US008719176B1

(12) **United States Patent**
Harrison, Jr.

(10) **Patent No.: US 8,719,176 B1**
(45) **Date of Patent: *May 6, 2014**

(54) **SOCIAL NEWS GATHERING, PRIORITIZING, TAGGING, SEARCHING AND SYNDICATION**

(75) Inventor: **Shelton E. Harrison, Jr.**, Culver City, CA (US)

(73) Assignee: **Search and Social Media Partners LLC**, Beverly Hills, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1126 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **12/583,109**

(22) Filed: **Aug. 14, 2009**

Related U.S. Application Data

(62) Division of application No. 10/888,781, filed on Jul. 9, 2004, now Pat. No. 7,599,938.

(60) Provisional application No. 60/486,630, filed on Jul. 11, 2003.

(51) **Int. Cl.**

G06Q 30/02	(2012.01)
G06Q 10/10	(2012.01)
G06Q 10/06	(2012.01)
G06Q 40/02	(2012.01)
G06Q 99/00	(2006.01)
G06Q 50/00	(2012.01)

(52) **U.S. Cl.**
CPC ***G06Q 50/01*** (2013.01)
USPC **705/319**; 705/1.1

(58) **Field of Classification Search**
None
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,175,814	A	12/1992	Anick et al.
5,220,625	A	6/1993	Hatakeyama et al.
5,321,833	A	6/1994	Chang et al.
5,446,891	A	8/1995	Kaplan et al.
5,488,725	A	1/1996	Turtle et al.
5,659,732	A	8/1997	Kirsch
5,696,962	A	12/1997	Kupiec
5,724,567	A	3/1998	Rose et al.
5,778,367	A	7/1998	Wesinger et al.
5,796,952	A	8/1998	Davis et al.
5,842,203	A	11/1998	D'Elena et al.
5,848,410	A	12/1998	Walls et al.
5,864,845	A	1/1999	Voorhees et al.
5,864,846	A	1/1999	Voorhees et al.
5,890,152	A	3/1999	Rapaport et al.
5,913,215	A	6/1999	Rubinstein et al.
6,006,218	A	12/1999	Breese et al.
6,029,195	A	2/2000	Herz
6,041,326	A	3/2000	Amro et al.
6,112,191	A	8/2000	Burke

(Continued)

OTHER PUBLICATIONS

Office Action dated May 31, 2013, in U.S. Appl. No. 12/924,688.

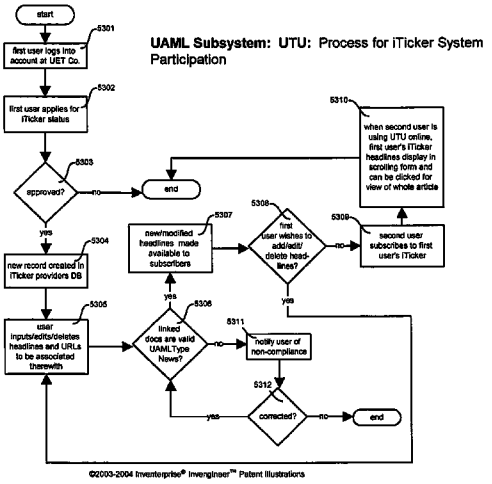
(Continued)

Primary Examiner — Jonathan Ouellette
(74) *Attorney, Agent, or Firm* — Beyer Law Group; Steve Beyer; Ed Van Gieson

(57) **ABSTRACT**

A "URLIT" identifier is assigned to a URL and embedded in an HTML document located at the URL. Transactions are conducted through a Universal Toolbar Utility. A search method allows user-definition of search algorithms and includes a ranking method that assigns relevancy scores to documents by polling users. A user-generated news service allows users to syndicate news. A user-generated resource allows users to create, approve and disapprove of submissions.

30 Claims, 82 Drawing Sheets



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,199,061 B1 3/2001 Blewett et al.
6,236,990 B1 5/2001 Geller et al.
6,247,007 B1 6/2001 Cooperman et al.
6,289,362 B1 9/2001 Van Der Meer
6,317,741 B1 11/2001 Burrows
6,327,593 B1 12/2001 Goiffon
6,347,307 B1 2/2002 Sandhu et al.
6,363,377 B1 3/2002 Kravets et al.
6,397,212 B1 5/2002 Biffar
6,415,316 B1 7/2002 Van Der Meer
6,421,675 B1 7/2002 Ryan et al.
6,433,795 B1 8/2002 MacNaughton et al.
6,473,749 B1 10/2002 Smith et al.
6,480,837 B1 11/2002 Dutta
6,490,577 B1 12/2002 Anwar
6,516,312 B1 2/2003 Kraft et al.
6,539,377 B1 3/2003 Culliss
6,546,388 B1 4/2003 Edlund et al.
6,571,238 B1 5/2003 Pollack et al.
6,601,061 B1 7/2003 Holt et al.
6,626,957 B1 9/2003 Lippert et al.
6,647,384 B2 11/2003 Gilmour
6,678,694 B1 1/2004 Zimmermann et al.
6,681,223 B1 1/2004 Sundaresan
6,704,739 B2 3/2004 Craft et al.
6,714,975 B1 3/2004 Aggarwal et al.
6,766,320 B1 7/2004 Wang et al.
6,766,362 B1 7/2004 Miyasaka et al.
6,772,150 B1 8/2004 Whitman et al.
6,778,193 B2 8/2004 Biebesheimer et al.
6,785,676 B2 8/2004 Oblinger
6,792,458 B1 9/2004 Muret et al.
6,801,936 B1 10/2004 Diwan
6,804,701 B2 10/2004 Muret et al.
6,816,850 B2 11/2004 Culliss
6,816,857 B1 11/2004 Weissman et al.
6,834,277 B1 12/2004 Learmonth
6,865,746 B1 3/2005 Herrington et al.
6,876,997 B1 4/2005 Rorey et al.
6,889,222 B1 5/2005 Zhao
6,895,385 B1 5/2005 Zacharia et al.
6,944,612 B2 9/2005 Roustant et al.
6,968,233 B1 11/2005 Parry et al.
7,028,024 B1 4/2006 Kommers et al.
7,043,450 B2 5/2006 Velez et al.
7,062,488 B1 6/2006 Reisman
7,089,236 B1 8/2006 Stibel
7,092,992 B1 8/2006 Yu
7,099,871 B2 8/2006 Faybishenko et al.
7,111,777 B2 9/2006 Singhal
7,117,198 B1 10/2006 Cronin et al.
7,139,972 B2 11/2006 Hamilton et al.
7,142,883 B2 11/2006 Rouse et al.
7,155,427 B1 12/2006 Prothia et al.
7,165,119 B2 1/2007 Fish
7,171,415 B2 1/2007 Kan et al.
7,181,488 B2 2/2007 Martin et al.
7,185,065 B1 2/2007 Holtzman et al.
7,240,055 B2 7/2007 Grasso et al.
7,246,106 B2 7/2007 Gaynor et al.
7,263,474 B2 8/2007 Fables et al.
7,293,019 B2 11/2007 Dumais et al.
7,669,123 B2 2/2010 Zuckerberg et al.
7,685,097 B2 3/2010 St. John et al.
7,849,202 B2 12/2010 Muret et al.
8,156,047 B1 4/2012 Sanders et al.
2001/0044811 A1 11/2001 Ballantyne et al.
2001/0044812 A1 11/2001 Byrd et al.
2001/0047290 A1* 11/2001 Petras et al. 705/10
2001/0051943 A1 12/2001 Drucker et al.
2002/0010639 A1 1/2002 Howey et al.
2002/0013728 A1 1/2002 Wilkman
2002/0032723 A1 3/2002 Johnson et al.
2002/0049792 A1 4/2002 Wilcox et al.
2002/0057299 A1 5/2002 Oren et al.
2002/0059204 A1 5/2002 Harris
2002/0069140 A1 6/2002 Tang
2002/0092019 A1 7/2002 Marcus
2002/0107853 A1 8/2002 Hofmann et al.
2002/0107882 A1 8/2002 Gorelick et al.
2002/0120609 A1 8/2002 Lang et al.
2002/0165856 A1 11/2002 Gilfillan et al.
2002/0169835 A1 11/2002 Paul, Jr. et al.
2002/0186255 A1 12/2002 Shafron et al.
2003/0009367 A1* 1/2003 Morrison 705/9
2003/0014428 A1 1/2003 Mascarenhas
2003/0046098 A1 3/2003 Kim
2003/0055831 A1 3/2003 Ryan et al.
2003/0088554 A1 5/2003 Ryan et al.
2003/0139975 A1 7/2003 Perkowski
2003/0144955 A1 7/2003 Kim
2003/0158839 A1 8/2003 Faybishenko et al.
2003/0167213 A1 9/2003 Jammes et al.
2003/0171944 A1 9/2003 Fine et al.
2003/0172005 A1 9/2003 Hellal et al.
2003/0182177 A1 9/2003 Gallagher et al.
2003/0182245 A1 9/2003 Seo
2003/0182372 A1 9/2003 Lee
2003/0200137 A1 10/2003 Drummond
2003/0200170 A1 10/2003 Tenembaum
2003/0233274 A1 12/2003 Urken et al.
2003/0233425 A1 12/2003 Lyons et al.
2004/0003097 A1 1/2004 Willis et al.
2004/0006536 A1 1/2004 Kawashima et al.
2004/0061720 A1 4/2004 Weber
2004/0064447 A1 4/2004 Simske et al.
2004/0068527 A1 4/2004 Smith
2004/0083143 A1 4/2004 Rodger
2004/0111370 A1 6/2004 Saylors et al.
2004/0111467 A1 6/2004 Willis
2004/0133601 A1 7/2004 Graham
2004/0205065 A1* 10/2004 Petras et al. 707/5
2004/0215624 A1 10/2004 Gonzalez
2004/0249801 A1 12/2004 Kapur
2005/0015718 A1 1/2005 Sambhus et al.
2005/0033641 A1 2/2005 Jha et al.
2005/0076003 A1 4/2005 DuBose et al.
2005/0154761 A1 7/2005 Lee et al.
2005/0165766 A1 7/2005 Szabo
2005/0234953 A1 10/2005 Zhang et al.
2005/0256905 A1 11/2005 Gruhl et al.
2005/0278317 A1 12/2005 Gross et al.
2006/0122856 A1 6/2006 Rushton et al.
2006/0149708 A1 7/2006 Lavine
2006/0161845 A1 7/2006 Kahn et al.
2006/0168185 A1 7/2006 McCall et al.
2006/0253459 A1 11/2006 Kahn et al.
2006/0253463 A1 11/2006 Wu et al.
2006/0253489 A1 11/2006 Kahn et al.
2006/0282822 A1 12/2006 Weng
2007/0050393 A1 3/2007 Vogel et al.
2007/0100898 A1* 5/2007 Petras et al. 707/200
2008/0104496 A1 5/2008 Williams et al.
2008/0147542 A1 6/2008 Dunlop et al.
2008/0249818 A1 10/2008 Olliphant et al.
2009/0192873 A1 7/2009 Marble
2009/0285205 A1 11/2009 Melick et al.
2010/0161458 A1 6/2010 McMaster et al.
2010/0161465 A1 6/2010 McMaster
2010/0180187 A1 7/2010 Miller et al.
2010/0198834 A1* 8/2010 Petras et al. 707/741
2011/0029416 A1 2/2011 Greenspan
2012/0078762 A1 3/2012 Valin et al.

OTHER PUBLICATIONS

Final Office Action dated Oct. 11, 2011 in U.S. Appl. No. 12/924,688.
Office Action dated Aug. 11, 2011 in U.S. Appl. No. 12/924,688.
Office Action dated Apr. 14, 2011 in U.S. Appl. No. 12/924,688.
Final Office Action dated Mar. 13, 2013 in U.S. Appl. No. 13/592,040.
Office Action dated Jan. 16, 2013 in U.S. Appl. No. 13/592,040.
Office Action dated Mar. 14, 2013 in U.S. Appl. No. 13/720,823.
Office Action dated Mar. 7, 2013 in U.S. Appl. No. 13/441,804.

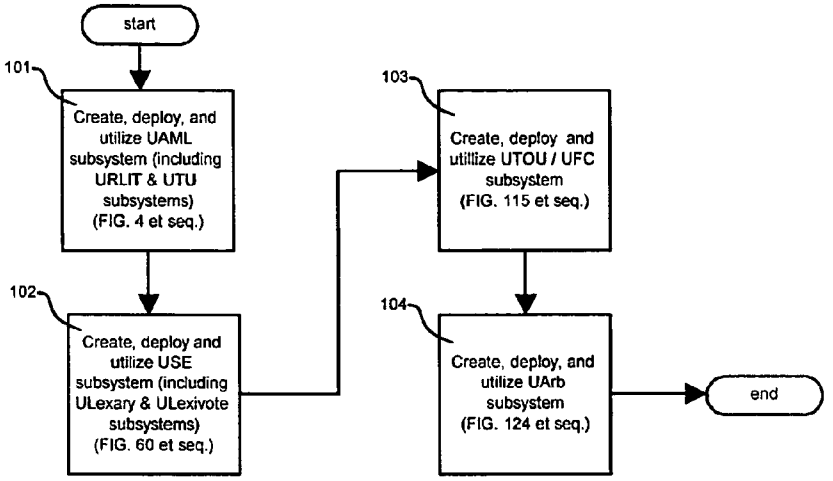
(56) **References Cited**

OTHER PUBLICATIONS

Rose, Barbara, "It is through iGive that charities receive," Chicago Tribune, Feb. 7, 2002.
Collins, Michelle, "Igive.com Spells Charity With an 'E'," Chicago Tribune, Apr. 12, 2000.
http://igive.com web-page as of Apr. 30, 1999.
Office Action dated Apr. 26, 2013, in U.S. Appl. No. 13/720,823.
Office Action dated Apr. 24, 2013, in U.S. Appl. No. 13/592,040.
Bharat et al., "When Experts Agree: Using Non-Affiliated Experts to Rank Popular Topics," Jan. 2002, ACM Press, vol. 20, Issue 1, pp. 47-58.
Unknown Author, "Alaska Cam," Touch n' Go Systems (alaskacam.com), Mar. 14, 2004, Anchorage, AK.
Liedtke, Michael; "Amazon.com Adds Photographs to Directory," Associated Press (a9.com), Jan. 29, 2005, San Francisco, CA.
Unknown Author, "Circa Technology: Applying Meaning to Information Management. An Applied Semantics Technical White Paper," Unknown Item, printed Aug. 26, 2005, Unknown City.
Unknown Author, "CamZone Streaming—Check Out Live San Diego," Camzone Networks, San Diego, CA, printed Aug. 26, 2005.
Cooper, Chip; "Online Contract Drafting and Document Assembly Service," Digital Contracts, Inc., Aug. 23, 2005.
Unknown Author, "Contract Builder System," Enhanced Technologies Inc., printed Aug. 26, 2005.
Unknown Author, "WebcamSat Server Software," Surveyor Corporation, printed Aug. 26, 2005.
Altova, "Altova Mapforce Database Mapping," Item Unknown, printed Aug. 26, 2005.
Unknown Author, "NRS Contract Builder," Drake Analytics (nrs-online com), printed Aug. 26, 2005.
Patch, Kimberly, "Summarizer Ranks Sentences," Technology Research News, Apr. 20-27, 2005.
Rhodes, Nick, "Electronic Text and Markup," Unknown Item, printed Aug. 26, 2005.
Microsoft, "Setting Up Windows Media Services 4.1: The Basics", Microsoft Windows Media (Microsoft.com), printed Aug. 26, 2005.
Marshall, Brian, "How Web Servers Work," How Stuff Works (computer.howstuffworks.com), printed Aug. 26, 2005.
M.Day, Lotus, J. Rosenberg, DynamicSoft, H. Sugano, Fujitsu, "A Model for Presence and Instant Messaging," RFC 2778—Internet RFC/STD/FYI/BCP Archives, Feb. 2000.
M. Day, Lotus, S. Aggarwal Microsoft, G Mohr, Activerse, J. Vincent, Into Networks, "Instant Messaging/Presence Protocol Requirements," RFC 2779-RFC/STD/FYI/BCP Archives, Feb. 2000.
Unknown Author, "Searching the ADS by Email" (NASA ADS Help Pages), Harvard (adsdoc.harvard.edu), printed Aug. 26, 2005.
Unknown Author, "Wikipedia: Dispute Resolution," Unknown Item, Jun. 10, 2004.
Hu, Jim; "Yahoo to Trillian : Talk to the Hand," CNET News.com (zdnet.com.com), Jun. 23, 2004.
Yahoo; "Get Rid of Pop-Ups Before They Pop Up," Yahoo! Companion Toolbar (companion.yahoo.com), printed Aug. 26, 2005.
Unknown Author, "About: Lexico Publishing Group-Offering Online Reference and Learning Services," Unknown Item, printed Aug. 26, 2005.
Emancipator, "Applied Semantics + Stemming: The Future of Google Searching," Search Guild, printed Aug. 26, 2005.
Coleman, Yechiel, "Ensuring Enforceability of Beis Din's Judgments," Jewish Law Articles (jlaw.com), May 3, 1998.
Yahoo, "Try the New Yahoo! Toolbar BETA With Anti-Spy," Yahoo! Toolbar (beta.toolbar.yahoo.com), printed Aug. 26, 2005.
Marshall, Brain, "How CGI Scripting Works," How Stuff Works (computer.howstuffworks.com), printed Aug. 26, 2005.
Hahnfeld, Matt, "EveryAuction," EverySoft, printed Aug. 26, 2005.
Gain Publishing, "Gator eWallet, The Smart Online Companion," Gator.com, Unknown Date.
Cape Clear, "CapeMail—Asynchronous Google Access or Google by Email," Cape Science (CapeScience.com), printed Aug. 26, 2005.
Watson, Dennis G., "Brief History of Document Markup," edis (edis.ifas.ufl.edu), Nov. 1992, Gainesville, FL.
Tyson, Jeff, "How Internet Infrastructure Works," How Stuff Works (computer.howstuffworks.com), printed Aug. 26, 2005.
TechTarget, "Lexibot," Whatis.com (Whatis.techtarget.com), Jul. 29, 2001.
Amter, Charlie; "AirFX : Good Vibrations?," TechTV (techtv.com), Apr. 21, 2001.
Long et al., "Google Hacking for Penetration Testers," Syngress, Sec. 1-2, Jul. 2004.
Musgrove et al., "Representing the Context of Equivalent Query Words as a Means of Preserving Search Precision," Apr. 2005, Proceedings . . . , pp. 63-71.
Quigley et al., "JavaScript by Example," Prentice Hall, Chapter 10, Jun. 19, 2003.
Howe, Jeff, "The Rise of Crowdsouring," Wired Magazine, Jun. 2006, San Francisco, CA.
Unknown Author, "What Is Upcoming.org?," www.archive.org, May 2004.
O'Reilly, Tim, "What Is Web 2.0?," O'Reilly Media, Sep. 30, 2005, San Francisco, CA.
Unknown Author, "Help Is at Hand," FLICKR.com, www.archive.org, Sep. 2004.
Unknown Author, "About Flickr," FLICKR.com, www.archive.org, Oct. 2004.
Unknown Author, "Del.icio.us," wikipedia.com, www.archive.org, Oct. 2004.
Unknown Author, "Collective Intelligence," Wikipedia, www.archive.org, Jun. 1, 2004.
Unknown Author, "FAQ," Digg.com, www.archive.org, Jan. 2005.
Unknown Author, "FAQ StumbleUpon.com," www.archive.org, Feb. 7, 2003.
Unknown Author, "What Is It?," StumbleUpon.com, www.archive.org, Apr. 2, 2003.
Unknown Author, "How It Works," StumbleUpon.com, www.archive.org, Apr. 2, 2003.
Unknown Author, "Redditt," wikipedia.com, Oct. 29, 2007.
Unknown Author, "I Want to Be a Slashdot.org Author!," Slashdot,org, Jan. 1998.
Unknown Author, "Editorial," Slashdot.org, Dec. 2002.
Unknown Author, "Slashdot FAQ," Slashdot.org, Dec. 2002.
Unknown Author, "About This Site," Slashdot.org, Dec. 2002.

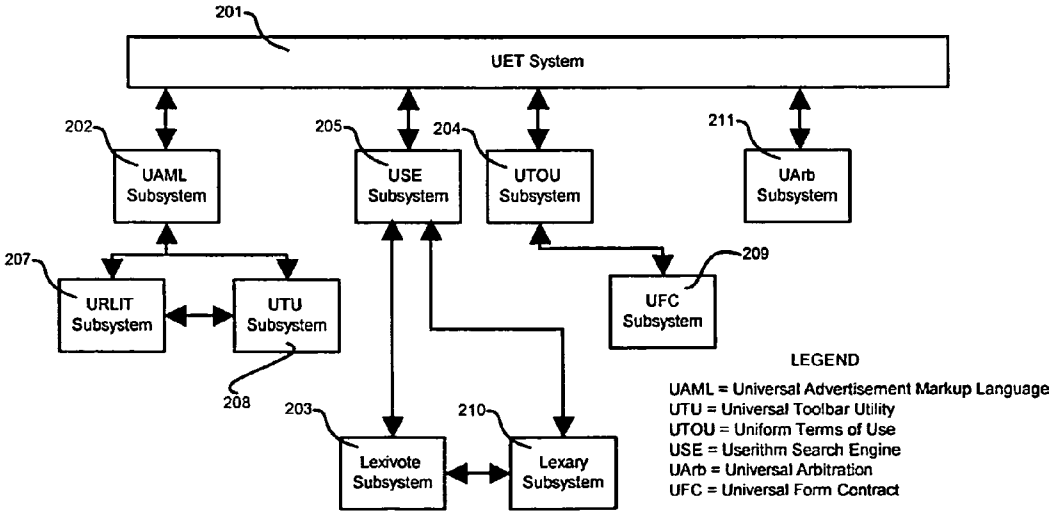
* cited by examiner

FIG. 1 **Universal Electronic Transaction (UET) System:** Method Overview



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 2 **UET System:** System Overview



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 3

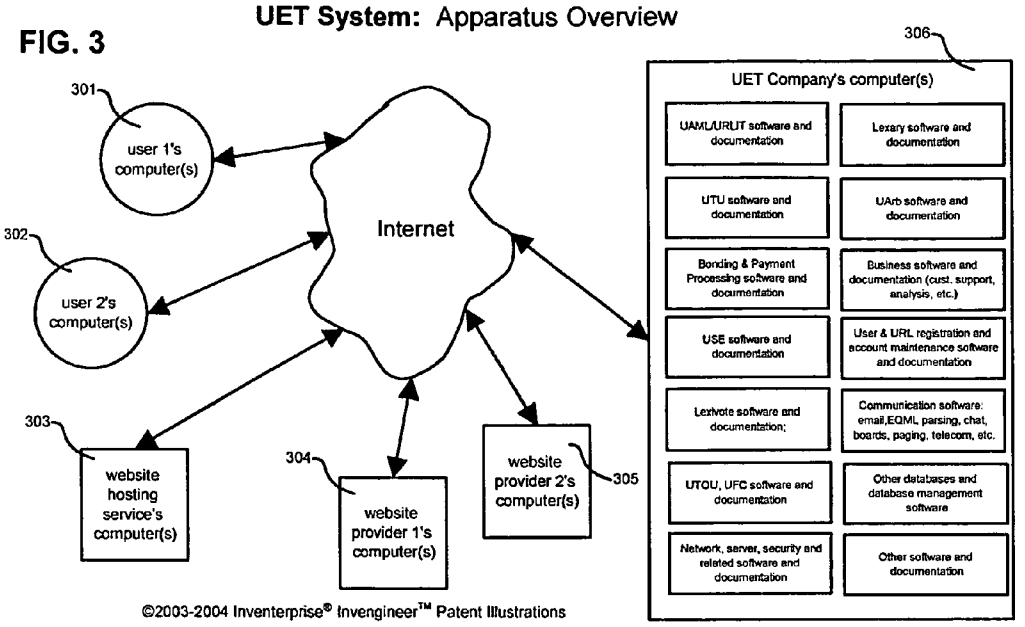

UET System: Apparatus Overview
301
user 1's computer(s)
302
user 2's computer(s)
Internet
303
website hosting service's computer(s)
304
website provider 1's computer(s)
website provider 2's computer(s)
305
306
UET Company's computer(s)
UAML/URLIT software and documentation
Lexary software and documentation
UTU software and documentation
UArb software and documentation
Bonding & Payment Processing software and documentation
Business software and documentation (cust. support, analysis, etc.)
USE software and documentation
User & URL registration and account maintenance software and documentation
Lexivote software and documentation;
Communication software: email,EQML parsing, chat, boards, paging, telecom, etc.
UTOU, UFC software and documentation
Other databases and database management software
Network, server, security and related software and documentation
Other software and documentation
©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 4

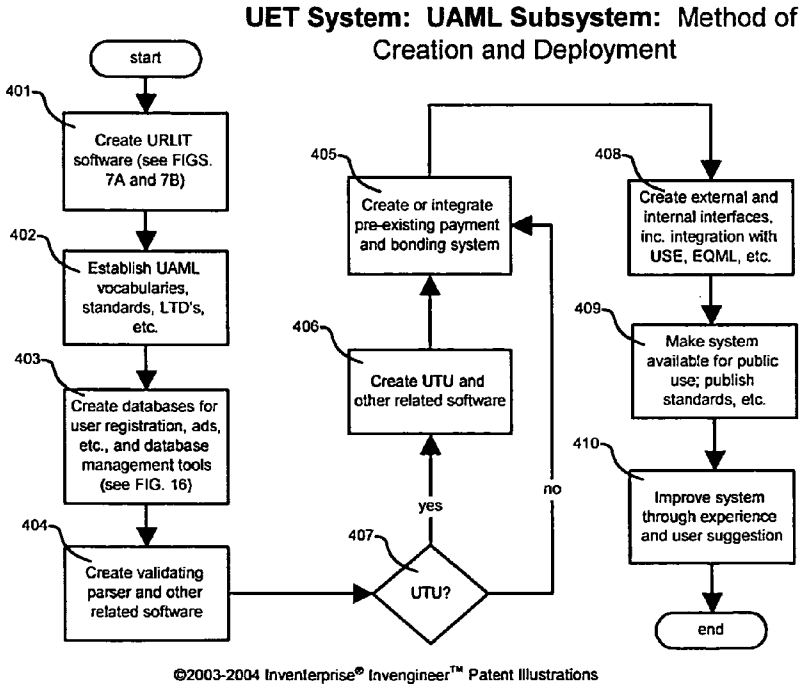

UET System: UAML Subsystem: Method of Creation and Deployment
start
401
Create URLIT software (see FIGS. 7A and 7B)
402
Establish UAML vocabularies, standards, LTD's, etc.
403
Create databases for user registration, ads, etc., and database management tools (see FIG. 16)
404
Create validating parser and other related software
405
Create or integrate pre-existing payment and bonding system
406
Create UTU and other related software
407
UTU?
yes
no
408
Create external and internal interfaces, inc. integration with USE, EQML, etc.
409
Make system available for public use; publish standards, etc.
410
Improve system through experience and user suggestion
end
©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 5

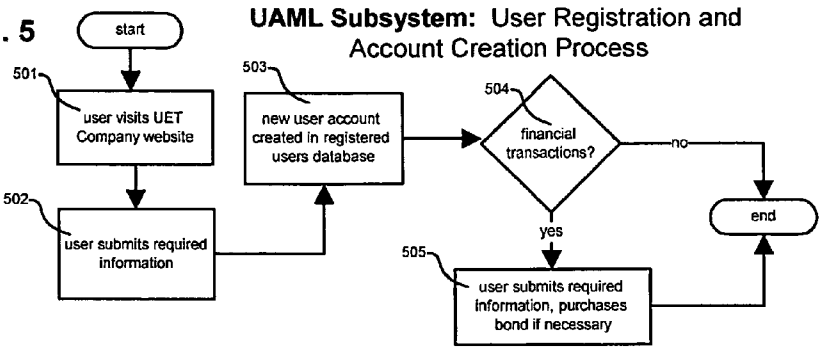
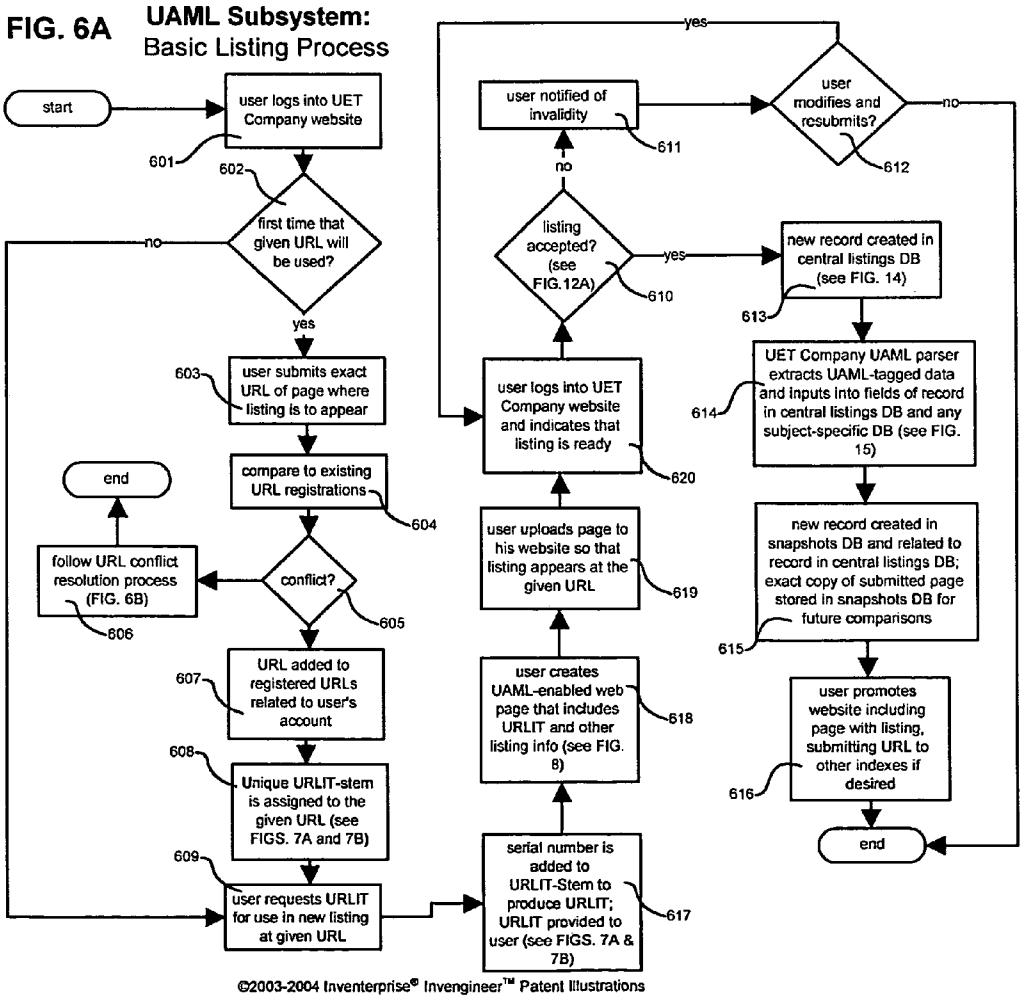


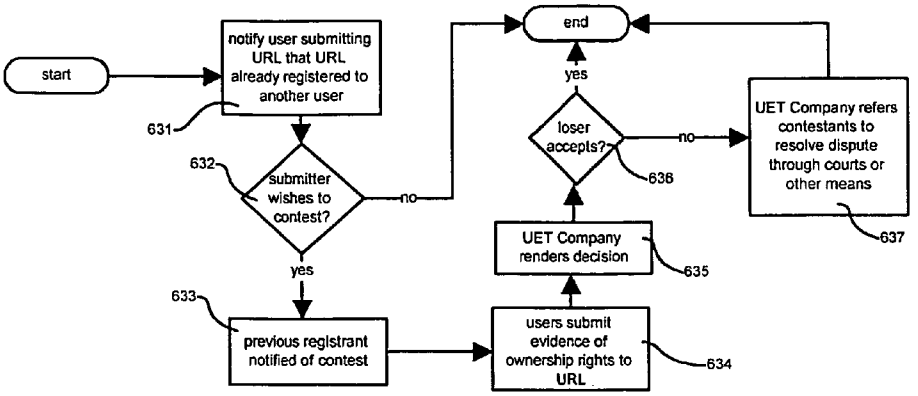
FIG. 6A



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 6B

UAML Subsystem: URL Conflict Resolution Process



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 7A

UAML Subsystem: URLIT Formation Process

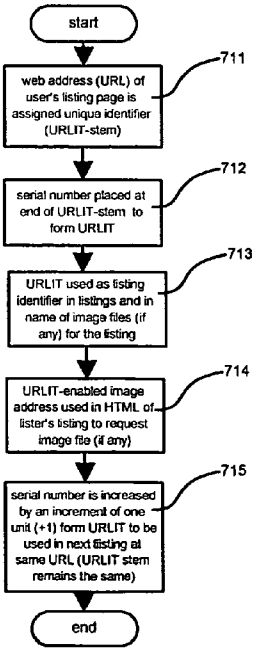
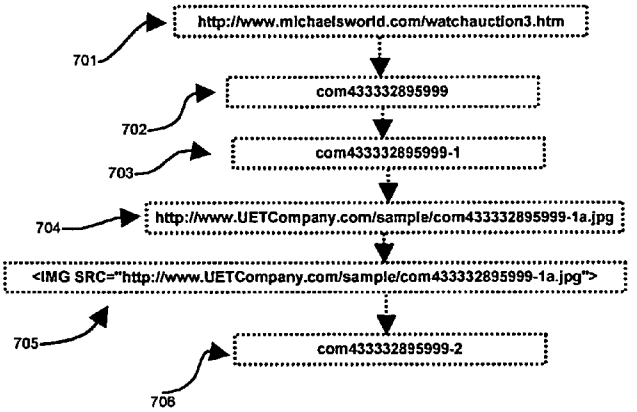


FIG. 7B

UAML Subsystem: Example URLIT Formation and Usage



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

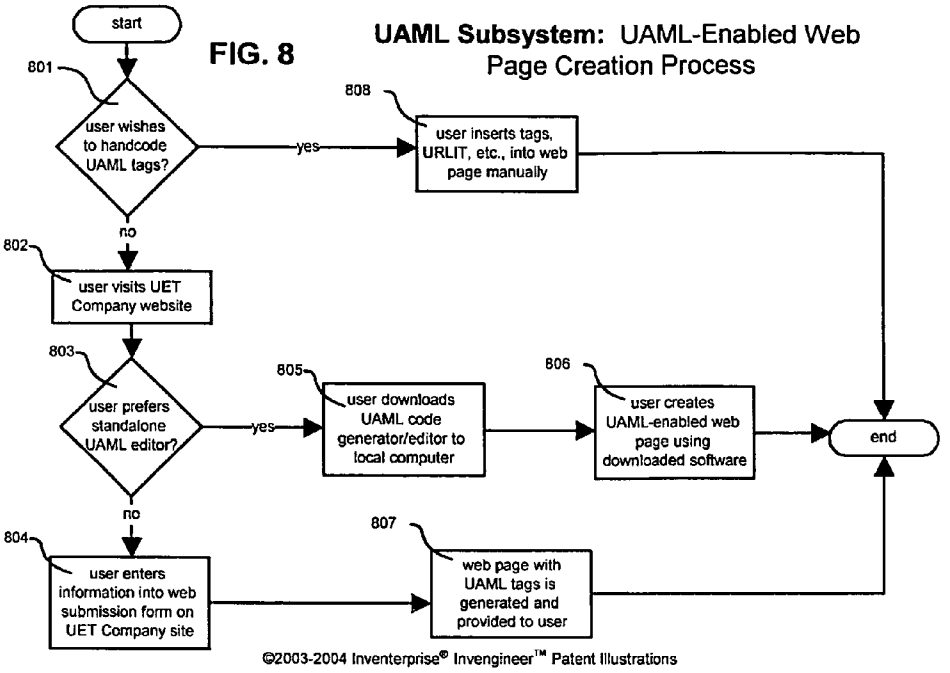


FIG. 8 **UAML Subsystem:** UAML-Enabled Web Page Creation Process

FIG. 9 **UAML Subsystem:** Example UAML-Enabled Web Page

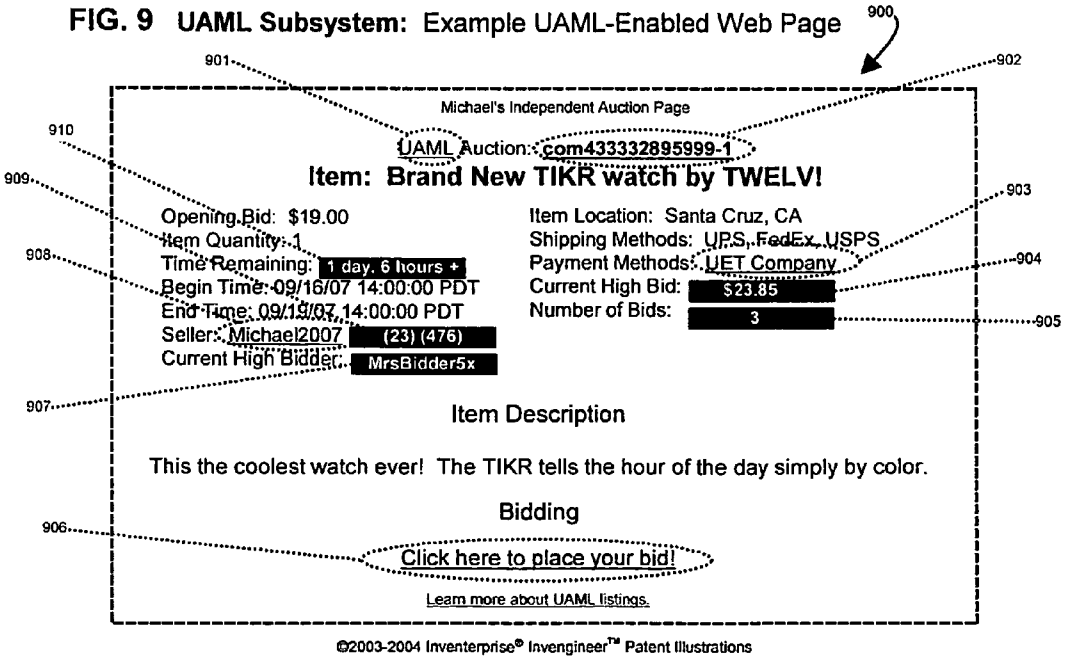


FIG. 10

1001

UAML Subsystem: Excerpt from Example User-Accessible Submission Form for Entry of Data and Submission to UAML Code Generator

UAML-Enabled Web Page Generator:
Submit Your Auction Info Below

Enter Your User ID	Michael2007
Enter the Title of Your Auction	Brand New TIKR watch by TWELV!
Enter the Opening Bid Amount	19.00

[etc.]

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 11 **UAML Subsystem:** Excerpt from Example UAML-Enabled HTML Document

1101

```
.....[cut].....
<TR> <TD>  <P><UAMLAuctOpenBidPhrase>Opening Bid:
<UAMLAuctOpenBidAmount>$19.00</UAMLAuctOpenBidAmount></UAMLAuctOpenBidPhrase></FO
NT></P>
</TD></TR>  <TR><TD> <P><UAMLAuctQPhrase>Item Quantity:
<UAMLAuctQuant>1</UAMLAuctQuant></UAMLAuctQPhrase></P>
</TD></TR> <TR> <TD> <P><UAMLAuctTimeRem>Time Remaining: <IMG
SRC="uaml-images/com433332895999-1a.jpg"></UAMLAuctTimeRem></P>
</TD> </TR><TR> <TD> <P><UAMLAuctBeginPhrase>Begin Time:
<UAMLAuctBeginDate>09/16/07</UAMLAuctBeginDate>
<UAMLAuctBeginTime>14:00:00</UAMLAuctBeginTime>
<UAMLAuctBeginTimeZone>PDT</UAMLAuctBeginTimeZone></UAMLAuctBeginPhrase></P></TD><
/TR>
<TR> <TD><P><UAMLAuctEndPhrase>End Time:
<UAMLAuctEndDate>09/19/07</UAMLAuctEndDate>
<UAMLAuctEndTime>14:00:00</UAMLAuctEndTime>
<UAMLAuctEndTimeZone>PDT</UAMLAuctEndTimeZone></UAMLAuctEndPhrase></P>
</TD></TR><TR><TD HEIGHT=14><P><UAMLAuctSellerPhrase>Seller: <A
HREF="http://www.uetcompany.htm/users/michael2007">Michael2007<IMG
SRC="uaml-images/com433332895999-1b.jpg"></A></UAMLAuctSellerPhrase></P>
</TD></TR><TR><TD><P><UAMLAuctHighBidderPhrase>Current High Bidder: <IMG
SRC="uaml-images/com433332895999-1c.jpg"></UAMLAuctHighBidderPhrase></P>
</TD> </TR></TABLE><BR></FONT></P> </TD> <TD VALIGN=top WIDTH=375><P><FONT
SIZE="-2" FACE="Arial" COLOR="#000000"><TABLE BORDER=0>
<TR><TD><P><UAMLAuctItemLocPhrase>Item Location: <UAMLAuctItemLocation>Santa Cruz,
CA</UAMLAuctItemLocation></UAMLAuctItemLocPhrase></P>
</TD> </TR><TR><TD><P><UAMLAuctShipMethPhrase>Shipping Methods:
<UAMLAuctShipMethod>UPS</UAMLAuctShipMethod>,
<UAMLAuctShipMethod>FedEx</UAMLAuctShipMethod>,
<UAMLAuctShipMethod>USPS</UAMLAuctShipMethod></UAMLAuctShipMethPhrase></P>
</TD></TR><TR><TD><P><UAMLAuctPayMethPhrase>Payment Methods: <A
HREF="http://www.uetcompany.com">UET Company</A></UAMLAuctPayMethPhrase></P>
</TD></TR><TR><TD><P><UAMLAuctHighBidPhrase>Current High Bid: <IMG
SRC="uaml-images/com433332895999-1d.jpg">></UAMLAuctHighBidPhrase></P>
</TD> </TR><TR> <TD><P><UAMLAuctNumBidsPhrase>Number of Bids: <IMG
SRC="uaml-images/com433332895999-1e.jpg">></UAMLAuctNumBidsPhrase</P>
.....[cut].....
```

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

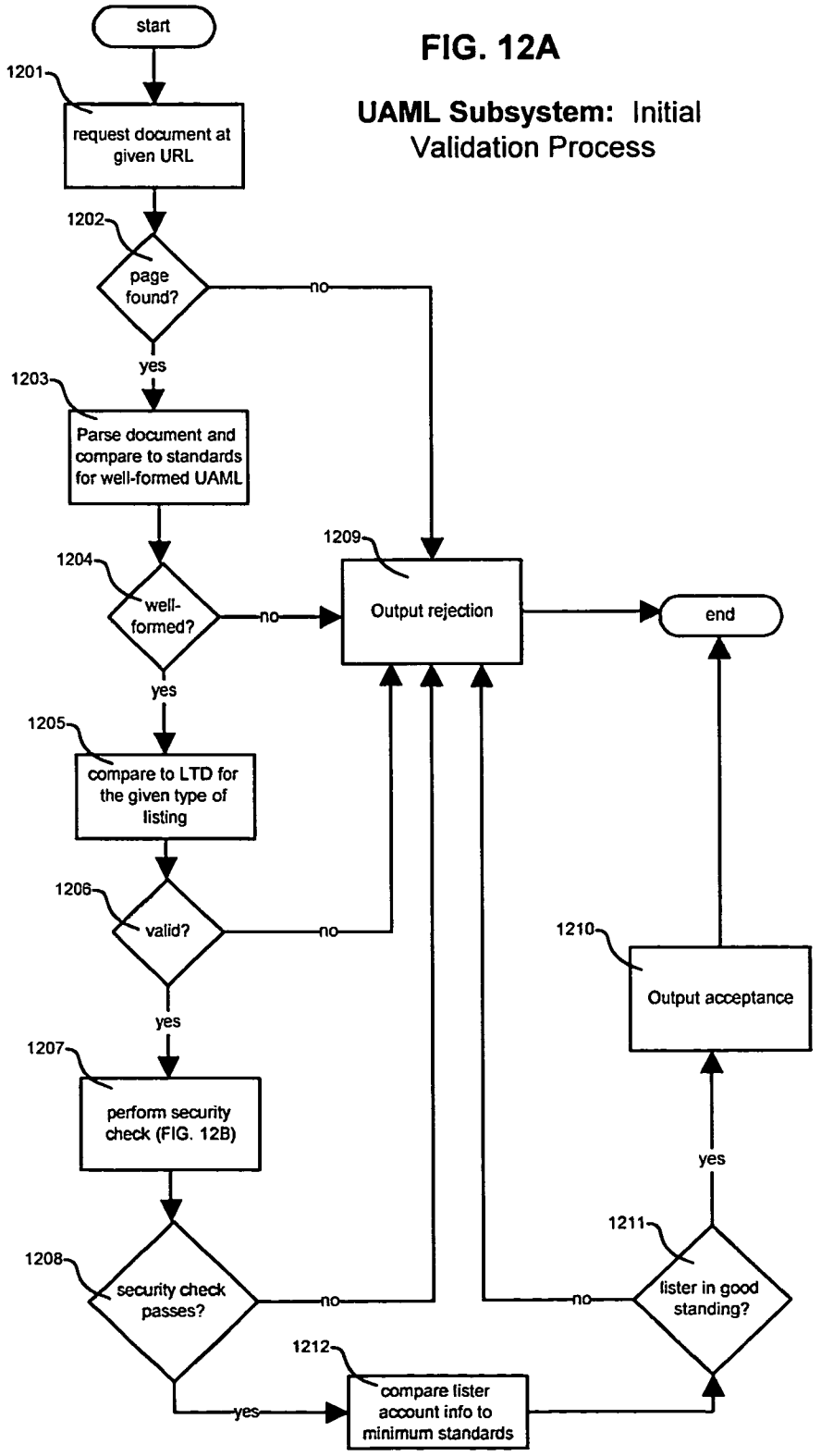


FIG. 12A

UAML Subsystem: Initial Validation Process

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

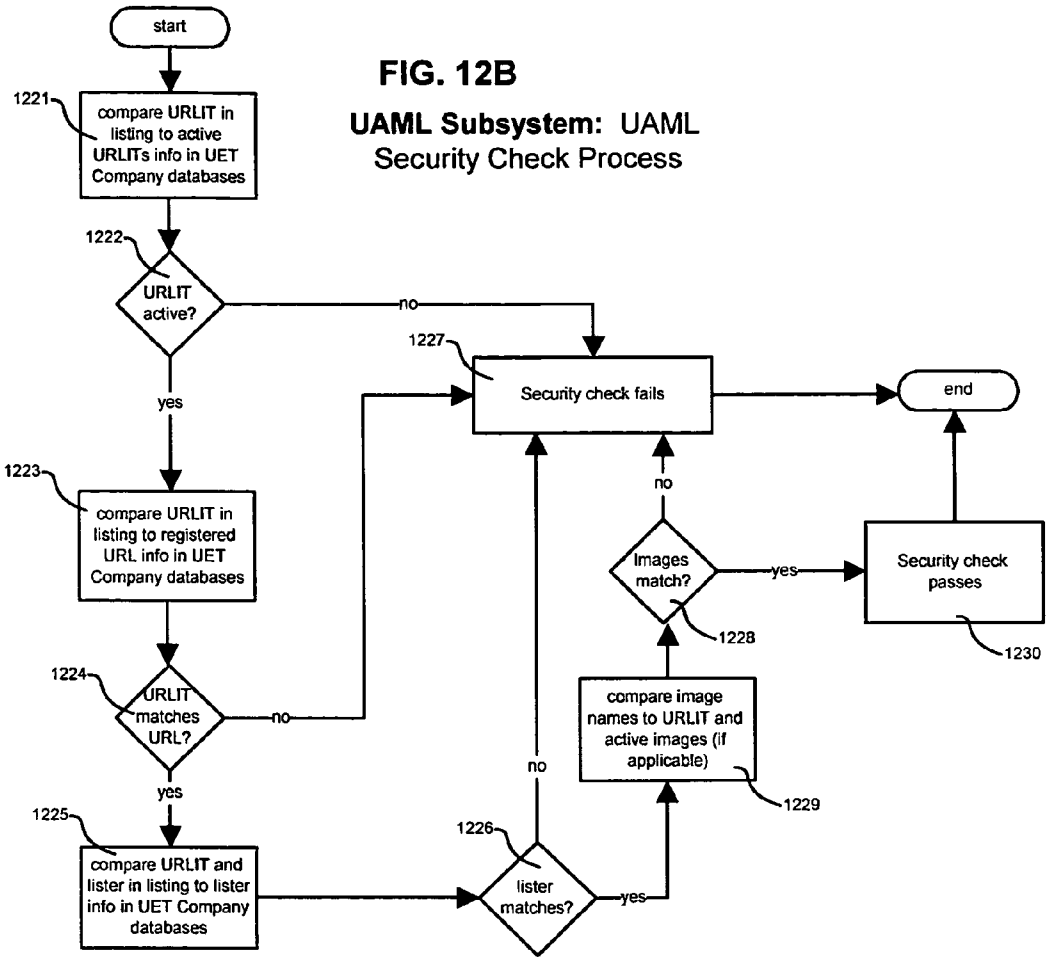


FIG. 12B

UAML Subsystem: UAML Security Check Process

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 13
UAML Subsystem: Sample Database Choices to Be Specified through "UAMLType" Field

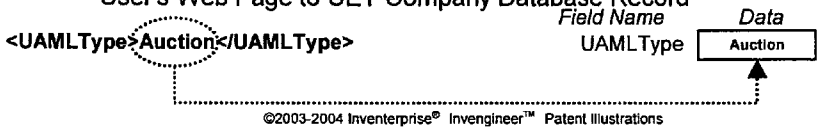
Auction*	ISBNListing	Trademark	CompHWare*	Military*
Personal	Review	PRelease	CompSWare*	Electronics*
RealEstate*	Recipe	News*	Furnishing	Toy*
Lease*	Resume	Sport*	Services*	Game*
VIN	Parcel*	Weather*	Rental*	Artwork*
Job	UPC	Restaurant*	CaseLaw*	Poem
Coin	EPC	Film	Statute*	Hotel
Stamp	Recipe	Stage	Company*	Flight
Pet	Patent	Music*	Nonprofit*	Cruise
Antique	Copyright	Account	Government*	Lender

**Some listings types may require an additional "category" selection (i.e., <UAMLAuctCategory>)*

FIG. 14
UAML Subsystem: Fields in UET Company Database

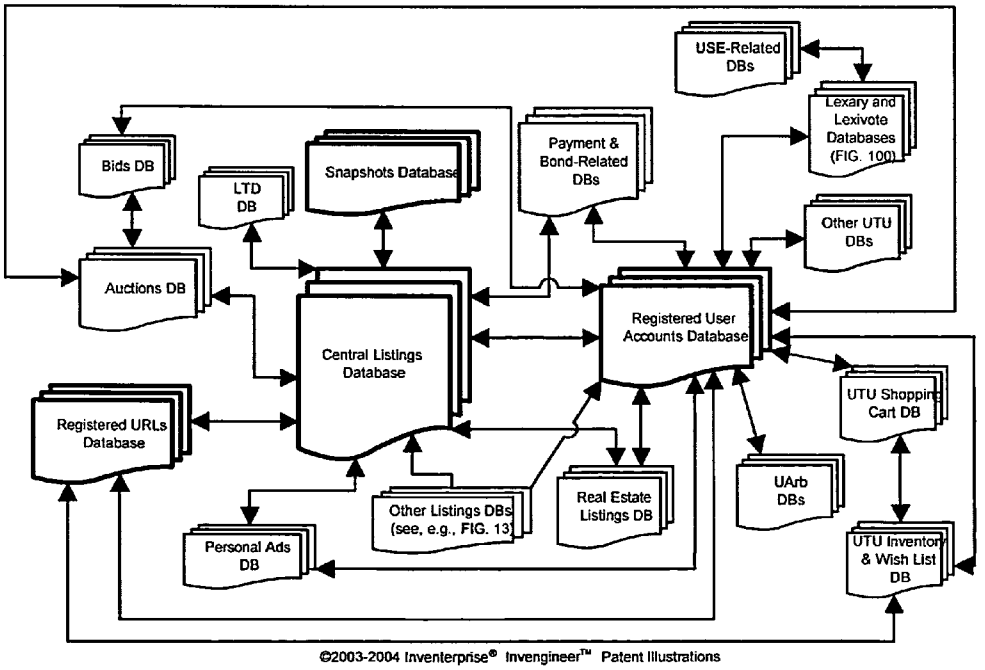
Field Name	*Data*
URLIT:	
UAMLType:	
Listing user:	
[etc.]	

