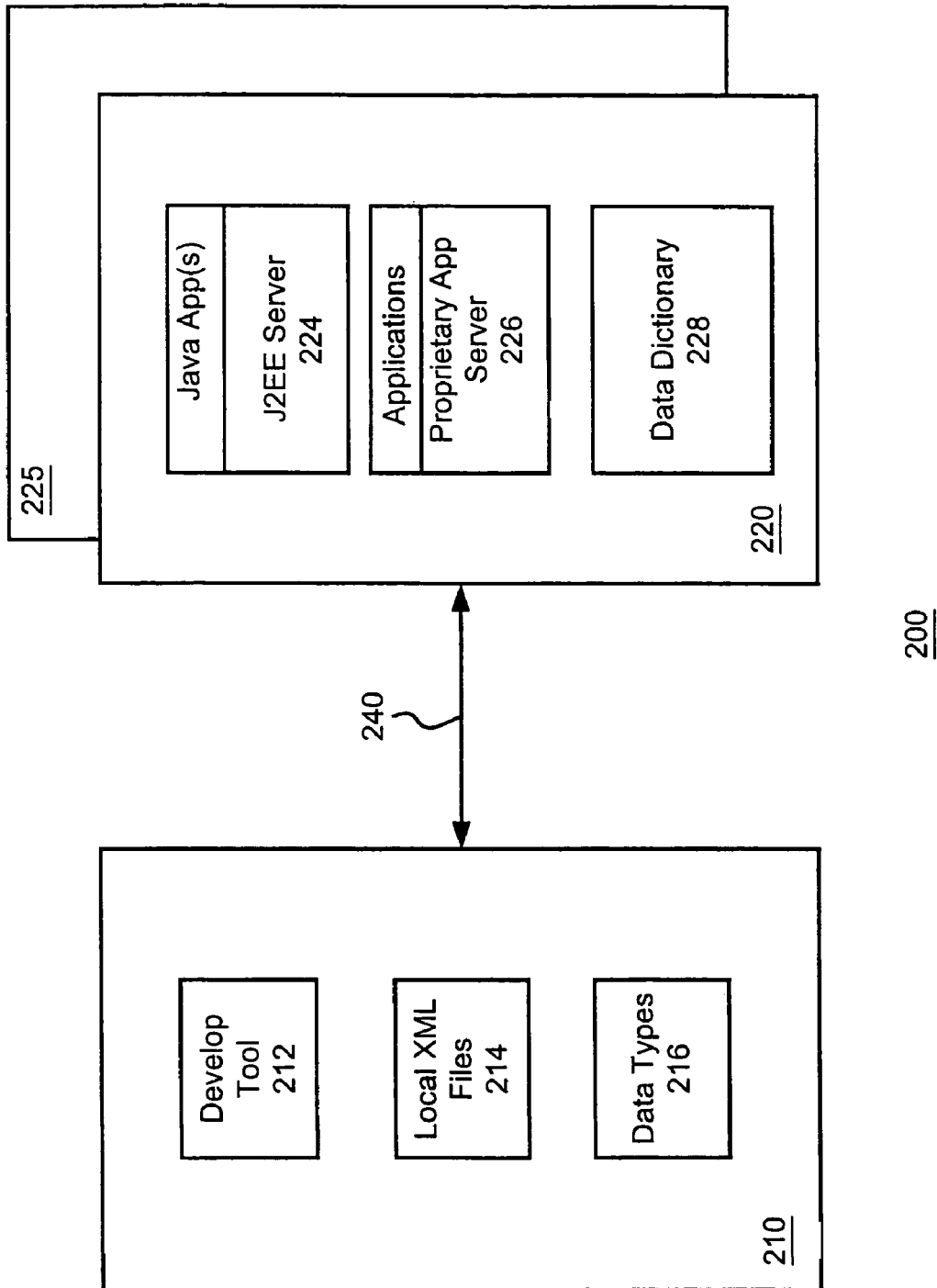


FIG. 2

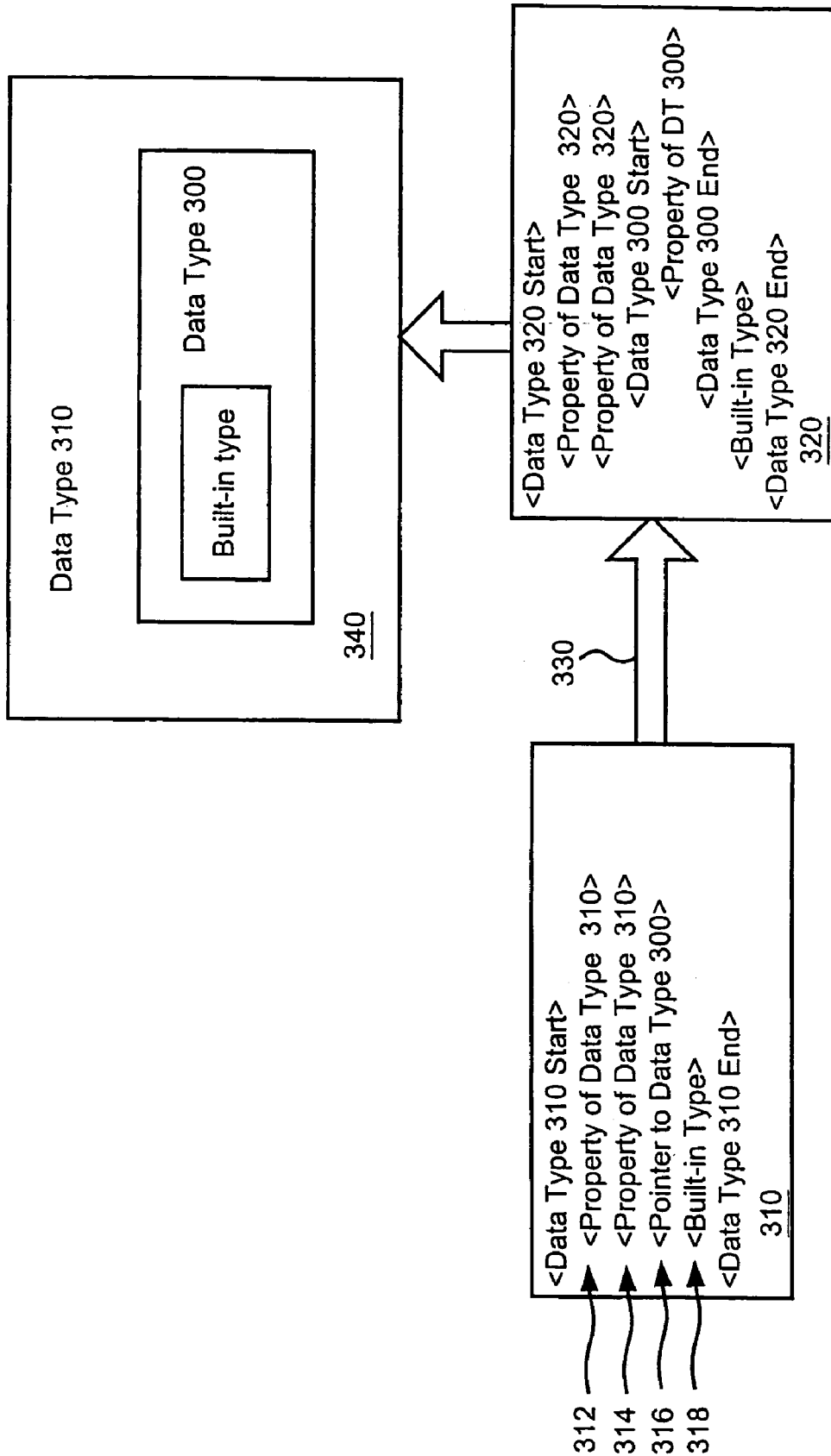


FIG. 3

