

# Exhibit C



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(12) **United States Patent**  
**Davis**

(10) **Patent No.:** **US 7,650,355 B1**  
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(54) **REUSABLE MACRO MARKUP LANGUAGE**

OTHER PUBLICATIONS

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Bruce Hallberg et al., "Special Edition, Using Microsoft® Excel197, Bestseller Edition," Que® Corporation (1997).

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(Continued)

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

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(57) **ABSTRACT**

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**Related U.S. Application Data**

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(51) **Int. Cl.**  
**G06F 17/30** (2006.01)

(52) **U.S. Cl.** ..... **707/102; 707/101; 707/3; 707/204; 715/234; 715/202**

(58) **Field of Classification Search** ..... **707/103, 707/102, 100, 3, 6, 101, 10; 345/604; 715/517, 715/500, 503, 513, 523, 50.1**

See application file for complete search history.

(56) **References Cited**

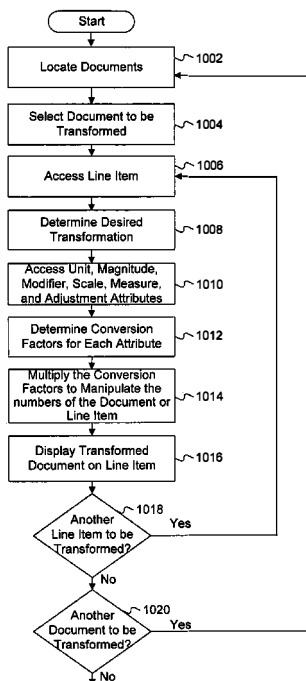
**U.S. PATENT DOCUMENTS**

4,674,043 A 6/1987 Hernandez et al.  
5,008,853 A \* 4/1991 Bly et al. .... 715/751

(Continued)

Methods and systems in accordance with the present invention provide macros and a markup language referred to as Reusable Macro Markup Language ("RMML") which allows numerical analysis routines to be written quickly, cheaply, and in a form that is usable by a broad range of data documents in the Reusable Data Markup Language ("RDML") formatting language. RMML and RDML are markup languages, such as the Hypertext Markup Language ("HTML") or the Extensible Markup Language ("XML"). Generally, RDML facilitates the browsing and manipulation of numbers, as opposed to text as in HTML, and does so by requiring attributes describing the meaning of the numbers to be attached to the numbers. RMML allows spreadsheet type macros to be posted as web documents, to be searched by search engines, to be combined into more complex programs, and to be reused with many data documents. RMML macros also provide reusable user-defined calculations for use in conjunction with RDML that automatically manipulate and display numerical data contained in RDML markup documents.

**56 Claims, 40 Drawing Sheets**



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## U.S. PATENT DOCUMENTS

## U.S. PATENT DOCUMENTS

5,276,776 A 1/1994 Grady et al.  
 5,339,392 A \* 8/1994 Risberg et al. .... 715/762  
 5,371,675 A \* 12/1994 Greif et al. .... 715/220  
 5,423,032 A 6/1995 Byrd et al.  
 5,603,021 A \* 2/1997 Spencer et al. .... 707/4  
 5,721,847 A \* 2/1998 Johnson ..... 715/786  
 5,737,592 A 4/1998 Nguyen et al.  
 5,754,939 A 5/1998 Herz et al.  
 5,822,587 A 10/1998 McDonald et al.  
 5,838,906 A 11/1998 Doyle et al.  
 5,838,965 A 11/1998 Kavanagh et al.  
 5,894,311 A 4/1999 Jackson  
 5,913,214 A 6/1999 Madnick et al.  
 5,917,485 A 6/1999 Spellman et al.  
 5,920,828 A \* 7/1999 Norris et al. .... 702/14  
 5,948,113 A \* 9/1999 Johnson et al. .... 714/38  
 5,950,196 A 9/1999 Pyreddy et al.  
 5,956,737 A \* 9/1999 King et al. .... 715/517  
 5,974,413 A \* 10/1999 Beauregard et al. .... 707/6  
 5,983,247 A \* 11/1999 Yamanaka et al. .... 715/209  
 5,999,944 A 12/1999 Lipkin  
 6,014,661 A 1/2000 Ahlberg et al. .... 707/3  
 6,026,388 A 2/2000 Liddy et al.  
 6,026,397 A 2/2000 Sheppard  
 6,034,676 A \* 3/2000 Egan et al. .... 701/29  
 6,058,385 A 5/2000 Koza et al.  
 6,065,026 A \* 5/2000 Cornelia et al. .... 715/531  
 6,092,036 A \* 7/2000 Hamann ..... 704/8  
 6,097,888 A 8/2000 Simonyi  
 6,108,662 A \* 8/2000 Hoskins et al. .... 707/102  
 6,121,924 A \* 9/2000 Meek et al. .... 342/357.13  
 6,134,563 A 10/2000 Clancey et al.  
 6,160,549 A 12/2000 Touma et al.  
 6,167,409 A \* 12/2000 DeRose et al. .... 715/513  
 6,173,284 B1 1/2001 Brown  
 6,195,676 B1 \* 2/2001 Spix et al. .... 718/107  
 6,199,046 B1 3/2001 Heinzle et al.  
 6,199,080 B1 3/2001 Nielson  
 6,223,189 B1 4/2001 Steffens et al.  
 6,240,407 B1 5/2001 Chang et al.  
 6,243,698 B1 6/2001 Powers et al.  
 6,256,030 B1 7/2001 Berry et al.  
 6,314,562 B1 11/2001 Biggerstaff  
 6,317,750 B1 11/2001 Tortolani et al.  
 6,349,307 B1 2/2002 Chen  
 6,351,755 B1 2/2002 Najork et al.  
 6,356,920 B1 3/2002 Vandersluis  
 6,366,915 B1 4/2002 Rubert et al.  
 6,370,537 B1 4/2002 Gilbert et al.  
 6,370,549 B1 4/2002 Saxton  
 6,373,504 B1 4/2002 Nielsen  
 6,374,274 B1 \* 4/2002 Myers et al. .... 715/523  
 6,418,433 B1 7/2002 Chakrabarti et al.  
 6,421,656 B1 7/2002 Cheng et al.  
 6,421,822 B1 \* 7/2002 Pavela ..... 717/125  
 6,424,980 B1 \* 7/2002 Iizuka et al. .... 715/206  
 6,460,059 B1 10/2002 Wisniewski  
 6,470,349 B1 10/2002 Heninger et al.  
 6,493,717 B1 12/2002 Junkin  
 6,505,246 B1 1/2003 Land et al.  
 6,507,856 B1 1/2003 Chen et al.  
 6,581,068 B1 6/2003 Bensoussan et al.  
 6,591,272 B1 7/2003 Williams  
 6,594,653 B2 7/2003 Colby et al.  
 6,615,258 B1 9/2003 Barry et al.  
 6,629,094 B1 9/2003 Colby et al.  
 6,635,089 B1 10/2003 Burkett et al.