FIG. 15 **UAML Subsystem:** Parsing and Mapping of UAML Data in User's Web Page to UET Company Database Record



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 16 **UAML Subsystem:** Example of UET Company Relational Database Complex with Focus on UAML Listings Core



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

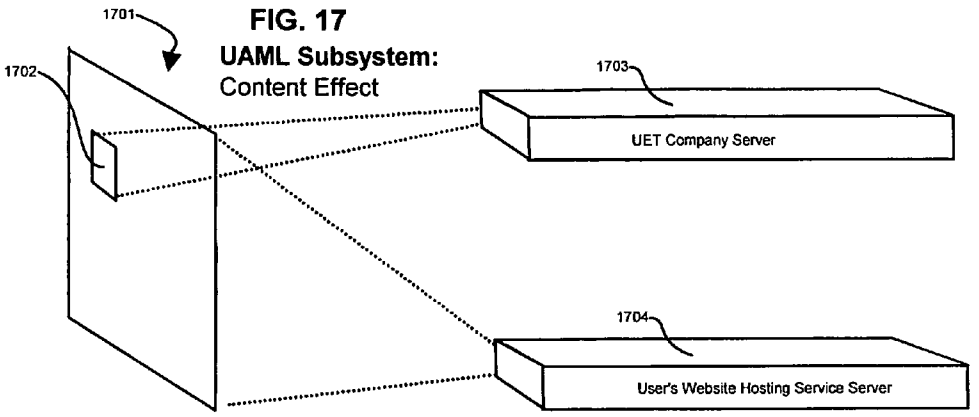
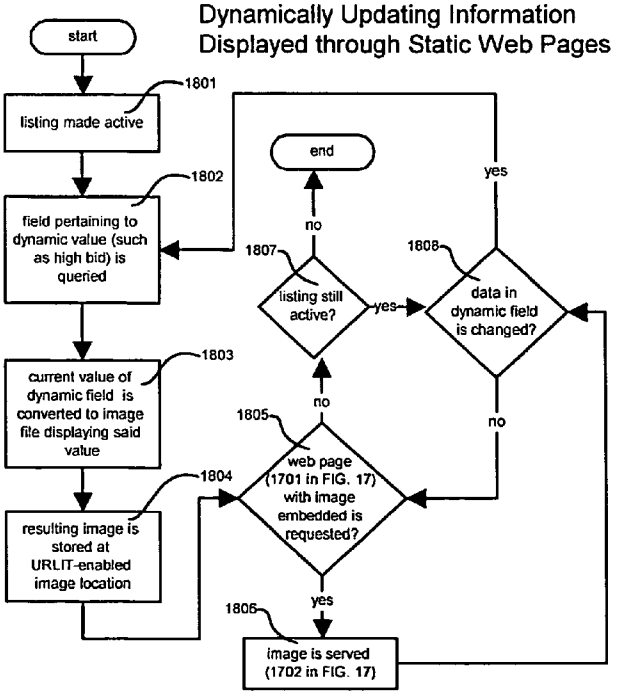


FIG. 17
UAML Subsystem: Content Effect

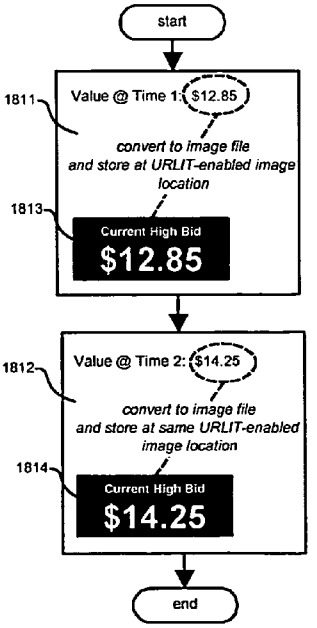
©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 18A
UAML Subsystem: Process for Dynamically Updating Information Displayed through Static Web Pages



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 18B
UAML Subsystem: Example Progression of Images as Data Changes



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 19A

UAML Subsystem: Process for Confirming Continued Validity of a Listing

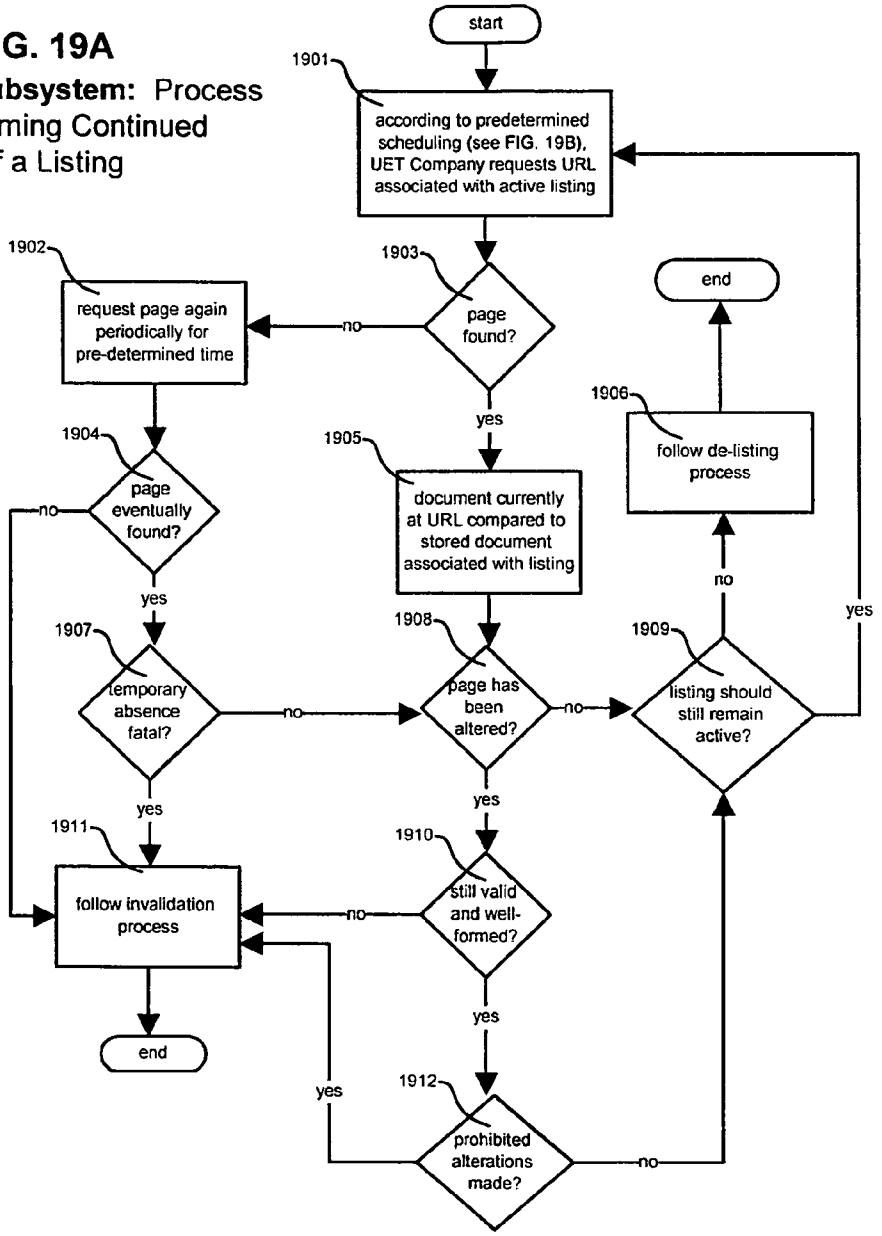


FIG. 19B **UAML Subsystem:** Detailed View of Step 1901: Various Options for Scheduling Confirmation of Listing Validity

1901

1. Request page on a regular schedule (e.g., once every day)
2. Request page every time an image that is hosted by UET Company (and embedded in the page) is requested
3. Request page every time it appears in search results (optionally, before providing those results to user such that returned results only include listings that have been confirmed)
4. Request (and optionally store a copy of) page every time a bid is submitted
5. Whenever a user of UTU visits URL

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 20

UAML Subsystem: Invalidate Listing Process

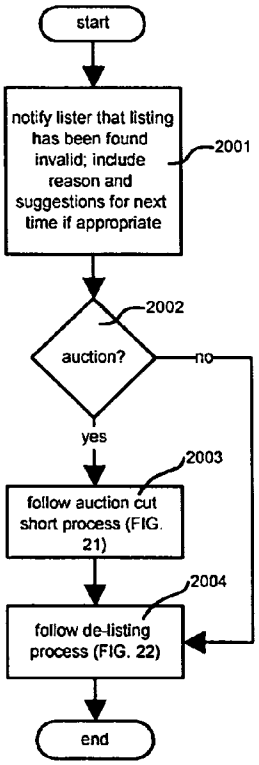


FIG. 21

UAML Subsystem: Auction Cut-Short Process

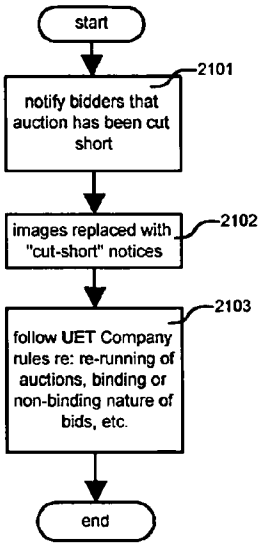
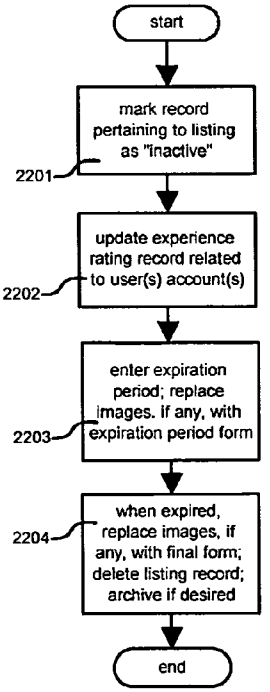


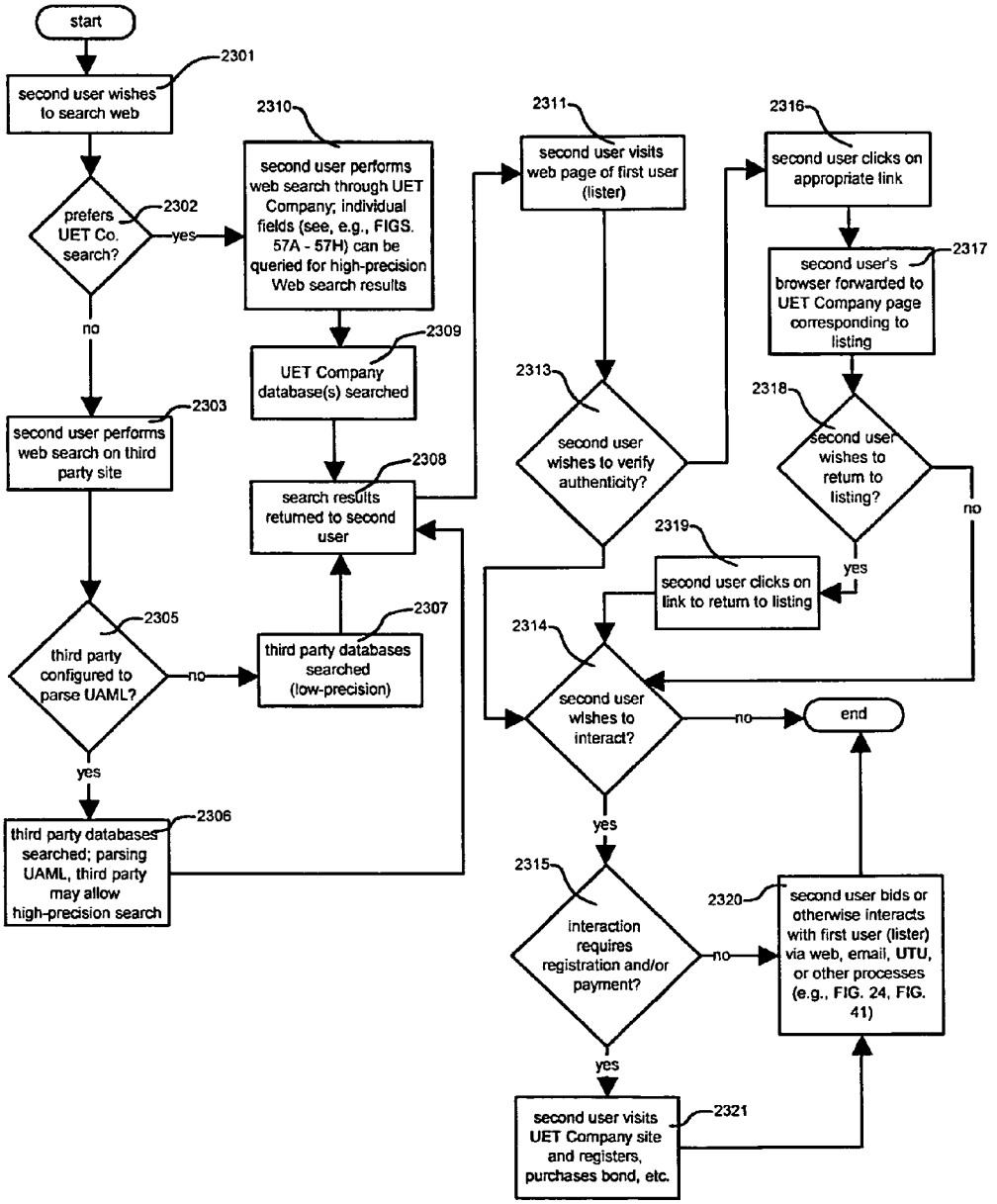
FIG. 22

UAML Subsystem: De-Listing Process



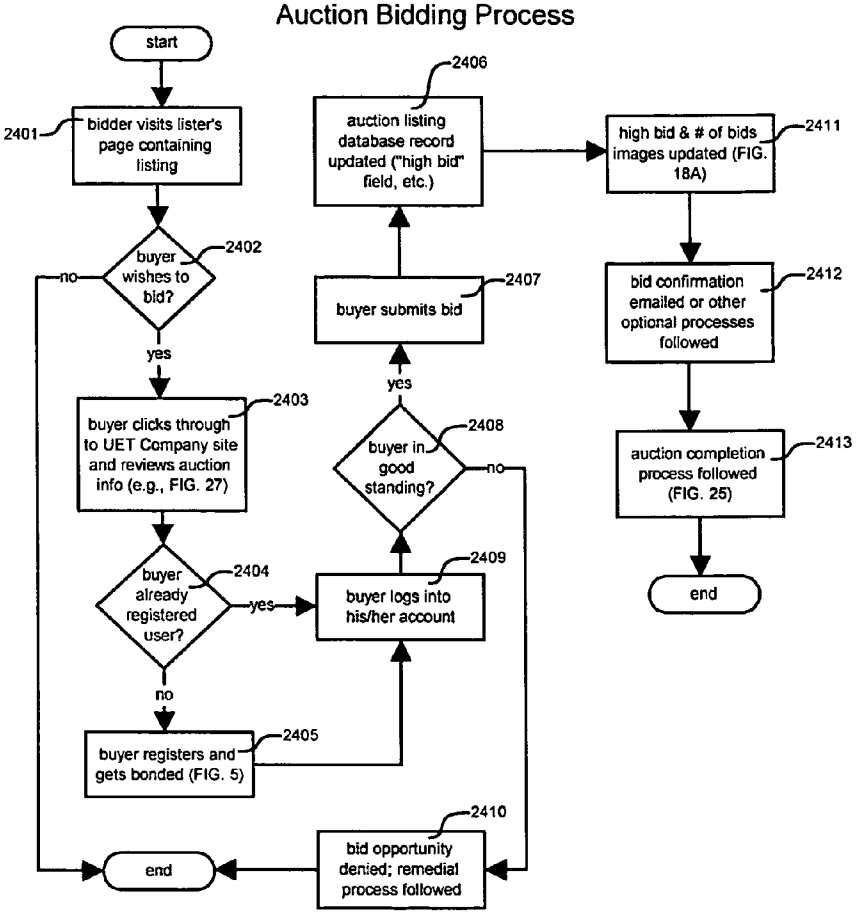
©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 23
UAML Subsystem: Example Usage Scenario



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

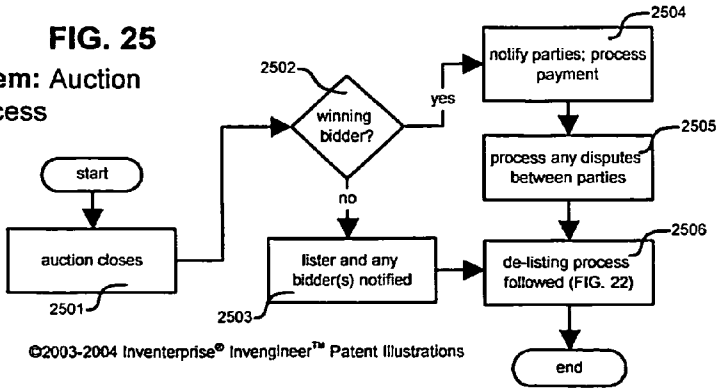
FIG. 24 **UAML Subsystem:** Auction Bidding Process



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 25

UAML Subsystem: Auction Completion Process



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 26 **UAML Subsystem:** Excerpt from Sample "My Registered URLs'" Page

You are logged in as: Michael2007

My Registered URLs

URL	URLIT Stem	Active URLIT	UTU Inventory	UTU Wish	UTU Contact	UTU Auction
1. www.michaelsworld.com/uaml/bookauction.htm	com431546621763	request	Inv. 1	Wish. 4	Cont. 1	add
2. www.michaelsworld.com/uaml/coinauction.htm	com431914362708	request	add	Wish. 4	Cont. 1	add
3. www.michaelsworld.com/uaml/bookauction2.htm	com432489349101	com432489349101-8	Inv. 1	add	Cont. 1	add
4. www.michaelsworld.com/uaml/lookingforlove.htm	com432919567432	request	Inv. 1	Wish. 2	Cont. 1	add
5. www.michaelsworld.com/uaml/watchauction3.htm	com433332895999	com433332895999-1	Inv. 1	Wish. 1	Cont. 1	add

2601 2602 2603 2604 2605 2606 2607

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 27 **UAML Subsystem:** Sample Web Page from UET Co. Site Displaying Record from UET Co. Listings Database Pertaining to a Given Auction Listing

You are logged in as: BidBather

URLIT: com433332895999-1
Lister: Michael2007
Type: Auction
Item: Brand New TIKR watch by TWELV!
Opening Bid: $19.00
Item Quantity: 1
Begin Time: 09/16/07 14:00:00 PDT
End Time: 09/19/07 14:00:00 PDT
Item Location: Santa Cruz, CA
Shipping Methods: UPS, FedEx, USPS
Payment Methods: UET Company
Current High Bidder: MrsBidder5x
Current High Bid: $23.85
Number of Bids: 3
Item Description: This is the coolest watch ever! The TIKR tells the hour of the day simply by color.

Enter Your Bid Amount [ ]

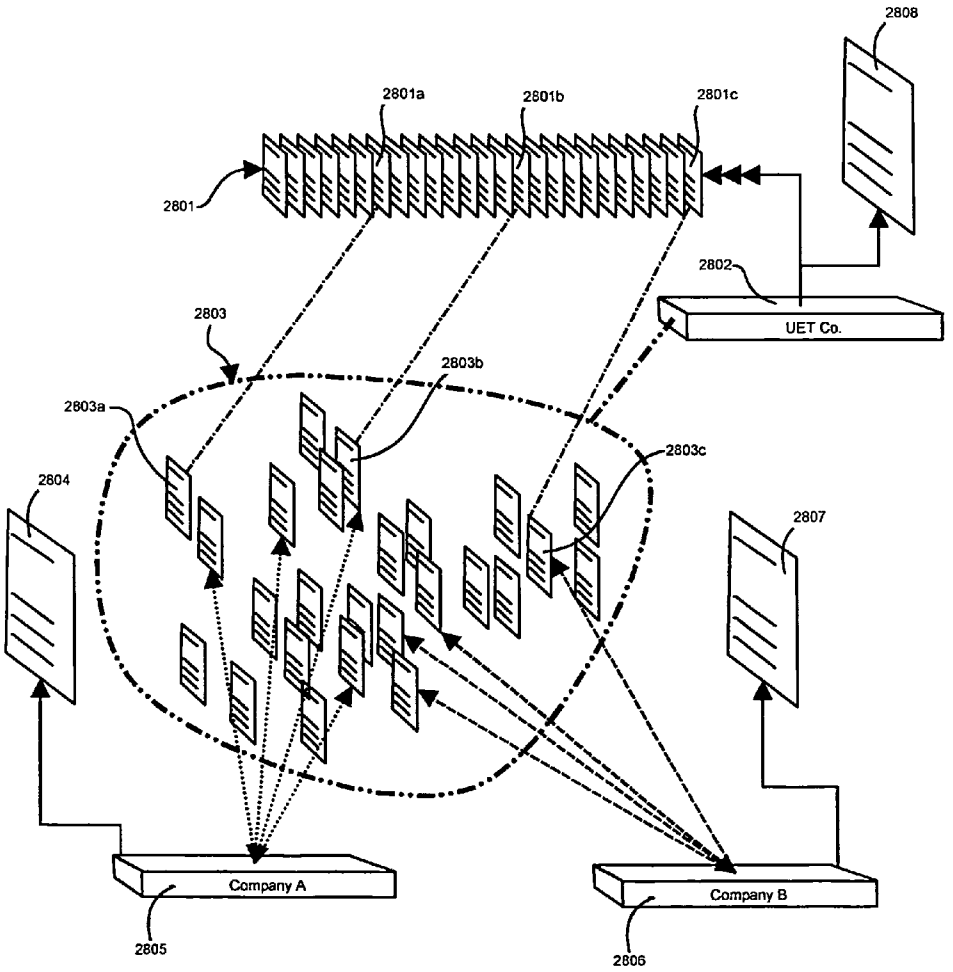
Enter Your Password [ ]

submit bid

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 28A

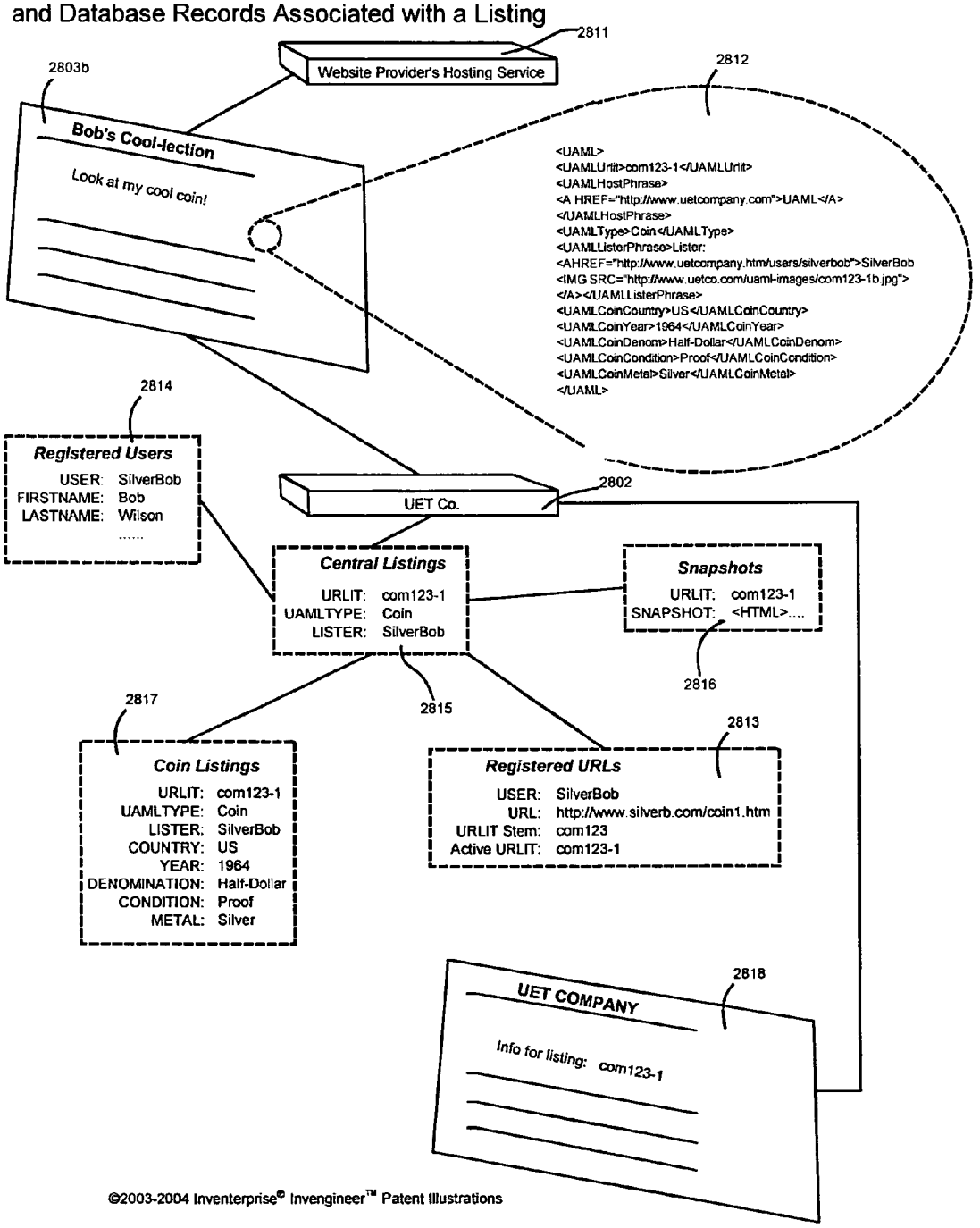
UAML Subsystem: Summary View of Interaction between UAML-enabled Pages Published by Users, Third Party Service Providers Tapping UAML-Enabled Pages, and UET Company Dynamically Generated Pages



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 28B

UAML Subsystem: Example Data Relationships Indicating Web Pages and Database Records Associated with a Listing



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 28C

UAML Subsystem: Excerpt from Sample Web Page by Third Party Website Provider Tapping UAML for Directory of Certain Type of Listings

PoetryAnthology.com
The Best Poetry on the Web!

Title	Poet	Year
How Once We Were in Love	Billy Willie	2004
Two Panthers	Doodle McLean	1972
Nights and Wisdom, Coals and Tears	Studs Walsh	1888
Summer's End	Brucene	1986

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 28D

UAML Subsystem: Excerpt from Sample Web Page by Third Party Website Provider Tapping UAML for Market Data

Auction Statistics - Week Ending 05/30/04

Category	Auctions	Avg. Opening Bid
Automobiles	1008	$1832
Collectibles	7313	$15
Computer Hardware	941	$61
Computer Software	1279	$22

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 28E

UAML Subsystem: Excerpt from Sample Web Page by Third Party Website Provider Tapping UAML for Independent Search Engine

Magic Search
We Do Magic With the Web!

What are you looking for, Merlin?

Job	Auction	Real Estate	Personals	Car	Flight	Movie	Stock	Book by ISBN	Product by UPC/EPC
◉	○	○	○	○	○	○	○	○	○

Enter the term(s) you want to search here, and let there be magic!

Abracadabra

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 29
UAML Subsystem:
Revenue Model

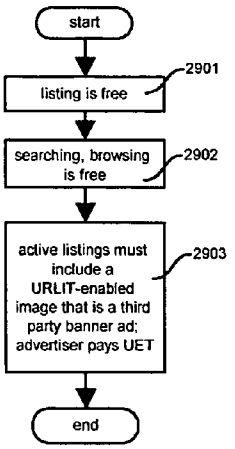


FIG. 30
UAML Subsystem:
Revenue Model

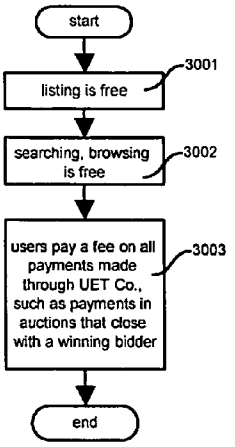


FIG. 31
UAML Subsystem:
Revenue Model

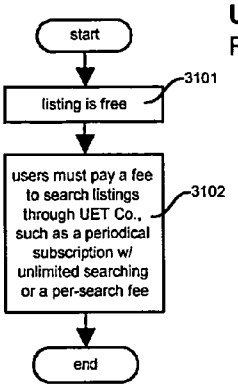


FIG. 32
UAML Subsystem:
Revenue Model

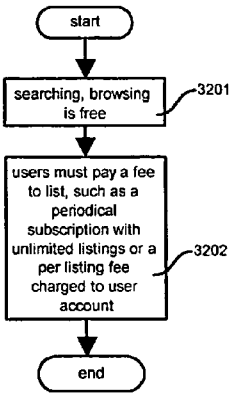


FIG. 33
UAML Subsystem:
Revenue Model

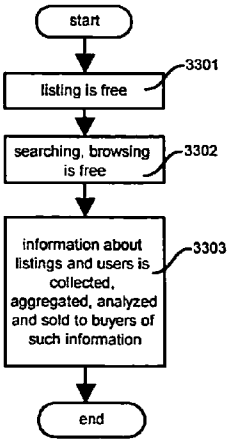


FIG. 34
UAML Subsystem:
Revenue Model

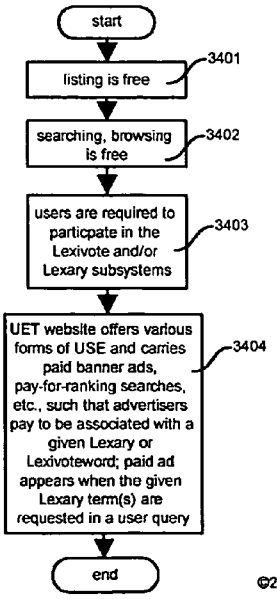


FIG. 35
UAML Subsystem:
Revenue Model

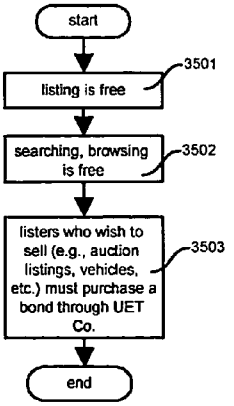
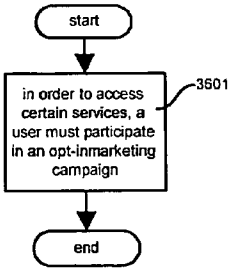
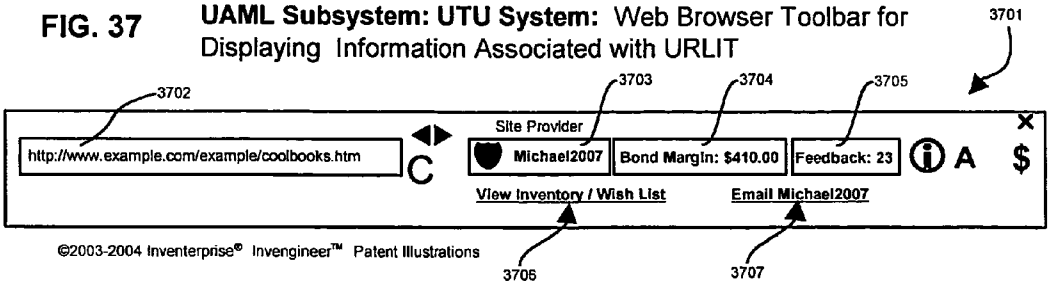


FIG. 36
UAML Subsystem:
Revenue Model



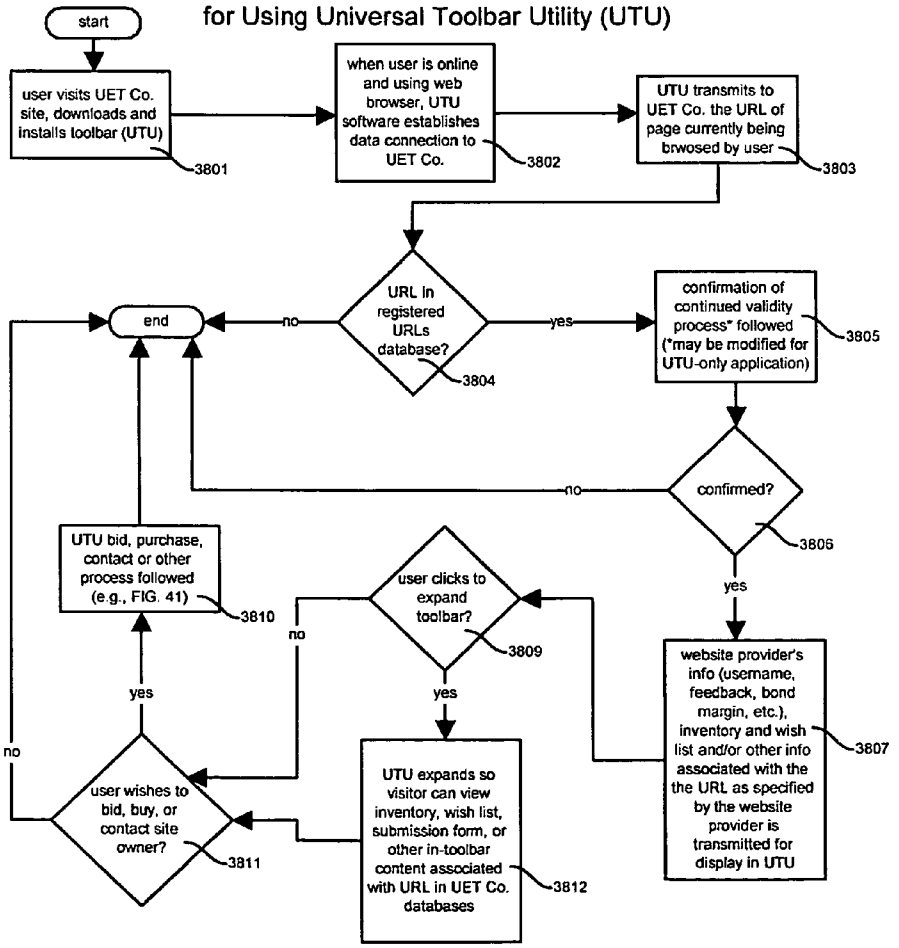
©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 37 **UAML Subsystem: UTU System:** Web Browser Toolbar for Displaying Information Associated with URLIT



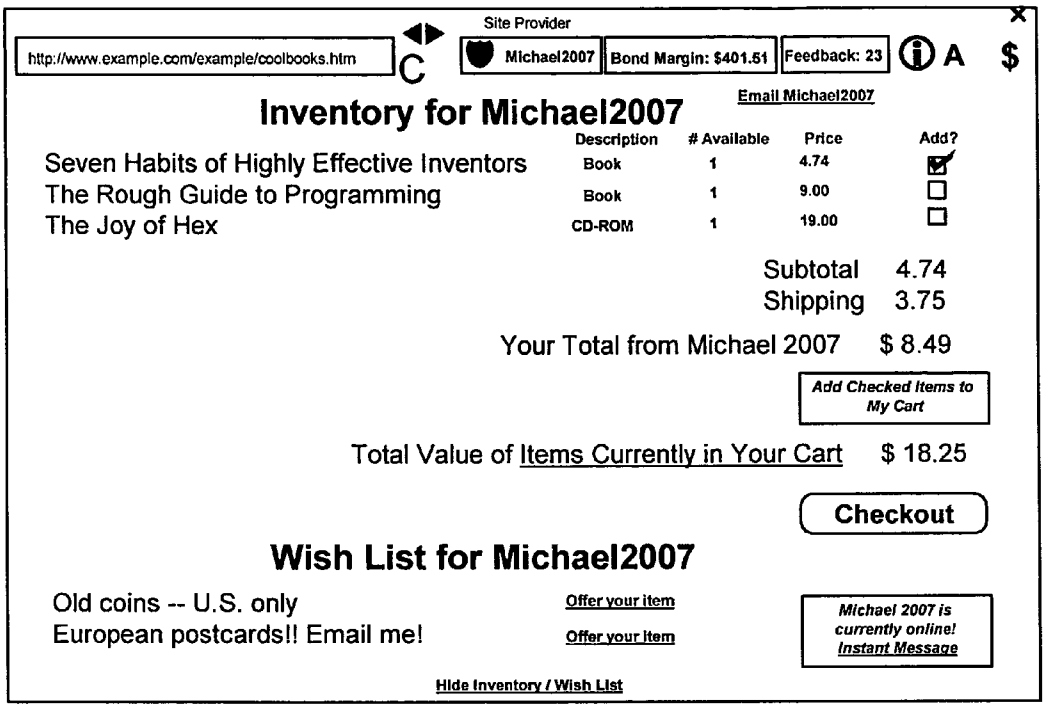
©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 38 **UAML Subsystem: UTU System:** Basic Steps for Using Universal Toolbar Utility (UTU)



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

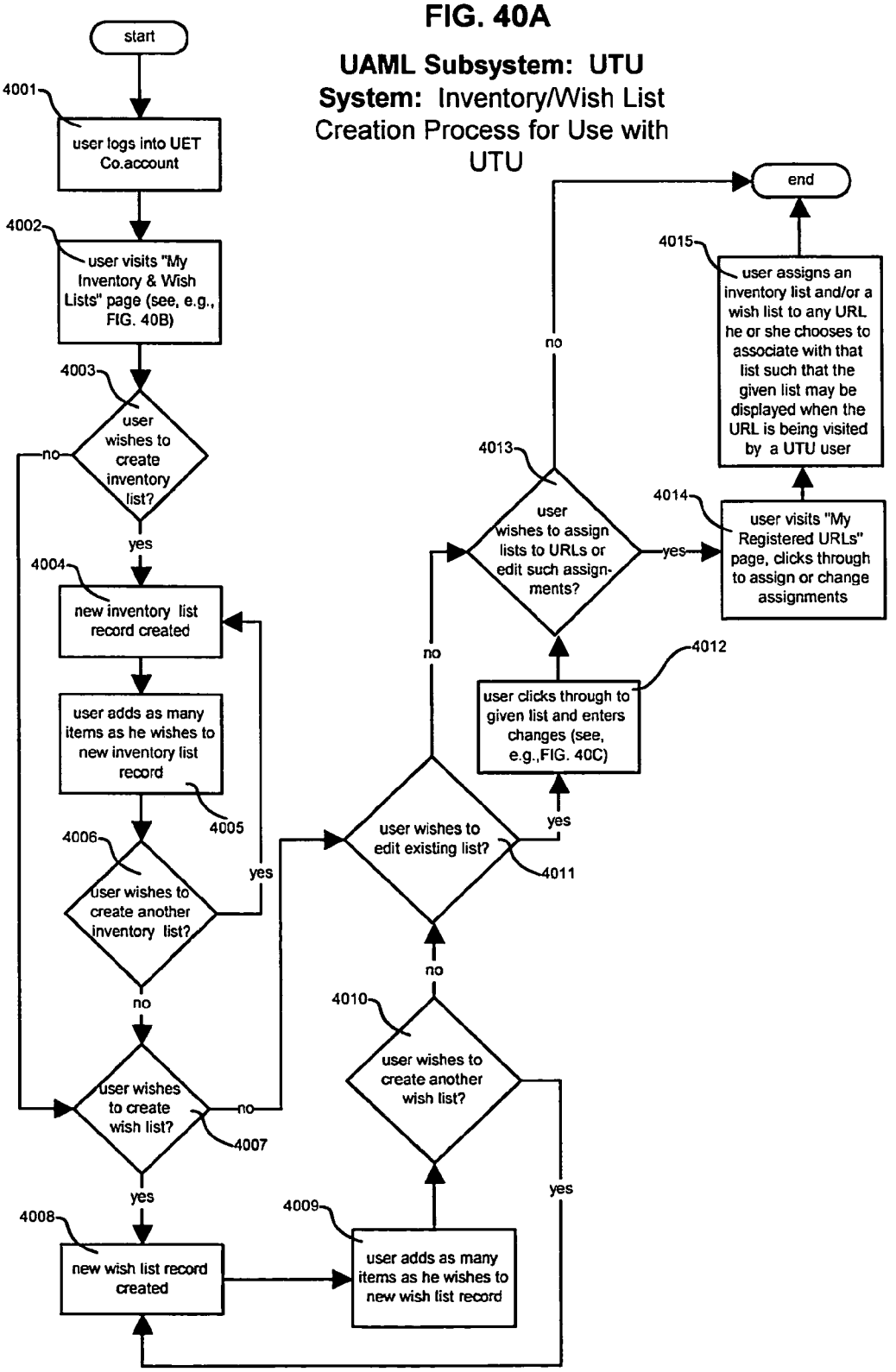
FIG. 39 **UAML Subsystem: UTU System:** Expanded Toolbar Displaying Inventory List & Wish List Associated with URL



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 40A

UAML Subsystem: UTU
System: Inventory/Wish List Creation Process for Use with UTU



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 40B **UAML Subsystem: UTU System:** Sample My Inventory & Wish List Main Page

4021

You Are Logged in as: Michael2007

My Inventory & Wish Lists

Inventory Lists

Name of List	Creation Date
Inv. 1	09/04/05
Inv. 2	11/12/05
Inv. 3 - Postcards	11/12/05

Wish Lists

Name of List	Creation Date
Wish. 1	09/04/05
Wish. 2	09/04/05
Wish. 3	09/04/05
Wish. 4	10/02/05
Wish. 5	11/12/05

Create New Inventory List

Create New Wish List

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 40C **UAML Subsystem: UTU:** Sample Inventory List Creation & Editing Page

4031

You Are Logged in as: Michael2007

My Inventory & Wish Lists

Modify Inventory List

List Name Inv. 1

Created: 09/04/05
Modified: 09/04/05

submit change

Existing Inventory

Item	*Description*	*Quantity*	*Price*	*Status*	*Item ID*
Seven Habits of Highly Effective Inventors	Book	1	$4.74	* Reserved *	98236749832761
The Rough Guide to Programming	Book	1	$9.00	For sale	74307078370078
Being Digital	Book	1	$3.00	Sold - Ship Immediately	09834790187087

