



US008510407B1

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

(10) **Patent No.:** **US 8,510,407 B1**
(45) **Date of Patent:** ***Aug. 13, 2013**

(54) **DISPLAYING TIME-VARYING INTERNET
BASED DATA USING APPLICATION MEDIA
PACKAGES**

(75) Inventors: **John Albert Kembel**, Palo Alto, CA
(US); **George Andrew Kembel**, Menlo
Park, CA (US); **Daniel S. Kim**, Palo
Alto, CA (US); **John Russell**, Palo Alto,
CA (US); **Jake Wobbrock**, Palo Alto,
CA (US); **Geoffrey S. Kembel**, Menlo
Park, CA (US); **Jeremy L. Kembel**, Palo
Alto, CA (US); **Lynn D. Gabbay**,
Sunnyvale, CA (US)

(73) Assignee: **Mainstream Scientific, LLC**, Mountain
View, CA (US)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 928 days.

This patent is subject to a terminal dis-
claimer.

(21) Appl. No.: **11/932,553**

(22) Filed: **Oct. 31, 2007**

Related U.S. Application Data

(63) Continuation of application No. 09/558,925, filed on
Apr. 26, 2000, now Pat. No. 7,660,868.
(60) Provisional application No. 60/176,699, filed on Jan.
18, 2000, provisional application No. 60/176,687,
filed on Jan. 18, 2000, provisional application No.
60/131,115, filed on Apr. 26, 1999, provisional
application No. 60/131,114, filed on Apr. 26, 1999,
provisional application No. 60/131,083, filed on Apr.
26, 1999.

(51) **Int. Cl.**
G06F 15/16 (2006.01)

(52) **U.S. Cl.**
USPC 709/217; 709/219
(58) **Field of Classification Search**
USPC 709/217, 219
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,599,756 A 2/1997 Matsuo 501/127
5,625,781 A 4/1997 Cline et al.
5,649,186 A 7/1997 Ferguson
5,682,511 A 10/1997 Sposato et al. 715/716
5,740,549 A 4/1998 Reilly et al.

(Continued)

FOREIGN PATENT DOCUMENTS

WO WO0180086 A2 10/2001

OTHER PUBLICATIONS

Alexa 1.4.1 Support Pages, 9 pages, www.alexa.com/support/index
1.html, Jan. 1999.

(Continued)

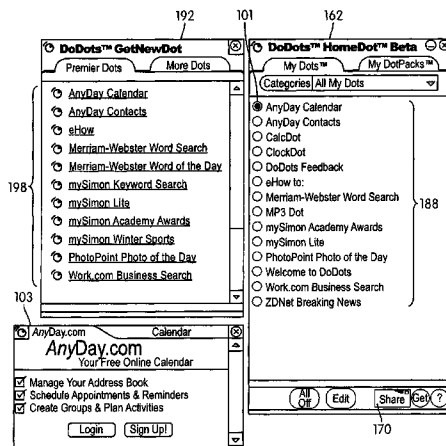
Primary Examiner — Kenny Lin

(74) *Attorney, Agent, or Firm* — Pillsbury Winthrop Shaw
Pittman, LLP

(57) **ABSTRACT**

A software component for accessing and displaying time-
varying Internet content includes a definition for rendering a
graphical user interface and a URL pointing to the time-
varying Internet content to be downloaded and presented
within said user interface. A component provider may create
displays of Internet content which vary as a function of the
varying of the time-varying Internet content. In one example,
the graphical user interface includes an image, and the image
varies in order to illustrate the varying of the time-varying
data.