6,745,384 B1 6/2004 Biggerstaff  
 6,886,005 B2 4/2005 Davis  
 6,910,017 B1 \* 6/2005 Woo et al. .... 705/10  
 6,912,293 B1 6/2005 Korobkin  
 6,920,608 B1 7/2005 Davis  
 2001/0018687 A1 8/2001 Gonzalez et al.  
 2001/0020237 A1 9/2001 Yarnall et al.  
 2001/0049687 A1 12/2001 Russell  
 2002/0023141 A1 2/2002 Yen et al.  
 2002/0052954 A1 5/2002 Polizzi et al.  
 2002/0091696 A1 7/2002 Craft et al.  
 2002/0198985 A1 12/2002 Fraenkel et al.  
 2003/0041077 A1 2/2003 Davis  
 2003/0140045 A1 \* 7/2003 Heninger et al. .... 707/10  
 2003/0167213 A1 9/2003 Jammes et al.  
 2005/0086216 A1 4/2005 Davis  
 2005/0182709 A1 8/2005 Belcsak et al.  
 2005/0198042 A1 9/2005 Davis

## OTHER PUBLICATIONS

Elliott Rusty Harold, "XML™ Bible," IDG Books Worldwide, Inc., An International Data Group Company (1999).  
 David Megginson, "Structuring XML Documents," Prentice Hall PTR, Upper Saddle River, NJ (1998).  
 Copending U.S. Appl. No. 09/573,419 entitled "Tree View for Reusable Data Markup Language," filed May 18, 2000.  
 Copending U.S. Appl. No. 09/573,778 entitled "Reusable Data Markup Language," filed May 18, 2000.  
 Extensible Business Reporting Language (XBRL) 2.0 Specification, (Dec. 14, 2001), Editors: Luther Hampton, e-Numerate; David van Kannon, KPMG LLP; pp. 1-42.  
 Information on Exchange Rates of Africa, Asia, and Australia, web site: <http://eh.net/hmit/exchangerates/infoafr.htm>, pp. 1-3, 2002 by EH.NET, downloaded Oct. 19, 2006.  
 Microsoft Press Computer Dictionary, Third Edition, Microsoft Press, p. 511 (1997) (3 pages).  
 Ohio CPA Newsletter, A Monthly Electronic Publication of the Ohio Society of Certified Public Accountants; Aug. 2000, vol. 1, No. 14 (7 pages).  
 Order of Magnitude (online Wikipedia article), [http://en.wikipedia.org/wiki/Orders\\_of\\_magnitude](http://en.wikipedia.org/wiki/Orders_of_magnitude), 2006 Wikimedia Foundation, Inc. pp. 1-4, downloaded Oct. 19, 2006.  
 Tools [online], extensible Business Reporting Language, [retrieved on Aug. 13, 2002]. Retrieved from the Internet <URL: <http://www.xbrl.org/Tools.htm>> (5 pages).  
 XBRL Essentials, (A nontechnical introduction to the extensible Business Reporting Language, the digital language of business), Jan. 2001, Charles Hoffman, CPA; Carolyn Strand, PhD, CPA, (AICPA), pp. 1-17.  
 XBRL Home Page [online], extensible Business Reporting Language, [retrieved on Aug. 13, 2002]. Retrieved from the Internet <URL: <http://www.xbrl.org>> (3 pages).  
 XBRL Technical Specification [online], extensible Business Reporting Language, [retrieved on Aug. 13, 2002]. Retrieved from the Internet <URL: <http://www.xbrl.org/TR/2001/default.htm>> (1 page).  
 The XML Cover Pages, Extensible Business Reporting Language (XBRL), (1994-2002), Robin Cover, pp. 1-18.  
 Berkley et al., The Road to Better Business Information Making a Case for XBRL, Winter 2000, Microsoft, pp. 1-13.  
 Blattner, Special Edition Using Microsoft Excel (R), May 3, 1999 (C) Que Corporation "Adding a Secondary Axis to the Chart" (3 pages).  
 Gilster, Paul, *Finding It On The Internet: The Internet Navigator's Guide to Search Tools & Techniques*, 2<sup>nd</sup> edition (1996) (3 pages).  
 Hamscher et al., Extensible Business Reporting language (XBRL) Specification, Jul. 31, 2000, XBRL Organization, pp. 1-27.  
 Charles Hoffman and Carolyn Strand, "XBRL Essentials, A Nontechnical Introduction to eXtensible Business Reporting Language (XBRL), the Digital Language of Business Reporting," pp. 1-148 (2001).  
 Jon Rienstra, "Using Excel® in Chemistry," <http://www.asa3.org/>