Add New Inventory

Item

Description

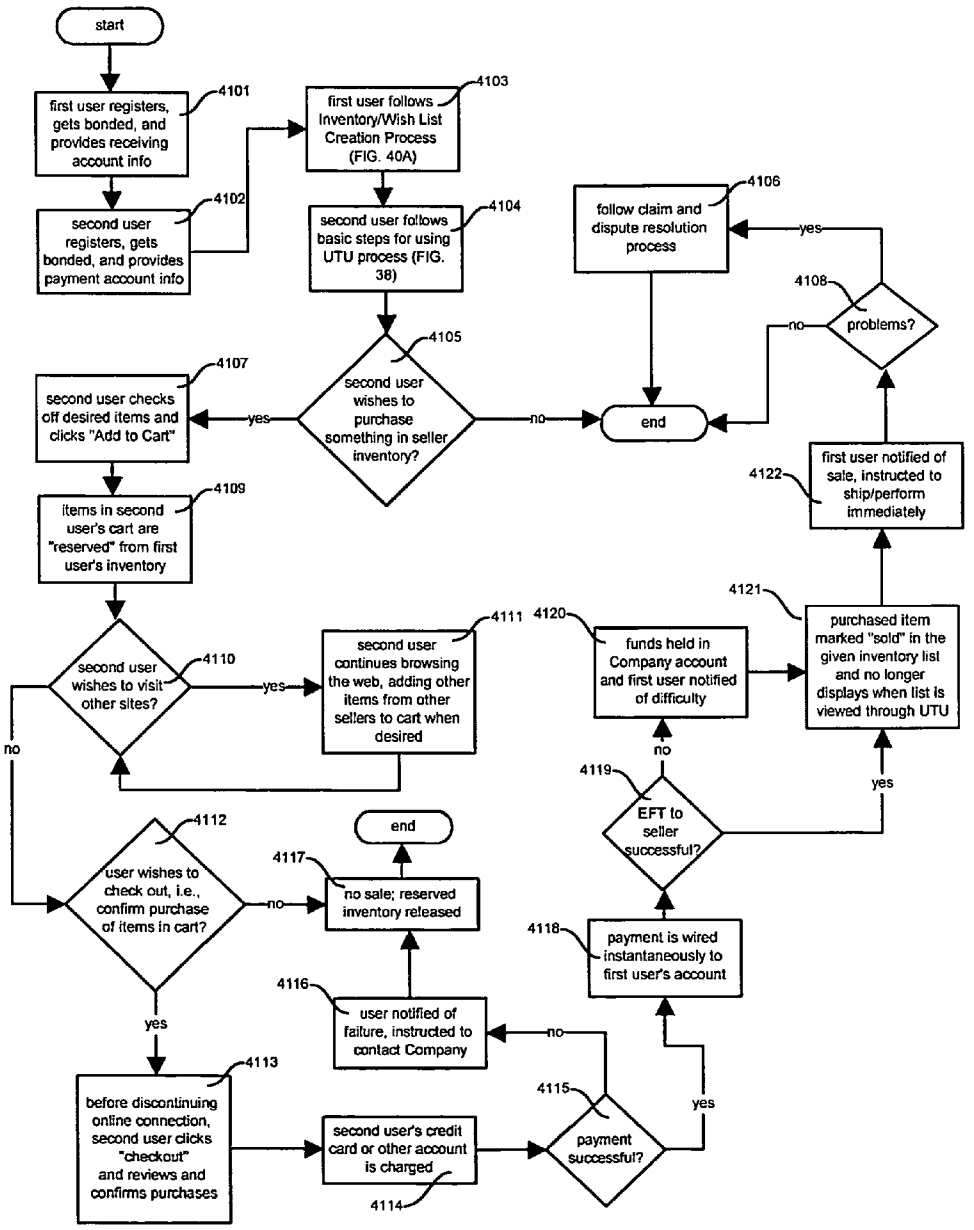
Quantity

Price $

submit item

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 41 **UAML Subsystem: UTU System:** Example Usage Scenario for UTU Shopping Cart Utility



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

UAML Subsystem: UTU: URLIT-to-URL Relationship in UTU Application vs. UAML-Enabled Listing Application

FIG. 42A

Web Page w/ UAML-Enabled Listing: Contains Transaction-Specific or Listing-Specific Information, Requiring One-on-One Correspondence

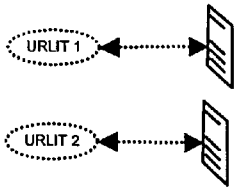
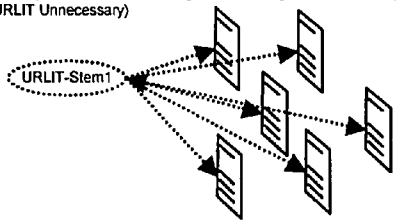


FIG. 42B

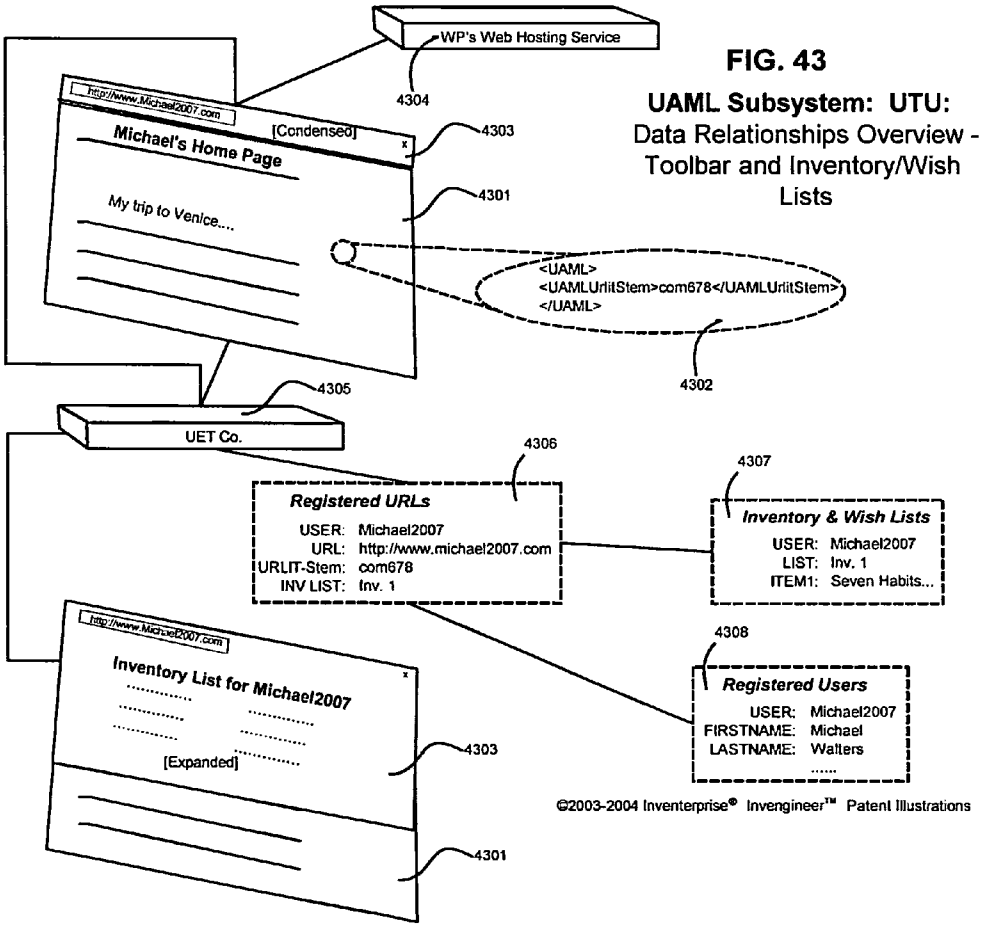
Web Page for UTU Application Only: Contains No Transaction-/Listing-Specific Information; URLIT Serves Only as Identifier for Authentication Purposes, Allowing Many-to-One Correspondence Between Pages and a Single URLIT-Stem (Full URLIT Unnecessary)



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 43

UAML Subsystem: UTU: Data Relationships Overview - Toolbar and Inventory/Wish Lists



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 44

UAML Subsystem: UTU: Data Relationships Overview - Multiple Inventory Lists and Shopping Cart

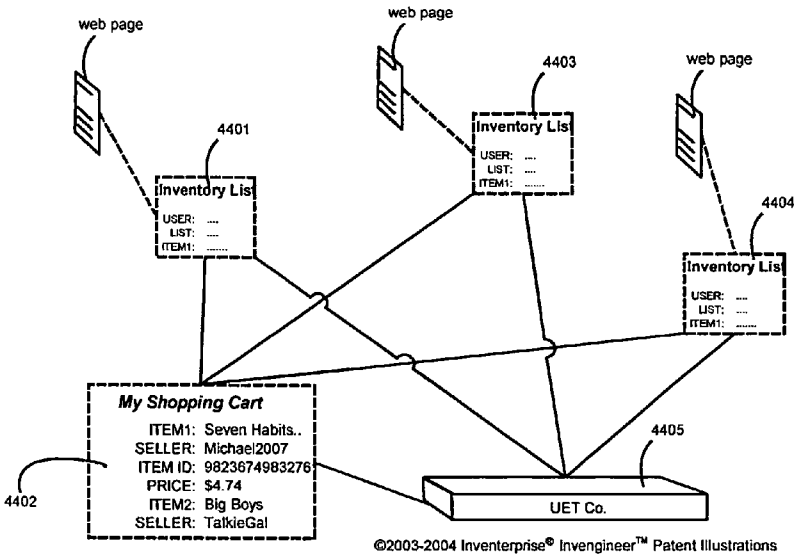
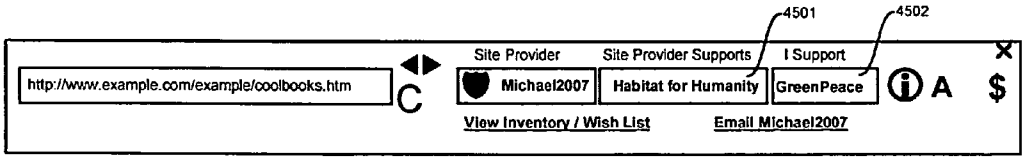
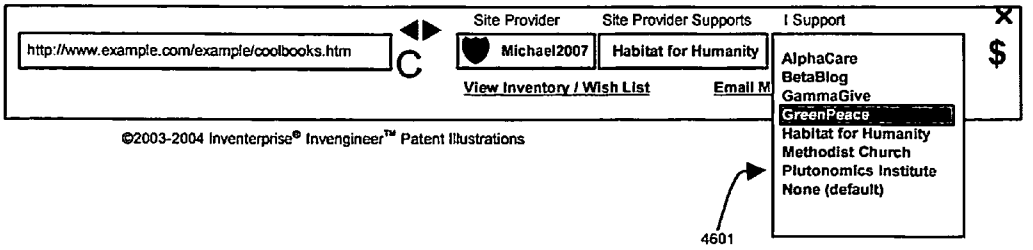


FIG. 45 **UAML Subsystem: UTU:** Non-Profit Donation UTU Embodiment



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

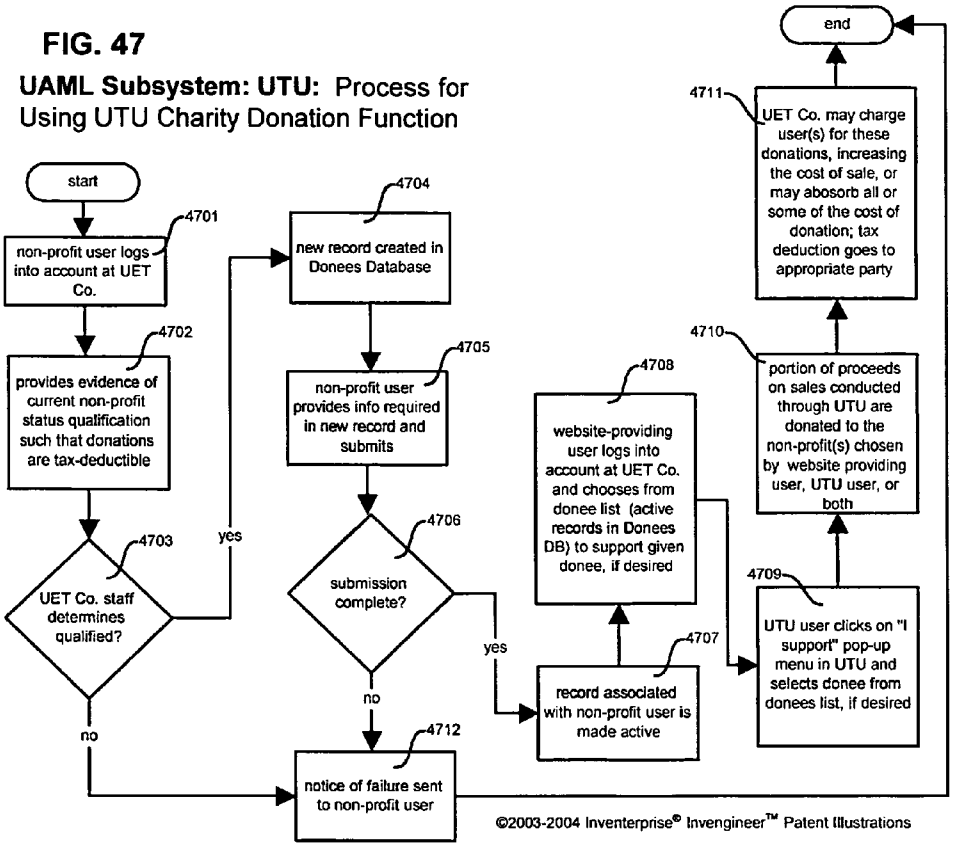
FIG. 46 **UAML Subsystem: UTU:** Non-Profit Donation UTU Embodiment with Pop-Up Menu Selected



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 47

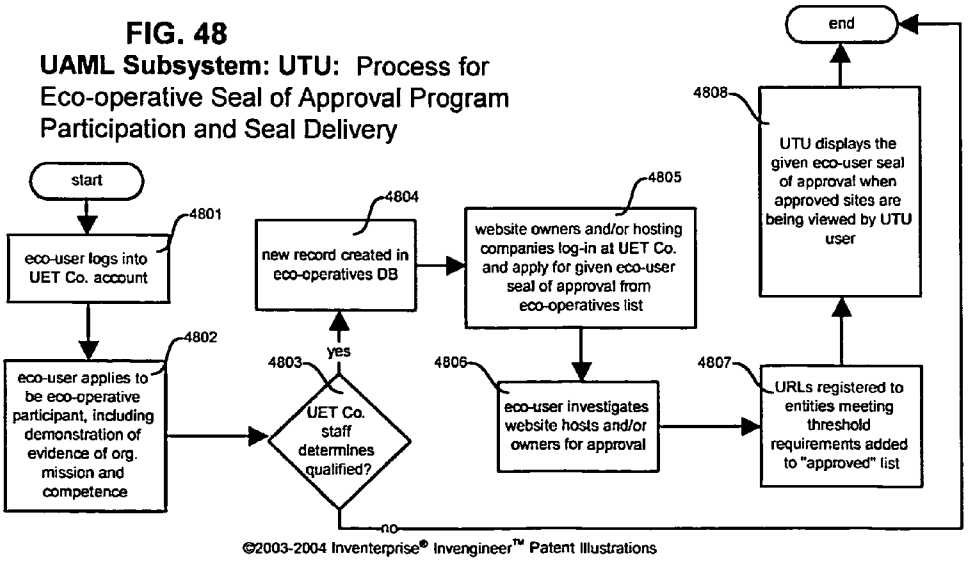
UAML Subsystem: UTU: Process for Using UTU Charity Donation Function



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 48

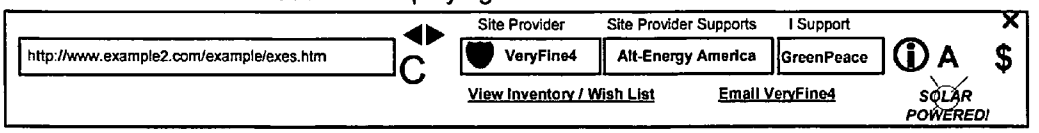
UAML Subsystem: UTU: Process for Eco-operative Seal of Approval Program Participation and Seal Delivery



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 49

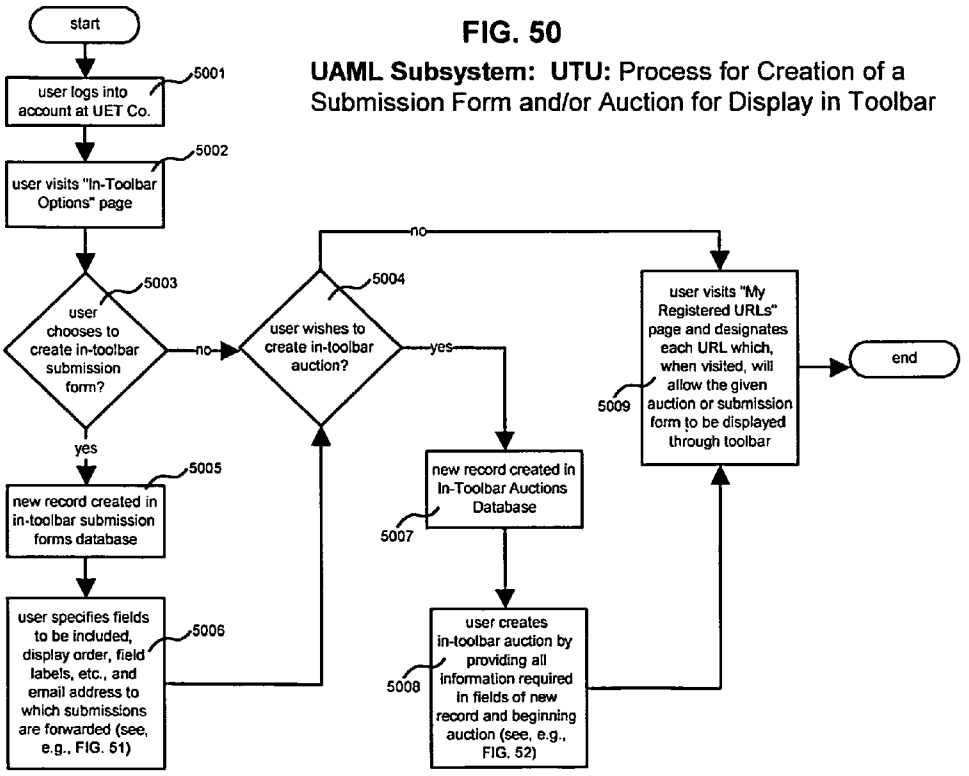
UAML Subsystem: UTU: Example Eco-Operative Seal of Approval UTU Embodiment in Use and Displaying Seal



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 50

UAML Subsystem: UTU: Process for Creation of a Submission Form and/or Auction for Display in Toolbar



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 51 **UAML Subsystem: UTU:** Excerpt from Sample Web Submission form for Creation of a Submission Form for Display in Toolbar

Account: Michael2007

Create Your Own In-Toolbar Submission Form

Check Box	Submit Button	Radio Button	Text Area	Text Field	Hidden Entry	Email Addr.	Pass-word	Field Name
☐	☐	☐	☐	☐	☐	X	☐	Email Address
☐	☐	☐	☐	X	☐	☐	☐	Your Name
☐	X	☐	☐	☐	☐	☐	☐	Submit

[etc.]

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 52 **UAML Subsystem: UTU:** Excerpt from Sample Web Submission form for Creation of an Auction for Display in Toolbar

Account: Michael2007

Create Your Own In-Toolbar Auction

Auction Title ☐

Duration ☐ 3 Days ☐ 5 Days ☐ 7 Days

Enter the Opening Bid Amount ☐

[etc.]

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

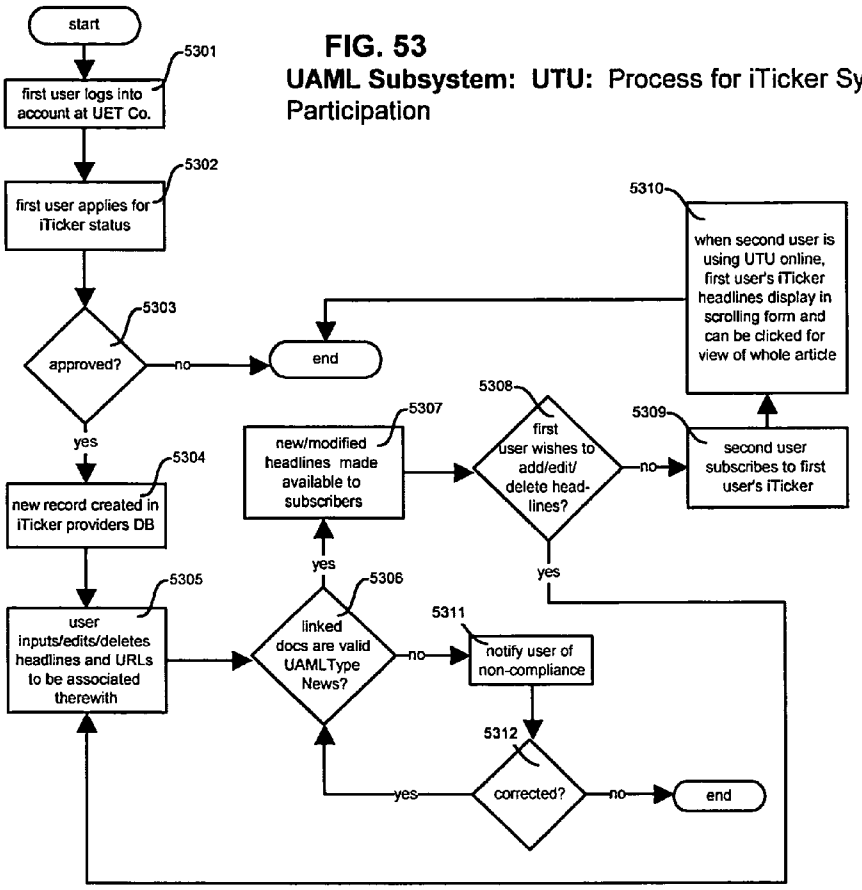
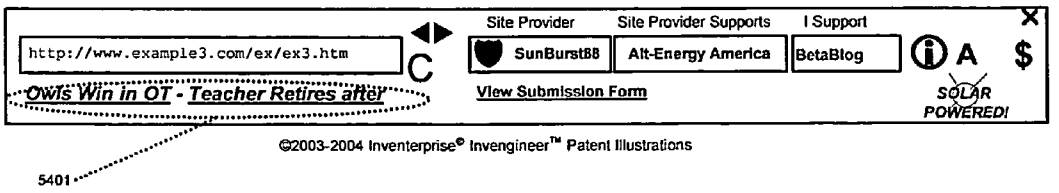


FIG. 53
UAML Subsystem: UTU: Process for iTicker System Participation

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 54 **UAML Subsystem: UTU:** Example iTicker UTU Embodiment in Use and Displaying iTicker Headlines



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 55 **UAML Subsystem:** Example Common Tags

- UAML
- UAMLType
- UAMLUrlit
- UAMLHostPhrase
- UAMLListerPhrase

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 56 **UAML Subsystem:** Subject-Specific Tag Nomenclature Template (for this disclosure)

<[Language][Database][Field]>Data</[Language][Database][Field]>

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 57A **UAML Subsystem:** Example Subject-Specific Tag Vocabulary/Fields for Database Record: Collectible Coin Listings

- UAMLCoinYear
- UAMLCoinDenomination (data: penny, etc.)
- UAMLCoinCountryOrigin (data: US, etc.)
- UAMLCoinCondition(data: MS-60, Proof, etc.)
- UAMLCoinPrecMetalType(data: gold, etc.)
- UAMLCoinWeight
- UAMLCoinPrecMetalPercent (data: 73, etc.)
- UAMLCoinImeg (data: double-die, etc.)
- UAMLCoinPrice
- UAMLCoinAppraisalValue
- UAMLCoinLocation

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 57B **UAML Subsystem:** Example Subject-Specific Tag Vocabulary/Fields for Database Record: Car Listings

- UAMLCarYear
- UAMLCarMake
- UAMLCarModel
- UAMLCarMpg
- UAMLCarIntColor
- UAMLCarExtColor
- UAMLCarNumDoors
- UAMLCarPowerWin
- UAMLCarPowerLock
- UAMLCarSoundSys
- UAMLCarFourWDrive
- UAMLCarFrontWDrive
- UAMLCarHorsePwr
- UAMLCarFuel (data: gas, diesel, hybrid)
- UAMLCarIntCubicFt
- UAMLCarTowCap
- UAMLCarMileage
- UAMLCarNumOwners
- UAMLCarBluebook
- UAMLCarLocation
- UAMLCarVIN

[etc.]

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 57C **UAML Subsystem:** Example Subject-Specific Tag Vocabulary/Fields for Database Record: Real Estate Listings

- UAMLRELotSqFt
- UAMLREBldgSqFt
- UAMLREZoning
- UAMLREYrBuilt
- UAMLRENumBeds
- UAMLRENumBaths
- UAMLREPrice
- UAMLREPropType (data: condo, SFR, etc.)
- UAMLREPool
- UAMLREMLSNum
- UAMLREContactName
- UAMLREContactNum
- UAMLREContactEmail

[etc.]

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

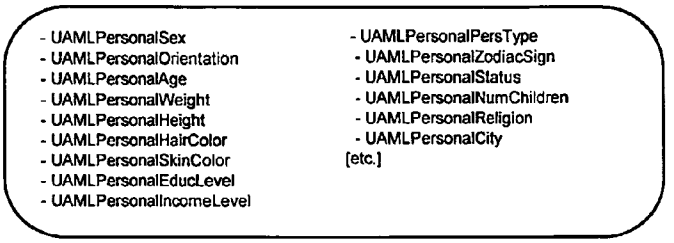
FIG. 57D **UAML Subsystem:** Example Subject-Specific Tag Vocabulary/Fields for Database Record: Job Listings

- UAMLJobTitle
- UAMLJobStatus (data: W-2, 1099)
- UAMLJobPayWeek
- UAMLJobHrsWeek
- UAMLJobLocation
- UAMLJobYrsExpReq
- UAMLJobDegreeReq
- UAMLJobTelecommute
- UAMLJobIndustry
- UAMLJobField
- UAMLJobRole
- UAMLJobHealthIns
- UAMLJobDentalIns
- UAMLJobTravelPct
- UAMLJobRetirePlan
- UAMLJobEmployer
- UAMLJobContactName
- UAMLJobContactNum
- UAMLJobContactEmail

[etc.]

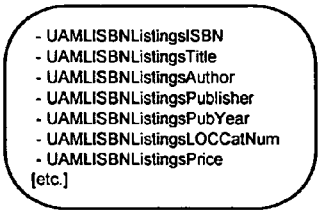
©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 57E **UAML Subsystem:** Example Subject-Specific Tag Vocabulary/Fields for Database Record: Personal Ads



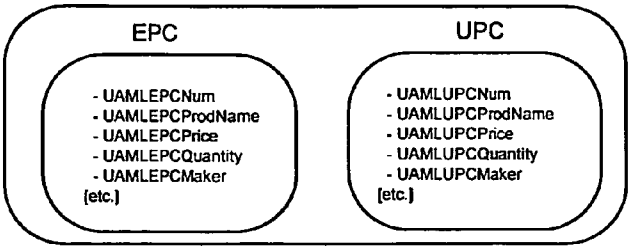
©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 57F **UAML Subsystem:** Example Subject-Specific Tag Vocabulary/Fields for Database Record: ISBN (Book) Listings



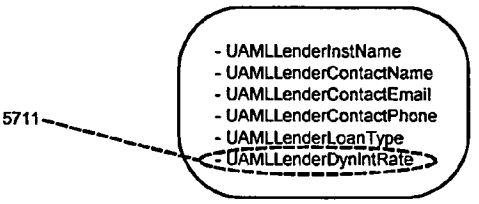
©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 57G **UAML Subsystem:** Example Subject-Specific Tag Vocabulary/Fields for Database Record: UPC or EPC (Any Product By UPC or EPC)



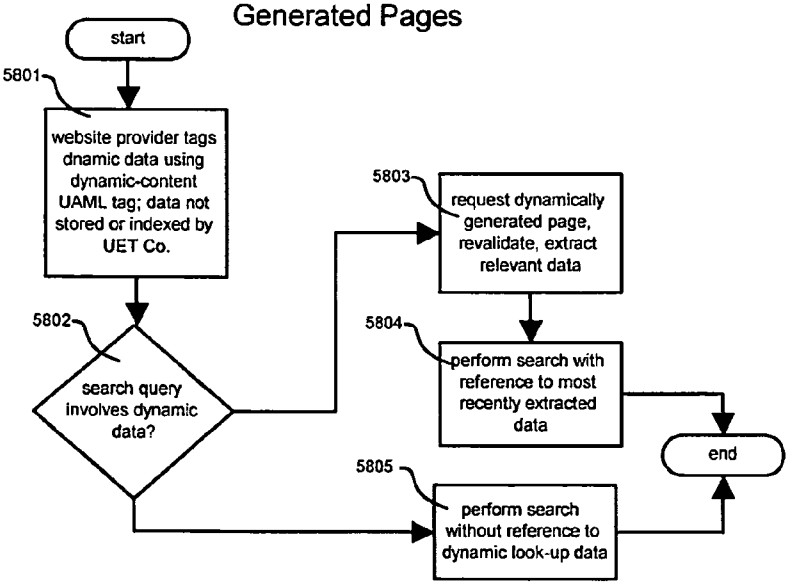
©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 57H **UAML Subsystem:** Example Subject-Specific Tag Vocabulary/Fields for Database Record: Lending Institution, with Tag for Dynamic Look-Up Field



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 58 **UAML Subsystem:** Process for Usage with Dynamically Generated Pages



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 59A
UAML Subsystem: Automatic Data Capture Integration Process

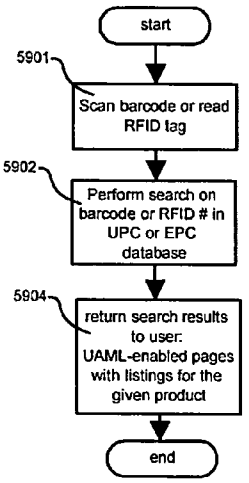


FIG. 59B
UAML Subsystem: Telephone Integration Process

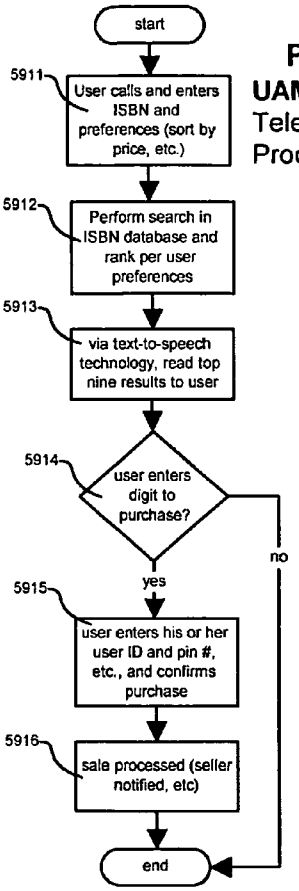
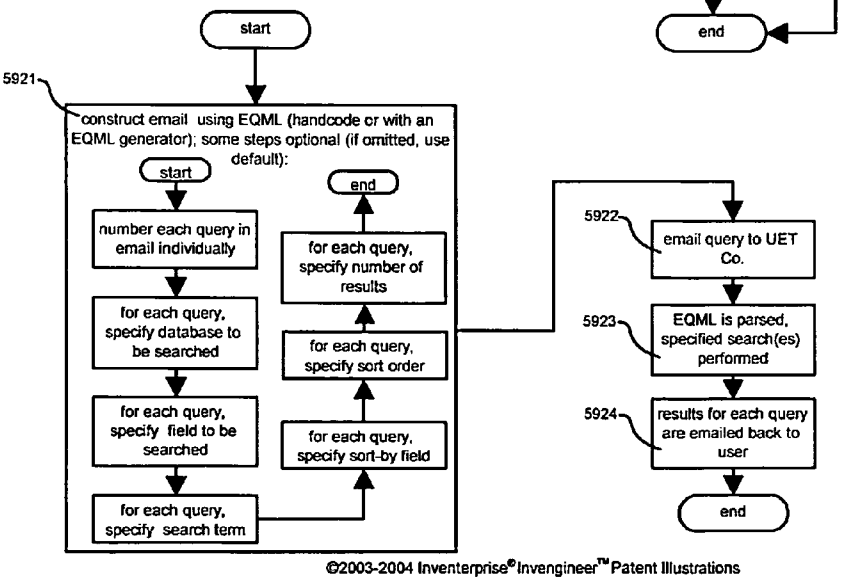
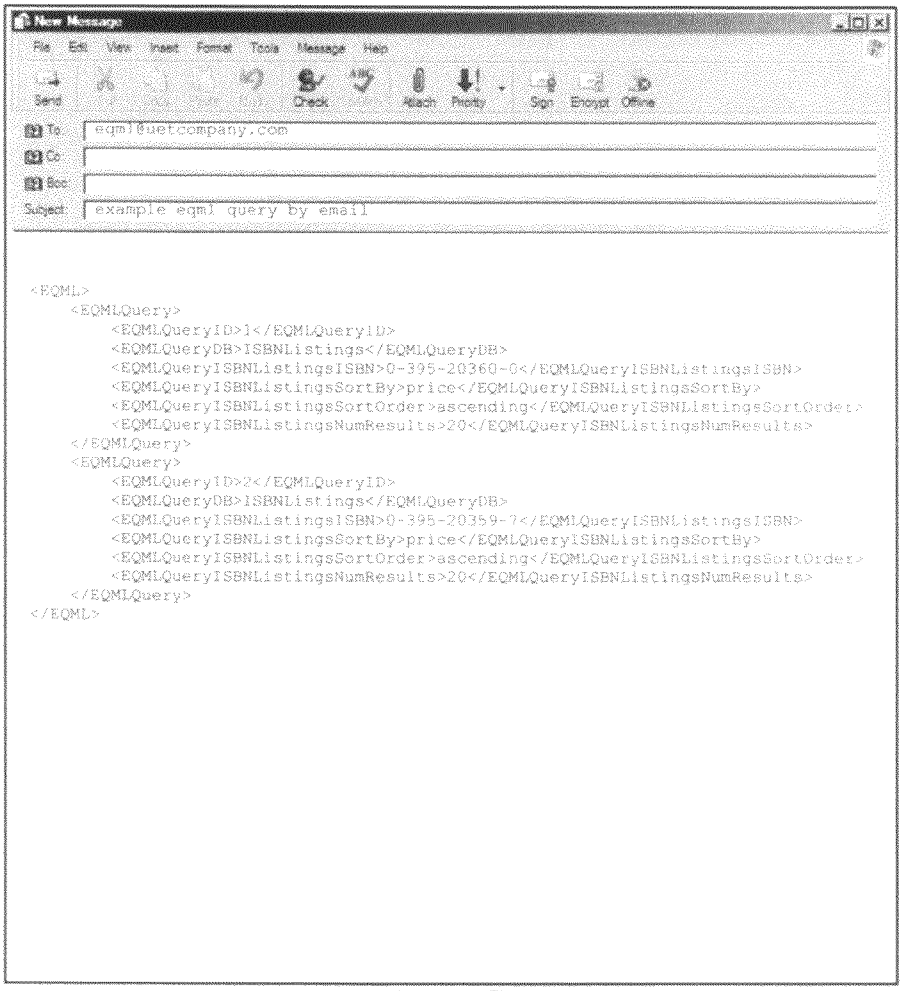


FIG. 59C
UAML Subsystem: Email Integration Process



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 59D **UAML Subsystem:** Email Integration Cont'd: Example of EQML-Enabled Search Engine Query via Email



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 59E **UAML Subsystem:** Email Integration Cont'd: Example of EQML Query Results

5941

Sample Query

File Edit View Tools Message Help

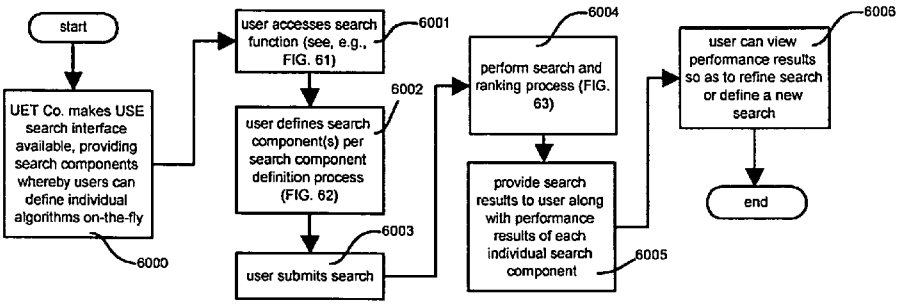
Reply Reply All Forward Print Delete Previous Next Addresses

FROM: UET Company
TO: UET User
DATE: June 20, 2007
Subject: Example

```
Hello,

Thanks for submitting your search queries to the UET Company.

The results of each query are provided below.

Regards,

The UET Team
---------

RESULTS

Query 1:
Database: ISBNListings
SearchTerm: 0-395-20360-0
Results ranked by: Price
Order: Ascending
Top 20 Results:

http://www.example1.com

http://www.example2.com


(etc.)
```

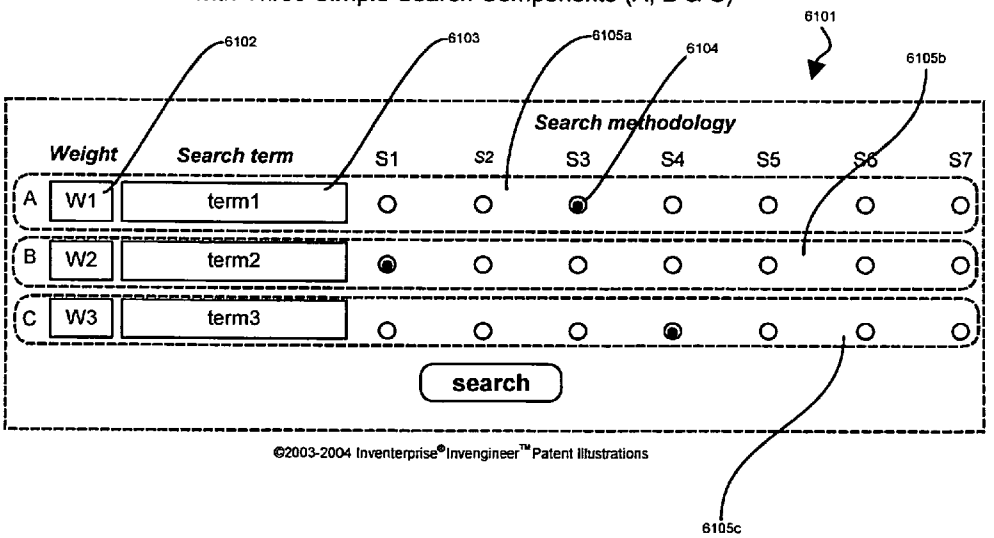
©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 60 **USE Subsystem:** Userithm Search Engine ("USE") Process Overview

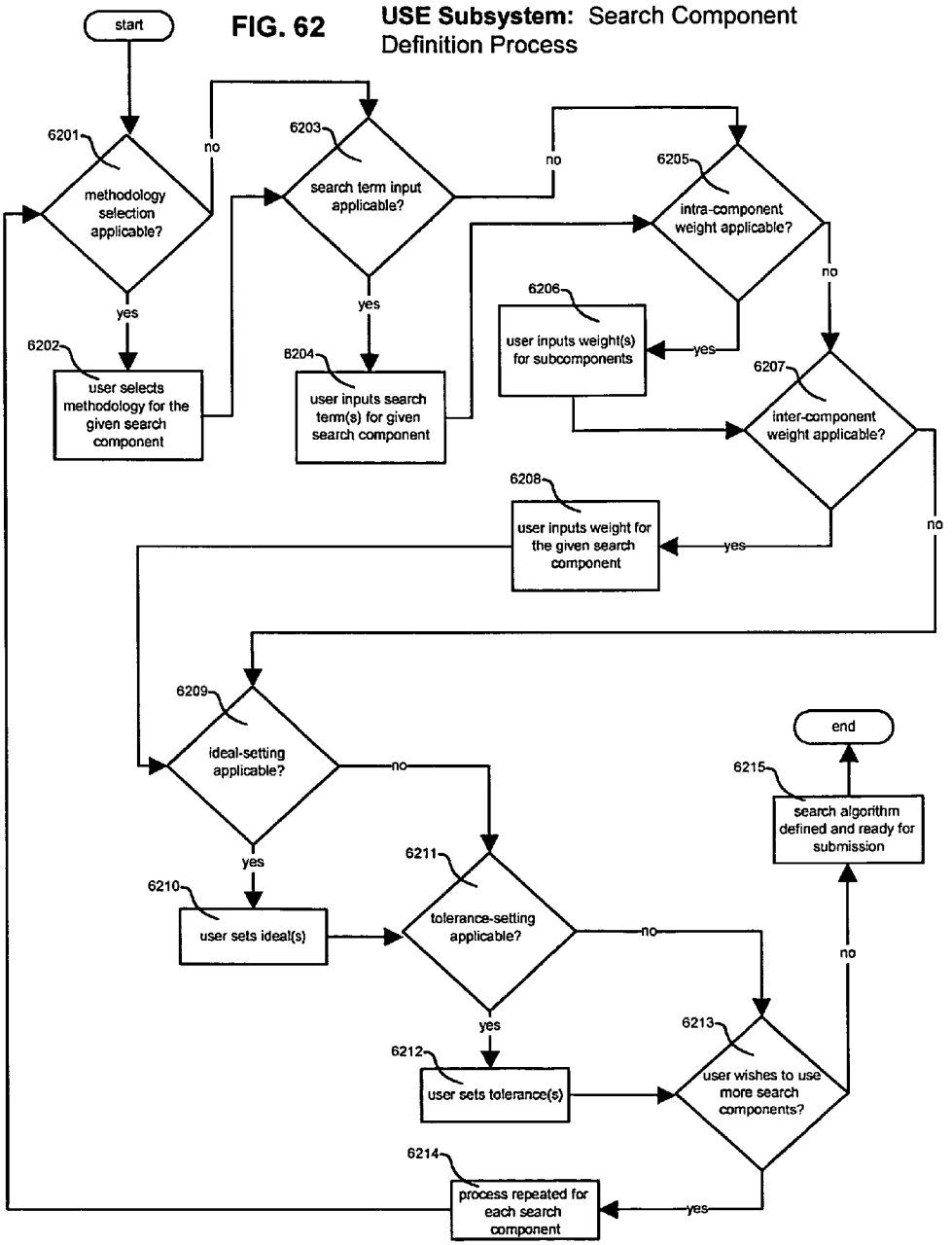


©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 61 **USE Subsystem:** Template for Primary (i.e., Simple Search Component) USE Search Submission Form with Three Simple Search Components (A, B & C)

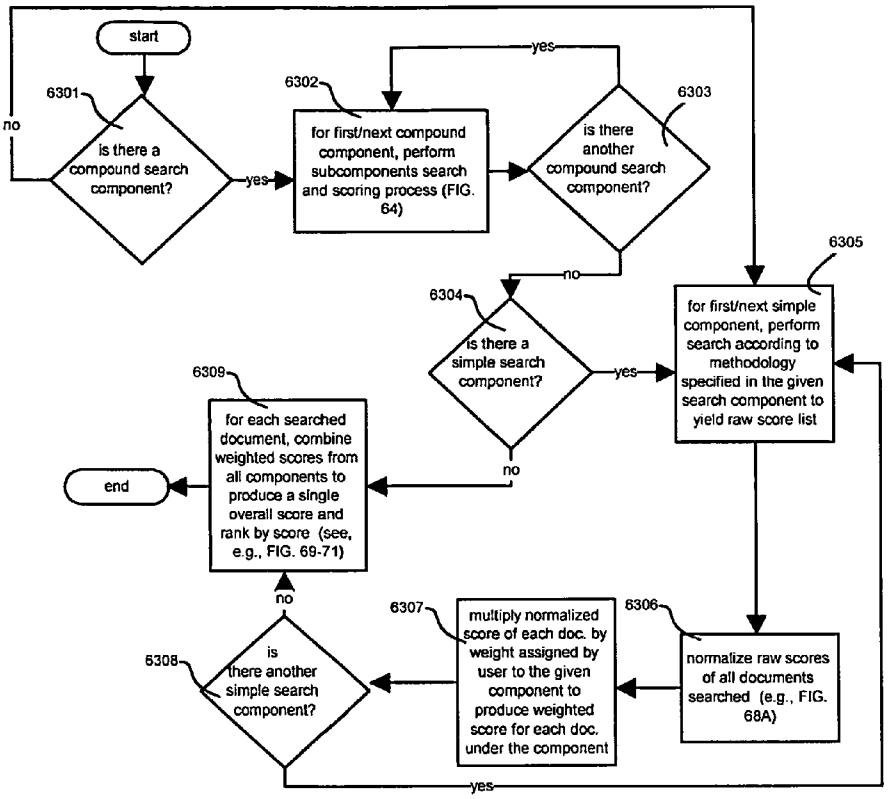


©2003-2004 Inventerprise® Invengineer™ Patent Illustrations



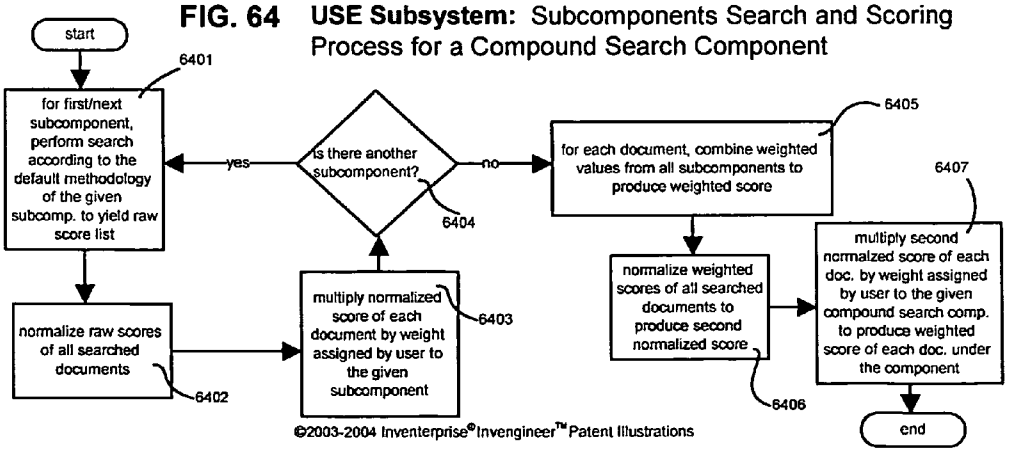
©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 63 **USE Subsystem:** Search and Ranking Process



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 64 **USE Subsystem:** Subcomponents Search and Scoring Process for a Compound Search Component



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 65 **USE Subsystem:** Example Simple Component USE Search Submission Page

		Search methodology						
Weight	*Search term*	*links to*	*links from*	*pay-for-placement*	*freshness*	*title or URL*	*popularity*	*Lexivote*
50	guitar	○	○	◉	○	○	○	○
10	guitar	◉	○	○	○	○	○	○
10	instruction	○	○	○	◉	○	○	○

search

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 66 **USE Subsystem:** Example Simple Component USE Search Submission Page with Methodology Already Defined

Weight	*Search string*
50	bears BUTNOT chicago
10	grizzly OR kodiac

search

FIG. 67 USE Subsystem: Example Options for Search Methodology Menu

Links to
Items ranked according to number of pages containing the search term that link to the given page (see, e.g., US Patent 6285999 to Page)
Links from
Items ranked according to number of pages containing the search term to which the given page links
Meaning
Items ranked with reference to meaning gleaned from words appearing in page related to the meaning of the search term (synonyms, etc.) (see, e.g., www.appliedsemantics.com)
Title/Name/URL
Items ranked according to density of search term itself in title, file name, and/or URL
Density
Items ranked according to density of search term in the given page
Popularity
Items ranked according to usage by previous users (see, e.g., US Patent 6539377 to Cullis)
Hits
Items ranked by a hit counter on the page that contains the search term
Freshness
Items ranked according to the time the document was most recently updated
My visits
Items ranked according to number of pages that the user has visited that link to the given page (with reference to visited URL's history)
Amount bid
Items ranked by bid of the site owner to pay for search ranking (see, e.g., US Patent 6269361 to Davis et al.)
Lexivote
Per the present disclosure, FIG. 93 et seq.