24 Claims, 37 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,745,718 A	4/1998	Cline et al.	715/777	6,339,826 B2	1/2002	Hayes, Jr. et al.	713/166
5,761,662 A	6/1998	Dasan		6,341,305 B2	1/2002	Wolfe	
5,774,670 A	6/1998	Montulli	395/200.57	6,342,907 B1	1/2002	Petty et al.	345/762
5,794,230 A	8/1998	Horadan et al.		6,343,377 B1	1/2002	Gessner et al.	717/10
5,796,393 A	8/1998	MacNaughton et al.		6,356,905 B1 *	3/2002	Gershman et al.	705/26.8
5,796,952 A	8/1998	Davis et al.		6,369,840 B1	4/2002	Barnett et al.	
5,801,702 A	9/1998	Dolan et al.		6,370,552 B1	4/2002	Bloomfield	715/513
5,802,530 A	9/1998	Van Hoff	715/513	6,374,273 B1	4/2002	Webster	707/513
5,805,829 A	9/1998	Cohen et al.	395/200.32	6,385,596 B1	5/2002	Wiser et al.	705/51
5,809,248 A	9/1998	Vidovic		6,393,407 B1	5/2002	Middleton et al.	
5,818,446 A	10/1998	Bertram et al.	715/746	6,401,134 B1	6/2002	Razavi et al.	709/310
5,835,088 A	11/1998	Jaaskelainen, Jr.	715/803	6,411,992 B1	6/2002	Srinivasan et al.	
5,838,906 A *	11/1998	Doyle et al.	715/205	6,414,677 B1	7/2002	Robertson et al.	345/419
5,860,068 A	1/1999	Cook	705/26.81	6,418,440 B1	7/2002	Kuo et al.	
5,864,676 A	1/1999	Beer et al.	709/229	6,434,563 B1	8/2002	Pasquali et al.	
5,864,868 A	1/1999	Contois	707/104	6,434,598 B1	8/2002	Gish	709/203
5,890,172 A	3/1999	Borman et al.		6,452,609 B1	9/2002	Katinsky et al.	345/716
5,893,091 A	4/1999	Hunt et al.		6,453,348 B1	9/2002	Barnier et al.	709/225
5,896,533 A	4/1999	Ramos et al.	395/680	6,460,029 B1	10/2002	Fries et al.	
5,918,237 A	6/1999	Montalbano	715/206	6,476,833 B1	11/2002	Moshfeghi	345/854
5,919,247 A	7/1999	Van Hoff et al.	709/217	6,484,149 B1	11/2002	Jammes et al.	
5,922,044 A	7/1999	Banthia	709/203	6,487,566 B1	11/2002	Sundaresan	
5,923,845 A	7/1999	Kamiya et al.	709/206	6,487,663 B1	11/2002	Jaisimha et al.	713/193
5,923,885 A	7/1999	Johnson et al.	717/176	6,496,203 B1	12/2002	Beaumont et al.	345/762
5,948,061 A	9/1999	Merriman et al.		6,510,466 B1	1/2003	Cox et al.	709/229
5,959,621 A	9/1999	Nawaz et al.	345/329	6,537,324 B1	3/2003	Tabata et al.	
5,966,715 A	10/1999	Sweeney et al.	707/203	6,538,673 B1	3/2003	Maslov	
5,973,692 A	10/1999	Knowlton et al.	345/348	6,549,612 B2	4/2003	Gifford et al.	
5,974,446 A	10/1999	Sonnenreich et al.		6,560,639 B1	5/2003	Dan et al.	
5,974,546 A	10/1999	Anderson	713/2	6,571,245 B2	5/2003	Huang et al.	
5,977,964 A	11/1999	Williams et al.		6,594,682 B2	7/2003	Peterson et al.	
5,983,227 A	11/1999	Nazem et al.		6,606,657 B1	8/2003	Zilberstein et al.	709/224
5,987,513 A	11/1999	Prithviraj et al.		6,629,143 B1	9/2003	Pang	709/226
5,995,756 A	11/1999	Herrmann		6,662,341 B1	12/2003	Cooper et al.	715/513
6,006,252 A	12/1999	Wolfe		6,681,368 B1	1/2004	Kawabata	715/501.1