**US 7,650,355 B1**

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---

Simon St. Laurent, "Why XML?," <http://www.simonstl.com/articles/whyxml.htm> (1998) (5 pages).

Suzuki et al., "Managing the Software Design Documents With XML," ACM Proceedings of the 16th Annual International Conference on Computer Documentation, Sep. 1998, pp. 127-136.

Copending U.S. Appl. No. 11/819,125 entitled "Tree View for Reusable Data Markup Language," filed Jun. 25, 2007.

Copending U.S. Appl. No. 11/819,126 entitled "Reusable Data Markup Language," filed Jun. 25, 2007.

\* cited by examiner

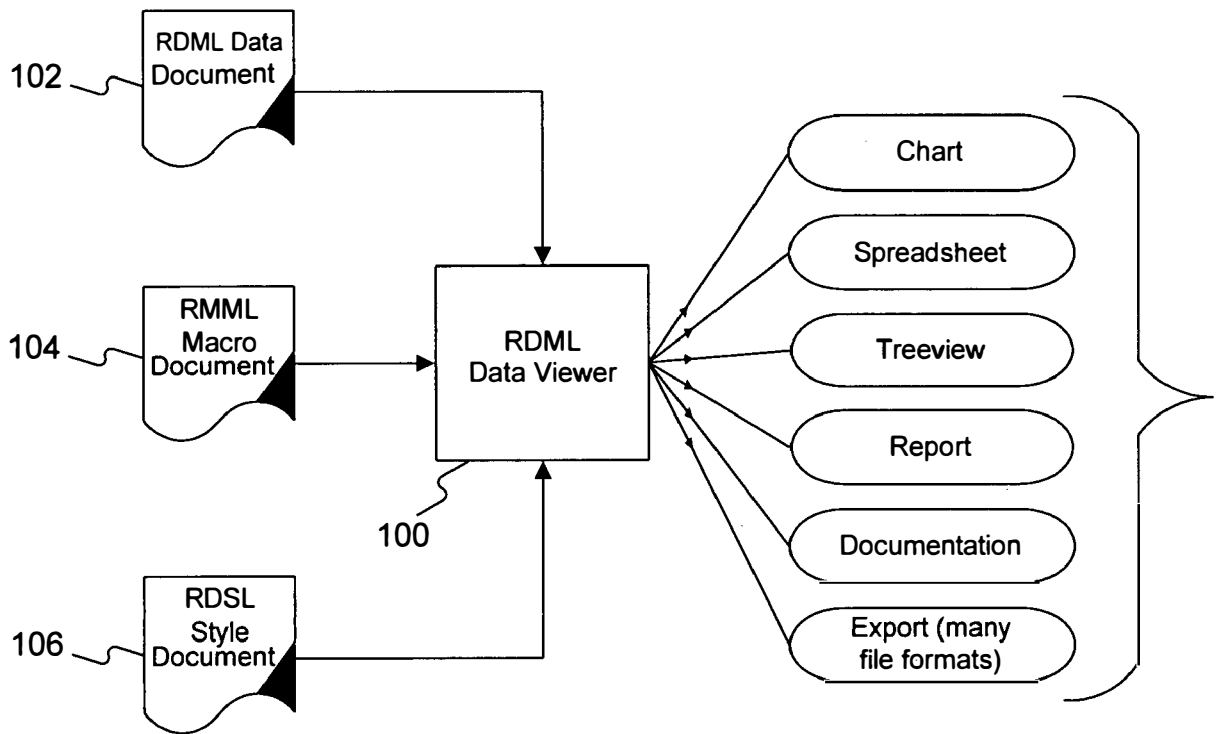


FIG. 1

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