FIG. 68A USE Subsystem: Basic Normalization Process

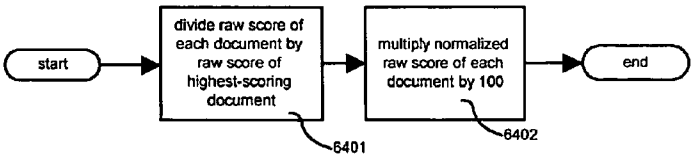


FIG. 68B USE Subsystem: Score Equation

$$r_1(A) = w_1(r_2(A)) + \ldots + w_{n-1}(r_n(A))$$

©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 69 **USE Subsystem:** *EXAMPLE:*
First search component, assuming user-assigned weight of "50"

	Normalized Score (scale of 1-100, as as an integer)	*Weighted Score*
Page P1	100	5000
Page P2	79	3950
Page P3	65	3250
Page P4	55	2750
Page P5	51	2550
Page P6	45	2250
Page P7	33	1650
Page P8	22	1100
Page P9	20	1000
Page P10	11	550

FIG. 70
USE Subsystem: *EXAMPLE:*
Second search component, assuming user-assigned weight of "10"

	Normalized Score	*Weighted Score*
Page P3	100	1000
Page P6	87	870
Page P11	65	650
Page P4	55	550
Page P1	51	510
Page P5	33	330
Page P2	22	220
Page P8	22	220
Page P7	21	210
Page P10	19	190

FIG. 71

USE Subsystem: *EXAMPLE:*
Overall scores and ranking according to sum of weighted values of first and second search components

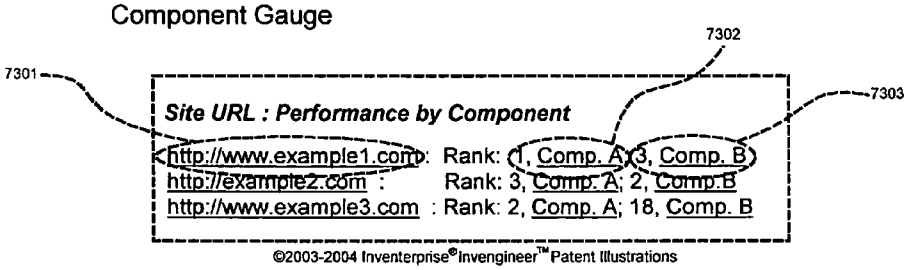
Rank in Descending Order	*Final Overall Score*
Page P1	5510
Page P3	4250
Page P2	4170
Page P4	3300
Page P6	3120
Page P5	2880
Page P7	1860
Page P8	1320
Page P9	1000
Page P10	740

FIG. 72 **USE Subsystem:** Conceptual Rendering of or Template for Results Page with Search Component Gauge

	Rank per each search component		
Site URL	A	B	C
http://result 1	Rank A1	Rank B1	Rank C1
http://result 2	Rank A2	Rank B2	Rank C2
http://result 3	Rank A3	Rank B3	Rank C3
http://result 4	Rank A4	Rank B4	Rank C4
http://result 5	Rank A5	Rank B5	Rank C5
http://result 6	Rank A6	Rank B6	Rank C6
http://result 7	Rank A7	Rank B7	Rank C7
http://result 8	Rank A8	Rank B8	Rank C8
http://result 9	Rank A9	Rank B9	Rank C9

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 73 **USE Subsystem:** Example Web Search Results Page with Search Component Gauge



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 74 **USE Subsystem:** Example Auction Search Results page with Search Component Gauge

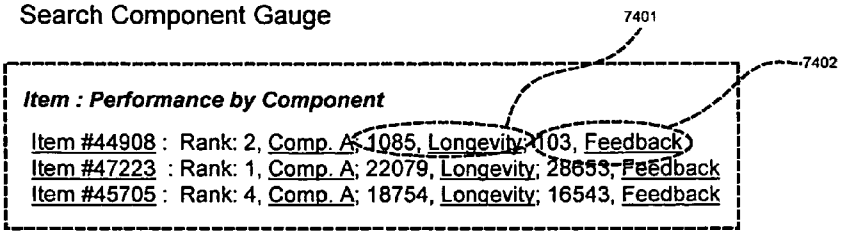
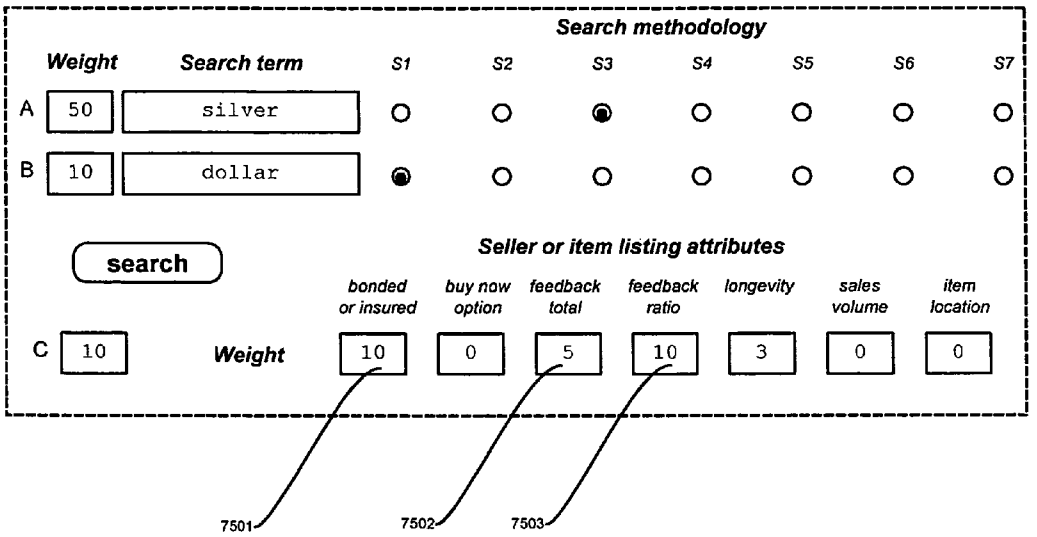


FIG. 75 **USE Subsystem:** Example Advanced USE (Level 1): Simple Components + Compound Component (Example: Auction Search)



©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 76 **USE Subsystem:** Advanced USE (Level 1): Alternative Application (Example: Stock Search (Simple Components not pictured))

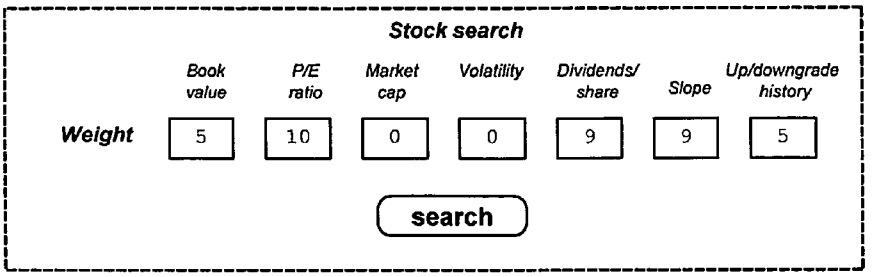


FIG. 77

USE Subsystem: Advanced USE (Level 1): Alternative Application (Example: Bond Search(Simple Comps. not pictured))

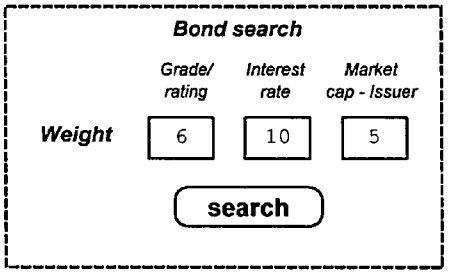


FIG. 78

USE Subsystem: Advanced USE (Level 1): Alternative Application (Example: Mutual Fund Search(Simple Comps. not pictured))

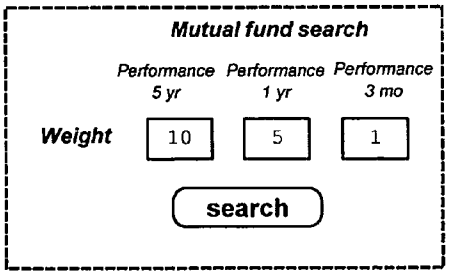


FIG. 79 **USE Subsystem:** Advanced USE (Level 1): Alternative Application (Example: Mutual Fund Search (Simple Comps. not pictured))

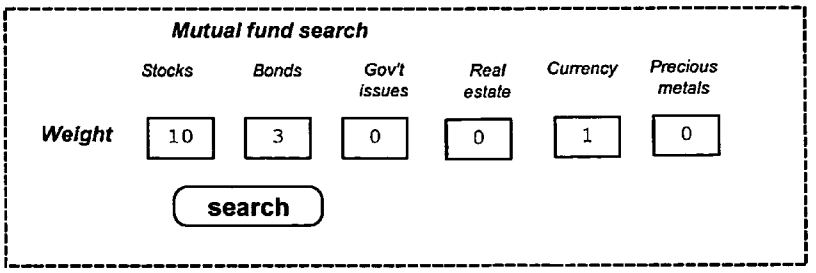


FIG. 80 **USE Subsystem:** Advanced Level 2: Simple Components (not pictured) + Compound Component with User-Assigned Intracomponent Weights and User-Defined "Ideal" or "Standard" (Example: Real Estate Search)

Real estate search

	Baths	*Bedrooms*	*Acreage*	*Sq. Ft.*	*Price (thousands)*
Ideal	3	3	1		$300
Weight *(10=Mandatory 0-9=Strength of Preference)*	10	10	5		3

FIG. 81 **USE Subsystem:** Advanced Level 2 USE: Alternative Application (Example: Job Search)

Job search

	City	*Position*	*Hours/wk*	*Start date*	*Salary (thousands)*
Ideal	Rome		40		$150
Weight	10		5		10

FIG. 82 **USE Subsystem:** Advanced Level 2 USE: Alternative Application (Example: Car Search)

Car search

	Year	*Price (thousands)*	*MPG*	*Doors*	*Passengers*
Ideal	2004	$5.5	65	4	4
Weight	10	5	10	5	2

Send the search results to me by email: user@example.com

FIG. 83 **USE Subsystem:** Advanced Level 2 USE: Simple Components (not pictured) + Compound Components Including User-Assigned Intracomponent Weights, User-Defined "Ideal" or "Standard", and User-Assigned Intercomponent Weights (Example: Personal Ads)

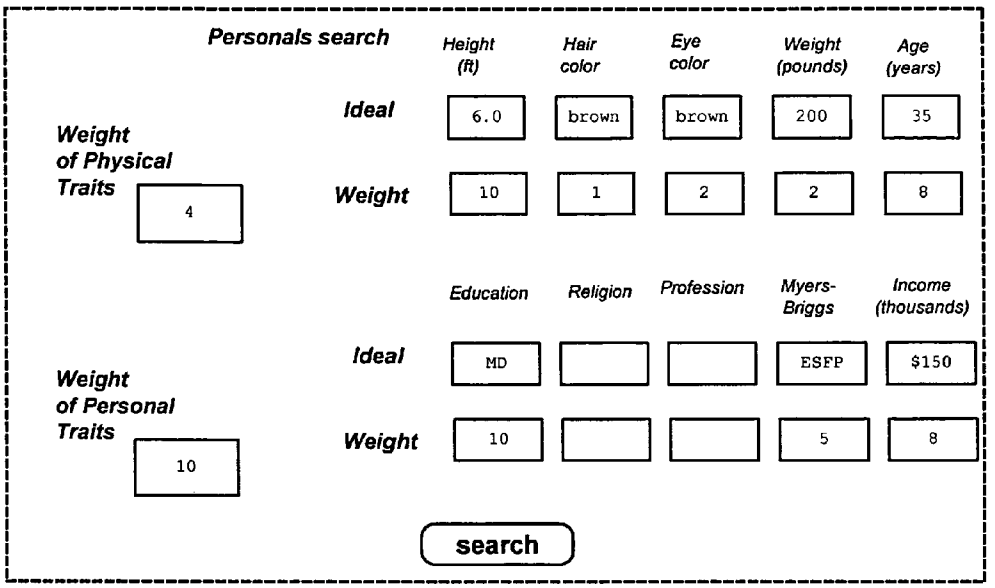


FIG. 84 **USE Subsystem:** Advanced Level 3 USE: Simple Components + Compound Components Including User-Assigned Intracomponent Weights, User-Defined "Ideal" or "Standard", and User-Assigned Tolerances for Variation from Ideal (Example: Articles Search)

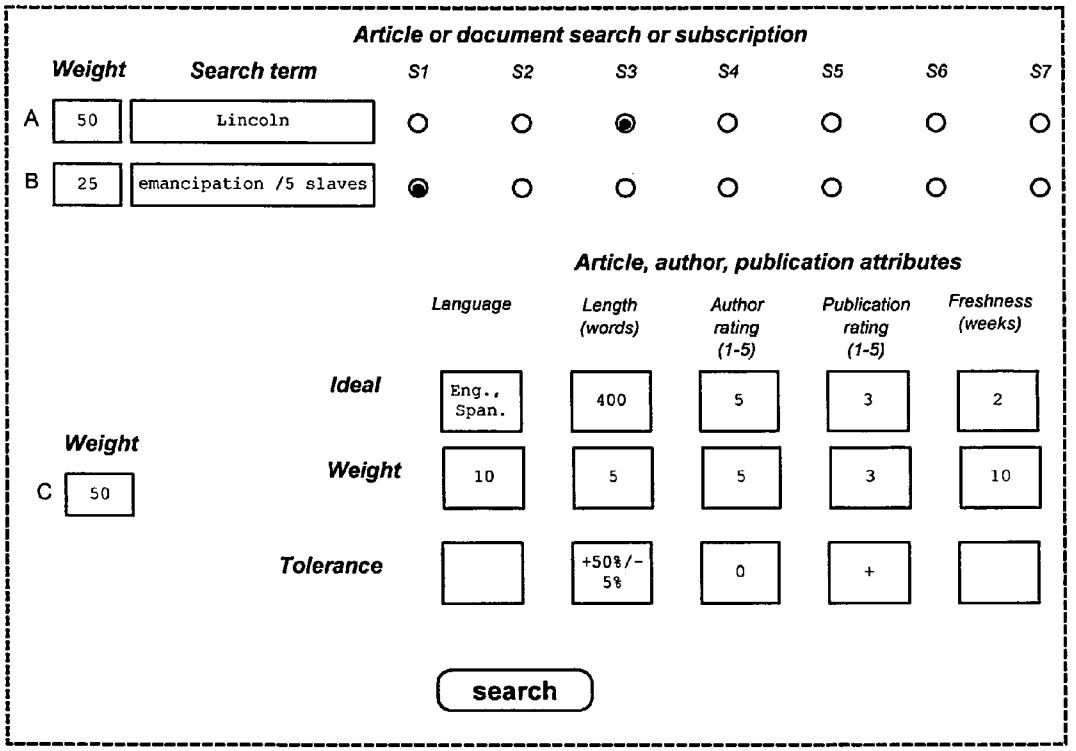


FIG. 85 **USE Subsystem:** Advanced USE Level 2 Variation Combining Filter Component and Scoring Component (Example: Airline Flights Search)

Travel search

	Airport From	Airport To	City From	City To	Airline	Date Depart	Date Return	Window	Aisle
MUST HAVE			SF	Nash		3/23			

PREFER TO HAVE	Airport From	Airport To	City From	City To	Airline	Date Depart	Time Depart	Window	Aisle
Ideal	SFO				United		11AM	Y	
Weight	7				4		7	10	

©2003-2004 Inventerprise®Invengineer™Patent Illustrations

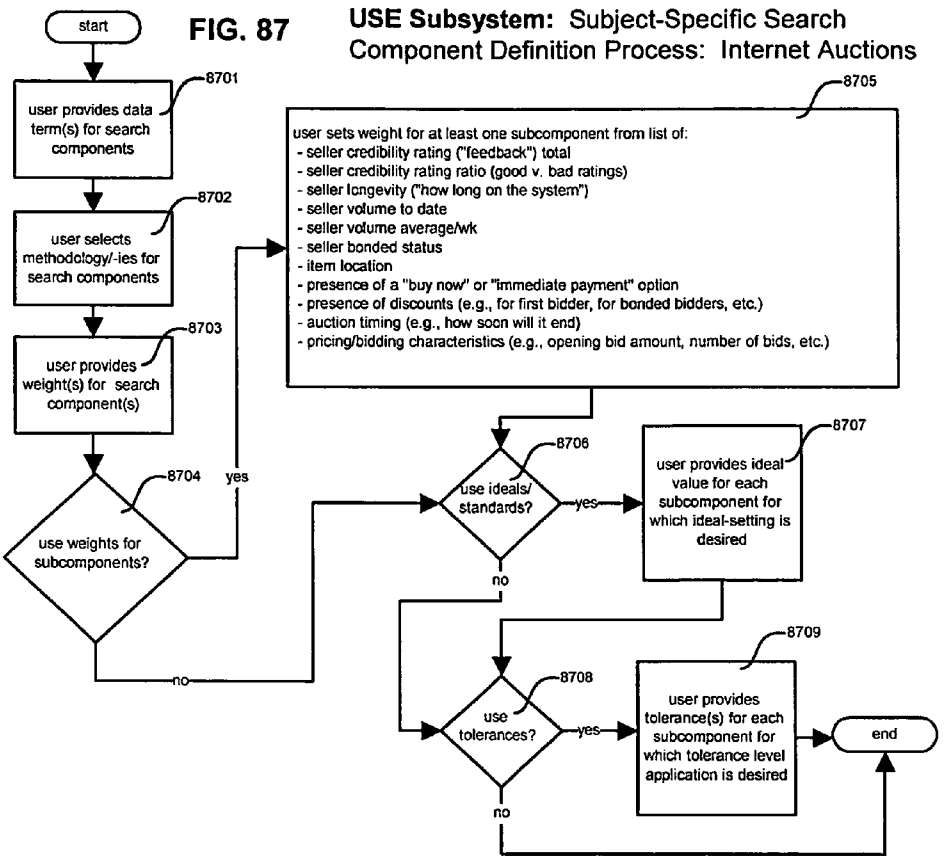
FIG. 86 **USE Subsystem:** Primary USE: Single Input Field Variation

Search string

finger-picking (25, linksto) instruct! (40, lexivote) guitar (!)

search

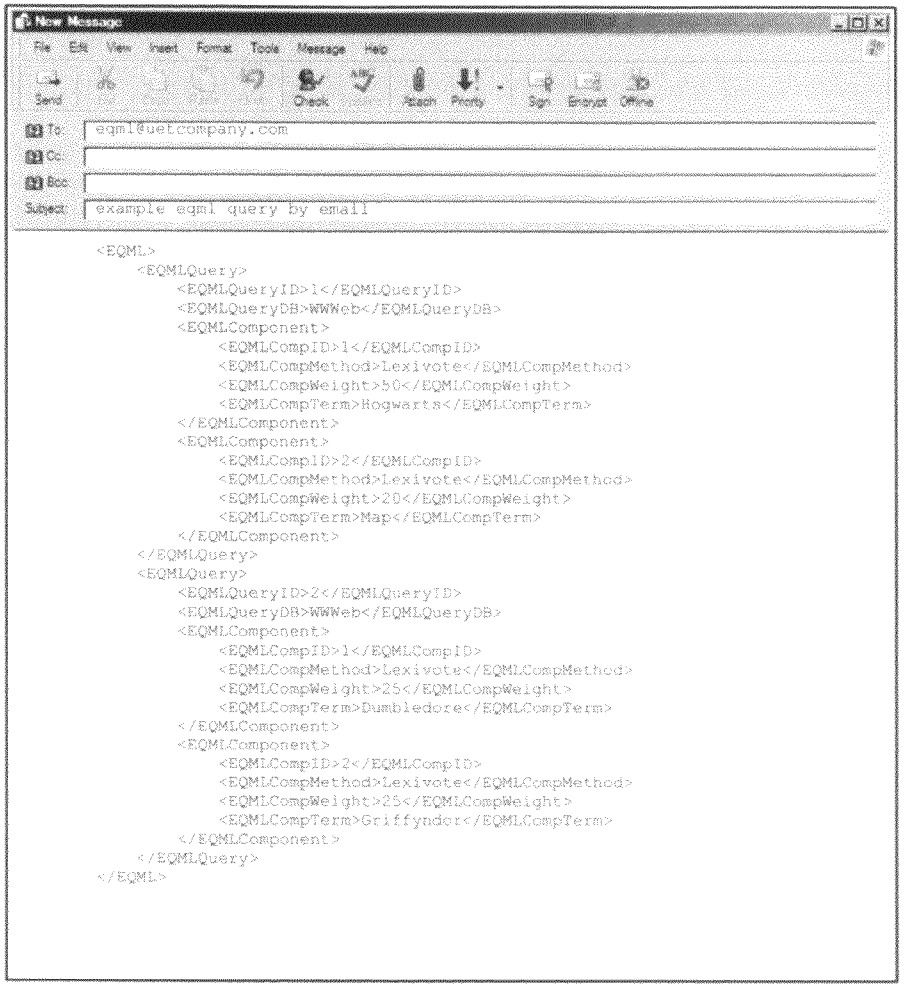
©2003-2004 Inventerprise®Invengineer™Patent Illustrations



©2003-2004 Inventerprise®Invengineer™Patent Illustrations

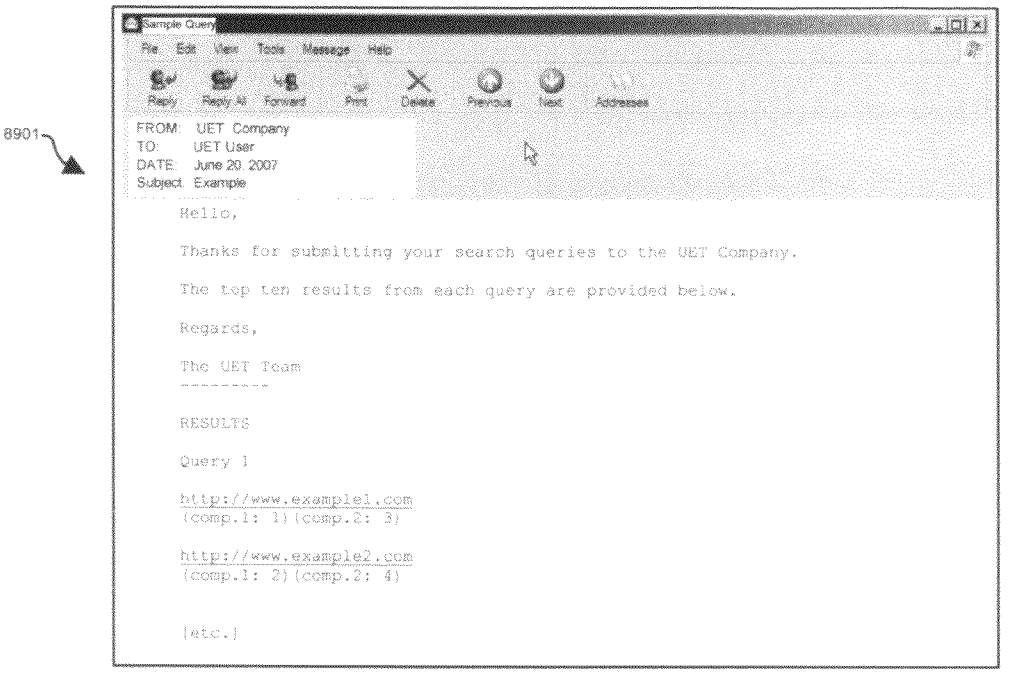
FIG. 88

USE Subsystem: Email Integration: Example of EQML-Enabled Search Engine Query via Email



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

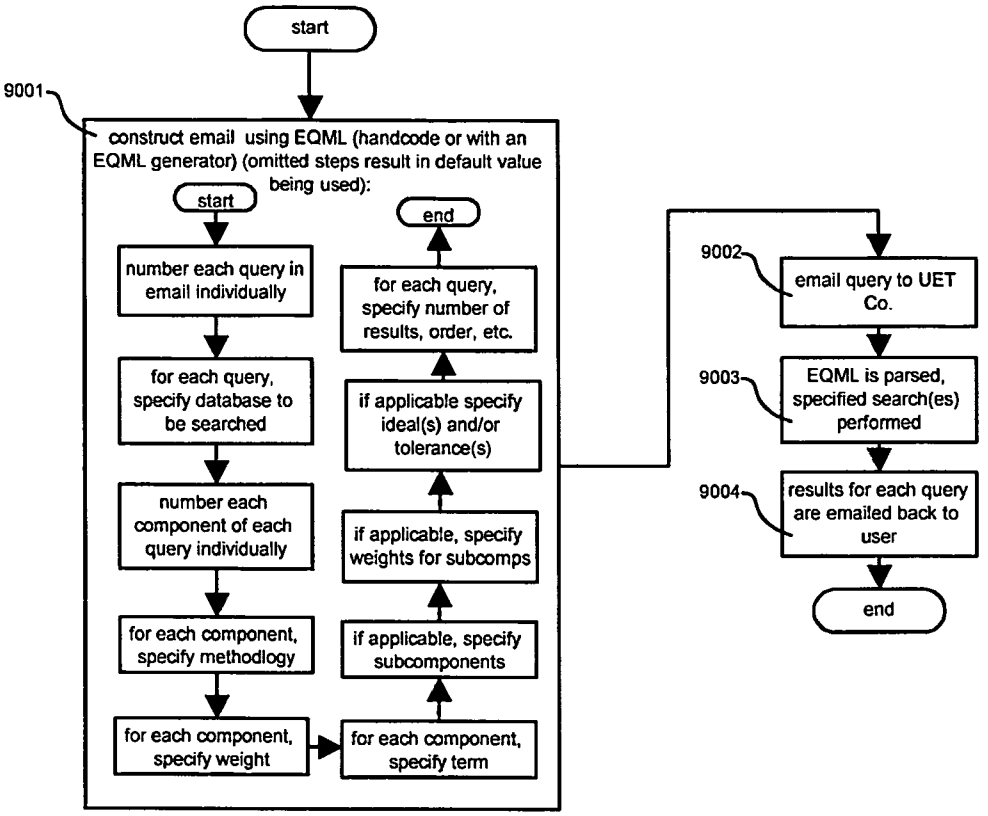
FIG. 89 **USE Subsystem:** Email Integration Cont'd: Example of EQML Query Results



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 90

USE Subsystem: Email Integration Process



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 91

USE Subsystem: Excerpt from Sample Web Submission Form for Creation of a Submission Form for Display in Toolbar

9101

Account: MyFlowers23 **Build Your Own Search Engine!**

Which database would you like your search engine to search?

auct. cars coins comp. web [etc.]

Number of Simple Search Components

Methodology Menu Choices per Simple Search Component

S1 S2 S3 S4 S5 S6

Number of Compound Search Components

Auction-Related Methodology Options

PS1 PS2 PS3 PS4 PS5 PS6

Real Estate-Related Methodology Options

PS7 PS8 PS9 PS10

Stock-Related Methodology Options

PS13 PS14 PS15 PS16 PS17 PS18

Car-Related Methodology Options

PS19 PS20 PS21 PS22

Allow Inter-Component Weighting?

Allow Intra-Component Weighting?

Allow user ideal-setting?

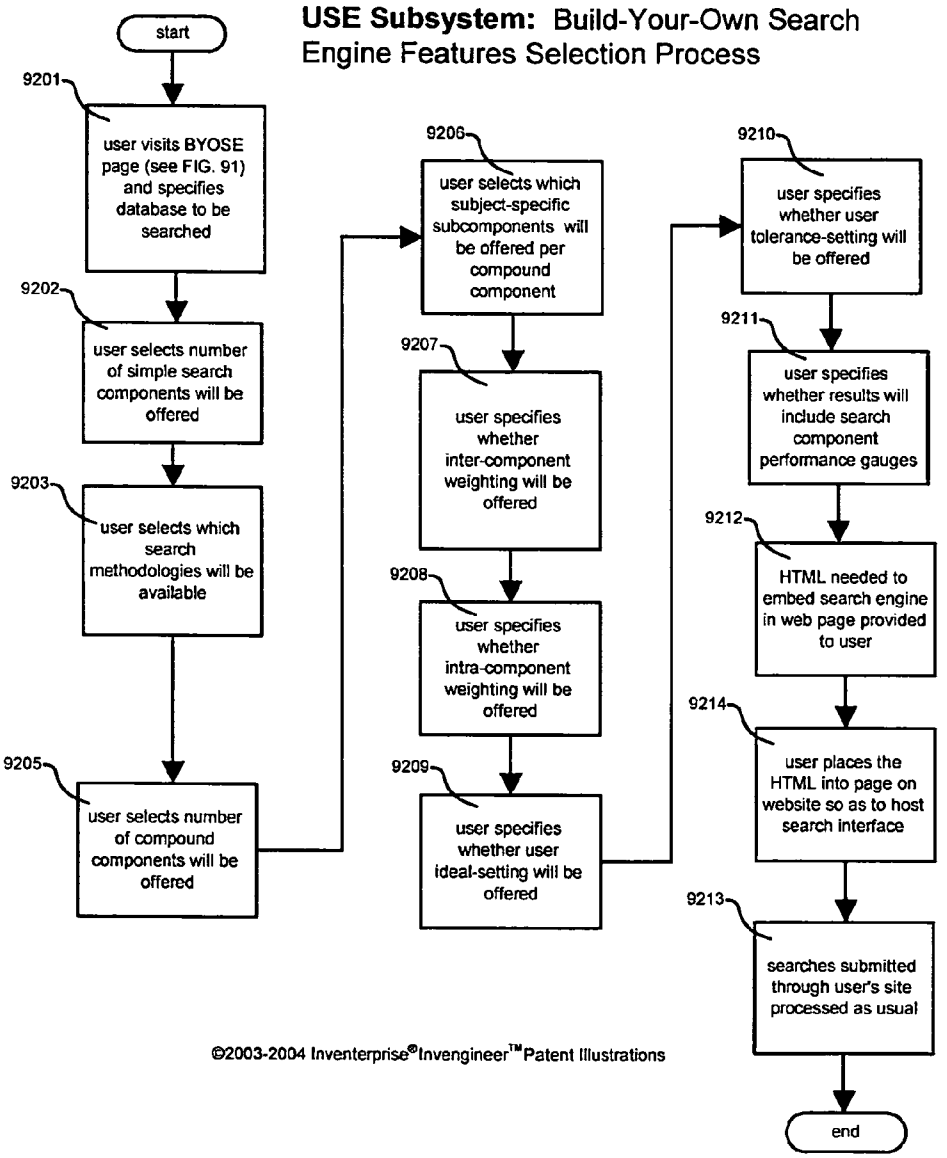
Allow user tolerance-setting?

Display search component performance gauge?

Submit

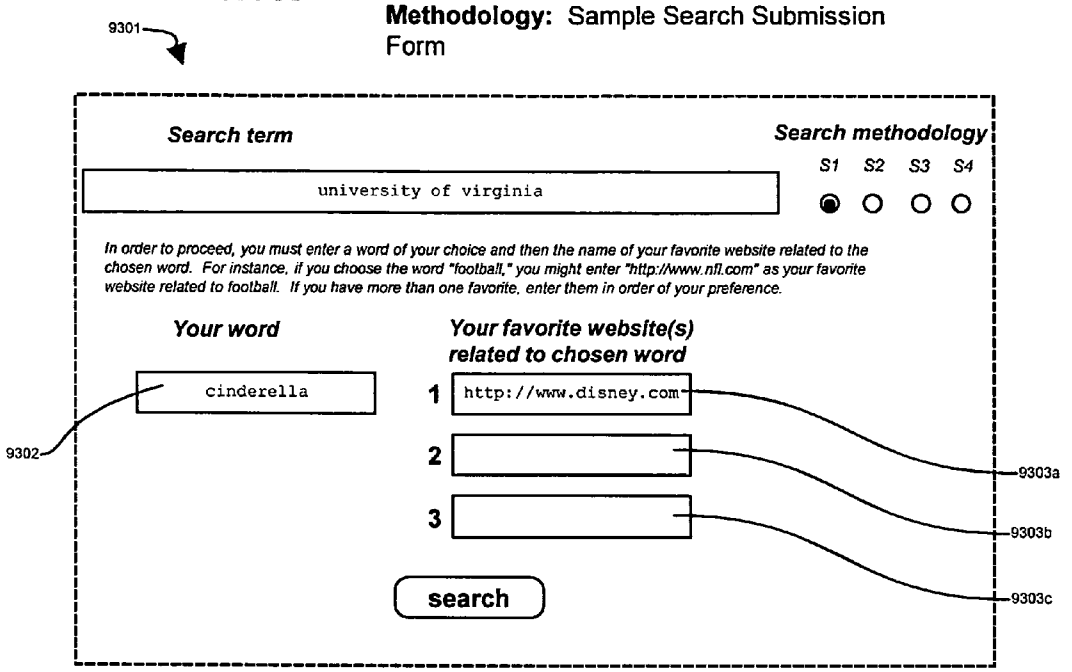
©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 92



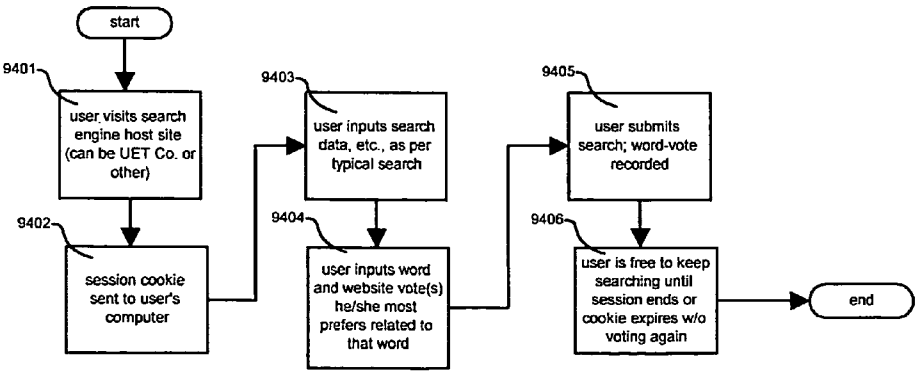
©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 93 **USE Subsystem: Lexivote Search**
Methodology: Sample Search Submission Form



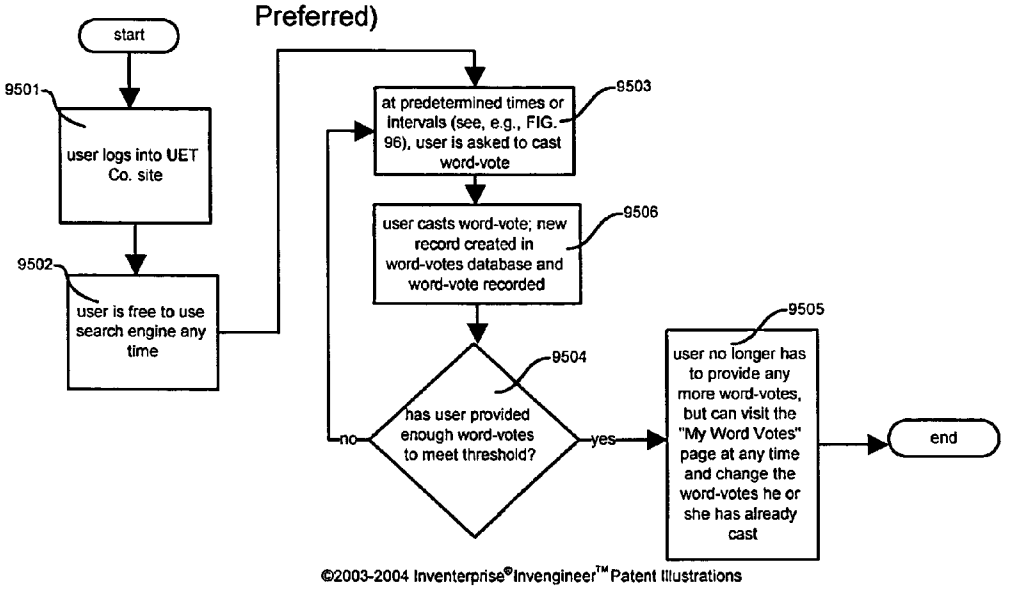
©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 94 **USE Subsystem: Lexivote:** Use Process (Random visitor, non-account embodiment)



©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 95 **USE Subsystem: Lexivote:** Use Process (Account-Holding Users Embodiment - Preferred)



©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 96 **USE Subsystem: Lexivote:** Sample Timing Events for Request That Registered Users Cast Word-Votes

1. Require user to provide a word-vote every third time he/she logs in until threshold met
2. Require word-vote every fifth search performed until threshold met
3. Require word-vote once per month until threshold met

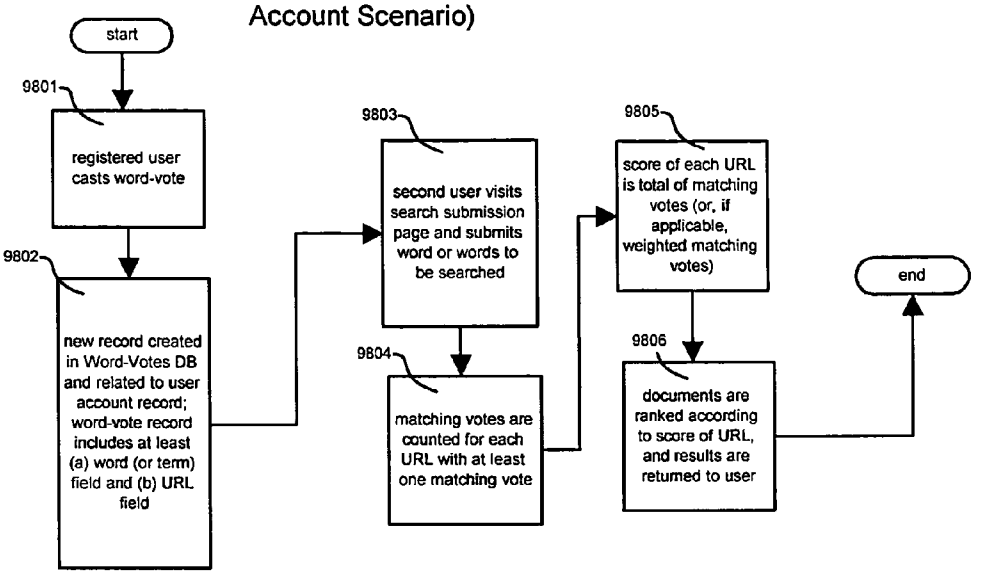
©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 97
USE Subsystem: Lexivote: Sample Word-Vote Weighting Schedule

First place vote: 5 points
Second place vote: 3 points
Third place vote: 2 points

©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 98A **USE Subsystem: Lexivote:** General Lexivote Search & Ranking Process (User Account Scenario)



©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 98B **USE Subsystem: Lexivote:** Scoring Equation when Weighted Word-Votes Are Used

$$r_1(A) = w_1(v_1(A)) + w_2(v_2(A)) + w_3(v_3(A))$$

©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 99

USE Subsystem: Lexivote: Sample excerpt form "My Word-Votes" page for viewing and altering votes

9901

Account: MotorVoter3

My Word-Votes

1. Word cinderella

Votes

First place: http://www.disney.com

Second place:

Third place:

2. Word stamps

Votes

First place: http://www.philatelist.org

Second place: http://www.philatelife.com

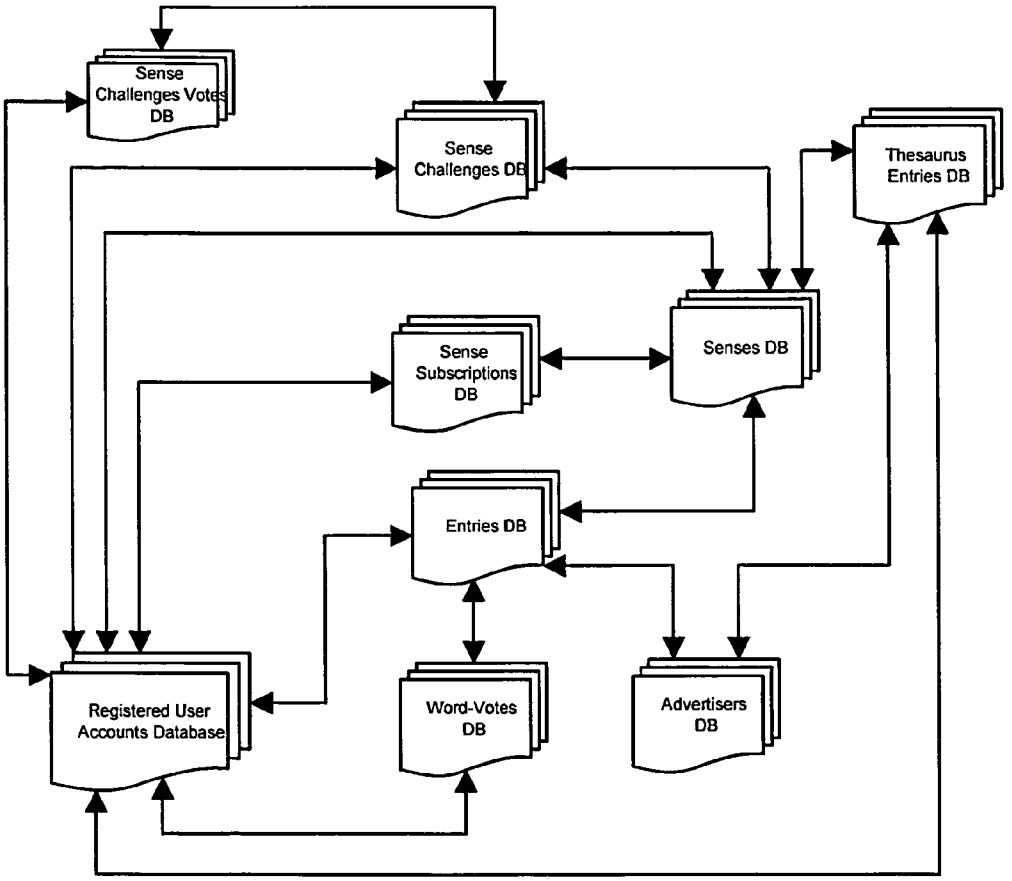
Third place:

Submit changes

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 100

USE Subsystem: Lexivote: Database Relationships for Lexivote & Lexary Integration



©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 101 **USE Subsystem: Lexary:** Method of Creation, Deployment and Use of the Lexary Subsystem

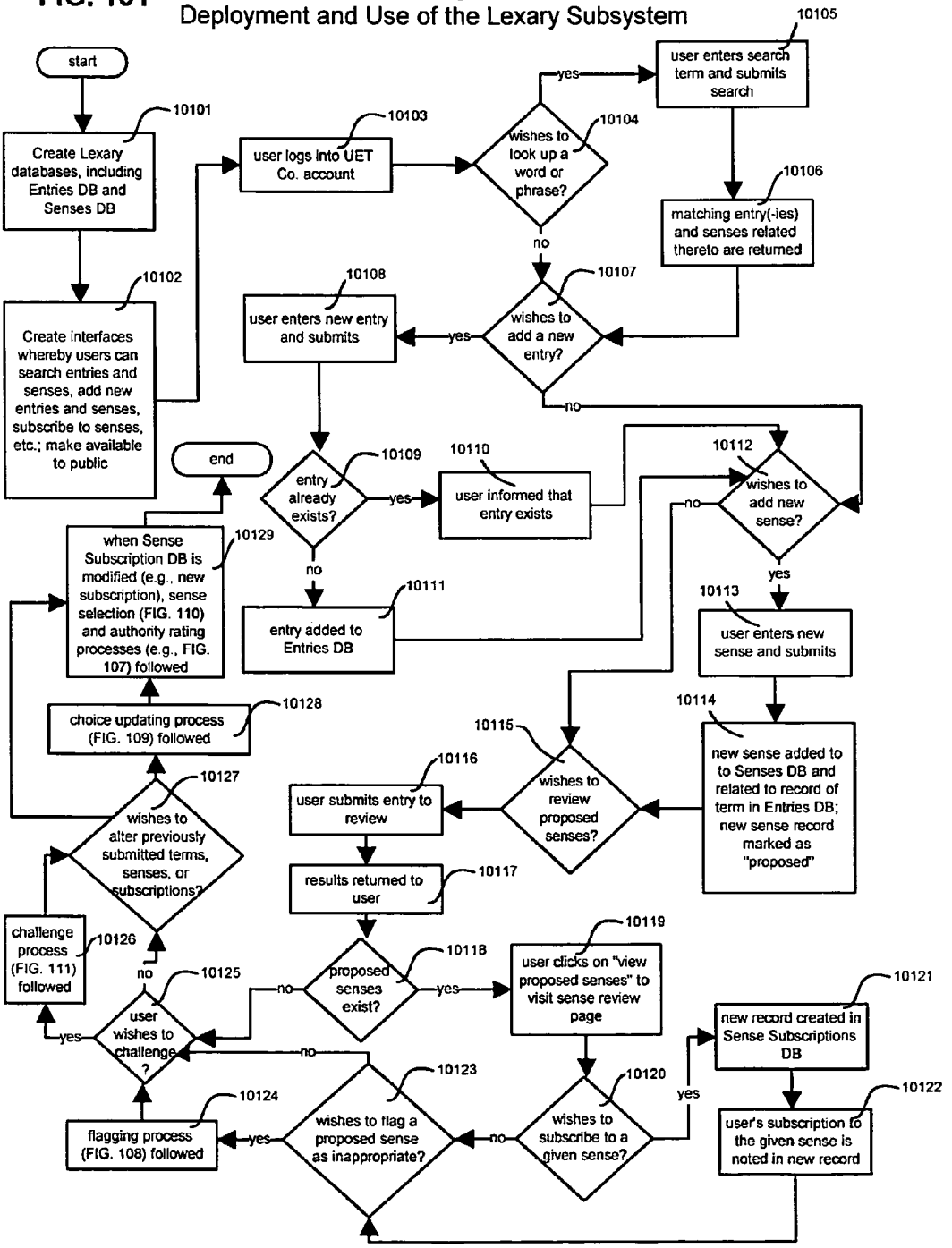
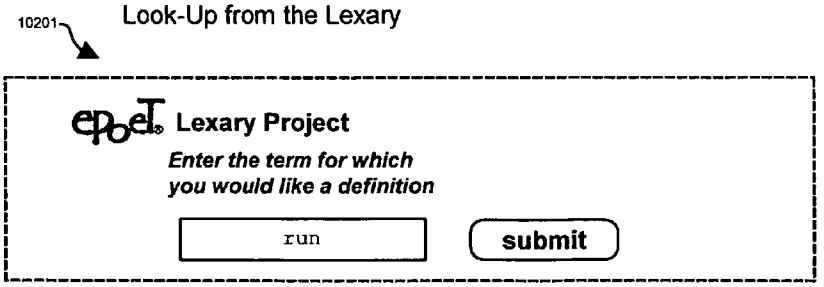
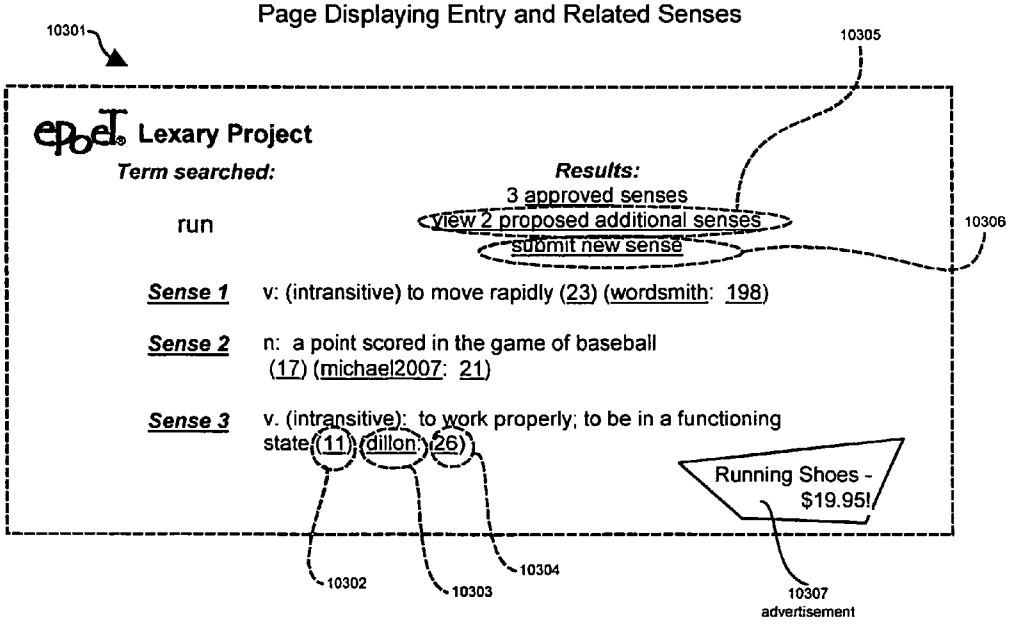


FIG. 102 **USE Subsystem: Lexary:** Interface for User Look-Up from the Lexary



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 103 **USE Subsystem: Lexary:** Example Results Page Displaying Entry and Related Senses



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 104 **USE Subsystem: Lexary:** Submit New Sense Page

10401

epoet Lexary Project

Term searched: *Submit New Sense*

run

Part of Speech *Qualifier*

New Proposed Sense

verb

intransitive

Definition for this sense of the word

to bleed; in reference to colors, to seep into surrounding material

Etymology (if known, not required)

Usage notes, including, if possible, usage in a sentence.