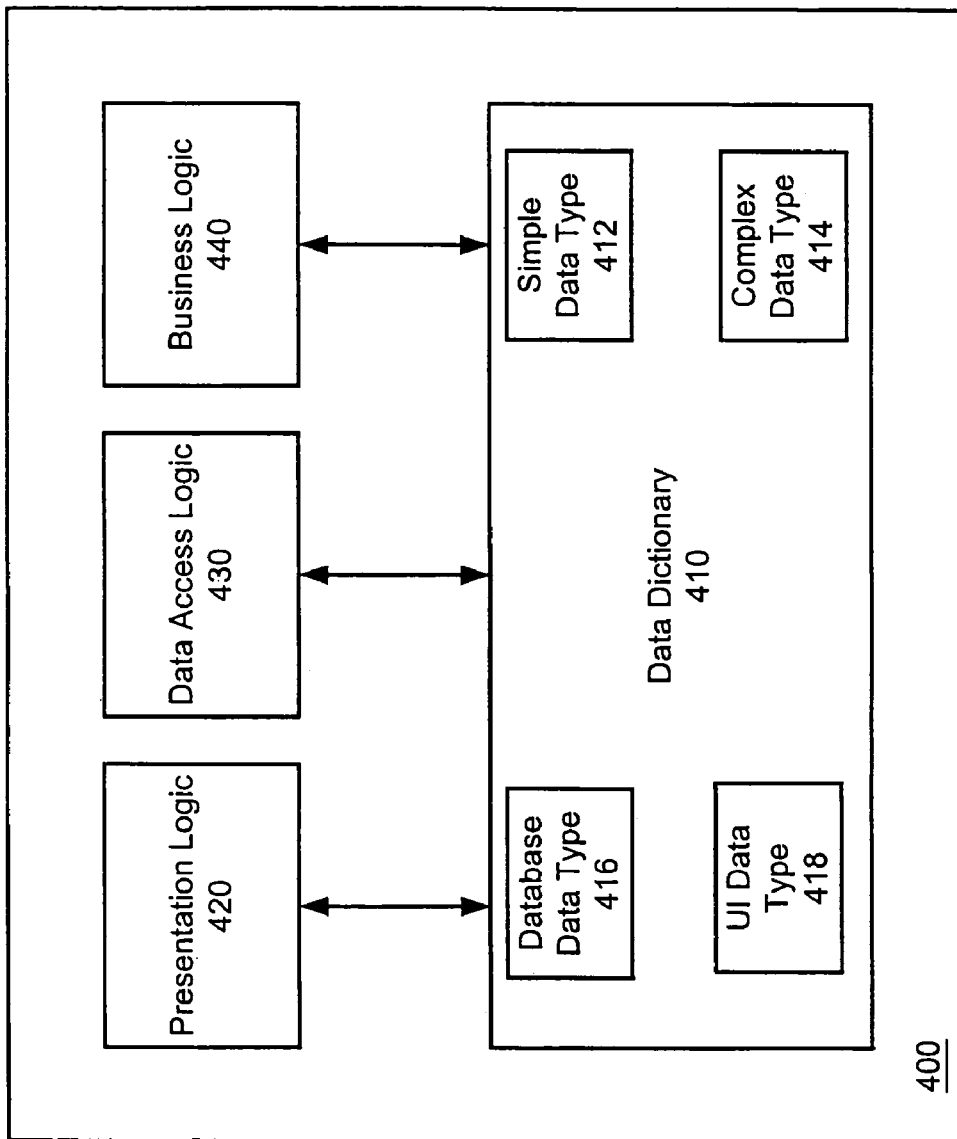


FIG. 4

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.