

EXHIBIT E



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(12) **United States Patent**
Davis

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(54) **COMBINING REUSABLE DATA MARKUP LANGUAGE DOCUMENTS**

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(65) **Prior Publication Data**

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(51) **Int. Cl.**
G06F 17/00 (2006.01)

(52) **U.S. Cl.** **715/209; 715/234**

(58) **Field of Classification Search** 715/209
See application file for complete search history.

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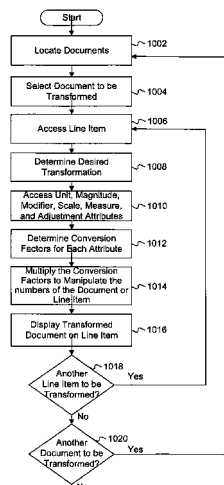
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(57) **ABSTRACT**
Methods and systems provide a computer markup language, referred to as Reusable Data Markup Language ("RDML"), and a data viewer for retrieving, manipulating and viewing documents and files in the RDML format that may be stored locally or over a network (e.g., the Internet). Generally, RDML permits the browsing and manipulation of numbers, as opposed to text and images like in HTML, and does so by including attributes describing the meaning of the numbers to be attached to the numbers. Documents compliant with the markup language encapsulate machine-readable documentation with numbers and data, and permit the data viewer to act as a combination web browser and spreadsheet to automatically read, interpret and manipulate the numbers and data. Furthermore, the methods and systems merge or combine RDML documents that have different data formats to produce a single data set for display.

27 Claims, 40 Drawing Sheets



US 8,185,816 B2

Page 2

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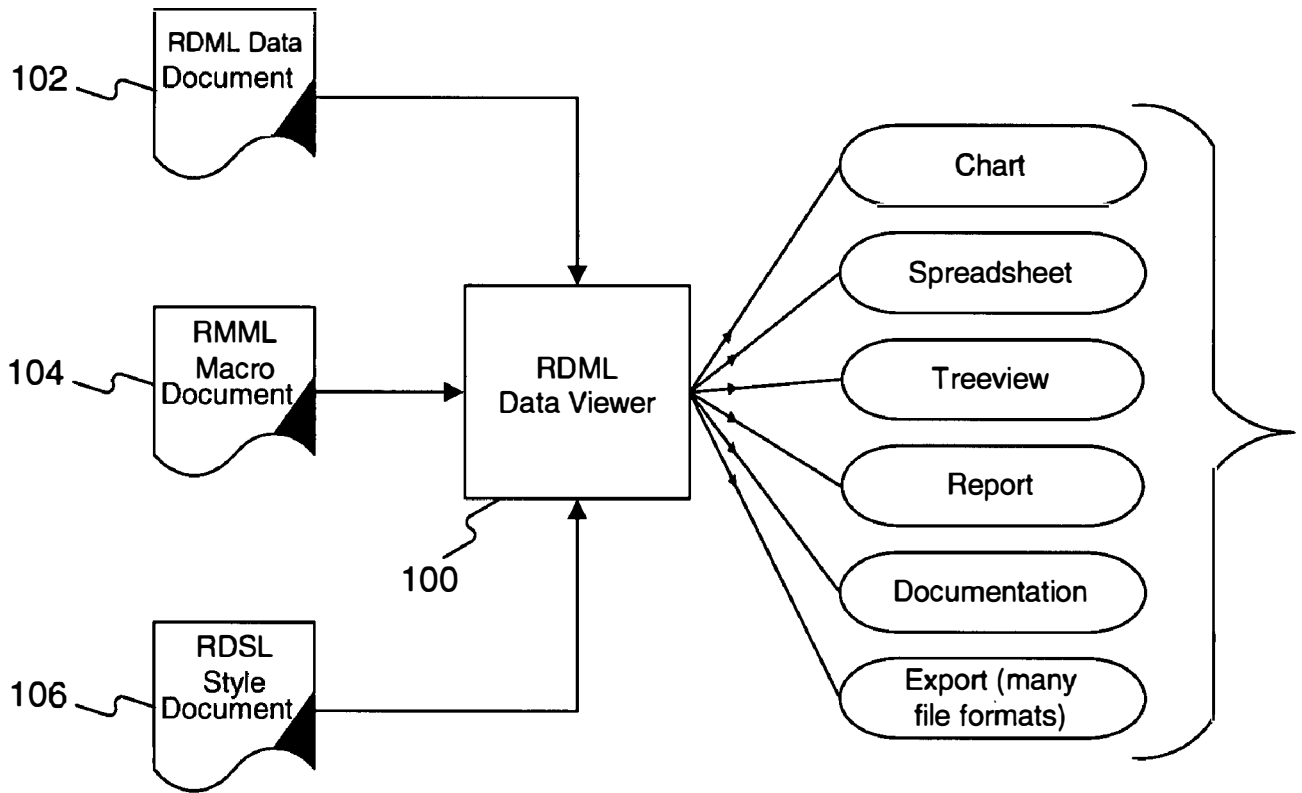


FIG. 1

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