The dye in this fabric is known to run when exposed to hot water.

submit

©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 105 **USE Subsystem: Lexary:** Review "Pending Proposed Senses" Page

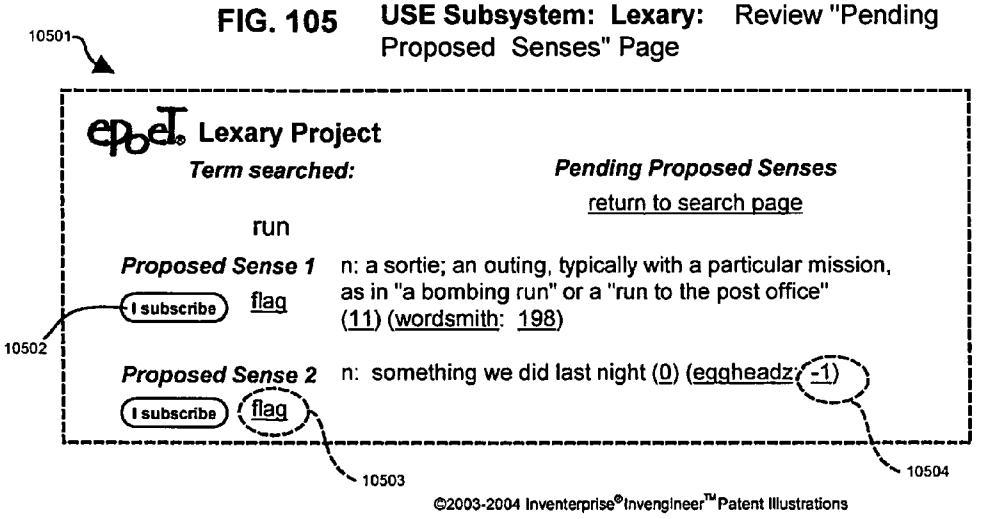


FIG. 106 **USE Subsystem: Lexary:** Excerpt from Example Sense Challenge Submission Form

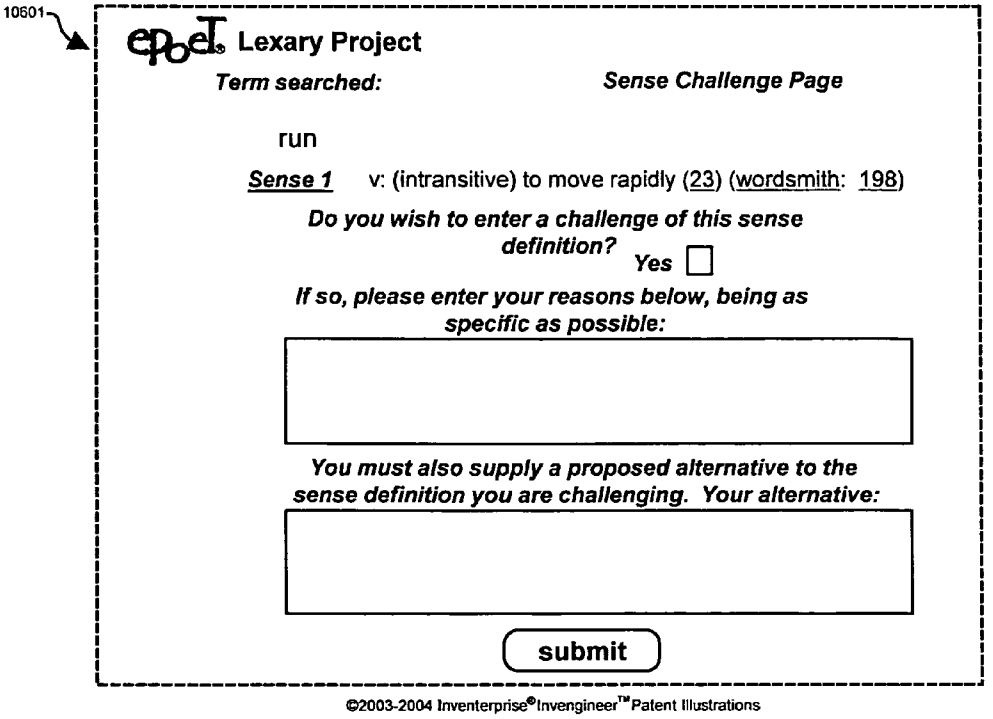


FIG. 107

USE Subsystem: Lexary: Authority Rating Process

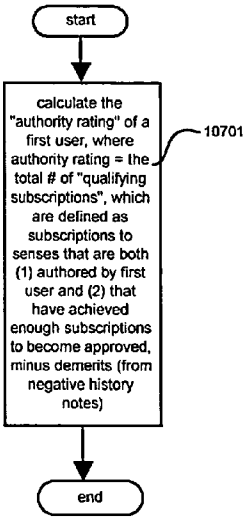


FIG. 108

USE Subsystem: Lexary: Flagging Process

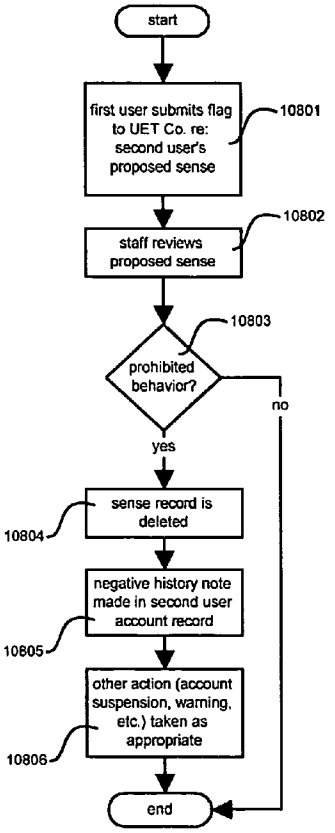
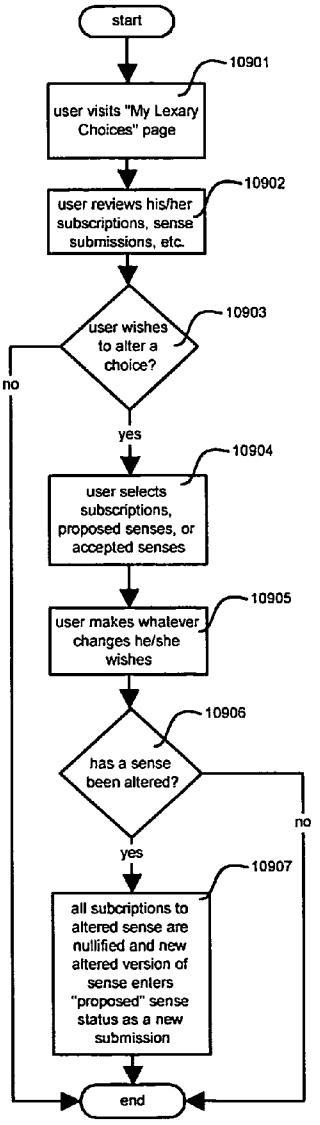


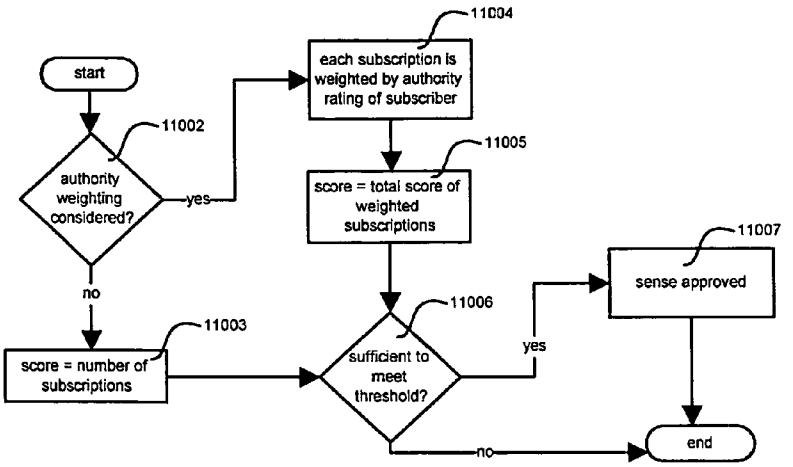
FIG. 109

USE Subsystem: Lexary: Choice Editing Process



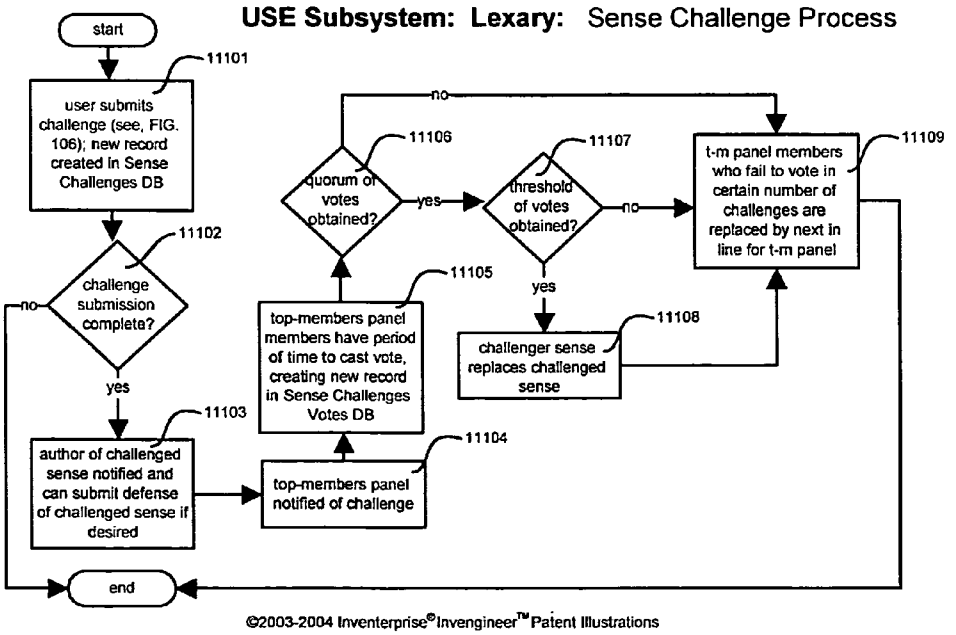
©2003-2004 Inventerprise©Invengineer™Patent Illustrations

FIG. 110 **USE Subsystem: Lexary:** Sense Selection Process



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 111 **USE Subsystem: Lexary:** Sense Challenge Process



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

11201

FIG. 112 **USE Subsystem: Lexary:** Simple Component USE Search Submission Form for Integration with Lexary

		Search methodology						
Weight	*Search term*	*links to*	*links from*	*Lexivote*	*pay-per-placement*	*title or URL*	*popularity*	*freshness*
50	rubber	◉	○	○	○	○	○	○
10	stamp	◉	○	○	○	○	○	○

search

11301

FIG. 113 **USE Subsystem: Lexary:** Secondary Selections Page for Lexary-Integrated USE

The search term(s) entered have multiple meanings. Please select the sense in which you mean the word:

rubber

☐ ***Sense 1*** n: an elastic material (29) (wordsmith: 198)

☐ ***Sense 2*** n: a device planted into a pitcher's mound in the game of baseball (21) (pitchingBill: 41)

11302

stamp

☐ ***Sense 1*** v: (transitive) to make an impression upon an object by forceful impact (73) (wordsmith: 198)

☐ ***Sense 2*** n: a small piece of paper affixed to a piece of mail to indicate that postage has been paid (107) (postboy: 31)

bypass this step | search according to my selection(s) above

©2003-2004 Inventerprise®Invengineer™Patent Illustrations

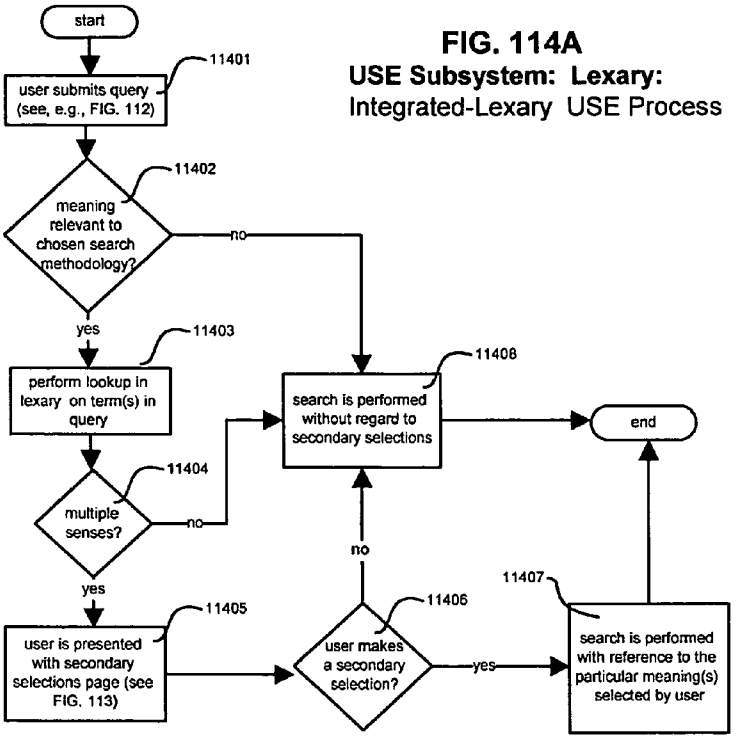


FIG. 114A
USE Subsystem: Lexary: Integrated-Lexary USE Process

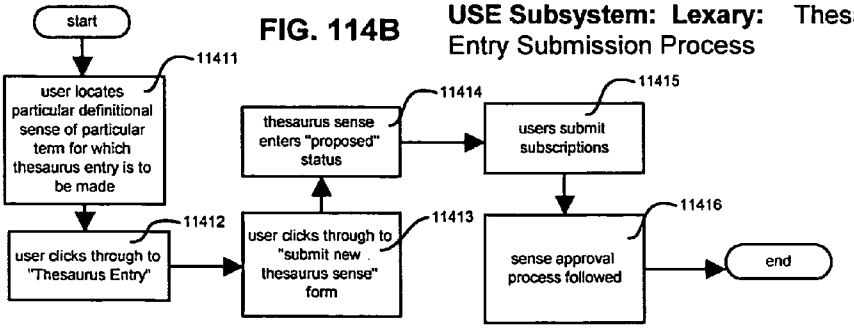


FIG. 114B
USE Subsystem: Lexary: Thesaurus Entry Submission Process

FIG. 114C **USE Subsystem: Lexary:** Excerpt from Sample Sense Display Page with Link to Thesaurus Entry for the Given Sense

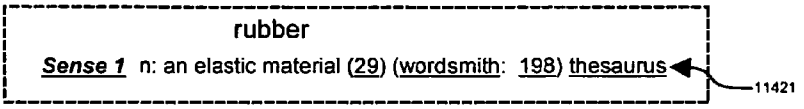


FIG. 115

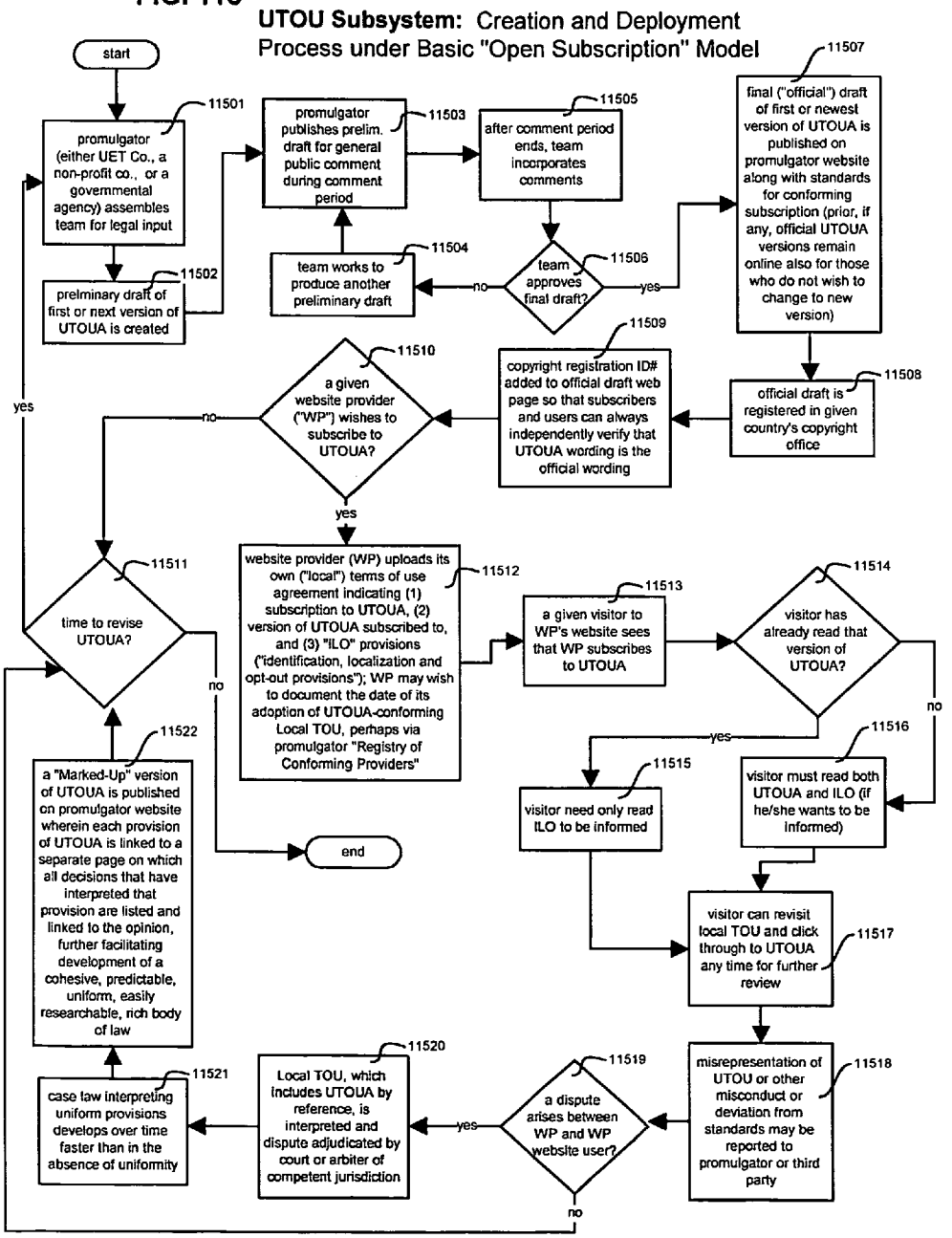

UTOU Subsystem: Creation and Deployment Process under Basic "Open Subscription" Model
start
11501
promulgator (either UET Co., a non-profit co., or a governmental agency) assembles team for legal input
11502
preliminary draft of first or next version of UTOUA is created
11503
promulgator publishes prelim. draft for general public comment during comment period
11504
team works to produce another preliminary draft
11505
after comment period ends, team incorporates comments
11506
team approves final draft?
no
yes
11507
final ("official") draft of first or newest version of UTOUA is published on promulgator website along with standards for conforming subscription (prior, if any, official UTOUA versions remain online also for those who do not wish to change to new version)
11508
official draft is registered in given country's copyright office
11509
copyright registration ID# added to official draft web page so that subscribers and users can always independently verify that UTOUA wording is the official wording
11510
a given website provider ("WP") wishes to subscribe to UTOUA?
no
yes
11511
time to revise UTOUA?
yes
no
11512
website provider (WP) uploads its own ("local") terms of use agreement indicating (1) subscription to UTOUA, (2) version of UTOUA subscribed to, and (3) "ILO" provisions ("identification, localization and opt-out provisions"); WP may wish to document the date of its adoption of UTOUA-conforming Local TOU, perhaps via promulgator "Registry of Conforming Providers"
11513
a given visitor to WP's website sees that WP subscribes to UTOUA
11514
visitor has already read that version of UTOUA?
yes
no
11515
visitor need only read ILO to be informed
11516
visitor must read both UTOUA and ILO (if he/she wants to be informed)
11517
visitor can revisit local TOU and click through to UTOUA any time for further review
11518
misrepresentation of UTOU or other misconduct or deviation from standards may be reported to promulgator or third party
11519
a dispute arises between WP and WP website user?
yes
no
11520
Local TOU, which includes UTOUA by reference, is interpreted and dispute adjudicated by court or arbiter of competent jurisdiction
11521
case law interpreting uniform provisions develops over time faster than in the absence of uniformity
11522
a "Marked-Up" version of UTOUA is published on promulgator website wherein each provision of UTOUA is linked to a separate page on which all decisions that have interpreted that provision are listed and linked to the opinion, further facilitating development of a cohesive, predictable, uniform, easily researchable, rich body of law
end

FIG. 116 **UTOU Subsystem:** Excerpt from Example Web Page Hosted by Promulgator Displaying a Given UTOUA Version

11601

UNIFORM TERMS OF USE AGREEMENT VERSION 1.0

1. This web page comprises the Official Text of the **Uniform Terms of Use Agreement Version 1.0 (UTOUA-1.0)**. The exact text hereof is also recorded in Copyright #XXX-XXX.

2. When properly referenced, all terms of this document may and shall be fully incorporated by reference into the terms of use agreement of a Subscribing Entity so that the terms herein govern in part the use of the Subscribing Entity's website(s) and/or service(s). A Subscribing Entity is one that controls a website in which the terms of use agreement thereof (hereinafter, the "Local TOU") is constructed and displayed in conformance to the standards set forth herein. When so incorporated by reference, this document and the terms hereof shall govern the parties to the Local TOU, **EXCEPT THAT** each such Local TOU shall display a section of text entitled "Identification, Localization and Opt-Out Provisions" (hereinafter, "ILO Section), the terms of which ILO Section may differ from the terms hereof and shall take precedence over the terms of this document in any conflict between the two. No terms outside of said ILO Section shall take precedence over the terms of this document in the event of a conflict.

3. In order to be considered in conformance with the standards set forth herein, each Local TOU shall be entitled "UTOU-CONFORMING TERMS OF USE AGREEMENT" and provide a hyperlink as described below. The Local TOU shall then comprise the following inital provision: "1. This Terms of Use Agreement governs the use of this Website and all related Services. Visitation or use of Website and/or Services signifies agreement by You, the visitor or user, to this Terms of Use Agreement. Provider subscribes to Uniform Terms of Use Version 1.0, which document is incorporated in its entirety into this Agreement and the terms of which are binding upon You and Provider, except as specified in Section 2, 'Identification, Localization and Opt-Out Provisions,' below." A second hyperlink shall be provided as described below....

[etc.]

©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 117 **UTOU Subsystem:** Example Excerpt from Local Website Terms of Use Page of a Website Provider Who Subscribes to UTOU

11701

Inventerprise®

UTOU-CONFORMING
TERMS OF USE AGREEMENT

1. This Terms of Use Agreement governs the use of this Website and related Services. Visitation or use of Website and/or Services signifies agreement by You, the visitor or user, to this Terms of Use Agreement. Provider subscribes to Uniform Terms of Use Version 1.0, which document is incorporated in its entirety into this Agreement and the terms of which are binding upon You and Provider, except as specified in Section 2, "Identification, Localization and Opt-Out Provisions," below.

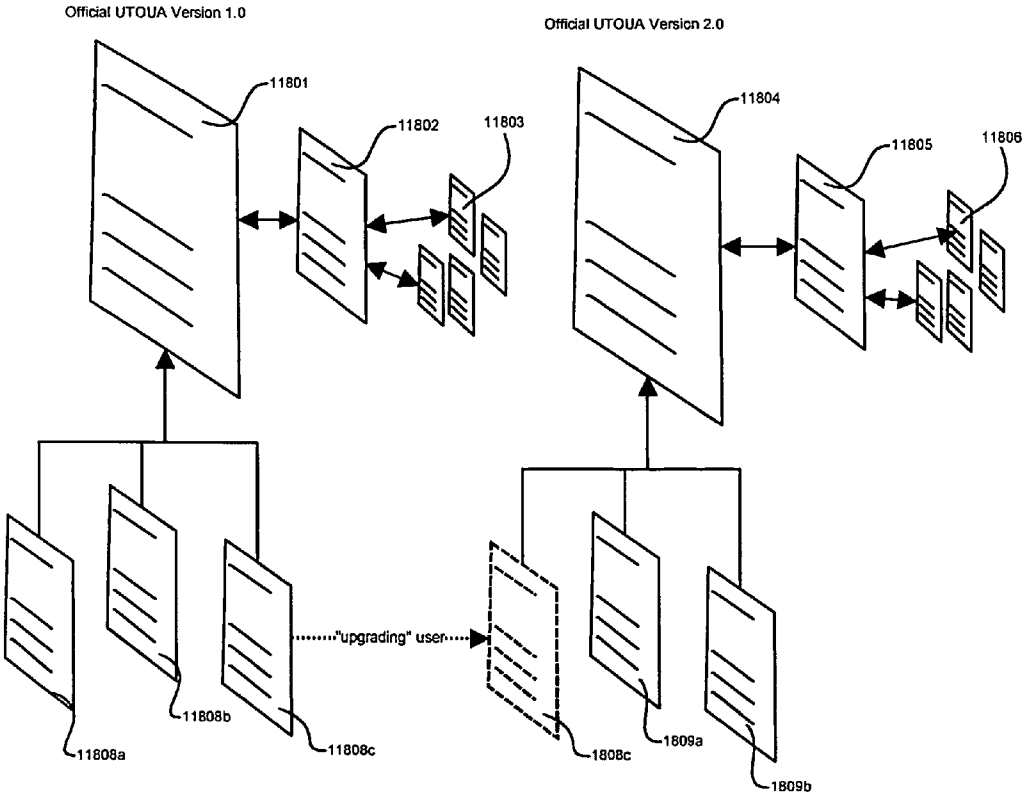
2. IDENTIFICATION, LOCALIZATION, AND OPT-OUT PROVISIONS.

2.1 IDENTIFICATION: Provider means *Inventerprise.*
2.2 IDENTIFICATION: Website means *www.inventerprise.com.*
2.3 LOCALIZATION: Interpretation and all disputes arising out of this Agreement shall be governed by the laws of the state of *California.*
2.4 OPT-OUT: *Subscription fee for newsletter is $25/month. If a user is found to have spammed other users, the offending user shall reimburse Provider $250 per offending email. Provider holds regularly scheduled maintenance of Website on.....*

[etc.]

©2003-2004 Inventerprise®Invengineer™Patent Illustrations

FIG. 118 **UTOU Subsystem:** Document Linking Overview



©2003-2004 Inventerprise® Invengineer™ Patent Illustrations

FIG. 119 **UTOU Subsystem:** "Registered Subscriber" Model Process, with UTU Integration

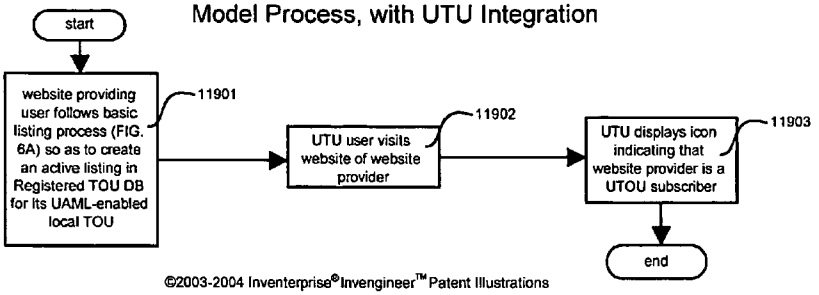


FIG. 120 **UTOU-UTU Subsystems:** Example UTU under "Registered Subscriber" Model

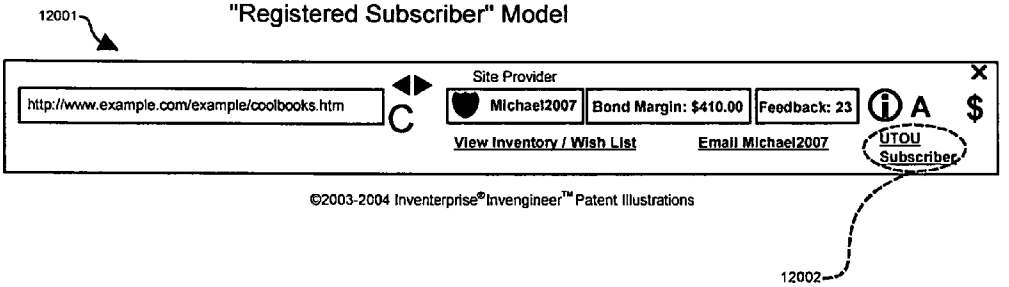
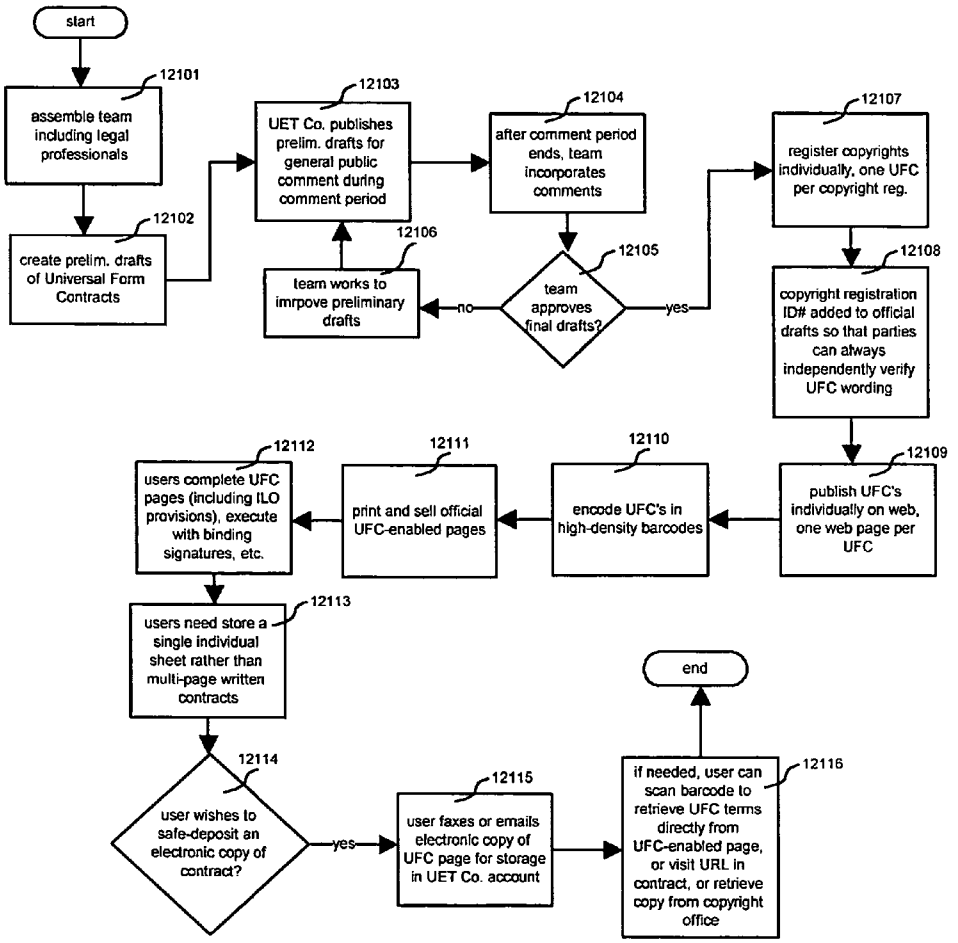


FIG. 121

UTOU Subsystem: UFC:
Method Overview



©2003-2004 Inventerprise®Invengineer™Patent illustrations

FIG. 122 **UTOU Subsystem: UFC:** Sample UFC-Enabled Paper Page

12201

barcode 12202

UFC-Enabled

General Purpose Purchase Agreement Form GPPA-1

1. The terms of this Agreement appear in the Antecedent Document, which appears at the the following URL: http://www.uetcompany.com/ufc/gppa-1.htm and in U.S. Copyright Reg#XXXX. Additional provisions of this Agreement are specified in Section 2, "Identification, Localization and Opt-Out Provisions," below. The Antecedent Document is incorporated by reference in its entirety into the present Agreement, and its terms are fully in force and binding upon the parties EXCEPT THAT in the case of a discrepancy between the Antecedent Document and the terms in Section 2 below, the terms of Section 2 below shall control.

2. IDENTIFICATION, LOCALIZATION, AND OPT-OUT PROVISIONS.

2.1 IDENTIFICATION: Seller means _____.
2.2 IDENTIFICATION: Buyer means _____.
2.3 LOCALIZATION: Interpretation and all disputes arising out of this Agreement shall be governed by the laws of the state of_____.
2.4 OPT-OUT and/or ADDITIONAL PROVISIONS:

_____
_____
_____
_____
_____
_____
_____

[etc.]

BUYER

_____ _____
date
Printed Name
_____

SELLER

_____ _____
date
Printed Name
_____

FIG. 123

UTOU Subsystem:
UFC: Benefits

BENEFITS OF UFC USAGE:
1. Reduction in usage and storage of paper and ink
2. Reduction in ease of making and filing back-up hard copies or electronic copies, which translates to lower likelihood of loss of documents
3. Easier to transmit via fax, email, etc.
4. Uniform terms produce greater reliability in case law
5. Uniform terms become more familiar to legal professionals, reducing attorney time required for review
6. Multiple redundant means of recovering referenced terms, including: (i) web-accessible version; (ii) copyright office records; (iii) barcode

FIG. 124

UArb Subsystem:
Method Overview

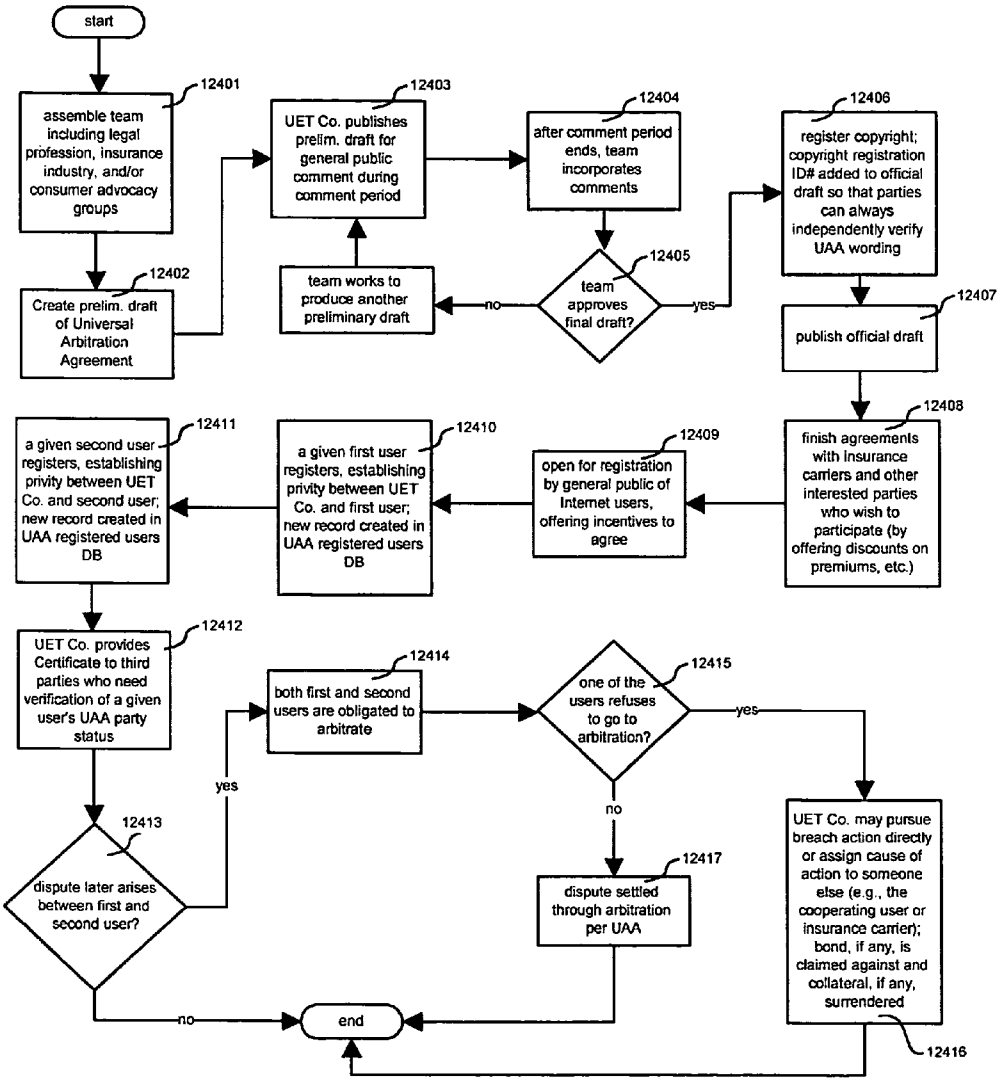


FIG. 125

UArb Subsystem:
PartyRelationships

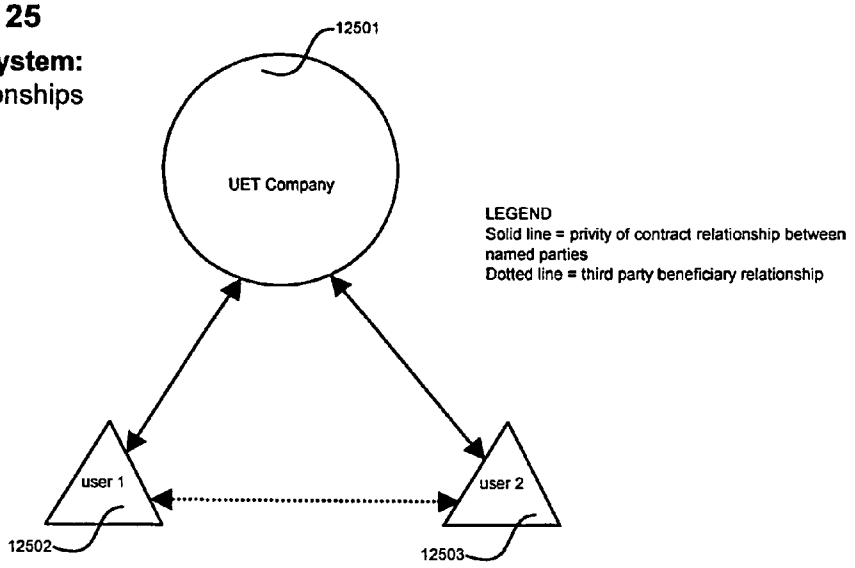


FIG. 126

UArb Subsystem:
PartyRelationships

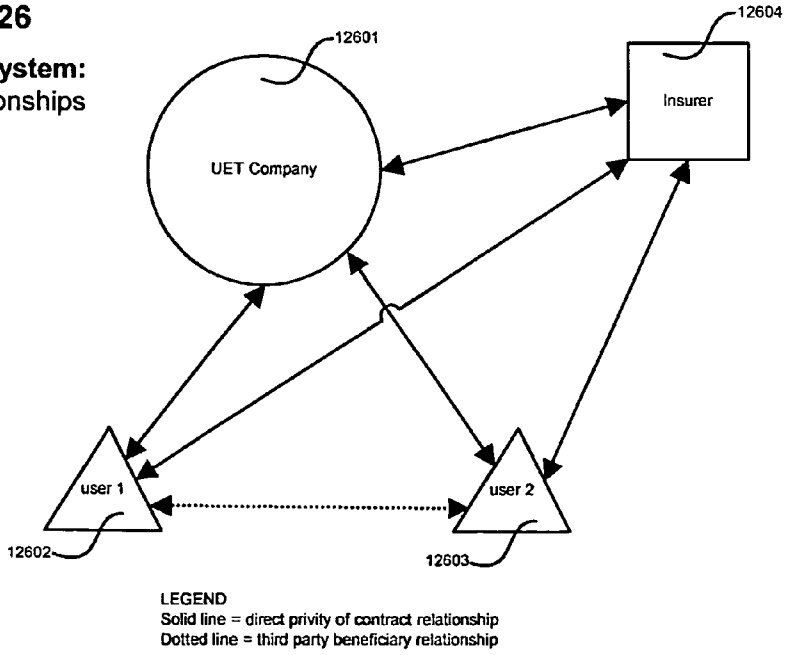


FIG. 127

UArb Subsystem: Benefits

INCENTIVES FOR USER PARTICIPATION

1. Discounted insurance premiums (if offered)
2. Lower risk of frivolous or extortionist litigation
3. Lower costs in the event of dispute
4. Avoidance of court backlog: quicker resolution

FIG. 128

UArb Subsystem: Excerpt from Example Web Page Hosted by UET Co. Displaying Universal Arbitration Agreement

UNIVERSAL ARBITRATION AGREEMENT
VERSION 1.0

1. This web page comprises the Official Text of the **Universal Arbitration Agreement Version 1.0 (UAA-1.0)**. The exact text hereof is also recorded in Copyright #XXX-XXX.

2. By signifying your agreement to this UAA, you, the registering user, are establishing a contractual relationship with UET Company. In so doing you are entitled to certain benefits and obliged to perform certain duties as follows. Being a party to the UAA may also make you eligible for special discounts offered by insurance companies and/or other third parties.

3. THIRD PARTY BENEFICIARY. The primary purpose of this UAA is to establish a third party beneficiary relationship between you and any other users who also agree to the UAA. You and UET Company, the parties to this Agreement, have a direct relationship -- "Privity of Contract." But this agreement also obligates you to perform a specific duty with respect to third parties: when a third party has entered into an identical contract with UET Company, i.e., when said third party has agreed to the UAA, you promise to submit to binding arbitration any disputes of the type specified below and arising between you and said third party. Said third party will, by virtue of entering into an identical UAA with UET Company, also owe this same duty to you.....

[etc.]

FIG. 129 **UArb Subsystem:** Example Certificate of User Participation in UArb System

UNIVERSAL ARBITRATION AGREEMENT
VERSION 1.0

Certificate of Party Status

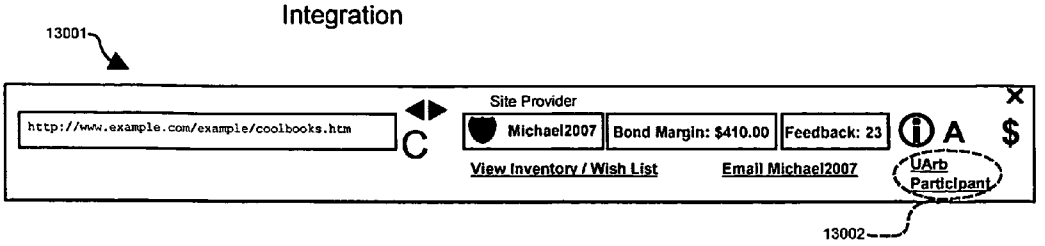
1. TO WHOM IT MAY CONCERN: This document certifies that John Q. Party has entered into a binding agreement with UET Company, the terms of which are essentially identical to the terms known as the Universal Arbitration Agreement Version 1.0., which can be found at the following URL _____ and in U.S. Copyright Reg. # _____ and, in encoded form, in the barcode above.

[etc.]

Signed

_____ _____
Bill Q. Uet date
CEO
UET Co.

FIG. 130 **UArb-UTU Subsystems:** Example UTU-UArb Integration



SOCIAL NEWS GATHERING, PRIORITIZING, TAGGING, SEARCHING AND SYNDICATION

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application is a divisional application of U.S. patent application Ser. No. 10/888,781, filed Jul. 9, 2004 now U.S. Pat. No. 7,599,938, which claimed the benefit of priority filing of U.S. provisional patent application 60/486,630, filed Jul. 11, 2003. The benefit of priority filing of said provisional patent application and said parent application are claimed, and the specifications thereof are hereby incorporated by reference in their entirety into the present disclosure.

A portion of the disclosure of this patent document contains material which is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent documents or patent disclosure, as it appears in the patent trademark office patent file or records, but otherwise reserves all rights whatsoever.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH AND DEVELOPMENT

None.

REFERENCE TO SEQUENCE LISTING, A TABLE, OR A COMPUTER PROGRAM LISTING APPENDIX

None.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The invention relates to electronic informational and commercial transactions and interactions, specifically, to facilitating such transactions and interactions through the use of computers and the Internet.

2. Description of Related Art

A. Related Art: The Need for a Universal Electronic Transaction System

Two of the most frequently used Internet and World Wide Web services are (I) electronic commerce services, particularly, the buying and selling of goods and services wherein a portion of the transaction is conducted via the World Wide Web, and (II) information search services, particularly, providing a customized list of websites and Web-accessible documents in response to an inquiry submitted by a user to a Web search engine, whereby an index of Web pages is searched. While effective technology for each of the aforementioned services exists, its usefulness is severely limited by a number of technical factors as follows.

B. Related Art: Internet Auction Systems

Under the related art, dynamically priced e-commerce transactions are offered to Web users through the use of dynamically generated web pages that incorporate data drawn from the auctioneer's databases. Current providers of such services include eBay, Amazon, and Yahoo. This approach is not ideal in that such "deep Web" data cannot be readily indexed and catalogued by external search engine providers; thus, searching Internet auctions for a particular item requires that a user visit each individual auction site and search through that given website's search interface or have an intermediary do so.

Moreover, auction site providers typically frown upon attempts to index, analyze, or otherwise make use of information in the auctioneer's databases for purposes other than bidding, and these website providers may use their control of the information therein to prevent competition by other companies. Thus, obtaining accurate and complete market data pertaining to Internet auctions is more difficult than it would be in a transparent marketplace.

If an Internet user does not wish to list his or her auctions on a major site and pay the fees charged by the given Internet auctioneer, a user can start his or her own auction site. This alternative is not ideal in that it involves a great deal of time and expense and offers a low chance of success: to launch a new Internet auction site, one must purchase (or write), install, run and maintain expensive auction site software on expensive computer hardware, incur all the other risks and expenses associated with starting a business, and then come up with a way to draw bidders and sellers away from the existing major companies' sites. Very few people are up to the task.

What is needed, therefore, is an Internet auction system and method that allows (I) any person with a web page (II) to host an Internet auction on that web page (III) without requiring this person to purchase any software (IV) while yet allowing the person's auction to be searchable through any Web search engine and (V) also allowing data from all such Internet auctions in the world to be easily and freely gathered, analyzed and disseminated by anyone who wishes to do so.

C. Related Art: Internet Search Systems and Methods

Web search engines under the related art allow users to input terms and operators of their own choosing. Current providers of search engines include Google, MSN, and Ask Jeeves. However, the search function itself is still conducted according to the particular algorithmic approach established by the service provider. Such a "paternalistic" approach presumes that computer engineers or business owners are better equipped to create a search algorithm than are the people doing the searching, e.g., users at large. These systems are not ideal in that such a one-size-fits-all service is unlikely to yield results that are better than—or even equal to—those that could be obtained through the use of individual algorithms that have been uniquely tailored to meet the individual needs of a particular person with a particular search inquiry at a particular point in time.

What is needed, therefore, is a mechanism that allows Internet users to select the search methodology used in a particular search term, to combine the results of a search under one methodology with another search under another methodology, to assign how much weight is allotted to each methodology, to set standards against which each indexed item (e.g., document or record) is measured, to set maximum levels or tolerances for variations from such standards, and to otherwise define the way a search is performed rather than be reliant upon an a priori definition set by someone else.

D. Related Art: Internet Classified Ad Systems

Dynamically priced transaction vehicles (e.g., auctions) are not the only type of Internet classified ad. Numerous websites devoted to a given type of classified ad—personal ads, real estate ads, job listing ads, vehicle ads, and others—have been developed to meet such demand. Current providers of such services include Craigslist, Zip Realty, and Matchmaker.com. Again, however, in order to allow user posting and editing of such classified ads, these sites also rely upon database-driven, dynamic web page generation. Thus, most of the limitations described above in reference to Internet auctions apply to these classified ad systems as well: indexing by third parties is difficult and may cause legal battles with

website providers who believe that user-provided content is their property; compilation and analysis of such data is difficult.

What is needed, therefore, is a new Internet classified ad system and method that allows all classified ads of a given type on the entire World Wide Web to be searchable through a single search engine with field-by-field precision, that allows anyone with a web page to participate in this worldwide classified ad system without requiring any special advertising or database software on the part of the participant, and for all the data in such classified ads to be accessible to anyone with Web access for the purposes of information gathering and analysis.

E. Related Art: Internet Legal Vehicles

Under the related art, legal relationships between website providers and website users are governed by individual terms of use agreements that vary from website to website such that there are literally millions of different terms of use agreements in effect with respect to the millions of different websites available at the time of this writing. This approach is not ideal in that careful reading of each individual website's terms of use agreement is prohibitively time-consuming for a user of multiple websites, and the duplicative legal work associated with the creation of each individual terms of use agreement is wasteful. Meanwhile, resolution of disputes arising under seemingly infinite varieties of terms of use agreements leads to unpredictability in the case law.

Uniform codes (e.g., Uniform Commercial Code or "UCC") are known and have been effective in reducing interjurisdictional uncertainty. These uniform codes suggest standards for lawmaking bodies, such as state legislatures, to follow so that businesses operating in multiple states do not have to learn multiple legal systems. Unfortunately, the Internet, replete with millions of separately owned and operated private websites, has no such uniformity. Each website is essentially its own little fiefdom.

What is needed, therefore, is a system and method whereby uniformity in terms of use agreements can be advanced so as to allow greater efficiency and reliability for both website providers and website users.

Moreover, numerous contracts that are paper-based under the related art are extremely duplicative as well. Many common agreements, such as purchase or rental agreements, contain large numbers of very similar terms which vary slightly from one agreement to another, which situation again requires excessive legal review by the parties themselves as well as third parties such as consumer advocacy groups and the courts, and again thwarts predictability in the law. Meanwhile, millions of pieces of paper and millions of dollars are unnecessarily spent each year in the creation, documentation, and storage of these terms in contract form.

What is needed, therefore, is a system and method whereby essentially duplicative portions of contracts can be standardized and recorded more efficiently.

Even in situations where the law is well-settled, however, dispute resolution through the courts typically takes anywhere from several months to several years, as backlogs continue to grow. Alternative dispute resolution methods, such as arbitration (e.g., American Arbitration Association), mediation, and religious courts such as the Jewish Beis Din court system, are known and are preferred by many businesses, organizations, and individuals, since protracted legal battles are expensive and time-consuming, and for many litigants the adage "justice delayed is justice denied" holds true. These alternative dispute resolution methods, however, are still only employed in a fraction of cases, since arrangement for such proceedings is done on a case-by-case or contract-by-contract basis. Moreover, many unsophisticated parties have little or no knowledge of the benefits and availability of alternative dispute resolution methods.

What is needed, therefore, is a system and method whereby the benefits of alternative dispute resolution may be made available to and more readily accessed by a larger portion of the population.

F. Related Art: HTML, Order Forms, and Contact Forms

Under the related art, contacting the provider of a website through the website itself relies upon a Web contact submission form (e.g., "<FORM ACTION= . . . ">) or purchase form. This approach is not ideal in that, since each website is designed completely differently from the next, a Web visitor must learn to navigate through the peculiar layout of each individual website in order to find the given site's order form or contact submission form.

Moreover, the Web order form concept itself is less than ideal in that, every time a user begins purchasing from a vendor through its website, the user must register with this vendor, providing credit card information, e-mail account address, and other sensitive data. Each time this data is circulated to a new party, the user's exposure to the risk of identity theft, fraud, and spam increases. Ideally, Internet users would be able to purchase from website providing vendors without having to register separately with each vendor and to fill out a separate purchase order form for each individual vendor website.

What is needed therefore, is a superior communication system and method that allows users to interact with and purchase from all website providers through a single common interface, thus requiring no website navigation, no per-site registration, and no per-purchase order form submission.

Meanwhile, HTML itself is simply a language for defining the structure of a document, such as which part of the document is a title, which part is a paragraph, which part should be emphasized, and so on. HTML is silent about what the document actually says, i.e., HTML does nothing to tell us about the content or subject matter of a given paragraph, sentence, or phrase. Given this reality, under the related art, elaborate content analysis software has been developed, such as that of Applied Semantics, to "read" web pages in an attempt to ascertain the subject matter thereof without human participation. Such an approach is, at best, approximate. Thus, World Wide Web search engines, relying upon highly uncertain approximations, oftentimes return results that are highly variable in terms of relevancy. Ideally, the World Wide Web would be searchable with the field-by-field precision commonly seen in bookkeeping software applications or contact management software, in which programs users can easily search for a particular term, such as a last name, in a particular field, such as a last name field.

What is needed, therefore, is a method of constructing and parsing a web page so that the exact meaning and content thereof can be immediately and reliability ascertained and so that a group of web pages can be searched with field-by-field granularity.

G. Related Art: Internet Search Engine Methodology

Also, under the related art, one commercially successful methodology for searching and ranking the relevancy of web pages is that of citation ranking, e.g., U.S. Pat. No. 6,285,999 to Page. This method ranks pages in part according to the number and nature of other Web pages that link to the given page. This method is not ideal in that it provides no means whatsoever for capturing the difference between a "positive" reference and a "negative" reference. In other words, under

this method, a link from an article that ridicules the linked document counts just as much as a link from an article that praises the same document.

What is needed, therefore, is a ranking methodology based upon the actual opinions of the user community rather than upon hit-or-miss surrogates for these opinions.

H. Related Art: Internet Dictionary, Stylebook and Grammar Book Technology

Dictionaries, literary stylebooks, and grammar books have heretofore been the province of elite editors and academicians at publishing companies and universities. Language, however, evolves faster than such institutions. In order to speed up the pace at which such reference materials are updated, some attempts have been made to create limited-function, on-line dictionaries—such as dictionaries for computer terms—that allow user-submission of definitions, but these attempts are not ideal in that these dictionaries must still be edited by someone so that false or frivolous submissions do not get published. Such attempts, in the absence of a superior approach, would be even more futile in the more subtle areas of language, such as grammar and style.

One approach is that used in Wikipedia, an online "encyclopedia," in which all the content is user-created and user-maintained. While the apparent democracy of such an approach seems attractive at first blush, the actual performance of such an approach is disappointing: a novice in a field can delete the work of an eminent scholar in the same field and replace this work with nonsense. Endless retaliatory deletions, re-writings, and political squabbles ensue. Meanwhile, someone trying to use the Wikipedia as a reference tool does so at his or her own risk, since the content thereof may or may not be accurate at any given time and changes from day to day.

What is needed, therefore, is an effective and efficient means by which a dictionary, stylebook, grammar book or other reference material can be created, maintained, and used as an authoritative reference tool by anyone with Internet access without the need for content-editing institutions.

I. Related Art: Web Browser Toolbar Technology

Software commonly called "toolbars", such as the NetZero, AOL, and Yahoo Companion toolbars, whereby features are included in or added to a Web browser, such as Microsoft Internet Explorer, are known. These toolbars typically feature advertisements or convenient access to a certain function, such as a Web search engine, that the given toolbar provider wishes to offer users.

One noteworthy variation on this theme is a toolbar feature used by Gain.com, which displays advertisements based upon a user's browsing habits, such as the websites he or she visits. This approach to the toolbar is not ideal in that the toolbar essentially exists to generate ad revenue for the toolbar maker at the expense of website providers themselves. In fact, as alleged in a recent lawsuit, this toolbar mechanism may be used to display ads for competitors of the website provider whose website is being browsed. Ideally, instead of working against website providers, the toolbar would actively serve the purposes of both website providers and visitors—without requiring each individual website provider to build and distribute its own toolbar.

What is needed, therefore, is an effective and efficient means through which the toolbar serves to enable easy, direct interaction between the toolbar user and virtually any provider of a website being browsed.

I. Related Art: Additional Technologies

Computers—which term is meant to include for purposes of this document all manner of computer and telecommunication hardware and software, including CPUs, RAM, ROM, disk drives, removable data storage media, ports, cables, routers, switches, interface devices, keyboards, point-and-click devices, wireless transmission/reception hardware, audio and video display monitors, modems, cards, power supplies, networks, networking equipment, operating systems, etc.—are known. Software comprising instructions stored on digital media whereby information is processed and steps are performed is known. Protocols for the storage and retrieval, both locally and remotely, of information using electronic devices are known. A URL (Uniform Resource Locator), a URI (Uniform Resource Identifier), a file name and a file path are known.

Markup languages (e.g., SGML, HTML, XML) and methods for accessing and manipulating markup language documents (e.g., DOM, SAX) are known, as are methods for displaying information in such documents (e.g., Web browsers, CSS, XSLT) and identifying individual vocabularies used therein (e.g., Namespaces). Database management systems (e.g., Oracle, Sybase), database query languages (e.g., SQL) and means of dynamically generating web pages which incorporate material drawn from a database (e.g., ASP, PHP) are also known. Techniques and software for mapping data from one type of database to another are known. Internet bonding and instantaneous electronic payment systems (e.g., U.S. patent application Ser. No. 09/848,639 by Harrison) are known.

Instant messaging services, such as AOL Instant Messenger, whereby a real-time or near real-time data connection is established between an Internet user and the service operator so that real-time delivery of text exchanges between users can be affected, are known.

Public recordation of information such that said information is assigned, indexed, and can be retrieved by a unique alphanumeric identifier, such as copyright registration, is known. Techniques for encoding data on paper for machine retrieval, such as bar codes and high-density bar codes (2D), are known. Means for hosting an image file and updating this image file each time the data in a database field is changed (e.g., Web Page hit counters) are known.

Third-party-beneficiary contracts are known. A "third-party-beneficiary contract" is "a contract between two or more parties, the performance of which is intended to benefit directly a third party ["one not a party to an agreement"], thus giving the third party a right to file suit for breach of contract by either of the original contract parties." Black's Law Dictionary, 6th edition, page 1480 (West publishing Co., St. Paul, Minn., 1990).

BRIEF SUMMARY OF THE INVENTION

Disclosed is a Universal Electronic Transaction (UET) system, method, and device comprising several subsystems and submethods/subprocesses as well as the physical apparatus of a computer network configured to execute certain steps. An entity called the UET Company is assumed to be the implementer of the UET system. Elements include:

The URLIT identifier. A "URLIT" identifier is a result of a process whereby a given URL is registered and access privileges established. The URLIT can be manipulated into multiple forms so as to serve multiple functions. It serves as a security measure to ensure that a registered user to whom a URL is registered has access to the content of the web page at the given URL, and that the party controlling the content of the web page has access to the password-protected registered user account to which the given URL is registered. The URLIT serves as a key code in relating records between databases in a relational database complex. The URLIT

serves as a transaction identifier by which auctions and other transactions can be tracked. The URLIT serves as part of file names that identify image files intended for display in association with the aforementioned web page.

UAML. The URLIT is a crucial part of a markup system called the Universal Advertisement Markup Language or "UAML." The UAML allows an Internet auction, classified ad, or other material for which indexing might be useful, such as poems or songs, to be embedded in any static web page. The resulting "UAML-enabled" web page can be parsed, UAML-tagged data extracted and imported into the fields of a relational database record, and the resulting record searched so that UAML-enabled auctions, ads, and other listings across the entire World Wide Web can be found, ranked, and analyzed with field-by-field precision.

UTU. The URLIT further enables a system and software program called a "Universal Toolbar Utility" (UTU). The UTU appears as a toolbar in a Web browser and serves to establish a data connection (push or pull) between a client computer on which the UTU is being used and the UET Company. A current URL being browsed is transmitted to the UET Company which in turn requests a file so identified. If the web page to which the URL points is properly UAML-enabled and the URL is properly registered, a variety of content can be transmitted for UTU display, including a contact or order form whereby interaction with or purchasing from a website provider directly through the UTU, processed by the UET Company, is made easy.

Userithm Search Engine. A "Userithm Search Engine" (USE) (from "user-defined" and "algorithm") allows users to design their own unique search algorithms. A "search component" is defined by a user's data input. A given methodology for the search component is selected from a menu of different search methodologies. A weight is assigned to the search component for use in combining the results of the search component with another search component. A standard for data within a field is set, along with a tolerance for variation from the standard. Search results are combined according to user-assigned weights, and a resulting rank list is returned to the user, along with a performance indicator for each search component so that the user can immediately discern which search technique is most effective for the particular case.

Lexivote search methodology. A "Lexivote" system provides a mechanism whereby a user submits an opinion regarding which website is most relevant to a word or phrase. The opinion—essentially a vote—is then used in a method of ranking search results.

Lexary. A "Lexary" is an electronic reference tool which provides access to an entry that is created and maintained by a community of users at large. Specifically, the Lexary is an on-line dictionary, thesaurus, style book, and grammar book, wherein users can submit, edit, rate, and challenge definitions of terms, grammar notes (punctuation, syntax, etc.), and style conventions for English or another language.

Uniform Terms of Use. A "Uniform Terms of Use" (UTOU) system provides a mechanism whereby a "terms of use agreement" that governs use of an individual website can be created, reviewed, maintained, and interpreted efficiently and predictably.

Universal Form Contract. A "Universal Form Contract" (UFC) system is an extension of the UTOU system into off-line settings, providing a mechanism whereby a written contract document can be created, executed, stored, and interpreted efficiently and predictably.

Universal Arbitration. A "Universal Arbitration" (UArb) system provides a mechanism whereby a UET user can make alternative dispute resolution arrangements efficiently.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** provides a flowchart of the method by which the Universal Electronic Transaction (UET) technology is created, deployed, and used.

FIG. **2** provides a diagram of the UET system and its component subsystems.

FIG. **3** depicts a diagram of the physical apparatus of the UET technology.

FIG. **4** depicts a flowchart of a method by which the UAML subsystem is created and deployed.

FIG. **5** depicts a flowchart of the process by which users of the UAML subsystem are registered and their accounts created.

FIG. **6**A depicts a flowchart of a process by which UAML advertisements/listings are made available.

FIG. **6**B depicts a flowchart of a URL conflict resolution process.

FIG. **7**A depicts a flowchart of a process by which a URLIT is assigned to a Web address, used in an image location, and otherwise used to enable the UAML system.

FIG. **7**B depicts an example URL and URLIT information associated therewith.

FIG. **8** depicts a flowchart of a process by which UAML-enabled web pages are created.

FIG. **9** depicts an example UAML-enabled web page.

FIG. **10** depicts an example of an HTML submission form whereby information can be submitted to a code generator program so that UAML tags can be automatically generated to describe the submitted information.

FIG. **11** depicts an example of an excerpt from source code of the UAML-enabled web page.

FIG. **12**A depicts a flowchart of a process whereby documents submitted for use within the UAML subsystem are validated.

FIG. **12**B depicts a flowchart of a UAML security check process.

FIG. **13** depicts a chart of sample data that could be described by a particular UAML tag, a "UAML type" tag, so as to identify a particular database.

FIG. **14** depicts a chart of some fields that could be contained in a record within a relational database complex for use in the UET system.

FIG. **15** depicts a diagram of extracting PCDATA within a particular element within the UAML-enabled document and inserting the data into a record in the relational database complex.

FIG. **16** depicts a diagram of some databases and relationships in the relational database complex.

FIG. **17** depicts a diagram of an effect of having content of a listing hosted on two servers, one under control of the UET Company and the other under control of the user.

FIG. **18**A depicts a flowchart of a process by which images hosted by the UET Company and appearing in listings are updated when database information changes.

FIG. **18**B depicts a temporal diagram of an image at a first moment in time and an image at a second moment in time.

FIG. **19**A depicts a flowchart of a process whereby continuing validity of a listing is confirmed.

FIG. **19**B depicts a chart of different scheduling options for executing the process in FIG. **19**A.

FIG. **20** depicts a flowchart of a process for invalidating a listing.

FIG. **21** depicts a flowchart of a process for cutting short an auction.

FIG. **22** depicts a flowchart of a process for delisting a listing.

FIG. **23** depicts a flowchart of an example usage scenario.

FIG. **24** depicts a flowchart of an auction bidding process.

FIG. **25** depicts a flowchart of an auction completion process.

FIG. **26** depicts an excerpt from an example "My Registered URLs" page.

FIG. **27** depicts an excerpt from an example auction review and bid submission page related to an auction listing.

FIG. **28**A is a diagram of a relationship between UAML-enabled listings under control of users and related pages under control of the UET Company, and a relationship between the listing pages and third party companies.

FIG. **28**B is a diagram of an example UAML-enabled web page including a listing and various databases that include a record related to this listing.

FIGS. **28**C, **28**D, and **28**E depict excerpts from web pages displaying data extracted from listings.

FIGS. **29** through **36** depict revenue models for the UAML subsystem.

FIG. **37** depicts an example of the Universal Toolbar Utility in use.

FIG. **38** is a flowchart of steps for using the UTU.

FIG. **39** depicts an example of the Universal Toolbar Utility in use, in expanded form.

FIG. **40**A is a flowchart of a process for creation of an inventory list or wish list for display through the UTU.

FIG. **40**B depicts an excerpt from an example web page hosted by the UET Company displaying lists of a given registered user's inventory lists and wish lists.

FIG. **40**C depicts an excerpt from an example web submission form through which a user can modify a given inventory list.

FIG. **41** is a flowchart of the process whereby a user uses the UTU universal shopping cart feature.

FIG. **42**A is a diagram depicting a one-to-one relationship between a URLIT and a UAML-enabled listing in contrast to a one-to-many relationship between a URLIT-stem and successive iterations of a document at a particular URL when used strictly for UTU purposes.

FIG. **43** is a diagram depicting a web page and databases involved in displaying information associated with the web page through the UTU.

FIG. **44** is a diagram depicting relationships between data in a shopping cart record of a UTU user and inventory lists associated with web pages under the control of other users from whom the UTU user is purchasing.

FIGS. **45** and **46** depict an example of an alternative embodiment of the UTU, configured to facilitate automatic contributions to nonprofit organizations.

FIG. **47** is a flowchart of the process through which the UTU is used to donate to nonprofit organizations.

FIG. **48** is a flowchart of the process through which the UTU is used to benefit environmentally conscious website providers and hosting services.

FIG. **49** depicts an example of the UTU in use displaying a "seal of approval" that indicates that a website provider or hosting service has met standards set by a user that has been found to be qualified to evaluate environmentally conscious business practices.

FIG. **50** is a flowchart of a process for user creation of a submission form or auction that is to be accessible through the UTU.

FIG. **51** depicts an excerpt from an example web submission form used in the creation of a UTU submission form.

FIG. **52** depicts an excerpt from an example web submission form used in the creation of an auction to be displayed through the UTU.

FIG. **53** is a flowchart of a process through which users participate in use an iTicker feature of the UTU.

FIG. **54** depicts an example of a UTU embodiment displaying scrolling iTicker headlines.

FIG. **55** depicts a chart of example UAML tags common to all listings.

FIG. **56** depicts a template for a subject-specific tag names used in the present disclosure.

FIG. **57**A depicts a chart of example subject-specific tags, corresponding to the fields of the UET Company database record in a database, for use in UAML-enabled listings for collectible coins.

FIG. **57**B through FIG. **57**H depict other subject-specific vocabularies.

FIG. **58** is a flowchart of a process through which variable data in dynamically generated web pages can be tagged for use within the UAML system.

FIG. **59**A is a flowchart of a process through which automatic data capture hardware, such as bar-code scanners and RFID readers, can be integrated into the UAML subsystem such that listings throughout the World Wide Web can be searched for a UPC or EPC.

FIG. **59**B is a flowchart of a process through which the UAML subsystem can be used through a telephone.

FIG. **59**C is a flowchart of a process through which a search query can be composed and the UAML subsystem can be used through e-mail.

FIG. **59**D depicts an example e-mail to be sent to the UET Company, where it is parsed and a search performed according to search criteria specified in the e-mail.

FIG. **59**E depicts an example e-mail sent by the UET Company to a user in response to a query such as that depicted in FIG. **59**D.

FIG. **60** is a flowchart of a process through which the Userithm search engine is used.

FIG. **61** depicts a template for web pages for use in submission of search queries under the Userithm search engine subsystem.

FIG. **62** is a flowchart of a process by which search components are defined on-the-fly in real time by a user of the Userithm search engine subsystem.

FIG. **63** is a flowchart of the Userithm search and ranking process.

FIG. **64** is a flowchart of the subcomponents search and ranking process.

FIG. **65** depicts an excerpt from a sample submission form through which a user submits a Userithm search query.

FIG. **66** depicts an excerpt from a sample search submission form with predefined methodology which still allows entry of intercomponent user assigned weights.

FIG. **67** depicts a chart of different search methodologies that can be used within the Userithm search engine system.

FIG. **68**A is a flowchart of the normalization process.

FIG. **68**B depicts an equation whereby an overall score of a document is produced by combining weighted scores of the document under various search components.

FIGS. **69** through **71** are charts of scores of a group of hypothetical web pages.

FIG. **72** depicts a template for display of search results along with performance gauges associated with each result.

FIGS. **73** and **74** depicts excerpts from example results pages including performance gauges.

FIGS. **75** through **86** depict excerpts from alternative example submission forms through which a user may submit a Userithm search query.

FIG. **87** is a flowchart of the process whereby search components are defined in a subject specific database search.

FIG. **88** depicts an example e-mail in which a user submits Userithm search queries via e-mail.

FIG. **89** depicts an example e-mail wherein results of a Userithm search query submitted by e-mail are provided to a user.

FIG. **90** is a flowchart of a process whereby the USE subsystem is accessed via e-mail.

FIG. **91** depicts an excerpt from an example submission form through which a user can submit choices to the UET Company regarding a customized search engine.

FIG. **92** is a flowchart of a process by which a build-your-own-search-engine feature is used.

FIG. **93** depicts an excerpt from an example web page through which word-votes are submitted for use in the Lexivote search system and methodology.

FIG. **94** is a flowchart of a process through which word-votes can be obtained from users of a search engine.

FIG. **95** is a flowchart of an alternative process through which word-votes can be obtained from users.

FIG. **96** depicts a chart of options for requiring users to submit word-votes.

FIG. **97** depicts a sample weighting schedule for weighting word-votes.

FIG. **98**A depicts a flowchart of a Lexivote ranking process.

FIG. **98**B depicts an equation used in the Lexivote ranking process.

FIG. **99** depicts an excerpt from a sample submission form through which a user can modify his or her word-votes.

FIG. **100** depicts an overview of databases and database relationships involved in the Lexivote and Lexary subsystems.

FIG. **101** depicts a flowchart of the process of creation, deployment and use of the Lexary subsystem.

FIG. **102** depicts an excerpt from a sample submission form through which a user can look up a definition in the Lexary.

FIG. **103** depicts an excerpt from a sample document in which approved senses of a given term are displayed.

FIG. **104** depicts an excerpt from a sample submission form through which a user may submit a new sense for consideration for approval by the user community for inclusion in the Lexary.

FIG. **105** depicts an excerpt from a sample document displaying pending proposed senses.

FIG. **106** depicts an excerpt from a sample submission form through which a user may submit a sense challenge.

FIG. **107** is a flowchart depicting a process by which an authority rating of a user is calculated.

FIG. **108** is a flowchart depicting a process by which a given sense is flagged.

FIG. **109** is a flowchart depicting a process through which a choice is edited.

FIG. **110** is a flowchart depicting a process whereby a sense is approved by the user community for inclusion in the Lexary.

FIG. **111** is a flowchart depicting a sense challenge process.

FIG. **112** is an excerpt from a sample submission form through which a user can submit a query to a Lexary-enabled USE system.

FIG. **113** is an excerpt from a sample secondary selections page for use in a Lexary-integrated USE.

FIG. **114**A use a flowchart of a process whereby the Lexary-integrated USE is used.

FIG. **114**B is a flowchart of a process whereby a thesaurus entry is submitted for consideration for approval by the user community for inclusion in the Lexary.

FIG. **114**C depicts an excerpt from a sample document in which approved senses of given term are displayed along with a link to a document displaying thesaurus entries related to the given sense of the term.

FIG. **115** is a flowchart depicting a process whereby the UTOU system is created, deployed, and used.

FIG. **116** depicts an excerpt from an example document wherein a version of a UTOU agreement is displayed.

FIG. **117** depicts an excerpt from an example document wherein a UTOU-conforming local terms of use agreement is displayed.

FIG. **118** is a diagram of a link relationships between the official UTOUA and various other documents.

FIG. **119** is a flowchart depicting a process by which a "Registered Subscriber" model of the UTOU system is integrated with the UAML and UTU systems.

FIG. **120** depicts a sample UTU displaying that a website provider is a subscriber to the UTOU system.

FIG. **121** depicts a process whereby the UFC system is created, deployed, and used.

FIG. **122** depicts an excerpt from a sample UFC-enabled document.

FIG. **123** depicts a chart of benefits of the UFC system.

FIG. **124** is a flowchart depicting a process by which the UArb subsystem is created, deployed, and used.

FIG. **125** is a diagram depicting relationships between the UET Company and two users of the UArb system.

FIG. **126** is a diagram depicting an alternative embodiment of the UArb system that includes an insurance company.

FIG. **127** is a chart of benefits of the UArb system.

FIG. **128** is an excerpt from an example web page that displays terms of a version of a Universal Arbitration Agreement.

FIG. **129** depicts an excerpt from an example certificate certifying that a user is a participant in the UArb system.

FIG. **130** depicts an embodiment of the UTU configured to display that a given website provider is a participant in the UArb system.

DETAILED DESCRIPTION OF THE INVENTION WITH REFERENCE TO THE DRAWINGS

1.1 Preface: The Present Disclosure

As is clear from the following detailed description, the disclosed invention is a subtle and complex one, including both technical innovations and broad syntheses. Every attempt has been made to render the text highly readable, avoiding lengthy restatements of known material. Toward that end, many simple examples and specific details have been provided for the sole purpose of illustration. As will be apparent to anyone of ordinary skill in the art, the disclosed invention lends itself to rich variation and alteration, yet such modification remains within the scope of the invention. Therefore, the following embodiments of the invention do not serve to limit the claimed invention but rather to teach its generality through the use of particulars.

For instance, several new markup language techniques are disclosed below. For the sake of simplicity of explanation, certain tag names are used in depicting embodiments of the invention. However, it should be clear to one of ordinary skill in the art that the disclosed techniques can be used with other

tag and field names being substituted for the particular names used in this description, and that the invention can be implemented so as to conform to one or more sets of standards as established by the World Wide Web Consortium or other standards-making bodies. Since these standards change through time, this disclosure has been drafted to explain the invention itself without limiting the invention to any particular set of standards or currently popular conventions. Where possible, functional and descriptive names have been used so that this document can be most easily understood by the reader and can be translated easily and effectively into other spoken languages.

The inventor wishes to thank Brucene, Shelton, Camille and Kitty-Witty Bang-Bang Harrison; Mildred Munny Harris; Paul Dowell; Colan Pursell; Elisabeth Roberts; Scott Colby Hollifield; Brad Conder; Robert Yarbrough; Todd Reese; Ed Treska; Christina Linhardt; M. Renee Orth; Paul Behrman; Courtney Ross-Tait; and Jason Ilouian.

1.2 Introduction: The Universal Electronic Transaction System

Disclosed is an invention called a "Universal Electronic Transaction" (UET) system, which is to be operated by a UET Company. The UET system comprises computer hardware and software configured to execute certain steps of a disclosed UET method, which method includes both computer-implemented and human-implemented steps.

The UET system makes possible a new way of using the Internet and World Wide Web. Certain processes that were heretofore considered essential to the World Wide Web are rendered largely unnecessary, and certain inefficiencies that were heretofore considered inherent are eliminated.

Each of the four major building blocks of the UET system—namely, (I) the URLIT/UAML/UTU subsystem, (II) the Userithm/Lexivote/Lexary subsystem, (III) the UTOU/UFC subsystem, and (IV) the UArb subsystem—are modular, i.e., each building block can be successfully implemented individually without reference to the other building blocks. However, when combined to form the complete UET system, the resulting whole enjoys multiplicative advantages as the individual modules support, complement, and enhance each other.

1.3 URLIT/UAML/UTU Subsystem Overview

A central feature of the first subsystem is an innovation called a "URLIT" (a term derived from "URL" and "iteration"). The URLIT is a tool used by the UET Company and its customers ("users") to establish identity, security, and communication. Typically, a user requests a URLIT for use with respect to a specified URL, and this URLIT is embedded in a web page at the given URL. The URLIT, combined with the system within which it works, fundamentally alters the ways in which the World Wide Web can be used.

In order to be effective, the URLIT is described in markup language tags embedded in a web document. These tags are part of a disclosed "Universal Advertisement Markup Language" (UAML).

The UET Company parses the user's web page, and if this page meets certain requirements, it is accepted as a "listing." The listing can be virtually any type of advertisement—a personal ad, real estate ad, used car ad, want ad—and can even be an Internet auction listing.

When a listing is accepted, a record is created in the UET Company's relational database complex, and fields of the record are populated with UAML-tagged data in the user's web page.

Once the record has been created and populated, the user's listing can be easily found by other users. Other users can visit the UET Company website and perform a search of the UET Company's databases, which includes the record associated with the given user's web page. Since the record contains individual fields corresponding to individual UAML nodes in the user's web page, the record contains much more specific information about the given user's web page than could be extracted from an HTML page that was not UAML-enabled. Thus, a search through the UET Company site is much more precise than a search through a conventional Web search engine.

One special type of listing deserves particular attention: the Internet auction. A UAML-enabled Internet auction listing displays real-time information, such as the current high bid, even though the web page itself is static. Display of this dynamically updated information is made possible by reference to image files hosted by the UET Company which are specific to the given listing and are overwritten each time the variables they represent change.

The URLIT also serves a crucial role in a disclosed "Universal Toolbar Utility" (UTU). The UTU is part of or works in conjunction with a Web browser such that, when a user is browsing a properly URLIT-enabled web page, the UTU serves as a communication conduit whereby the browsing user can view the web page provider's inventory and wish list, can purchase from the website provider, or can submit information to the website provider via a submission form—all through the toolbar known as the UTU. In this way, the UTU renders Web submission forms and Web purchase forms largely obsolete. It also makes possible a "universal shopping cart" such that purchases from many different websites can all be added to a single shopping cart, making time-consuming registration with each different website provider unnecessary and navigation to the website's purchase form or contact form unnecessary.

1.4 Userithm Search Engine/Lexivote/Lexary Subsystem Overview

The second subsystem provides users the power to define their own search algorithms. To achieve this effect, data input fields are grouped into clusters called "search components." In a basic embodiment, three distinct pieces of data are input by a user for each search component: (I) the term or terms to be searched, (II) a search methodology selection, and (III) a weight. Additional fields may also be included in a search component as discussed below.

When a user defines two or more search components, a separate search of the UET Company databases is performed for each component, and results of each search are scored according to the given search methodology. Then, the multiple results lists are combined into a single list according to the weights assigned to each component by the user, i.e., the results of a search under a higher weighted component have a greater effect on the final list ranking than do the results of a search under a component that has been assigned a lower weight by the user.

The Userithm search engine may also include additional fields for user input of data. For instance, users may set their own standards for a particular variable. This technique is most useful for Userithm search engine embodiments that are geared for a particular subject matter, such as real estate. For instance, in a Userithm search engine devoted to real estate, a user may assign a value of "3" to set the standard for the number of bedrooms. Units with three bedrooms score the maximum under this criterion, while units with two bedrooms

or four bedrooms score lower, while units with one bedroom or five bedroom score even lower.

Users may also set their own tolerance levels for variation from standards. Thus, the user may set, in the above example, a tolerance of plus or minus one bedroom, such that units with two, three, or four bedrooms are not filtered out of search results, but units with one bedroom or five bedrooms are.

Userithm search engines devoted to specific subject matter, such as stocks, mutual funds, vehicles, real estate, personal ads, etc., may also include intracomponent weighting fields in addition to intercomponent weighting fields.

While the Userithm system has been designed to accommodate multiple pre-existing search methodologies—as well as any methodologies developed after the time of this writing—a particular novel search methodology, called a "Lexivote" method and system, is also disclosed. The Lexivote system provides a mechanism through which users can submit a word or phrase along with a website address that the user believes is a valuable resource pertaining to that word or phrase. Then, when another user submits a search query including that word or phrase, search results are scored according to such user preference submissions or "votes" such that websites receiving more votes with respect to a particular word or term are ranked higher than websites receiving fewer votes or no votes with respect to the searched word or phrase.

To take more advantage of the Lexivote system, the UET Company may also use a disclosed method and system called a "Lexary". The Lexary is an online reference tool—specifically, a combined dictionary, thesaurus, stylebook, and grammar book—in which entries and senses are submitted, maintained, and evaluated by the user community per disclosed processes.

1.5 Uniform Terms of Use/Universal Form Contract Subsystem Overview

The third subsystem streamlines UET participation while also establishing a foundation for beneficial developments in Internet law. It should be noted, however, that it is beyond the power and scope of this document and this technology to alter statutory or case law in any jurisdiction. Thus, deployment of technologies disclosed herein does not guarantee any particular judicial interpretation.

Under a disclosed "Uniform Terms of Use" system, the UET Company hosts a web page that comprises a number of generic terms that have been established collaboratively with the legal community and the user community. A website provider can, in its own terms of use agreement, "subscribe" to the UTOU version displayed in that web page, thereby incorporating by reference the terms thereof. Having done so, the website provider needs only to articulate a handful of terms that are unique to its specific website. Visitors to the subscribing website, once they have reviewed the UTOU version referenced, need only review the site-specific terms of use. Over time, numerous beneficial effects accrue to the website provider and website user communities: legal fees are saved, time is saved, and the law governing Internet usage develops in a more cohesive, predictable fashion.

One extension of the UTOU system is a disclosed "Universal Form Contract" method and system. Under the UFC system, paper contracts are written to incorporate by reference uniform terms that are hosted online by the UET Company, again creating savings in terms of legal expense, paper usage and storage, and efficient development of case law.

1.6 Universal Arbitration Subsystem Overview

The fourth subsystem streamlines UET participation by offering users broad and convenient access to the benefits of alternative dispute resolution. Users agree with the UET Company to submit disputes to alternative dispute resolution when these disputes arise with other users who have also so agreed. External parties, such as insurance companies, can also participate in the system by offering special incentives to users who participate and thereby diminish the insurance companies' exposure to litigation costs.

1.7 Subsystem Interaction

When the four subsystems are deployed together, numerous beneficial synergies arise: For instance, listings created under the UAML subsystem can be searched under the Userithm search engine subsystem; Web pages comprising these UAML-enabled listings can be provided by users who participate in the UTOU and UArb subsystems such that disputes arising out of UET usage can be handled reliably and efficiently.

1.8 General Introductory Drawings

The present invention may be more fully explained through reference to the drawings.

FIG. **1** provides an overview of the current invention construed as a method. Specifically, the present document discloses a four-step process: creation and deployment of the Universal Advertisement Markup Language (UAML) subsystem **101**, including major parts such as the URLIT mechanism and the Universal Toolbar Utility (UTU); creation and deployment of the Userithm Search Engine (below) **102**, including the Lexivote search methodology subsystem and the Lexary subsystem; creation and deployment of the Uniform Terms of Use (UTOU) and Universal Form Contract (UFC) subsystems **103**; and creation and deployment of the Universal Arbitration (UArb) subsystem **104**. Each of these steps is described in greater detail below.

FIG. **2** depicts an overview of the current invention construed as a system, wherein interaction between subsystems serves to produce a greater whole.

FIG. **3** depicts an overview of the current invention construed as an apparatus.

2.1 Detailed Description of URLIT and UAML

FIG. **4** depicts the steps necessary for creation and deployment of the UAML subsystem. As will be clear to anyone of ordinary skill in the art, the depicted steps can be performed in an order that differs from that depicted. URLIT software for processing URL submissions and assigning URLITs is developed **401** so as to execute steps depicted in FIG. **7**A and exemplified in FIG. **7**B. UAML vocabularies and standards for well-formed UAML and valid UAML documents of different types ("UAML listing document type definitions" or "LTDs") are established **402**; example vocabularies appear in FIGS. **55** through **57**H. A complex of relational databases needed to manage information used in the UET system is created **403**; major databases and relationships are depicted in FIG. **16**. Next, a validating UAML parser and related software for mapping data extracted from UAML-enabled documents to appropriate fields in records in the UET Company's relational databases as exemplified in FIG. **15** are created **404**.

Although it is not necessary for the UTU to be included in the UAML subsystem, the benefits of this feature are significant and desirable. If the UET Company chooses to include the UTU **407**, then software for performing functions such as those depicted in FIGS. **37** through **54** is developed **406**. An electronic payment and bonding system such as that disclosed

in U.S. patent application Ser. No. 09/848,639 by Harrison (hereinafter, "Harrison bonded payment system") is developed or integrated with the remainder of the UET system **405**.

Next, internal and external interfaces for UET Company staff and the general public of users respectively are created **408**, including integration with, inter alia, the Userithm Search Engine and the EQML techniques discussed below. Thereafter, the UAML subsystem is made available to the public, and standards for the use of UAML and participation in the UET system in general are disseminated **409**. Finally, the UAML subsystem is continually improved through experience and suggestion **410**.

Usage of the UET system by the public begins with a user registration and account creation process depicted in FIG. **5**. Visiting the UET Company website **501**, the user submits required information **502**, including first and last name, address, e-mail address, password, and other contact or identification information, and, presuming the submission is complete, a new record is created in the registered users database to establish the new user's account **503**. If the user wishes to buy and/or sell through the UET system **504**, he or she may also be required to submit financial information, such as credit card numbers, Social Security numbers, bank account information, electronic funds transfer information, and credit references, and, for larger transaction volumes, purchase a bond through a mechanism such as the Harrison bonded payment system **505**.

A process for listing an ad (e.g., an Internet auction, job listing, real estate listing, registered UTOU listing, or other listing) through the UET system is depicted in FIG. **6**A. A user logs into his or her account with the UET Company **601**. If the listing is to appear at a URL that has not previously been registered to the user's UET account **602**, the user submits the exact URL of the page where the listing is to appear **603**. This URL is compared to all URLs currently registered in the UET system **604**, and if a conflicting registration exists **605**, a URL conflict resolution process is followed **606** as depicted in FIG. **6**B. If the URL submitted is not currently registered to someone else **605**, the submitted URL is added to the user's account as a registered URL **607**.

Next, a unique alphanumeric character string called a "URLIT-stem" is assigned to the newly registered Web address **608**. The URLIT-stem may be randomly generated or can be the product of a predetermined URL-conversion algorithm, but no two URLIT-stems should be identical to each other.

When the user is ready to use the registered URL for a listing, the user requests a URLIT for use in the new listing **609**. The URLIT is produced by adding a serial number to the URLIT-stem **617**, and the URLIT is provided to the user **617**. The serial number added to the URLIT-stem to produce a URLIT must be unique with respect to that URLIT-stem but need not be unique with respect to other URLIT-stems. Thus, the first serial number to be applied to the URLIT-stem can simply be a "1". The second time a URLIT is requested for the same URLIT-stem, the serial number applied to the URLIT-stem can be simply "2".

Equipped with the new and unique URLIT, the user creates a UAML-enabled Web page (an HTML document) in which the URLIT is included per UAML standards **618**. The user then uploads this page to his or her website **619**. The user then logs into his or her UET Company account and submits the listing for activation **620**. An initial validation process, depicted in FIG. **12**A, is followed to determine whether the listing is accepted for inclusion in the UET system **621**. If accepted **610**, a new record is created in a Central Listings Database **613**, this record including fields such as those depicted in FIG. **14**. The UAML parser software then extracts the UAML-tagged data and maps this data to corresponding fields in the Central Listings Database and a subject-specific database that corresponds to the particular type of listing **614**, if any, specified in the listing. The subject-specific database and the LTD applicable to the listing are identified in a "UAML type" element, for which example data appears in FIG. **13**. Data in UAML elements are extracted and entered into the corresponding fields in the UET Company database as exemplified in FIG. **15**.

An identical copy of the page in which the new listing appears is stored in the snapshots database **615** for use in a later comparison, such as a comparison used in a process for confirming continued validity of the listing, depicted in FIG. **19**A.

Since the listing appears on the user's own website, the user is free to promote the web page and listing by whatever means he or she deems appropriate, including submission of the given URL to search engines not affiliated with the UET Company **616**. In this way, the easy capturing of a static web page is combined with the power of field-by-field searching and the database-driven flexibility of dynamically generated content as described below.

FIG. **6**B depicts the steps of the URL conflict resolution process. First, the user who has submitted a URL already registered to another user is notified of the conflict **631**. If the submitting user indicates that he or she wishes to contest the prior registration **632**, the prior registrant is notified of the contest **633**. Both parties may then submit evidence of their ownership rights in the URL **634** to the UET Company. The UET Company then renders its decision **635** based on the evidence submitted. If the loser accepts **636** the decision of the UET Company, the conflict has been resolved. If not, the UET Company refers the opposing parties to resolve the dispute by other means **637**. Such disputes can often be resolved by simply testing access: a person who is unable to access a given URL—by uploading a URLIT-enabled web page, for instance—is not likely to be the rightful owner thereof, especially if the opposing user does have such access. However, it is possible that two conflicting parties could have access to the same URL, a situation which renders the "access test" unhelpful.

The URLIT formation and usage process is separately depicted in FIG. **7**A. First, after the user has submitted the URL of the document in which a listing is to appear, a unique identifier is assigned to this location **711**. This unique identifier is the URLIT-stem. When the user wishes to activate a listing at the URL, he or she requests a full URLIT for use in the listing; this full URLIT is created by adding a serial number to the given URLIT-stem **712**. The user then embeds the URLIT in UAML tags per UAML standards so that his or her listing can be validated and made active **713**. The URLIT also serves as a portion of the filename for any image files required for a valid document of the chosen type of listing **713**. For instance, typically five image files are required for an auction listing; the names of these five image files can simply be the URLIT plus a letter (e.g., a, b, c, d, and e). The URL of each image is used in the web page that includes the listing so that when this web page is called, the image is also served **714**. When the user decides to remove the listing and put a new listing up at the same Web address, he or she requests a new URLIT, which is created by replacing the prior serial number with the next incremental serial number **715**.

FIG. **7**B illustrates the process in FIG. **7**A through example. Here, an example URL has been submitted by a user **701**. A unique identifier, the URLIT-stem, is then assigned to this URL **702**. When the user requests a URLIT for use in a

listing, a serial number is added to the URLIT-stem to produce a complete URLIT **703**. This URLIT is then, in some cases, used in the name of a unique, dynamically updated image file that resides on the UET Company's servers **704** such that the user has no control over the content of this image. In such cases, when the user creates the web page in which his or her listing is to appear, he or she includes an HTML image reference to this file **705** so that it can serve as a dynamic indicator of the current high bid, number of bids, or other variable content as described in more detail below in FIGS. **18**A and **18**B. When the user subsequently decides to reuse the given URL for publishing a different listing, he or she requests a new URLIT, which is provided **706** by replacing the serial number of the previous URLIT with the next incremental serial number. The new URLIT serves to uniquely identify the new listing.

Creation of a UAML-enabled web page can be handled in many ways, as depicted in FIG. **8**. If a user wishes to tag data by hand **801**, he or she may do so **808**. Otherwise, the user may visit the UET Company website **802** where he or she may choose **803** between downloading a UAML editor for stand-alone use on a local computer **805**, such as a laptop or desktop, or simply entering all data to be included in his or her listing into a form on the UET Company site and submitting it **804**. An example **1001** of such a submission form appears in FIG. **10**. This Web-accessible UAML generator returns a UAML-enabled web page to the user **807** by whatever means is preferred, either providing the marked up text on the Web or via e-mail. When properly submitted, UET Company software adds HTML and UAML tags to the user-submitted information so as to produce a document such as that which appears in FIG. **11**. The stand-alone UAML editor serves as a typical HTML editor with the added functionality of generating UAML tags so as to produce a UAML-enabled web page **806**. It may also include an automatic means of requesting URLITs, validating UAML documents, etc.

FIG. **9** depicts the end result of the process in FIG. **8**: a basic UAML-enabled web page as displayed in a typical browser, such as Netscape or Internet Explorer. A link **901** to the UET Company through which the UET system is made possible is provided, as well as a link **902** to the UET Company web page that corresponds to the user's listing, e.g., FIG. **27** (a listing that is not an auction will be represented on the UET site by a page that is similar to that depicted in FIG. **27** in that it displays information drawn from the UET Company database records pertaining to the given listing except that no data entry fields through which a bid can be submitted appear in the page, being unnecessary to a non-auction listing). The listing user, identified by a registered user ID **908**, has specified that payment will be processed through the UET Company **903**. A link to the web page on the UET Company site through which a bidder can place a bid is also provided; such a web page is depicted in FIG. **27**. Five URLIT enabled images—time remaining **910**, sellers feedback rating and bond margin gauge **909**, current high bidder **907**, current high bid **904**, and number of bids **905**—also appear in the listing document, along with an item description and other information. An excerpt from the source code of the web page depicted in FIG. **9** appears in FIG. **11**; such a document **1101**, as is plain, includes both HTML tags and UAML tags. The disclosed UAML system takes advantage of the standard Web browser practice of ignoring unrecognized tags, so that the UAML functionality can be added to a web page without the appearance of the page being affected. The user ID of the seller **908** appears next to the feedback rating image **909** and link **906** to a bid page **1001** appears in the listing page **900**.

Note that the UAML tags describe only parts of the data, namely, that which is to be extracted for replication in the UET Company databases. Thus, much of the data in the document is "invisible" from a UAML perspective, just as the UAML tags themselves are ignored by a Web browser when displaying this page as shown in FIG. **9**. By design, however, the data that is described within UAML tags also appears in some form in the web page as displayed by browser. UAML-tagged text is text that is also displayed as text in the browser, and the UAML-tagged image files are displayed as images in the Web browser. In other words, not all data that is relevant from an HTML perspective is relevant from a UAML perspective, but most if not all data that is relevant from a UAML perspective is also relevant from an HTML perspective in this document. Such is the preferred relationship between UAML data and HTML data; preferably, UAML tags should not include attributes, for instance. Data to be captured by a UAML parser should be visible through the Web browser so as to minimize the likelihood of a discrepancy between crucial information seen by a website visitor and that "seen" by a UAML parser. Thus, for instance, a validating UAML parser may be configured to ignore any UAML tags appearing in HTML "comment" tags, since the data within such tags may be ignored by a Web browser in displaying the document.

Since the web page **900** is hosted on the user's website—either on a computer owned and operated by the user or one which belongs to the website hosting company from which the user rents Web space—and therefore under control of the user, the user can modify the appearance of the web page **900** to suit his or her business branding needs and personal aesthetic preferences so long as the UAML standards for validity of a document are not violated. Such complete user control of the appearance of an auction listing is not possible under the related art systems in which the appearance of auction listings is set by the auctioneer.

While the web page is static, the image files serve as dynamically changing indicators by virtue of the process depicted in FIG. **18**A, producing the effect depicted in FIG. **17**. When a listing is made active **1801**, the relevant fields of the database record in the auction listings database in the UET Company relational database complex are queried to retrieve the current values of the fields **1802**. Specifically, the current high bid field, the current high bidder field, and the other fields which can change during the course of the auction are queried, and the current values of each of these fields is converted to an image file **1803**. Each resulting image is named per the URLIT filename step described above and stored at the appropriate image location **1804** so that when the user's auction listing web page is requested **1805**, these dynamically updated images are returned for display in the requesting browser **1806**.

Whenever a new bid is submitted, data in the relevant fields changes **1808**. When the data in these fields changes, these fields are queried **1802**, and a new image is created displaying the new value of the data in each of the relevant fields **1803**. The old image is overwritten with the new image **1804** using the same file name and location. The process is repeated until the listing is no longer active **1807**. For illustration, FIG. **18**B depicts an image file **1813** (e.g., jpg or gif file) which displays the value of the current high bid field at time 1. After a higher bid has been submitted (time 2), the value of the current high bid field changes and a new image **1814** is created and replaces the old image **1813**.

The net effect is that the features of a dynamically generated web page can be replicated through a static web page. As shown in FIG. **17**, the static web page **1701** is hosted on the user's website host servers **1704**, while each image **1702**

serving as a variable real-time indicator is hosted on the UET Company's servers **1703**. This image file is overwritten with a new image at the same file location each time the information it portrays changes as per the process depicted in FIG. **18**A. Thus, each time the static web page is requested, the latest value represented by the image is presented to the user. The user cannot control the content of the image or delete the image **1702**, since it is hosted on the UET Company's servers **1703**. Also, while the information appears in an image file **1702** in the web page itself **1701**, the underlying data is still stored as a value by the UET Company, a more searchable form.

FIG. **12**A depicts the initial validation process used during the basic listing process of FIG. **6**A to determine whether the listing submission is accepted or rejected **621**. Specifically, UET Company software requests the file located at the submitted URL **1201**. If the page is found **1202**, then the document is parsed and compared to the standards for well-formed UAML **1203**, which includes syntactical requirements as well as the requirement that a URLIT be present in the document and tagged as such. If well-formed **1204**, the document is then compared to the LTD for the specified type of listing **1205**. If the document is valid **1206** under the given LTD, the security check process of FIG. **12**B is performed **1207**. If the security check passes **1208**, then the registered user account of the submitting user is compared **1211** to the minimum standards for acceptance of a listing **1212**. For instance, if the submitting user currently has a past due balance owed to the Company or is otherwise delinquent in his or her responsibilities to the UET Company or another registered user, his or her submission will be rejected **1209**. If all facets of the validation process are passed, then the listing is accepted **1210**.

FIG. **12**B depicts the UAML security check process used **1207** in the initial validation process of FIG. **12**A. First, the URLIT appearing in the submitted web page is compared to the active URLITs in the UET Company databases **1221**. If the URLIT in the submitted page is existent and active (e.g., not expired) **1222**, the URLIT is compared to registered URL information in the UET Company databases **1223**. If the web page in which the URLIT is being used appears at the same URL for which the given URLIT was issued **1224**, then the user ID specified as that of the lister in the listing is compared to the user ID associated with the registered user account to which the URL is registered **1225**. If the lister matches **1226**, then the image names and locations in the web page are compared to the image names and locations associated with the given URLIT **1229** if applicable. If any security comparison fails, the security check fails **1227**. If all succeed, the security check passes **1230**.

FIG. **13** depicts a chart of sample data choices which may be appropriate for designation of a given type of listing in the "UAML type" element. Each of these choices typically specifies a different database within the UET Company database complex, a different LTD, and sometimes a different vocabulary that is used by valid documents of the given listing type.

FIG. **14** depicts some of the fields occurring in records of a specific database within the UET Company's relational database complex, the central listings database. These fields include the URLIT, the listing type, the user ID of the lister, etc. UAML-tagged data in a document is extracted by UET Company parsing software and input into the corresponding field in the appropriate database within the UET Company database complex as illustrated in abstract form in FIG. **15**. The URLIT field may be used as the "key" field whereby records of the central listings database are related to records in other databases; the listing user field may serve as the key in other relationships.

FIG. **16** depicts the UET Company relational database complex such that primary databases and important relationships between certain databases are represented. As is plain to one skilled in the art, additional databases may and should be used to supplement those depicted in order to effectively serve the purposes of a given implementation of the disclosed UET system. Moreover, a limited deployment of the current system could be effectively implemented without reference to some of the depicted databases. For instance, the UET Company may not wish to serve user demand for personal ads and would therefore have no needs for a personal ads database.

FIG. **19**A depicts the process by which the continued validity of a listing is confirmed. At predetermined times, such as those suggested in FIG. **19**B, the URL associated with an active listing is requested **1901**. If the page is found **1903**, the page currently appearing at the URL is compared with the document stored in the snapshots database associated with this listing **1905**. If the page cannot be found, is no longer well-formed and valid **1910**, or one or more prohibited alterations have been made **1912**, then the listing invalidation process depicted in FIG. **20** is followed **1911**. Also, if a page is temporarily unavailable and later found but the temporary absence is considered unacceptable for the type of listing (e.g., an auction listing was unavailable during the hour prior to close) **1907**, the listing invalidation process in FIG. **20** is also followed **1911**. If the listing has expired (e.g., the auction has closed) **1909**, then the delisting process depicted in FIG. **22** is followed **1906**. Pages that are not initially found **1903** are requested **1902** again periodically for a predetermined period of time, and if not found **1904**, the remainder of the invalidation process is followed **1911**; pages that have not been altered **1908** need not be re-examined **1910** for well-formedness. If a listing has been found invalid through the process depicted in FIG. **19**A, the lister is notified **2001**; if the item is an auction **2002**, the auction cut short process depicted in FIG. **21** is followed **2003**; if not **2002**, the delisting process depicted in FIG. **22** is followed **2004**.

When an auction that is currently running is found to be invalid, special measures must be taken, since the contractual obligations undertaken by seller and any bidders were premised on a particular closing time, one which will not be reached when the auction is cut short. Thus FIG. **21** presents the process used in cutting short an auction. After the listing invalidation process depicted in FIG. **20** has been followed, bidders are also notified that the auction has been cut short **2101**. All URLIT-enabled image files associated with the listing are overwritten with "auction cut short" notices so that any subsequent viewers can be so informed **2102**. Business rules established by the given UET Company are applied regarding whether the auction can be restarted, etc. **2103**.

All listings, whether delisted by the user's choice or by the UET Company for some reason, eventually go through the delisting process depicted in FIG. **22**. Records pertaining to listings being delisted are marked as inactive so that they are no longer included in the records searched through user submitted search queries **2201**. The lister's experience rating, such as that used in the Harrison bonded payment system, is updated to reflect any events that may have caused the delisting or may otherwise affect the registered user's experience rating **2202**. The listing then enters a period of expiration during which period any image files, such as those used in an auction listing, display information indicating that the listing has closed but also displaying the final values (i.e., the winning bid) so that the parties to the auction can still refer to the

images **2203**. Finally, when the expiration period has ended, the listing is officially expired and the images, if any, are replaced with their final form, which can be whatever the UET Company chooses, such as a UET Company banner ad **2204**. The relevant database records are deleted and archived or otherwise handled as the UET Company wishes **2204**.

FIG. **23** depicts the steps that may occur in a given usage case. For example, considering the lister to be a first user, a second user wishes to search the Web **2301**. The second user chooses **2302** to perform a Web search through the UET Company **2310** so as to search the Company's databases **2309**, or the user may search through a third party website **2303**, which may or may not be configured **2305** to parse UAML. In either case **2306**, **2307**, search results are returned to the second user **2308** who then clicks through to view the lister's web page including the listing **2311** which includes UAML-tagged data, although the UAML will not be visible to a visitor unless he or she examines the actual source text of the given web page. If the second user wishes to verify the authenticity of the listing or find out more about the lister **2313**, the second user clicks the appropriate link appearing in the web page **2316** and thereby visit the UET Company website, specifically, the dynamically generated web page associated with the given listing **2317** and incorporating certain information as stored in the UET Company databases. Thereafter, if he wishes **2314**, the second user interacts **2320** with the lister via the web page, by following the auction bidding process depicted in FIG. **24**, for instance, or via the UTU, e-mail, or other mechanism or process **2320**. The user may also return, if he wishes **2318**, to the listing **2319**. Some actions, such as bidding, may require registration and purchasing of a bond **2321**.

FIG. **24** depicts an auction bidding process for use in the UET system. After having visited the listing page **2401**, a potential bidder clicks through to the UET Company site **2403** where he or she views a dynamically generated web page, such as the example depicted in FIG. **27**, that presents auction information as stored in the UET Company databases. Here the user reviews the auction information, and if he or she wishes to bid, the buyer registers if necessary **2405** and logs into his or her UET Company account **2409**. Presuming that the buyer is in good standing **2408**, the buyer then may submit his or her bid via a bid submission form such as that depicted in FIG. **27**, which depicts an excerpt from the dynamically generated web page that displays content from a database record associated with the listing **2701**; clearly, this web page resembles conventional Internet auction listings, since it, unlike a UAML-enabled static web page, is a dynamically generated page. Upon submission of a bid, the database record pertaining to the given auction listing is updated **2406** and images are replaced **2411** per the process depicted in FIG. **18**A. Bid confirmation notices, outbid notices, etc., and other optional processes are followed **2412**.

When the auction ends, the auction completion process in FIG. **25** is followed **2413**, namely: if there is no winning bidder **2502**, the user is notified **2503** and the delisting process is followed **2506**; if there is a winning bidder **2502**, the parties are notified **2504**, any disputes are processed **2505**, and the delisting process if followed **2506**.

To summarize, the basic information flow for usage of a URLIT includes the steps:

- The first user submits a URL to the UET Company
- The UET Company assigns a URLIT-stem to the URL
- The first user requests a URLIT
- The Company adds a serial number to the URLIT-stem to produce a URLIT
- The UET Company provides the first user the URLIT
- The first user embeds the URLIT using UAML tags in a UAML-enabled HTML document
- The first user uploads the document such that it appears at the URL associated with the URLIT
- The first user notifies the UET Company that the listing is ready
- The UET Company requests the document at the URL
- The UET Company parses, validates, and authenticates the document
- The UET Company inputs data extracted from UAML-tagged elements in the document into corresponding fields of database records
- the UET Company notifies the first user that the listing is active
- A second user performs a search through the UET Company
- Search results are returned to the second user
- The second user requests the document containing the first user's listing
- The document (hosted by the first user's hosting service) is served to the second user, along with any URLIT-enabled images (hosted by the UET Company), as in the case of a UAML auction
- If the second user is using a UTU and the first user has created a wish list, inventory list or other UTU content, this content is made available to the second user through the UTU (see below)
- If the listing is a UAML auction and the second user wishes to bid, the second user requests the UET Company site page associated with the given listing, reviews the information therein, and submits his or her bid
- The URLIT-enabled images are updated to reflect the new high bid, number of bids, etc.
- When the auction closes, the first and second users are notified that the transaction identified by the particular URLIT has been consummated
- If the first and second user are bonded and electronic funds transfer information is correct, payment is wired from the second user's account to the first user's account instantaneously upon the close of the auction
- If a dispute arises, the aggrieved user visits the UET Company site and opens a dispute claim specifying the transaction by URLIT
- If the first user wishes to reuse the URL for another listing, he or she requests a new URLIT for use with the URL and process begins again

Note that this overview is meant to cover the highlights of a URLIT's lifespan. Various peripheral steps are not explicitly mentioned, such as the periodic revalidation of the UAML-enabled web page containing the user's listing, periodically updating the "time remaining" image file, etc. Additional URLIT-related processes and criteria can be established, such as automatic expiration of a URLIT after a predetermined period of time has elapsed.

Management of a user's listings is handled through the "My Registered URLs" page associated with the given user's account as depicted in FIG. **26**. Information may be displayed as shown in columns, including a URL column **2601** where each item is linked to the given URL itself; a URLIT-stem column **2602**; an active URLIT column **2603**, where each item is linked to the record in the given UET Company central listings database associated with the given URLIT; and various columns associated with the UTU described below, including the inventory list column **2604**, which displays which inventory list is assigned to the given URL; the wish list column **2605**; the UTU contact form column **2606**; and the UTU auction column **2607**.

FIG. **28**A depicts a diagram of the relationship between user-hosted UAML-enabled web pages containing listings and corresponding pages dynamically generated by the UET Company in response to browser requests. Depicted are a group of UAML-enabled pages **2803**, each of which contains an active listing. These pages **2803** have been parsed and validated by the UET Company's computers **2802**, and a record has been created in the UET Company's databases for each listing. The UET Company's databases can be searched through the UET Company's search page **2808**.

For each listing **2803** a corresponding dynamically generated page **2801** can be requested through the UET Company site. For instance, suppose that a particular web page **2803***a* is an auction listing, similar to that depicted in FIG. **9**. If a visitor wishes to bid, he or she requests the corresponding page **2801***a* on the UET Company site, which appears similar to the page depicted in FIG. **27**.

Notice that other companies can also collect data from the UAML-enabled pages **2803**, since the markup tags can be parsed by anyone. Thus, for example, Company A may collect and store some data on its computers **2805** from some UAML-enabled pages, while Company B catalogs other pages on its computers **2806**. Each of these companies may in turn publish data pertaining to or links to these pages through its own Company website page **2804**,**2807**. Examples of the types of web pages that could be effectively produced by third parties using information derived from UAML listings appear in FIGS. **28**C through **28**E.

FIG. **28**B presents a more detailed view of information relationships underlying FIG. **28**A. A given user's web page **2803***b* is hosted by a Company C's Web server **2811**. Included in this user's web page **2803***b* are a number of UAML tags **2812** describing the data in the web page (most of the HTML within which these UAML tags are embedded is not shown for the sake of simplicity of this example; see FIG. **11** for fuller context). The UET Company computers **2802** request the web page **2803***b* and parse the UAML data **2812**. Security check is made with reference to the registered URLs database record **2813** pertaining to the URL of the given web page **2803***b* and the given registered users database record **2814** pertaining to the registered user to whom the URL is registered. When the listing is approved, a record is created in the central listings database **2815**, a copy of the web page is stored in the snapshot database **2816**, and a record is created in the subject-matter-specific database **2817** (the coin listing database in the depicted example) and related to the central listings database record **2815** by the URLIT field. When requested, the UET Company computers **2802** serve a dynamically generated web page **2818** that incorporates the data stored in the company databases, e.g., FIG. **27**.

FIG. **28**C depicts an excerpt from a web page created by a third party, not the UET Company, that has parsed the UAML-tagged data out of various listings of a particular type, in this case, poems, that have been published by users through UAML-enabled web pages on their own websites. FIG. **28**D depicts an excerpt from another third-party-published web page, in which data has been extracted and analyzed and then published in statistical form.

Although a third party would not have the full control and security benefits of the URLIT system, it is nonetheless fully possible for a third party to parse UAML-enabled pages, index them, publish its own site and provide its own high-precision search engine. FIG. **28**E depicts an excerpt from a web page through which visitors can submit a query for such a search. Such transparency provides a significant advance over the "proprietary data" model used in the related art.

2.2 Revenue Models for Use with the UAML System

Several different revenue models are possible: FIG. **29** depicts a model in which listings are required to carry banner ads for which advertisers pay the UET Company **2903**. FIG. **30** depicts a model in which users pay a fee for payment processing **3003**. FIG. **31** depicts a model in which users pay a fee to search listings through the UET Company, paying either on a search-by-search basis or on a subscription basis **3102**. FIG. **32** depicts a model in which users pay a fee to list a listing either on a per-listing basis or a subscription basis **3202**. FIG. **33** depicts a model in which data gained about listings and users through the UET system is sold to third parties for research or marketing purposes **3303**. FIG. **34** depicts a model in which revenues are generated through advertising related to the search engine, either through paid advertisements thereon, payments to be included in search results, or other methods **3404**. FIG. **35** depicts a model in which sellers and/or bidders must purchase a bond through the UET Company before being allowed to place listings offering something for sale **3503**. FIG. **36** depicts a model in which access to certain UET services is contingent upon user agreement to participate in opt-in marketing campaigns (e.g., to receive e-mail advertisements), for which advertisers pay the UET Company **3601**.

2.3 The Universal Toolbar Utility (UTU) Subsystem

FIG. **37** depicts a "screenshot" of an embodiment of the Universal Toolbar Utility (UTU). The UTU can be integrated into a Web browser or operated in conjunction with a Web browser. The UTU leverages the URLIT system to provide a large number of services directly through the toolbar that have conventionally been provided only through web pages.

The UTU **3701** depicted in FIG. **37** shows the URL of a web page in the address field **3702** as in a typical Web browser. Additionally, however, the user name of the site provider **3703**, the bond margin gauge **3704** corresponding to the site provider's UET Company account, and the site provider's feedback or credibility rating **3705** also appear. A link **3706** to display the given site provider's inventory list and wish list and a link **3707** to display a contact form through which the site provider can be contacted are also supplied.

In this way, several pieces of information that may or may not be available in the particular web page being browsed at a given time are nonetheless readily available through the toolbar.

FIG. **38** depicts steps whereby the UTU serves its function. A UTU user acquires and installs the UTU **3801**. As in some common forms of toolbar or instant messenger software, the UTU establishes a live data connection to the UET Company computers when the UTU user is online **3802**. The UTU transmits the URL of a web page currently being browsed by the UTU user **3803**. If the given URL is registered in the UET company databases **3804**, the document at the URL is requested, parsed, and checked for continued validity **3805**.

Note that, as described below, a page need not include a listing in order to be valid for UTU purposes.

If the page is valid for UTU purposes **3806**, the additional information such as that depicted in FIG. **37** is transmitted from the UET Company computers to the UTU installed on the UTU user's computer **3807**. The user of the UTU can ignore the additional information in the toolbar and continue Web browsing as usual, or can click on one or more of the

additional information links, so as to expand the toolbar **3809** and view the inventory list, wish list, submission form or other in-toolbar content associated with the given URL **3812**. An example of the expanded UTU appears in FIG. **39**. If the UTU user wishes to interact with the website provider **3811**, he or she follows the appropriate process for contacting, purchasing from, or bidding on the auction of the website provider through the UTU **3810**.

FIG. **39** depicts the UTU in expanded form. As shown, the inventory that the given website provider has associated with the given URL through the inventory/wish list creation process depicted in FIG. **40**A appears, allowing the UTU user to check those items which he or she wishes to buy and add the checked items to the UTU "universal shopping cart" through the process depicted in FIG. **41**. The total value of items currently in the UTU user's cart—items which have been added to his or her cart from other vendors' inventory lists that he or she has viewed earlier in the given browsing session—is also shown, and he or she can click the appropriate link to display the other items in his or her cart.

Also visible is a wish list that the given website provider has associated with the URL in the UET Company's databases. If the UTU user wishes to respond to the website provider's wish list, letting the website provider know that the UTU user has something that the website provider wants, the UTU user simply clicks the "offer your item" link to display the website provider's contact form.

FIG. **40**A depicts a process whereby a given website provider creates inventory and wish lists and associates these lists with registered URLs in the UET company database complex. The website provider logs into his or her account at the UET Company website **4001**. The website provider visits **4003** the "My Inventory and Wish Lists" page **4021**, an example of which is depicted in FIG. **40**B. If the website provider wishes to create an inventory list **4003**, he or she clicks the "create new inventory list" link to create a new record **4004** in the inventory list database and browse the "Create and Modify Inventory List" page **4031**, such as the example depicted in FIG. **40**C. From this page, the website provider submits items to be included in the particular inventory list record **4005**, and/or removes any items that he or she no longer wishes to sell. If the website provider wishes to create additional inventory lists **4006**, the process for creating an inventory list is repeated.

If the website provider wishes to create a wish list **4007**, a similar process is followed: a new record is created **4008** and items that the website provider would like to acquire are added to the wish list **4009**. The process is repeated **4010** as necessary. If the website provider wishes to edit an existing list **4011**, he or she can also do so **4012**.

Once at least one wish list or inventory list has been created, the website provider can choose to assign the list to a URL that has been registered with the Company **4013**. This is done through the "My Registered URLs" page **4014**, where assignments of lists to URLs are made **4015** by clicking on the name of the list currently assigned to the given URL (or "add" if no list is assigned) to visit another submission form (not depicted) through which he or she can choose from a list of available lists.

FIG. **41** depicts a process by which the UTU user uses the universal shopping cart utility function of the UTU. The website provider registers with the UET Company, gets bonded per the Harrison bonded payment system, and provides electronic funds transfer information for a receiving account into which funds collected from buyers will be deposited **4101**. The UTU user registers, gets bonded and provides payment account information, such as a credit card account, bank account, or other account from which funds to pay for purchases made through the UTU are to be drawn **4102**. The website provider creates an inventory list **4103** per the process in FIG. **40**A. The UTU user logs into his or her account through the UTU and uses the UTU **4104** per the process in FIG. **38**. If the UTU user wishes to purchase something in the website provider's inventory **4105**, the UTU user checks the checkbox next to the item or items and clicks the "add to cart" button **4107**. The selected items are then marked as "reserved" in the UET company database record pertaining to the given inventory list. When an item is reserved, it no longer is displayed when the given inventory list is displayed in the UTU but appears in the shopping cart of the UTU user who has reserved it.

If the UTU user wishes **4110**, he or she can visit other websites and add more items to his or her shopping cart **4111** from other vendors unrelated to the aforementioned website provider. Thus, instead of filling out multiple purchase forms and registering with multiple web vendors, the UTU user can buy from any number of vendors through a single interface: the UTU.

When the UTU user is ready to checkout **4112** and confirm the purchases in his or her cart, he or she clicks the "checkout" button **4113**, reviews a list of the items in his or her cart (not depicted), and clicks "confirm purchases". The UTU user's confirmation can be processed directly through the UTU, or, alternately, this last step of the process can be handled through a Web form on the UET Company website. Once the UTU user confirms the purchases, the amount due is charged to the payment account previously provided **4114**. If the payment is not successful **4115**, e.g., a credit card is declined, the UTU user is notified and instructed to contact the Company **4116**. Otherwise, funds are then wired to the website provider's receiving account previously provided **4118**, minus any processing fees charged by the UET Company, etc. If the electronic funds transfer is impossible for some reason **4119**, the website provider's funds are held by the UET Company and the website provider is notified and requested to provide a valid receiving account **4120**. In any case, once funds have been collected from the UTU user, the purchased item is marked "sold" and is no longer visible through the UTU nor available for purchase **4121**. The website provider is then instructed to deliver the item immediately **4122**. If the UTU user does not confirm his or her purchases before ending the UTU session during which they were reserved, these items are removed from reserved status so that other users may purchase them.

If there are problems **4108**, the dispute resolution process is followed **4106**. While in a buyer's cart, items are reserved from a seller's inventory **4109** so that the user can continue browsing **4111** if he wishes **4110**; if he fails to check out **4112**, these items are released **4117**.

FIGS. **42**A and **42**B illustrate the difference between usage of a URLIT for UAML listings and usage of a URLIT-stem for UTU purposes. In the context of UAML listings, the URLIT serves both a security/authentication purpose and a transaction identification purpose. Thus, a given URLIT can only be used for one UAML listing. If a URL is reused for another UAML listing, a new URLIT must be used; usage of a URLIT that has already been used for a previous listing will result in rejection under the validation process depicted in FIG. **12**A.

Meanwhile, however, transactions that take place through the UTU do not rely upon the URLIT as a transaction identifier. In this case, therefore, a one-to-many relationship is possible. Thus, within the context of the UTU system, a URLIT-stem can be reused for multiple iterations of a web

page at the particular URL for which that URLIT-stem was generated and assigned, provided that this URLIT-stem is correctly tagged as such in the UAML embedded in the web page.

FIG. **43** depicts data relationships underlying the UTU system. The website provider's web page **4301** hosted by the website provider's computers **4304** includes embedded UAML tags identifying a URLIT-stem **4302**. The UTU **4303** transmits the URL being browsed by the UTU user to the UET Company's computers **4305**. This URL is compared to the registered URLs in the registered URLs database, and provided that there is a match and that the URLIT-stem in the website provider's web page is the URLIT-stem assigned to the registered URL in the registered URL database record **4306**, the inventory list or wish list from the inventory database or wish list database associated with the given URL is retrieved from the inventory and wish list database record **4307** and transmitted to the UTU **4303**. The UTU user clicks to expand it and thereby view the inventory and/or wish list(s) that the website provider has associated with the URL. The registered URL database **4306** is related to a registered users database record **4308** that corresponds to the user to whom the URL is registered.

FIG. **44** depicts the data relationships between the various inventory lists that various website providers have assigned to registered URLs and the shopping cart that the UTU user uses to purchase from these website providers all through the same shopping cart vehicle hosted by the UET Company. The UTU universal shopping cart feature eliminates the need to register with individual website providers, to go through a different checkout process with each website provider, or otherwise undergo redundant steps. Avoidance of such redundancy not only saves time and makes online shopping easier, but, in reducing the number of separate site registrations and purchase transactions, minimizes the risk of improper usage of users' personal information, such as identity theft.

The UTU user visits a first website and through the UTU views the associated inventory list **4401**, adding an item to his shopping cart **4402** as per the process depicted in FIG. **41**. Then the user visits a second website and adds another item to his shopping cart **4402** from the inventory list **4403** associated with the second site. The user then visits a third website, views the inventory list **4404** associated with the given URL in the UET company database complex, and adds another item to his or her shopping cart **4402**. Since both the inventory lists and shopping cart are hosted on the UET Company's computers **4405**, when it is time to checkout, the UTU user can simply checkout but a single time and purchase thereby multiple items from multiple vendors.

FIG. **45** depicts an alternative embodiment of the UTU. This toolbar, geared toward the promotion and financial support of nonprofit institutions, provides both a "Site Provider Supports" field **4501** and an "I Support" field **4502**. Participation in this mechanism is accomplished on the part of the website provider by way of a process depicted in FIG. **47**. The UTU user, meanwhile, selects the organization that he or she supports directly from the UTU itself, which displays a pop-up menu **4601** for the "I Support" field as depicted in FIG. **46**. The options available in the "I support" field are the names of the organizations that have successfully activated a record in the donees database through the process depicted in FIG. **47**. The UTU user can select his or her preferred donee from the pop-up menu, and a portion of the proceeds from his or her purchases through the UTU goes to whichever donee is the selected donee at the time the given user checks out.

FIG. **47** depicts a process by which a donee database record is created and activated, the website provider designates a donee for UTU sales, and the UTU user designates a donee for UTU purchases. A nonprofit organization logs into its account at the UET Company **4701** and provides **4702** evidence of its nonprofit status, qualification as a 501(c)(3) corporation, etc. If the UET Company staff determines that the nonprofit organization is qualified **4703**, a new record is created in the donees database **4704**, the nonprofit organization is notified, and the nonprofit organization is requested to provide additional information as required in the new record **4705**, such as electronic funds transfer information. If all required information is submitted **4706**, the nonprofit organization's record in the donee database is made active **4707**. If an applicant is not qualified **4703**, notice of failure is sent **4712** to the user.

The website provider logs into his or her UET Company account, and if he or she wishes to have a portion of the proceeds of sales conducted through the UTU donated to a qualified nonprofit, selects a donee from the active donees **4708**. As discussed in reference to FIG. **46**, the UTU user can also select a donee from the active donees **4709**. Thereafter, a portion of proceeds from sales and/or purchases conducted through the UTU are donated to the registered nonprofit user or users designated by the website provider, UTU user, or both **4710**. Business rules established by the UET Company can fix the percentage of the transaction value donated, or the registered user account of a given donor can provide a field wherein a percentage is set by the donor correctly.

Business rules established by the UET Company can also provide that donors are charged for donations or an alternate scheme can be established, such as absorption of some or all of the cost of the donation by the UET Company, or matching of donations by the UET Company or by a third party **4711**. The tax deduction is treated according to applicable law.

FIG. **48** depicts a process whereby a "seal of approval" can be displayed by the UTU when environmentally friendly websites are being viewed. An "eco-user" who wishes to be approved as an "eco-operative" logs into its UET Company account **4801** and applies to be an eco-operative **4802**. This application includes demonstration that the eco-user, such as a nonprofit or governmental agency, is competent to determine whether a website provider adheres to particular environmentally friendly standards. If the UET Company staff determines that the eco-user is qualified **4803**, a new record is created in the eco-operatives database **4804**, and the fields of the record are populated with information pertaining to the eco-user.

Thereafter, a website provider logs into its UET Company account and applies for a seal of approval from the eco-user **4805**. The eco-user then investigates the relevant practices of the website provider or the host of the website provider's website **4806**. If the provider or its website hosting service meets the requirements for the given eco-user's seal of approval, the relevant URL or URLs are added to the given eco-user's approved list **4807**. Then, when a UTU user visits the approved web page(s), the UTU displays the eco-user's seal of approval **4808** as demonstrated in FIG. **49**.

FIG. **49** depicts a UTU embodiment that includes the eco-operative seal of approval feature. As shown, a "Solar-Powered" icon appears in the toolbar, indicating that the given URL is controlled by a website provider or hosted by a website hosting service that has been approved by the eco-user who offers the "Solar-Powered" seal of approval.

As demonstrated above, a wish list or inventory list can be created for display through the UTU when a given URL is being browsed by a UTU user. FIG. **50** depicts a process by which a contact form or auction can alternately be created for display in the UTU. The website provider logs into his or her

account at the UET Company **5001** and visits an "In-toolbar options" page **5002**, where he or she can choose to create an in-toolbar submission form **5003** or in-toolbar auction **5004**. If the website provider chooses to create a submission form, a new record is created in the in-toolbar submission forms database **5005** and the website provider specifies fields to be included in the submission form **5006** through a submission form such as that depicted in the example in FIG. **51**. If the website provider chooses to create an in-toolbar auction **5004**, a new record is created in the in-toolbar auctions database **5007** and the website provider provides information pertaining to the auction **5008** through a Web submission form, depicted in the example in FIG. **52**. Finally, as with wish lists and inventory lists, the website provider then visits the "My Registered URLs" page and designates which URLs will allow display of the auction **5009**. The contact form, however, will display through the UTU any time the "e-mail [user name of website provider]" link is clicked in the UTU. Alternately, this link can be a conventional "mail to" link, of which the e-mail address is that which the website provider designates, or a link to a Web submission form hosted on the UET Company site. If an in-toolbar contact form is used, the submission is processed through the UET Company servers and forwarded to the website providing user at the e-mail address associated with the website provider's registered user account.

FIG. **53** depicts a process by which another optional feature is used. The "iTicker" is a UTU function to which UTU users can subscribe so as to be presented with scrolling headlines that are provided by a chosen source. These headlines can be provided by any approved iTicker provider, and are especially well-suited for distribution of information to members of long-standing group affiliations, such as school alumni, club members, church members, and enthusiasts (sports team fans, etc.).

An iTicker provider logs into his or her account at the UET Company **5301** and applies for iTicker provider status **5302**. This application may require demonstration of affiliation with the particular group to which the proposed iTicker headlines and content will be directed, i.e., if an iTicker provider wishes to provide headlines for alumni of a particular school, the UET Company may require the iTicker provider to demonstrate its official capacity to represent that school. If the iTicker provider is approved for iTicker provider status **5303**, a new record is created in the iTicker provider's database **5304** and the iTicker provider inputs headlines and URLs to be associated with these headlines into the iTicker provider record **5305**, which can be maintained and updated as often as the iTicker provider wishes so as to keep the content fresh. Although not necessary, the UET Company may wish to require that the URL associated with a given headline be the address of a web page that is properly UAML-enabled so as to be a valid "news" UAML listing **5306**.

After the iTicker subscription has been made available **5307**, the UTU user can subscribe to the given iTicker provider's iTicker **5309** such that when the UTU is in use, the iTicker headlines provided by the iTicker provider are displayed in the UTU in scrolling form and can be clicked if the UTU user wishes to view the article associated therewith **5310**. FIG. **54** depicts a UTU embodiment with iTicker function **5401**. If a user wishes to add/edit/delete headlines **5308**, he or she does so **5305**. If a linked documents is not valid **5306**, the user is notified **5311** and may correct **5312** the document.

FIG. **55** depicts a chart of example UAML tags or elements common to virtually all listings, including one element identifying the UAML markup language (or namespace, if XML is to be used to implement the invention); an element declaring the LTD/type of listing; one describing the URLIT; one identifying the UET Co. through which the listing is to be processed (more than one UET Co. may exist), inc. a child element link (in HTML) to the UET Co.; and one describing the lister's user ID. Some elements are to contain only PCDATA; others should contain both prescribed data (e.g., "Seller:") and one or more child elements, including HTML elements to be captured for validation purposes, e.g., to verify that the lister ID links to UET Co. page associated with lister's UET account or that a proper image reference to URLIT-enabled image exists. Such validation of HTML elements (to appear in UAML "phrase" elements) is crucial to insure that listings display in browsers per UET standards. These common elements can only appear once in a valid UAML listing document, and omission or deviation from mandatory content (URLIT, link, etc.) is fatal to listing approval.

FIG. **56** depicts an abstract template of nomenclature used in figures pertaining to subject-specific vocabularies. Specifically, for this disclosure, each tag begins with "UAML" to denote that the tag element pertains to the present invention; a different name may be used in a given implementation. Each tag then names a subject-specific database which, in addition to the central listings database, is to store information extracted from UAML-described elements. For instance, a coin listing involves a record in the central listings database and a record in the coin listings database, the subject-specific database. Finally, each subject-specific tag includes the field name into which data described by that tag is to be entered.

FIG. **57**A depicts a chart of an example subject-specific tag vocabulary for use with collectible coin listings. FIG. **57**B depicts such a vocabulary for car listings. FIG. **57**C depicts such a vocabulary for real estate listings. FIG. **57**D depicts such a vocabulary for job listings. FIG. **57**E depicts such a vocabulary for personal ads. FIG. **57**F depicts such a vocabulary for book listings, which, preferably, rely primarily upon the ISBN of the given book for easy and reliable grouping and indexing, since book names and other identifiers may be often misspelled; notice that the database in these tags is called "ISBN listings" so as to distinguish from "ISBN reviews", a database and listing type for book reviews. FIG. **57**G depicts two separate vocabularies, one for product listings which rely primarily upon the EPC of the given product, another for product listings which rely primarily upon the UPC of the given product for easy and reliable grouping and indexing, since product names and other identifiers may be often misspelled.

FIG. **57**H depicts such a vocabulary for use in a listing for a lending institution. This vocabulary includes a special tag for use with web pages that include dynamically generated, variable content, the tag that includes the "Dyn" letters. Data described by this tag is not stored by the UET Company. Rather, when a search is done on this field, the data is looked up from the listing page itself in real time. In this way, the UAML technology, designed to enhance the functionality and searchability of static web pages, can also be used to search dynamically changing pages more effectively than the related art allows. This approach allows data that changes rapidly, such as interest rates offered by a lender, to be looked up for current values each time such is necessary.

FIG. **58** depicts the process of using UAML in dynamically generated pages. A website provider tags **5801** dynamic data using appropriate tags; thereafter, if a search query involves dynamic data **5802**, the dynamically generated page is requested **5803**, and a search is performed **5804** using the

most recently extracted data. If not **5802**, a search is performed without reference to dynamic lookup data **5805**.

Search results can also be obtained using nontraditional means of submitting search queries. FIG. **59**A depicts the process through which automatic data capture hardware, such as a bar-code scanner or RFID reader, can be used to perform a search of UAML enabled listings throughout the entire World Wide Web. First, the automatic data capture mechanism, coupled to a computer including a computer monitor, is used to scan a product for its RFID tag or bar-code number, a UPC or EPC number **5901**. This information is submitted to the UET Company, and a search is then performed in the appropriate field of the appropriate database **5902** on the given identification number. These results are then returned to the user **5904** in the form of a hypertext document that includes links to listings for the given identified product.

The barcode reader can also be used in an alternative embodiment (not shown) optimized for real estate. A URLIT can be encoded in barcode form, placed on a "For Sale" sign that is installed at a property, and then scanned by an interested party. The listing associated with the URLIT is then looked up for more information on the property.

FIG. **59**B depicts the process through which a telephone can be used to perform a search of UAML-enabled listings throughout the entire World Wide Web. A user calls a telephone number dedicated to this purpose and, when prompted, enters the ISBN number of a book for which he or she wishes to search **5911**. Menu options the UET Company wishes to offer, such as sorting preferences, can also be selected **5911**. A search is then performed in the ISBN listings database and the results are ranked according to the user selected preferences, if any **5912**; default ranking is by price in ascending order. Text-to-speech technology is then used to read the nine top results to the user, each result (book title, price, seller ID) being identified by a digit **5913**. If the user wishes to purchase **5914**, he or she enters the digit corresponding to the results desired. The user then enters his or her user ID and personal identification number, etc., and confirms the purchase **5915**. The sale is processed as other sales, with funds being drawn from the buyer's payment account and funds being wired to the seller's receiving account, the seller being notified by e-mail of the sale, etc. **5916**.

FIG. **59**C depicts the process through which an e-mail can be used to perform a search of UAML-enabled listings throughout the entire World Wide Web. First, the e-mail, using the disclosed markup language called "EQML", is written per the process depicted in step box **5921**. The e-mail is then e-mailed to the UET Company at an e-mail address dedicated to this purpose **5922**. The EQML text in the e-mail is then parsed and a search performed according to the criteria specified in the UAML-enabled e-mail **5923**. The results for each search query defined in the user's e-mail are then e-mailed back to the user **5924**. An example of an EQML-enabled e-mail **5931** appears in FIG. **59**D. Note the structure of an EQML document: the EQML language (or root element, or namespace, where applicable) is specified, and then each separate query is defined in a separate element. Each query element includes child elements such as: an ID number element that identifies one query as opposed to other separate queries in the same document; a database element; an element specifying the field to be searched and the search string; an element specifying the field by which results should be sorted; an element specifying the sort order; and an element specifying the number of results desired. Additional or alternative tags can be used; some elements can be omitted and default values used.

FIG. **59**E depicts an e-mail from the UET Company to the UET user in which the results of the queries submitted by the e-mail depicted in FIG. **59**D are provided to the submitting user.

3.1 Userithm Search Engine (USE) Subsystem

The Userithm search engine (USE) system allows a user to design his or her own search algorithm in real time, on-the-fly. Although the USE system can be used with a wide variety of databases and database content, including databases of articles, court cases, statutory law, patents, dictionary or thesaurus entries, business records, etc., the illustrative case of the World Wide Web is used herein to demonstrate the function and benefits of the USE system. Specifically, the USE system disclosed herein represents a superior technique for locating relevant documents in response to a search query by a user attempting to find information on the World Wide Web.

FIG. **60** depicts an overview of the process through which the user uses the Userithm search engine. The UET Company provides a search page through which clusters of information, called "search components," can be input by the user and transmitted to the UET Company. The user accesses the search function by visiting the search page on the UET Company website **6001**. The user then defines one or more search components per the search component definition process **6002** and submits his query **6003**. A search, including a separate search for each search component as described below, is performed and results are ranked according to the search and ranking process **6004**. Results of the search are provided to the user **6005** along with gauges of the performance of each result under the individual search components **6006**. The user can then view the search results and performance gauges and refine his or her search as necessary. A wide variety of additional steps can also be performed as described below.

FIG. **61** depicts an excerpt from a web page including a Web submission form whereby the user search query can be submitted. Included are three "search components" **6105***a*, **6105***b*, and **6105***c*. Each search component includes a weight field, a search term field, and a search methodology field. For instance, in search component A **6105***a*, a field is provided wherein a user can enter a weight **6102**, a word or group of words to be searched **6103**, and a selection **6104** from radio buttons provided in the depicted search methodology menu.

The process for defining search components through an interface such as the various example submission forms disclosed herein is depicted in FIG. **62**. Provided that a search methodology selection is available **6201**, the user selects the methodology from the given search methodology menu **6202** for the given search component. Provided that usage of a search term is applicable **6203**, the user provides a search term or terms for the given search component **6204**. Provided that intracomponent weight assignments are applicable **6205**, the user provides intracomponent weights for subcomponents of search components **6206**. Provided that intercomponent weights are applicable **6207**, the user sets a weight for the given search component **6208**. If ideal-setting is allowed **6209** as in the search interface depicted in FIG. **80**, the user inputs an ideal **6210** pertaining to the given variable. Provided that the given search component allows user input of tolerances **6211**, the user inputs a tolerance pertaining to the given ideal **6212**. If the user wishes to define more search component **6213**, the process is repeated **6214** for each search component. Once all search components have been defined **6215**, the search is ready for submission.

FIG. **63** depicts an overview of the search and ranking process. If a given search component is "compound"—mean-

ing that it contains subcomponents **6301**, which are individual searches to be performed and then combined to establish the score of a document under the compound component—then the subcomponents search and ranking process is performed first **6302** and for each other compound search component **6303**. If the search contains a simple component **6304**, then a separate search is performed for each simple component **6305** under the algorithm described by the user-input criteria of that search component, i.e., the selected methodology, terms, etc. Each separate search component therefore yields a separate raw score list **6305**. Each individual raw score is then normalized **6306** to a single scale, such as 0 to 100, where 0 represents the lowest performing page and 100 represents the highest performing page under the given search component, thereby producing a normalized score for each document for each search component. Normalization is accomplished through a process depicted in FIG. **68**A. Each normalized score is then multiplied by the user-assigned weight for the given search component **6309**, and the weighted values assigned to each page under each search component are combined to yield a single overall score **6309**. Results are then ranked according to their scores. Normalized scores for a given simple search component are multiplied by the weight assigned to the given component **6307** by the user, and the appropriate steps are repeated for the next simple search component if there is another simple search component **6308**.

FIG. **64** depicts the subcomponents search and ranking process. An individual search is performed according to the specified or default methodology for each subcomponent **6401**, yielding a raw score for each document for that subcomponent. Results for each subcomponent are then normalized **6402**. The normalized results under each subcomponent are multiplied by the weight assigned to the given individual subcomponent **6403**. The process is repeated for each other subcomponent **6404**. The resulting weighted values are combined to form a single overall score for each document **6405**. The overall scores for each document are then normalized again **6406** and then multiplied by the weight assigned to the whole compound component by the user **6407**.

FIG. **65** depicts an example of a primary USE submission page, where "primary" means that the depicted interface provides only the fields necessary for simple search component definition; no compound components appear in this particular search definition interface. In the depicted example, the user has assigned a weight of "50" to the first search component, a weight of "10" to the second search component, and a weight of "10" to the third search component. The user-provided search term of the first search component is the word "guitar." The search methodology selected by the user for this first component is "pay-for-placement," a search methodology under which pages are ranked according to the amount bid by an advertiser, e.g., U.S. Pat. No. 6,269,361 to Davis.

The user has also input the term "guitar" as the search term for the second search component, but has selected the "links to" methodology for this search component. The links to methodology ranks pages according to the number of link citations to the given page, as per the methodology depicted in U.S. Pat. No. 6,285,999 to Page, or a similar interconnectedness-based ranking methodology.

The step of selecting a methodology can be broken out such that a user first selects a methodology and then inputs search terms and weights; FIG. **66** depicts a submission form for use in such an embodiment.

FIG. **67** depicts a chart of example search methodologies that can be offered as options in the search methodology menu available to each search component. This list is not intended to be exhaustive but simply illustrative.

FIG. **68**A depicts the process of normalizing the scores of items being ranked to a single scale (0 to 100 in this case). Normalization is necessary so that scores from separate searches can be combined in a meaningful way.

The score of a page A according to the present invention can be defined, as depicted in FIG. **68**B, as

$$r_1(A)=w_1(r_2(A))+\ldots+w_{n-1}(r_n(A))$$

where $r_1(A)$ is the overall score of page A; $r_2(A), \ldots, r_n(A)$ are the normalized scores of A under each individual search component; and $w_1, \ldots, w_{n-1}$ are the weights individually assigned to each search component by the user.

This formula is applied in the examples depicted in FIGS. **69** through **71**. FIG. **69** provides an example of a normalized score list and a resulting weighted score list of a hypothetical set of ten pages under a hypothetical first search component with a user assigned weight of "50", such as the first search component depicted in FIG. **65**. FIG. **70** depicts an example of a normalized score list and a resulting weighted score list of the hypothetical set of 10 pages under a hypothetical second search component with the user assigned weight of 10, such as the second search component depicted in FIG. **65**. FIG. **71** depicts a final ranking of these ten pages, wherein the weighted value of each page under the first search component is combined with the weighted value of that page under the second search component to produce a final value, the score of the given document. Documents are ranked according to their scores as depicted in the overall rank list in FIG. **71**.

In order to maximize the utility of allowing users to define their own search algorithms, users may also be provided with immediate feedback on the performance of the search components they have designed. FIG. **72** provides a template for such a feedback mechanism. In this abstract search results page, a first column from the left displays the URLs of ranked documents in order of their overall rank. A next column displays document scores under the first search component's search criteria. Another column displays document scores under the second search component's search criteria. Another column displays document scores under the third search component's search criteria, and so on.

FIGS. **73** and **74** depict the search component gauge in an example usage. Referring to FIG. **73**, a URL **7301** of a document is displayed in the first column; the rank of the document under the first search component is displayed in the second column **7302**; and the rank of the document under the second search component is displayed in the third column **7303**. Referring to FIG. **74**, an example results page geared specifically for searching auctions, gauges of the performance of each document under certain subcomponent searches are displayed. For instance, in a search where the user has allotted some weight to longevity and feedback scores of sellers, ranks of the sellers of the searched items under these criteria are provided, specifically, the longevity ranking **7401** and the feedback ranking **7402** (different from a feedback rating) of a given seller.

FIG. **75** depicts an excerpt from an example web page containing a Web submission form through which an advanced USE search can be performed, "advanced" referring to a USE embodiment which provides one or more compound search components. The embodiment in FIG. **75**, optimized for use with an Internet auction system, provides two simple search components as well as a group of subcomponents that together form a third "compound" search component, "compound" signifying that a search component is enabled for processing that occurs at the intracomponent

level—between subcomponents—prior to processing at the intercomponent level. Specifically, as depicted, a number of fields are provided into which a user can put a weight on a particular attribute associated with a seller or item in an auction environment, such that the weight is used to place relative importance upon one subcomponent as opposed to another subcomponent. Thus, for instance, in the depicted example, the user has input a weight of 10 into a "bonded or insured" field **7501**, a weight of 5 in a "feedback total" field **7502**, and a weight of 10 in a "feedback ratio" field **7503**, thereby establishing the relative importance of search results obtained under searches performed for these three subcomponents relative to each other.

FIG. **76** depicts an example of a compound search component that includes subcomponents optimized for searching stocks. As depicted, this advanced USE allows user entry of an individual weight for each subcomponent. Thus, a user can assign the relative emphasis to be placed upon the results of each search under one subcomponent relative to the results under other subcomponents. Note that a user does not have the option of selecting a search methodology for each subcomponent; the search performed under each subcomponent is performed according to a default methodology that is specific to that subcomponent, e.g., a "book value" subcomponent searches records pertaining to stocks and scores them according to book value; a "P/E ratio" searches stock records and scores them according to price-earnings ratio. The user simply defines which variable is more important to him or her.

FIG. **77** depicts an alternative embodiment of a compound search component optimized for searching bonds, including subcomponents with default methodologies for ranking bonds by grade, interest rate, etc.

FIG. **78** depicts an alternative embodiment USE optimized for searching mutual funds, including subcomponents with default methodologies for ranking mutual funds according to their performance over different time periods.

FIG. **79** depicts another alternative embodiment USE optimized for searching mutual funds, including subcomponents with default search methodologies for ranking mutual funds according to the types of assets in which the given mutual invests.

FIG. **80** depicts a "level 2" advanced USE. In a level 2 advanced USE, the subcomponents can be assigned not only a weight but also an ideal, i.e., a value that sets the standard against which other values are measured within the given subcomponent's search results. For instance, a user may assign a value of "3" to set the standard for the number of bedrooms. Given this value as the standard, units with three bedrooms score the maximum under this subcomponent, while units with two bedrooms or four bedrooms score lower, while units with one bedroom or five bedrooms score even lower. Meanwhile, emphasis on search results from this subcomponent relative to those from other subcomponents is established by user-assigned weight.

FIG. **81** depicts a level 2 advanced USE embodiment optimized for searching job listings. Here, the user sets his or her ideal value for numbers of hours of work per week, for instance, and available positions are ranked under a "hours per week" subcomponent according to how close each listed position comes to the user's ideal. Intracomponent weighting is again performed according to weights input by the user.

FIG. **82** depicts a level 2 advanced USE optimized for searching an automobile ad database, again providing data entry fields through which a user can assign an ideal and a weight to a given subcomponent. In this particular example, a field is also included whereby a user can submit an e-mail address where search results can be sent.

FIG. **83** depicts a variation of the level 2 advanced USE embodiment that provides two search components having subcomponents, optimized for searching a personal ads database. In this example, the results from each of two depicted compound components can be weighted relative to each other. Specifically, a given record is ranked according to each subcomponent in a "physical traits" compound component and these results are weighted and combined to produce a single score for that compound component. The same is done for a "personal traits" compound component. Then the result of the physical traits component is combined with the result of the personal traits component according to the user assigned weights of each compound component so as to produce a single overall score for the given record.

FIG. **84** depicts a level 3 advanced USE. In a level 3 advanced USE, not only can a weight and an ideal be assigned to a subcomponent, but also a tolerance level with respect to variation from the ideal can be assigned. The tolerance level essentially serves as a filter mechanism as opposed to a scoring mechanism. In other words, records falling outside of an acceptable level of variation get no score under the search component. Alternately, at the choice of the given UET Company, records that exceed the tolerance set by the user can be excluded from search results altogether.

In either case, the syntax a user uses to enter a tolerance level that can be properly processed can take whatever form the UET Company chooses to support. For instance, the tolerance level can be specified using a percentage accompanied by a plus (+) or minus sign (−); an integer that simply indicates how many units away from the ideal threshold an item can fall before exclusion; a greater than/less than relationship; or any other relative or absolute indicator that will serve to establish a meaningful boundary for acceptable variation.

Thus, in FIG. **84**, a search algorithm input form is depicted that includes two simple search components, A and B, and one compound search component, C. The compound search component provides subcomponents whereby searches on language, length, author rating, publication rating, and freshness of an article can be defined. Each subcomponent provides a data entry field for ideal, weight, and tolerance assigning for the given subcomponent. As shown, for the length subcomponent, the user has input "+50%/−5%" to indicate a willingness to accept articles that are up to 50 percent longer than the user-established ideal length (400 words in the depicted example) and down to 5 percent shorter than this ideal length. The user has entered a "0" in the tolerance field for author rating to indicate that no variation from the ideal is acceptable in this subcomponent. The user has entered a "+" in the tolerance field for the publication rating to indicate that variation of any magnitude is acceptable provided that this variation is positive, i.e., values greater than the user-established ideal are acceptable and values less than the ideal are not.

FIG. **85** depicts a variation of the level 2 advanced USE in which one search component, labeled "must have", serves as a filter, while the second component, labeled "prefer to have", serves to rank results that have passed through the filter. The particular example is a USE optimized for searching airline flights.

FIG. **86** depicts a primary USE with but a single field. This particular embodiment, of course, is attractive for its simplicity. Rather than having separate fields for selection of a search methodology and input of user-assigned weights and search terms, all three characteristics of a simple search component are input using operators that are parsed by the UET Company computers after submission by the user.

Thus, in the depicted example, the first search component is defined via two main parts: (I) a search term ("finger-picking") and (II) some information in parentheses. The information in parentheses identifies a search methodology to be used in the search under the given search component and a weight to be assigned to results of the given search component relative to other search components. Specifically, a number appears first and then is separated by a comma from a methodology selection. Thus, following the first search term in the depicted example is the information "(25, linksto)". This information puts an intercomponent weight of "25" on the first search component and selects "linksto" as the search methodology for the first search component. Two more search components as input by the user are included in the depicted example.

A user provides data terms **8701**, methodologies **8702**, weights **8703**, and, if weights are used for subcomponents **8704**, sets weights for at least one subcomponent **8705**. If ideals/standards are used **8706**, the user also provides an ideal value **8707**. If tolerances are used **8708**, the user provides a tolerance **8709**.

3.2 USE Subsystem: EQML Integration

FIG. **88** depicts an example of an e-mail through which a USE query can be submitted to the UET Company, thereby providing the same power and flexibility afforded by the submission form embodiments depicted above while using e-mail as the submission medium. As depicted, EQML tags are used to denote a database to be searched, a search methodology for each component, an intercomponent weight for each component, a search term for each component, and so on.

FIG. **89** depicts an example of an e-mail returned to the UET user by the UET Company in response to a search query submission submitted by an e-mail such as that depicted in FIG. **88**. Results are returned to the user, including the Web address of each result and performance gauge information pertaining to each result.

FIG. **90** depicts the process by which e-mail is used to tap the USE subsystem.

3.3 USE Subsystem: The "Build-Your-Own Search Engine" Feature

FIG. **91** introduces an extension of the USE concept: the "Build Your Own Search Engine" system. FIG. **91** depicts an excerpt from a sample web page that includes a Web submission form through which a user can select features to be included in a search engine interface that the user can then embed in his or her own website. The search itself is still conducted through the UET Company computers, but the user can pick and choose what features will be included in the particular search engine interface.

Specifically, the user follows the process in FIG. **92**: First, the user chooses which UET Company database are to be searched **9201**. Next the user selects the number of simple search components that are to be offered **9202**. The user then selects which search methodologies are to be available for use with each simple search component **9203**. The user then chooses how many, if any, compound components are to be offered **9205**. The user then chooses which subcomponents are to be included in each compound component **9206**. The user then specifies whether intercomponent weighting **9207** is to be offered (if not, then each search component is equally weighted), and, if compound components are used, whether intracomponent weighting **9208** is to be offered. If compound components are being used, the user indicates whether ideal setting is to be offered **9209** and whether tolerance setting is to be offered **9210**. The user then specifies whether results are to include search component performance gauges **9211**. Once the form has been submitted, the HTML to be included in the web page where the user is to host his or her submission form is e-mailed or otherwise provided to the user **9212**. Queries submitted through the user's submission form are then processed by the UET Company as normal **9213**.

3.4 USE Subsystem: Lexivote Ranking Methodology

Allowing users to design their own algorithms and manipulate the power of multiple search methodologies, as demonstrated above, is a powerful tool. However, the power of the USE can be even more fully realized when combined with a more powerful relevancy ranking methodology than the related art provides.

The Lexivote ranking methodology essentially allows a search engine user to interview millions of other users to find documents most relevant to his or her query. Specifically, a database of "word-votes" is created, then populated over time through user input, and then searched in response to a search query so as to provide the most relevant documents pertaining to the term or terms searched.

A word-vote, in its simplest form, is a pairing of two data: (I) a word datum and (II) a URL datum. Thus, a given word-vote could be a group such as "music" and "http://www.performer.org". A word-vote database record, in its simplest form, has two corresponding fields: the word datum field and the URL datum field.

Word-votes are cast one at a time by individual users. Specifically, the user inputs a word and inputs a URL that he or she believes to be the URL of the best resource pertaining to that word.

A query for use in the Lexivote system is, in its simplest form, a word. When a query consisting of a word is submitted for a search under the Lexivote methodology, the word-vote database is searched for matching word-votes. A matching word-vote is a word-vote record in which the word datum in the word-vote vote matches the query word.

Results of the search are ranked using matching word-votes. In its simplest form, the score of a document A under a Lexivote search according to the present invention is

$$r(A)=m$$

where r(A) is the score of the document A and m is the number of matching word-votes in which the URL is the same as the URL of document A.

Thus, for instance, assume that users have cast exactly 1000 word-votes in which "music" is the word, and, of these 1000 word-votes, exactly 7 of them contain "http://www.performer.org" as the URL. When a query on the word "music" is submitted, there are 1000 matching word-votes, and the score of the document appearing at the URL http://www.performer.org under the submitted query is 7.

Complexity and subtlety can be added to the process quickly. For instance, the word datum in a word-vote can be a phrase or almost any character string rather than just a single word. A word-vote can include more than one URL-datum field, such that there can be a one-to-many relationship between the word/phrase datum and the URLs associated with this datum in a single word-vote database record.

In such a one-to-many word-vote, the URL data fields can be weighted such that a user puts his or her favorite URL in first, his or her second favorite URL in second, and so on. Then, instead of the score of the document being simply the

number of matching votes that include the URL of the document, such matching votes are weighted according to the priority of the given URL in each matching vote. Greater weight is assigned to the first URL than to the second URL, and greater weight is assigned to the second URL than the third URL. A formula for scoring under such an approach appears in FIG. **98**B.

Additionally, word-vote derivatives can be included. A word-vote derivative is an additional datum derived from a word-vote. For instance, every word-vote database record can include an additional field that is automatically populated with simply the domain name appearing in the URL datum. This domain name field can then be used in a secondary ranking methodology: when the basic Lexivote ranking methodology yields rankings that are very close together, the domain name field is used in a sort of "tiebreaker" methodology; a URL that includes a more popular domain name ranks higher than the URL that includes a less popular domain name.

The Lexivote system is further explained in reference to the figures. FIG. **93** depicts an example of an excerpt from a web page **9301** that provides a search query submission form. Also included are the fields necessary for submission of a word-vote to a Lexivote system operated by the UET Company. Specifically, the user chooses a word or phrase to enter in the word datum submission field **9302** and then enters into the URL datum submission field **9303***a* a URL that identifies the web page that he or she believes to be the most relevant page associated with the given word or phrase. If the user wishes to submit more than one URL to be associated with the chosen word, he or she can enter them in the additional "Favorite Website . . . " fields provided **9303***b*, **9303***c*. The user then submits both his search query and his word-vote by clicking the "search" button.

While FIG. **94** depicts a process by which the Lexivote system can be implemented without the use of registered user accounts, this approach is particularly vulnerable to abuse. The preferred embodiment therefore is that depicted in FIG. **95**, which is based upon registered user accounts. Through this approach, several quality control measures can be implemented. For instance, by allowing only registered users to cast word-votes and preventing any registered user account from including a duplicate word-vote, i.e., a word-vote in which the word datum is identical to that of another word-vote, the given user account can be limited to one word-vote for any given term. This measure will help to reduce the likelihood of attempts to "stuff the ballot box." (Note that the presence of multiple word-votes cast by the same user and including identical URLs as the URL data is not problematic; certainly, the same website can be a user's favorite website pertaining to a variety of different words.)

Thus, in the preferred embodiment, the user logs into his or her UET Company account **9501** and uses the UET search engine **9502**. At predetermined times, intervals, or events, the user is asked to cast a word-vote **9503**; the UET Company can choose to follow some suggested timing criteria depicted in FIG. **96** for requesting users to submit word-votes or adhere to a schedule of its own design.

Over time, as more and more users participate in the Lexivote system and cast more and more word-votes, the word-vote database grows richer and the Lexivote ranking methodology more effective.

FIG. **97** depicts an example weighting scheme for use in an embodiment in which one-to-many relationships are possible in word-votes.

FIG. **98**A depicts a process through which pages are ranked according to word-votes. First, registered users cast their word-votes **9801**. For each word-vote, a new record is created in the word-votes database and related to the user account of the user casting the vote **9802**. As discussed above, each word-vote includes a word/phrase datum and a URL datum (or more than one URL datum in certain embodiments).

When the user submits a query **9803**, results are ranked according to matching votes **9804**, or, in some embodiments, weighted matching votes.

One benefit of the account-based approach is that users can change their votes as their tastes change and as the World Wide Web evolves. FIG. **99** depicts an excerpt from an example web page through which the user can view and alter his or her word-votes in an account-based Lexivote system. This feature can be used to further enhance the functionality of the Lexivote system by assuring "freshness" of word-votes; users can be periodically required to confirm previously cast word-votes or otherwise update them if the user's preferences have changed or a URL is no longer valid.

3.5 USE Subsystem: Lexary Reference Tool

A Lexary is provided to further enhance the functionality of the Lexivote subsystem and USE subsystem.

The Lexary is an electronic reference tool that includes two basic reference features, entries and senses. The Lexary serves the combined functions of a dictionary, thesaurus, grammar book, and stylebook. An entry is a word, phrase, punctuation mark, or other datum that may be included in such reference materials. A sense is a definition, synonym, antonym, usage note, or other descriptive content that explains the entry with which the sense is associated. Thus, a sense can be a dictionary sense (e.g., a definition of a word entry), a thesaurus sense (e.g., a synonym or antonym of a word entry), a grammar sense (e.g., a usage note pertaining to a punctuation mark entry), or a style sense (e.g., a usage note pertaining to an editorial convention entry, such as idiomatic usage of a phrase or proper citation of a source).

The Lexary provides a mechanism through which users can submit entries and senses. Additionally, so that the Lexary can serve as an authoritative source of information, the Lexary also provides a number of quality control mechanisms. Without such mechanisms, the anarchy and misinformation that characterizes many user-generated-content sites would almost certainly overtake the Lexary also.

When a new sense is submitted, whether in association with an existing entry or a new entry, the new sense is marked "proposed." In order for the sense to move beyond proposed status to "approved" status, it must receive a predetermined threshold number of "subscriptions," a subscription being an indication of approval of the sense by a registered user. Once approved, the sense becomes published as part of the Lexary such that a search on the given entry will return the given sense as an authoritative statement.

Over time, as the number of Lexary users increases, users with unusually high levels of linguistic understanding will periodically encounter senses that have been approved but are not completely accurate. The Lexary therefore provides a "challenge" mechanism through which the user can call an existing approved sense into question and seek to supplant it with an improved version of the sense. The challenge is denied or upheld through a special voting procedure that involves only a small portion of the whole user community, namely, the users who have already demonstrated an outstanding track record with respect to contribution of material to the Lexary. This track record is represented by the user's authority rating.

A general method of creation, deployment and use of the Lexary system appears in flowchart form in FIG. **101**. First, a group of databases necessary for use in the Lexary system, such as those depicted in FIG. **100**, are created **10101**, as are a group of interfaces through which users can submit, review, search, subscribe to, challenge, flag, and edit entries and senses **10102**.

Once the Lexary has been made available to the public, a user logs into his or her UET Company account **10103** and, if the user so desires **10104**, the user enters a term search through the Lexary search interface **10105**. Search results are returned to the user **10106**, including an entry or entries matching the search term and a sense or senses associated therewith.

If the user wishes to add a new entry **10107**, the user enters information pertaining to the new entry through a new entry submission form **10108**, and if the entry does not already exist **10109**, the entry is added as a new entry record in the entries database **10111**. If the entry does exist **10109**, the user is so informed **10110**.

An entry is not searchable through the official published Lexary until at least one sense associated with the given entry has been approved. If a user wishes to add a new sense **10112** to be associated with an entry, the user enters the new sense through a new sense submission form **10113** and a new record is created in the senses database and related to the given entry record in the entry database **10114**. The new sense is marked "proposed" at this point.

If the user wishes to review proposed senses **10115**, he or she submits a search on the term to be reviewed **10116** and results are returned to the user **10117**. If there are some pending proposed senses associated with the search term **10118**, the user clicks through to a sense review page **10119**. If the user wishes to subscribe to a sense **10120**, he or she clicks the "I subscribe" link and a new record is created in the sense subscription database **10121** noting the subscription of the user to the given sense **10122**.

Occasionally, users will propose inappropriate senses in an attempt to be funny or offensive. If the user wishes to flag such a sense **10123**, the flagging process depicted in FIG. **108** is followed **10124**. If the user wishes to challenge an approved sense **10125**, the sense challenge process depicted in FIG. **111** is followed **10126**. If the user wishes to alter a choice he or she has formerly made—such as a sense or subscription he or she previously submitted—, the choice editing process depicted in FIG. **109** is followed **10128**. If a user wishes to alter previously submitted terms, senses or subscriptions **10127**, the choice updating process depicted in FIG. **109** is followed **10128**.

Any time a choice made by a user affects a calculation used in the Lexary system, the process of performing this calculation is restarted **10129**. For instance, sense approvals are based on the number of user subscriptions; thus, when a user submits a new subscription, a sense selection process, depicted in FIG. **110**, must be followed again; running of the process need not occur immediately but rather can be conducted at regularly scheduled intervals at the choice of the UET Company. Similarly, since a user's authority rating is based upon approved senses, an authority rating process, depicted in FIG. **107**, should be followed when a sense authored by a user has become approved.

For the sake of simplicity, the following figures depict excerpts from sample web pages for a limited scope deployment of the Lexary, specifically, one that serves only as a dictionary. It should be understood that one of ordinary skill in the art can easily modify the depicted pages so as to allow the searching, submitting, and editing of non-dictionary entries and senses, such as grammar and style entries and senses. It should also be noted that the same basic processes disclosed herein can be used for management of longer entries, such as encyclopedia entries, although the Lexary is primarily aimed at serving the purposes described above.

FIG. **102** depicts a Web submission form **10201** through which a term can be looked up in the Lexary. FIG. **103** depicts an excerpt from a sample results page **10301** generated and returned to the user in response to a Lexary search query.

The results page **10301** displays all approved senses associated with the term searched. Additionally, the number **10302** of subscriptions to each sense is displayed to the right of that sense. The user ID **10303** of the user who submitted the given sense is also displayed, as is the authority rating **10304** of this sense author.

A link **10305** to a page that displays pending proposed senses associated with the entry, such as the page depicted in FIG. **105**, is displayed. A link **10306** to a page including a Web submission form through which a new sense for the entry can be submitted, such as the "Submit New Sense" page depicted in FIG. **104**, is also displayed. An advertisement **10307** also appears. An advertiser pays the UET Company to serve the advertisement **10307** each time certain terms are searched in the Lexary.

When a user wishes to submit a new sense, he or she does so through a Web submission form such as the form **10401** in FIG. **104**. For a dictionary sense (as depicted), the submission form includes fields for a part of speech, a qualifier (such as transitive or intransitive in the case of verbs), a definition, an etymology, and a usage note. Clearly, additional fields can be used and different fields should be used for different types of entries, e.g., grammar or style.

If a user wishes to subscribe to a pending proposed sense, he or she does so by clicking an "I subscribe" button **10502** appearing in the review proposed senses page **10501** depicted in FIG. **105**. If a user wishes to flag a proposed sense, he or she clicks a "flag" link **10503** to initiate the flagging process depicted in FIG. **108**. Inappropriate use of the Lexary can result in demerits which subtract from a given user's authority rating; enough demerits can result in a negative authority rating **10504**.

FIG. **106** depicts an excerpt from an example "Sense Challenge Submission" form **10601**. Through such a form, a user may submit a challenge to a currently approved sense. Such a challenge may be necessary when an approved sense is good enough to have received enough subscriptions to be approved but nonetheless is, in the eyes of the challenger, incomplete or otherwise imperfect. Fields to be included in a sense challenge page should include an "explanation for the challenge" field and a "proposed alternative" field.

An embodiment of the authority rating process is depicted in FIG. **107**. In the depicted embodiment, a user's authority rating equals the total number of "qualifying subscriptions," where qualifying subscriptions are defined as subscriptions by other users to approved senses that were authored by the user being rated, minus any demerits. Certainly, other formulae for producing an authority rating can be used. For instance, a recursive definition, using one or more known techniques for handling recursive equations, can be used. Such a definition might define a first user's authority rating in terms of authority ratings of other users who have subscribed to senses authored by the first user.

The flagging process is depicted in FIG. **108**. After a flag has been submitted by a user **10801**, UET Company staff reviews the flagged sense **10208**. If the staff determines that the flagged sense was not submitted in good faith **10803**, the sense record pertaining to the flagged sense is deleted **10804**

and a negative history note is entered in relation to the user account of the submitter of the flagged sense **10805**. Such a negative history note may result in demerits per UET Company business rules. If the violation is sufficiently egregious or part of a pattern of misconduct, additional action may be taken **10806**, such as suspension of the offending user account.

Occasionally, users will find that they no longer agree with senses they themselves have submitted or with senses to which they have previously subscribed. In such a case, the user can follow the choice editing process depicted in FIG. **109**. The user browses the "My Lexary Choices" page **10901**, from which he or she can review previously submitted subscriptions and senses **10902**. If the user wishes to alter such a choice **10903**, the user selects the choice to be modified **10904** and makes the appropriate change **10905**. If the user alters a sense **10906**, the altered sense is treated as a new sense submission **10907**: all previous subscriptions to that sense are voided and the modified sense enters "proposed" status. This measure is necessary so that approved senses are not subsequently altered into a form that would not have received such approval from the community.

Senses are approved through a sense selection process such as that depicted in FIG. **110**. The UET Company can choose **11002** to weight subscriptions with reference to the authority rating of the subscribing user **11004** and **11005**, or to simply count all subscriptions equally **11003**. Whichever methodology is chosen, the score of a sense is compared to a predetermined threshold **11006**, and if the score meets or exceeds this threshold, the sense is approved **11007**.

Senses are challenged through a sense challenge process depicted in FIG. **111**. If a user wishes to submit a challenge, he or she does so through the submission of a form such as that depicted in FIG. **106**, and a new record is created in the sense challenges database **11101**. Provided that the submission meets minimum requirements for completeness **11102**, the author of the challenged sense is notified and given the opportunity to submit a rebuttal to the challenge **11103**. After this rebuttal has been received or a certain period of time has elapsed, a panel of users who are considered "top members" are notified of the challenge **11104**. Top members are users with the highest authority ratings, and the top member panel may consist of approximately 300 to 500 top members.

Panel members must cast a vote agreeing or disagreeing with the challenger's case within a certain period of time **11005**, each vote being a record in the sense challenges votes database. If not enough votes are received to reach a quorum **11106**, the challenge fails. But if a quorum is reached and enough votes for the challenger are received to meet or exceed a predetermined threshold **11107**, the challenge is upheld and the challenger sense replaces the challenged sense **11108**. The UET Company can choose whether a successful challenger sense inherits all the subscriptions of the challenged sense it replaces or simply is awarded a minimum number of subscriptions to become approved. The UET Company can also choose what happens to the replaced sense.

The viability of the sense challenge process relies upon the participation of top members. A top member who repeatedly fails to respond when asked to vote on challenges may be removed from the top members panel and replaced by another top member **11109**.

The Lexary can be integrated with the Userithm search engine system to produce an even more effective search mechanism. FIG. **112** depicts an excerpt from a web page including a USE search submission form **11201**; this particular USE embodiment provides two simple search components.

When a search query submitted through this form **11201** contains search terms that appear in the Lexary as entries with more than one associated sense per entry, the user is presented with a secondary selections page such as that **11301** depicted in FIG. **113**. This page provides an input field **11302** next to each available sense so that a user can eliminate ambiguity by selecting the particular sense of the word that he or she intends.

For instance, if a user submits a search query that includes the words "rubber" and "stamp" as depicted in the example in FIG. **112**, he or she may be presented with a secondary selection page such as that **11301** depicted in FIG. **113**. This page **11301** displays two approved senses associated with the word "rubber" in the Lexary. This page also displays two approved senses associated with the word "stamp" in the Lexary. The user can either bypass the use of secondary selections by clicking a "bypass this step" button, or he or she can check a checkbox next to the sense in which he or she intends the word, thereby indicating his or her secondary selection, and then click the "search according to my selections above" button to submit the search query.

This process is summarized in the flowchart depicted in FIG. **114**. When a user submits a query **11401** and the chosen search methodology relies in part upon the meaning of the given word **11402** (as opposed to a search simply for the appearance of a word in a domain name, for instance), the submitted search term or terms are looked up in the Lexary **11403**. If any of the search terms appear as entries in the Lexary with more than one associated sense **11404**, a secondary selections page such as that depicted in FIG. **113** is presented to the user **11405**. If the user chooses to refine his or her search through the use of a secondary selection **11406**, the search is performed with reference to the particular sense or senses selected by the user **11407**. Otherwise, the search is performed as usual without reference to secondary selections **11408**.

Searches performed using secondary selections can be enhanced by reference to the thesaurus-like functionality of the Lexary. Specifically, the usage of synonyms of a particular sense of a word in a document helps to indicate that the word is being used in the intended sense in the document. Thus, while the process of submitting a thesaurus entry is essentially similar to the process of submitting any other type of entry, a thesaurus entry submission process is depicted in FIG. **114**B. In the depicted embodiment, while viewing senses associated with an entry, a user locates the particular dictionary sense for which he or she wishes to submit a synonym **11411**. The user then clicks through, using a link such as that **11421** depicted in FIG. **114**C, to view the thesaurus entry related to the given sense **11412**. The user can then view thesaurus senses associated with the particular dictionary sense of the word, and, if desired, the user can click through to a Web submission form whereby he or she can submit the new thesaurus sense **11413**. The new thesaurus sense then enters "proposed" status as usual **11414**, allowing other users to submit subscriptions **11415**, and the sense approval process is followed as usual **11416**.

4.1 UTOU Subsystem

A Uniform Terms of Use (UTOU) subsystem is provided to further facilitate informational and commercial transactions and interactions between users of the UAML and USE subsystems.

The UTOU subsystem allows a website provider to "subscribe" to a particular version of a Uniform Terms of Use Agreement (UTOUA) by properly referencing the UTOUA in

a "local" terms of use agreement governing a relationship between the website provider and a website user.

In so doing, the UTOU subsystem enables significant savings in terms of time and expense for both website providers and website users while also causing numerous beneficial side effects, such as laying a foundation for uniformity in Internet-related law.

A process of creation, deployment and use of the UTOU subsystem is depicted in flowchart form in FIG. **115**. The embodiment depicted in FIG. **115** is an "open subscription" model, meaning, that any website provider can participate in this model without registering with the UET Company. A "Registered Subscriber" model is provided, in contrast, in FIG. **119**. There are advantages and disadvantages to both models: under the open subscription model, the convenience of participating may encourage more participants; under the registered subscriber model, quality assurance mechanisms can be implemented and UTU integration is possible.

Under the open subscription model, a promulgator—an entity such as the UET Company, a nonprofit organization, or a governmental agency—assembles a UTOU drafting team that includes representatives of the legal community, consumer advocacy groups, and other interested parties **11501**. The team produces a preliminary draft of a first (or, in later iterations, a next) version of the UTOUA **11502**. The promulgator publishes the preliminary draft on its website together with a mechanism through which citizens-at-large can comment on the preliminary draft **11503** for a predetermined period of time. After the comment period ends, the drafting team incorporates knowledge gained through the public comment procedure into the draft **11505**. If, after these revisions, the team approves the draft as final **11506**, it is published as the official final draft of the given version of the UTOUA **11507**. Otherwise, another preliminary draft is produced **11504** and the public comment procedure is repeated **11503**.

Related information, such as standards for proper usage of the UTOUA are also published **11507**. Older versions of the UTOUA, if any, remain at the URL where they were originally published so that any citations to them remain valid.

The official draft of the latest UTOUA version is registered in a governmental copyright office **11508**, and a unique copyright number is added to the official draft **11509**; in this way, a dispute about the actual language appearing in the draft can be resolved by reference to the copy of the draft at the copyright office.

If a website provider wishes to subscribe to the UTOUA **11510**, the website provider drafts its own local terms of use agreement so that it conforms to the standards set forth on the promulgator website (and in the UTOUA itself) **11512**. A conforming local terms of use agreement includes a valid reference and link to the UTOUA version to which the website provider subscribes as well as a group of terms that are specific to the website provider's local terms of use agreement. These site-specific terms, called "ILO" provisions, identify the website provider, indicate which jurisdictional laws apply, and provide all terms that differ from or add to the terms of the UTOUA version to which the website provider subscribes **11512**.

When a visitor visits the website provider's website, he or she can see that the website provider subscribes to the UTOUA by viewing the local terms of use agreement **11513**. If the visitor is already familiar with the version of the UTOUA to which the website provider subscribes **11514**, the visitor need only read the ILO provisions **11515** in order to be informed about the contractual provisions to which he or she is agreeing in using the website.

In allowing website visitors to focus strictly on these site-specific provisions applicable to the given website, the UTOU subsystem saves visitors a great deal of time and encourages them to read the local terms of use agreement.

Any time the visitor wishes to refresh his or her knowledge of the UTOUA, the visitor can simply click through from the local terms of use agreement to the UTOUA **11517**. Whenever a website provider misuses or deviates from the standards for conforming usage of the UTOUA, misconduct can be reported to the promulgator **11518**.

If a dispute arises between the website provider and the visitor **11519**, the provisions of both the local terms of use agreement and the UTOUA, provided the latter has been properly incorporated by reference by the former, apply to the dispute, with the site-specific ILO provisions trumping any conflicting terms in the UTOUA **11520**. As the terms of the UTOUA are interpreted during the resolution of disputes, the body of caselaw pertaining to the UTOU develops into a richer and more uniform body of law than is possible in the absence of such a system **11521**.

As decisions interpreting the UTOUA provisions are handed down, a document linking system, such as that depicted in FIG. **118**, is deployed to further facilitate easy researching of legal issues pertaining to the UTOUA and development of a settled body of Internet law **11522**.

FIG. **116** depicts an excerpt from an example web page **11601** hosted on the promulgator website. This page **11601** displays a version of the Uniform Terms of Use Agreement, including terms that describe how a conforming subscription can be made effective as well as the actual terms that will be legally active and applicable when a conforming subscription is in effect.

FIG. **117** depicts an excerpt from an example web page **11701** hosted on the website provider's website. This page **11701** displays the local terms of use agreement, which has been made effective in conformance with the UTOU standards for subscription. Thus, the UTOUA version indicated in the document is incorporated by reference so as to be legally active. ILO provisions are also included, serving to identify the website provider, the website, the jurisdiction whose laws will apply to conflicts arising out of the agreement, and the site-specific opt-out provisions.

FIG. **118** depicts document-linking relationships underlying the UTOU subsystem. Depicted is a first version **11801** of the UTOUA and a second version **11804** of the UTOUA. Multiple local terms of use agreements **11808***a* and **11808***b* link to the first version **11801** and multiple local terms of use agreements **11809***a* and **11809***b* link to the second version **11804**. One terms of use agreement **11808***c* is depicted at two different moments in time: at one time, this local terms of use agreement **11808***c* incorporates by reference the first version of the UTOUA **11801**; at a later date, this document **11808***c* has been modified by the website provider so as to incorporate the second version of the UTOUA **11804** by reference.

Each version of the UTOUA links to a marked-up, exact copy of the same document. Thus, for instance, the first version of the UTOUA appears in "clean" form **11801** and links to a "marked-up" document **11802** that includes the same version of the UTOUA. Each clause or provision of the marked-up UTOUA **11802** is an individual hyperlink to another page **11803**. The latter page **11803**, continually updated by the promulgator, provides a list of cases in which the individual UTOUA provision linking to the latter page **11803** has been interpreted.

This document linking system allows anyone to visit the marked up version of the UTOUA and click on an individual contractual provision so as to view cases relating to that

provision. Researching the legal significance of any given provision in the UTOUA is thereby made much easier.

The registered subscriber model includes all the steps of the open subscription model but involves the additional steps shown in the flowchart in FIG. **119**. The website provider tags his or her local terms of use agreement with UAML tags, specifically, using the UTOU tag vocabulary (not depicted), and lists the local terms of use web page as any other UAML-enabled listing per the process depicted in FIG. **6**A. Thereafter, when a UTU user visits the web page including the UTOU listing **11902**, the UTU displays an icon indicating that the given website provider is a registered UTOU subscriber **11903**. Such an icon **12002** appears in the UTU embodiment **12001** depicted in FIG. **120**.

Registering UTOU subscribers through the UAML listing method allows certain benefits: the local terms of use agreement can be validated, like other UAML listings, by comparison to standards for conforming subscriptions, while the presence of a URLIT enables UTU integration as described above.

4.2 UTOU Subsystem: UFC Subsystem

The basic approach of the UTOU subsystem can be extended into a Universal Form Contract (UFC) subsystem.

The UFC subsystem allows two or more users to establish a written contract between each other that "subscribes" to a particular Universal Form Contract by properly referencing the UFC in the written contract; the terms of the UFC referenced in the written contract are stored in multiple locations for easy retrieval.

In so doing, the UFC subsystem enables significant savings in terms of time and expense for users while also causing numerous beneficial side effects, such as reducing the use of paper by potentially millions of pages annually and laying a foundation for uniformity in contract law.

A method of creating, deploying and using an embodiment of the UFC subsystem appears in flowchart form in FIG. **121**. A drafting team is formed **12101** to create a preliminary draft for each type of Universal Form Contract **12102**. Types of UFCs may include: a UFC apartment rental agreement; a UFC personal property purchase agreement; a UFC nondisclosure agreement; a UFC will; and other such legal instruments. The UET Company then publishes the draft of each UFC **12103** for public comment. Once the public comment period ends, the drafting team modifies each UFC so as to accommodate useful public comments **12104**. If a draft is not approved **12105**, the team works to improve the preliminary draft **12016**. When the draft is finally approved by the team **12105**, each UFC is individually registered in the copyright office **12107** and the copyright registration number is added to the official draft so that parties can verify the official terms through an independent source **12108**.

Each UFC is published individually on the website of the UET Company site so that only one UFC appears per URL **12109**. Each UFC is then encoded in high-density bar-code form **12110**, which bar-code is then printed along with human readable text on an official "UFC-enabled" paper page **12111** such as the example page **12201** depicted in FIG. **122**.

Users wishing to record an agreement in written form acquire a UFC-enabled page that references the appropriate UFC type, fill out the ILO provisions by hand or machine print, and then execute the agreement with signatures **12112**.

In this way, most written contracts can be reduced from several pages to one page **12113** while still containing the same amount of contractual provisions.

If a user wishes to create a back up copy of the executed UFC-enabled contract document **12114**, he or she can fax or e-mail an electronic copy of the UFC-enabled contract document to the UET Company for storage as a digital file related to the user's UET Company account **12115**. Whenever a user or third party needs to look up the UFC terms incorporated into the written document, three different ways are readily available: visit the URL identified in the written document, scan and decode the bar-code on the document, or retrieve the copy of the document deposited at the copyright office **12116**. These and other benefits are described in the chart depicted in FIG. **123**. Most importantly, the UFC subsystem offers a significant opportunity to reduce the waste of paper and other resources used in making paper.

5.1 Universal Arbitration Subsystem

A Universal Arbitration Subsystem is also provided to further facilitate informational and commercial transactions and interactions between users of the UAML and USE subsystems.

The UArb subsystem allows users to form a community by contracting with an intermediary such that members of the UArb community are bound to submit their disputes to alternative dispute resolution.

A method of creation, deployment, and use of the UArb subsystem appears in flowchart form in FIG. **124**. First, a drafting team, including representatives from the legal profession, insurance industry, consumer advocacy groups, and other interested parties, is formed **12401** to create a preliminary draft of the Universal Arbitration Agreement (UAA) **12402**. The UET Company then publishes the preliminary draft for public comment **12403**. After the public comment period ends, the drafting team incorporates these comments **12404**. When the drafting team approves the final draft **12405**, the final official draft is registered at the copyright office and the copyright registration number is added to the official draft for the reasons discussed in reference to the UTOU subsystem above **12406**. The official draft is then published on the UET Company website **12407**.

The UET Company optionally arranges any agreements with insurance companies or other parties who may wish to offer incentives to encourage users to participate in the UArb subsystem **12408**. The UArb system is then made available **12409** so that a user can register by agreeing to the Universal Arbitration Agreement **12410**. Such agreement establishes privity of contract between the agreeing user and the UET Company, which serves as an intermediary in the UArb subsystem as described below. Other users also agree to the UAA **12411**, and a new record is created in the UAA participants database for each participant.

Thereafter, if a third party, such as an insurance company, needs to verify that the agreeing user has agreed to the UAA, the UET Company can provide a certificate indicating the agreeing user's party status and the expiration date of the current UAA agreement between the agreeing user and the UET Company **12412**.

In the event that a dispute later arises between two users who have both agreed to the UAA during the effective term of both parties' agreements **12413**, both agreeing users are obligated to submit that dispute to binding arbitration **12414**. If one of the agreeing users so obligated refuses arbitration **12415**, enforcement of the arbitration duty can be pursued by the other agreeing user or by the UET Company directly, or the cause of action can be assigned to someone else for enforcement **12416**. Otherwise, the dispute is settled through arbitration per the UAA **12417**, and the parties thereby enjoy

considerable savings in terms of time and money in avoiding litigation through the court system. Additional benefits are described in the chart in FIG. **127**.

FIG. **125** depicts the party relationships described above. Specifically, a first agreeing user **12502** forms a binding UAA contract with the UET Company **12501**. A second agreeing user **12503** also forms a binding UAA contract with the UET Company **12501**. The terms of the UAA provide that any agreeing user agrees to submit disputes with third parties to binding arbitration when said third parties have also agreed to the UAA. These terms create a mutual "third party beneficiary" relationship between one agreeing user and another agreeing user.

FIG. **126** depicts the party relationships described above so as to include an insurer **12604**. The insurer **12604**, in order to incentivize users to participate in the UArb subsystem, may offer premium discounts to users who agree to the UAA. A separate agreement, establishing privity of contract between the insurer **12604** and an agreeing user **12602**, may thereby be formed. The insurer **12604** may wish to make such an offer to users so as to reduce its exposure to litigation costs. The UET Company **12601** thereby establishes a third-party beneficiary relationship between a first user **12602** and second user **12603**.

FIG. **128** depicts an excerpt from an example web page, hosted by the UET Company, that contains an embodiment of a version of the Universal Arbitration Agreement.

FIG. **129** depicts an excerpt from an example certificate through which the UET Company certifies that an agreeing user has agreed to the UAA.

The UAML/UTU subsystem and UArb subsystem can be integrated to enhance the functionality of each other. Specifically, when a UTU user visits a UAML-enabled listing of a website provider who has agreed to the UAA, information can be transmitted from the UET Company to the UTU indicating that the website provider is a UArb subsystem participant. The UTU can then display an icon informing the UTU user of the website provider's UArb status.

FIG. **130** depicts an embodiment of the UTU **13001** displaying such an icon **13002**.

6.1 Ramifications

As shown, the disclosed URLIT and UAML system offers users opportunity, flexibility, economy, and precision. UAML listings, including Internet auctions, can be hosted on any website, and the appearance of such listings is determined by the user. Indexing and searching such listings is easy, and the precision and accuracy of such searches are much greater than conventional HTML pages and Web search engines allow. This power can even be tapped by e-mail, telephone, or other nontraditional search input media. Meanwhile, the subject matter of UAML listings is almost limitless: auctions, jobs, personals, automobiles, real estate, and all manner of other classified ads.

The disclosed UTU reduces or eliminates the need for traditional Web submission forms and purchase forms, thereby saving users time and reducing the risk of identity theft. The universal shopping cart feature allows purchasing from multiple vendors through a single interface. The inventory and wish list features give website providers an additional vehicle for maximizing the value of their websites.

The disclosed Userithm Search Engine gives users tremendous leeway in customizing search algorithms to meet their individual needs for a unique search in real-time, on-the-fly. Performance feedback is provided immediately so that users can improve their own techniques over time. The Userithm Search Engine method can be applied to a wide variety of subject matter, including auctions, personal ads, real estate, investment vehicles and more.

The disclosed Lexivote search methodology offers direct access to the collective intelligence of the World Wide Web user community. Lexivote search results are essentially the product of countless individual interviews, making for highly dependable levels of relevancy.

The disclosed Lexary reference materials method provides both the currency of a user-maintained resource and the authority of extensively reviewed content, while avoiding the pitfalls of anarchy.

The disclosed UTOU subsystem brings order and commonality to the disjointed, unpredictable landscape of relationships between website providers and website users. In so doing, high priority, unique contractual terms are brought into focus while common terms need not be read over and over. Meanwhile, the UTOU establishes a platform upon which rich and settled case law can develop rapidly.

The disclosed UFC subsystem offers the advantages of the UTOU subsystem while also reducing paper usage and storage requirements while making the transmission and backup of important legal documents easier.

The disclosed UArb subsystem allows the formation of intentional communities via the Internet, whereby the efficiencies of alternative dispute resolution are made conveniently available to citizens at large.

7.1 Scope

Although the description above contains many specificities, these should not be construed as limiting the scope of the invention but as merely providing illustrations of some of the presently preferred embodiments of this invention. Accordingly, the scope of the invention should be determined by the appended claims and their legal equivalents, rather than by the examples given. For instance, it will be understood that features of one embodiment may be combined with features of other embodiments while other features may be omitted or replaced as being nonessential to the practice of the invention. As is plain to one skilled in the art, the disclosed invention can be deployed using entirely different tag names as long as the purposes for which these tags exist are served. Following disclosed tagging conventions may be useful, but one skilled in the art will see that the invention can use other conventions or be modified to meet external standards, e.g., XML.

Licensing information may be obtained through http://www.inventerprise.com.

What is claimed is:

1. A computer-implemented method, said computer-implemented method comprising the following:

providing for receiving at a first computer, via a computer network, first information, said first information comprising at least (i) first user account information, (ii) first word or phrase information, or (iii) first approval or disapproval information;

providing for storing at least some of said first information in a first database;

providing for associating a first item with a first status, said first item comprising or relating to said first information;

providing for associating a second item with said first status;

providing for determining a first measure of community approval, said providing for determining said first measure of community approval comprising at least providing for counting a first plurality of submissions, said first plurality of submissions pertaining to said first item;

providing for comparing said first measure of community approval to a second measure of community approval;

providing for associating said first item with a second status, said second status being different from said first status, the associating said first item with said second status being performed at least partly according to an outcome of said providing for comparing said first measure of community approval to said second measure of community approval;

providing for comparing a third measure of community approval to a fourth measure of community approval;

providing for removing a third item from said second status, the removing said third item from said second status being performed at least partly according to an outcome of said providing for comparing said third measure of community approval to said fourth measure of community approval; and

providing a plurality of real-time newsfeeds or tickers, said plurality of real-time newsfeeds or tickers comprising at least a first real-time newsfeed or ticker, said first real-time newsfeed or ticker comprising at least a first news item, said first news item being related to said first information.

2. The method in claim **1** additionally comprising the following:

providing a first web browser bar function, said providing said first web browser bar function comprising at least one of the following:

(i) providing for at least partly causing display of an alternately expandable and collapsible web browser bar, said alternately expandable and collapsible web browser bar conveying real-time, user-generated content;

(ii) providing for at least partly causing display of first indicia in a web browser bar when a first domain or URL is being requested, said first indicia indicating at least a first real-time quantity that pertains specifically to said first domain or URL; and

(iii) providing for at least partly causing display of said first news item in a web browser bar.

3. The method in claim **1** additionally comprising the following:

providing for recommending a first user to a second user, said providing for recommending said first user to said second user comprising providing for determining that at least one of said first user and said second user matches at least one criterion.

4. The method in claim **1** additionally comprising the following:

providing a first search engine, said providing said first search engine comprising at least receiving a first query and providing at least a first plurality of URLs in response to said first query; and

providing a first financial service, said first financial service being selected from the group consisting of:

(i) processing of a first user-to-user payment;

(ii) processing of a first user-to-user sale;

(iii) processing of a first charitable donation or contribution; and

(iv) indicating of a first financial condition of a user.

5. The method in claim **1** wherein said providing for determining said first measure of community approval additionally comprises the following:

providing for determining whether a first time criterion has been met; and

providing for calculating a first user authority.

6. A computer-implemented method, said computer-implemented method comprising the following:

receiving at a first computer system, via a computer network, first information, said first computer system comprising at least a processor and a memory;

registering a first account;

receiving, via said computer network, second information, said second information indicating or comprising at least a first approval, said first approval pertaining to said first information;

determining, by computer, a first measure of popularity, said first measure of popularity pertaining to said first information and being based at least in part on said second information;

at least partly causing, by computer, display of first indicia, said first indicia indicating said first measure of popularity; and

promoting, by computer, said first information from a first status to a second status, said second status being different from said first status, the promoting said first information from said first status to said second status being performed at least partly according to said first measure of popularity; wherein:

said first account is associated with at least a first real-time newsfeed or ticker for conveying a plurality of real-time news items, said plurality of real-time news items comprising at least a first news item, said first news item being related to said first account.

7. The method in claim **6** additionally comprising:

receiving, via said computer network, second information;

receiving, via said computer network, a first tag, said first tag identifying at least a topic to which said second information pertains;

associating said second information with said topic;

receiving, via said computer network, a second news item; and

including said second news item in said plurality of real-time news items.

8. The method in claim **6** wherein said first status entails that said first information is in a pending or upcoming status and said second status entails that said first information is in an approved or popular status.

9. The method in claim **6** wherein said second status entails inclusion in a first real-time resource and said first status entails exclusion from said first real-time resource.

10. The method in claim **6** wherein one of said first status and said second status entails that said first information has attained a degree of collective acceptance or popularity and the other of said first status and said second status does not entail.

11. The method in claim **6** wherein the promoting said first information from said first status to said second status is performed also at least partly according to a second measure of popularity, said first measure of popularity being based at least partly on a first plurality of approvals and said second measure of popularity being based at least partly on a second plurality of approvals, wherein one of said first plurality of approvals and said second plurality of approvals comprises at least one approval that the other of said first plurality of approvals and said second plurality of approvals does not comprise.

12. The method in claim **6** wherein said first real-time newsfeed or ticker pertains to a first organization, said first account being associated with said first organization, said first organization being selected from the group consisting of:

(i) a second organization, said second organization pertaining to a religion;

(ii) a third organization, said third organization pertaining to an academic entity; and

(iii) a fourth organization, said fourth organization pertaining to a club; and

wherein the method additionally comprises:

verifying a first organizational status or affiliation.

13. The method in claim **6** additionally comprising:

receiving, from a first phone, a first query;

organizing, by computer, a plurality of results in response to said first query; and

providing, to said phone, at least some of said plurality of results.

14. A system comprising:

a first computer system communicatively coupled to a computer network, said first computer system comprising at least a processor and memory;

a registration component, said registration component being configured for registering a first user or account;

a publication component, said publication component being configured for:

receiving a first submission, said first submission being associated with said first user or account;

determining a first quantity, said first quantity being based at least in part on how many users like said first submission; and

publishing said first submission in a first manner when said first quantity satisfies a first criterion; and

a news feed or ticker component, said news feed or ticker component configured for providing a plurality of real-time news feeds or tickers, said plurality of real-time news feeds or tickers comprising at least a first real-time news feed or ticker, said first real-time news feed or ticker configured for providing a plurality of real-time news items, said plurality of real-time news items comprising at least a first news item, said first news item being related to said first user or account.

15. The system in claim **14** wherein:

said first criterion pertains to attaining a degree of popularity or approval among users; and

said publishing said first submission in said first manner signifies that said first submission has attained a degree of popularity or approval among users.

16. The system in claim **14** additionally comprising:

a security component, said security component being configured for at least one of:

(i) validating at least one of (a) a first resource and (b) a first URL; and

(ii) verifying a first relationship, said first relationship pertaining to at least one of

(a) an affiliation with an organization and (b) a demonstration of access to a second resource.

17. The system in claim **14** wherein said publication component is further configured for at least one of:

(i) determining a first authority, said first authority being based at least partly upon said first quantity; and

(ii) receiving a first comment on said first submission and providing said first comment to at least some users.

18. The system in claim **14** wherein said publication component is further configured for:

(i) receiving a first edit of said first submission; and

(ii) after said receiving said first edit, treating said first submission as an edited submission.

19. The system in claim **14** wherein said publication component is further configured for at least partly causing display of first indicia, said first indicia conveying at least a measure of how popular said first submission is.

20. The system in claim **14** additionally comprising an aggregation component, said said aggregation component being configured for:

requesting, by way of said computer network, and obtaining data from a first plurality of external resources;

determining at least a second quantity, said second quantity being based at least in part on said data; and

providing at least said second quantity.

21. A computer-implemented method, said computer comprising at least a processor and a memory and being connected to a first computer network, said memory comprising at least a first news database for storing a plurality of news submissions, the method comprising:

registering a first user account;

receiving, via said first computer network, a URL and a first term, said first term comprising a word or phrase;

providing, via said first computer network, at least one of said URL and said first term to a community of users;

determining, by computer, a first score, said first score pertaining to at least one of said URL and said first term, said first score being based at least partly on a measurement of popularity; and

at least partly causing, via said first computer network, display of a first real-time news feed or ticker, said first real-time news feed or ticker comprising or conveying a plurality of real-time news items, said plurality of real-time news items comprising at least a first item, said first item relating to said first user account.

22. The method in claim **21** additionally comprising:

providing, via first said computer network, a resource from which are excluded items that have not attained a degree of popularity; and

alternately including a second item in said resource or excluding said second item from said resource, the alternately including or excluding said second item being performed at least partly according to a second score.

23. The method in claim **21** additionally comprising:

at least partly causing, by computer, display of first indicia, said first indicia indicating a quantity that is at least partly based on said measurement of popularity.

24. The method in claim **21** wherein the determining said first score is performed at least partly according to a first freshness criterion or time requirement.

25. The method in claim **21** additionally comprising:

receiving, from a first phone, a first query; and

providing, to said first phone, a first plurality of results in response to said first query, said first plurality of results being arranged according to a first ranking criterion.

26. The method in claim **21** additionally comprising:

at least partly causing, via said first computer network, display of a second term; and

at least partly causing, via said first computer network, display of a first advertisement when at least partly causing display of said second term.

27. A system comprising:

a first computer system connected to a computer network, said first computer system comprising at least a processor and a memory;

a first component, said first component being configured for:

registering a first user account in said memory;

a second component, said second component being configured for:

receiving, by way of said computer network, (i) a URL and (ii) first content, said first content being related to said URL;

providing, by way of said computer network, at least one of said URL and said first content to a first community; and

determining, by computer, a first quantity, said first quantity pertaining to an opinion of said first community, said opinion of said first community pertaining to at least one of said URL and said first content; and

a third component, said third component being configured for:

providing a plurality of real-time news feeds or tickers, said plurality of real-time news feeds or tickers comprising at least a first real-time news feed or ticker, said first real-time news feed or ticker comprising or conveying a plurality of real-time news items, said plurality of real-time news items comprising at least a first news item, said first news item being related to said first user account.

28. The system in claim **27** wherein:

the determining said first quantity comprises at least counting, by computer, a first plurality of submissions received from said first community, said first plurality of submissions comprising at least a first submission, said first submission comprising or indicating a first opinion of a first community member and being selected from the group consisting of:

(i) a positive opinion, or approval; and

(ii) a negative opinion, or disapproval.

29. The system in claim **27** additionally comprising:

a fourth component, said fourth component being configured for:

performing a security check;

a fifth component, said fifth component being configured for:

receiving, from or by way of a first phone, a first request; and

providing a response to said first request;

a sixth component, said sixth component being configured for:

providing a first search engine; and

a seventh component, said seventh component being configured for:

at least partly causing, by computer, display of a first advertisement.

30. The system in claim **27** additionally comprising:

a fourth component, said fourth component being configured for:

changing an item from a first status to a second status, said second status being different from said first status;

a fifth component, said fifth component being configured for:

providing a first search engine; and

a sixth component, said sixth component being configured for:

at least partly causing display of first indicia, said first indicia pertaining to a second quantity, said second quantity pertaining to popularity of an item.

* * * * *