6,012,090 A	1/2000	Chung et al.		6,687,745 B1	2/2004	Franco et al.	709/219
6,012,098 A	1/2000	Bayeh et al.		6,691,130 B2	2/2004	Kawasaki et al.	707/102
6,018,344 A	1/2000	Harada et al.		6,694,484 B1	2/2004	Mueller	715/513
6,023,698 A	2/2000	Lavey, Jr. et al.	707/10	6,718,015 B1	4/2004	Berstis	379/88.17
6,026,433 A	2/2000	D'Arlach et al.		6,724,403 B1	4/2004	Santoro et al.	345/765
6,031,904 A	2/2000	An et al.	379/201	6,751,606 B1	6/2004	Fries et al.	
6,034,652 A	3/2000	Freiberger et al.	715/730	6,757,716 B1	6/2004	Blegen et al.	709/217
6,044,403 A	3/2000	Gerszberg et al.	709/225	6,766,454 B1	7/2004	Riggins	713/185
6,061,695 A	5/2000	Slivka et al.	707/513	6,784,900 B1	8/2004	Dobronsky et al.	
6,061,696 A *	5/2000	Lee et al.	715/209	6,816,880 B1	11/2004	Stent et al.	
6,065,044 A	5/2000	Ogasawara		6,819,343 B1	11/2004	Sobeski et al.	715/848
6,088,717 A	7/2000	Reed et al.	709/201	6,819,345 B1	11/2004	Jones et al.	345/856
6,091,411 A	7/2000	Straub et al.	715/747	6,834,302 B1	12/2004	Harvell	709/224
6,091,412 A	7/2000	Simonoff et al.	345/335	6,842,779 B1	1/2005	Nishizawa	
6,101,510 A *	8/2000	Stone et al.	715/234	6,879,994 B1	4/2005	Matsliach et al.	709/204
6,104,391 A	8/2000	Johnston, Jr. et al.	715/745	6,938,041 B1 *	8/2005	Brandow et al.	1/1
6,105,063 A	8/2000	Hayes, Jr.	709/223	7,039,857 B2	5/2006	Beck et al.	715/500.1
6,115,040 A	9/2000	Bladow et al.	345/335	7,039,859 B1	5/2006	Sundaresan	
6,128,655 A *	10/2000	Fields et al.	709/219	7,076,737 B2	7/2006	Abbott et al.	715/744
6,133,916 A	10/2000	Bukszar et al.		7,107,548 B2	9/2006	Shaftron	
6,161,112 A	12/2000	Cragun et al.		7,216,300 B2	5/2007	Dang	
6,177,936 B1	1/2001	Cragun		7,222,303 B2	5/2007	Oren et al.	715/744
6,192,407 B1	2/2001	Smith et al.	709/229	7,356,569 B1	4/2008	Kembel et al.	
6,199,082 B1	3/2001	Ferrel et al.		7,574,649 B1	8/2009	Safars et al.	715/200
6,215,490 B1	4/2001	Kaply	715/788	7,660,868 B1	2/2010	Kembel et al.	709/217
6,216,141 B1	4/2001	Straub et al.	707/513	7,756,967 B1	7/2010	Kembel et al.	709/224
6,230,173 B1	5/2001	Ferrel et al.		7,792,947 B1	9/2010	Kembel et al.	709/224
6,237,030 B1	5/2001	Adams et al.		8,020,083 B1	9/2011	Kembel et al.	715/201
6,240,555 B1	5/2001	Shoff et al.	725/110	8,346,887 B1	1/2013	Kembel et al.	709/217
6,268,856 B1	7/2001	Bruck et al.		2001/0042107 A1	11/2001	Palm	709/218
6,275,854 B1	8/2001	Himmel et al.		2002/0065896 A1	5/2002	Burakoff et al.	709/206
6,278,448 B1	8/2001	Brown et al.	345/333	2002/0078136 A1	6/2002	Brodsky et al.	709/203
6,278,449 B1	8/2001	Sugiarto et al.	715/826	2002/0089526 A1	7/2002	Buxton et al.	345/700
6,286,034 B1	9/2001	Sato et al.	709/204	2002/0089536 A1	7/2002	Dang	345/749
6,289,362 B1	9/2001	Van Der Meer	715/273	2002/0091697 A1	7/2002	Huang et al.	707/10
6,292,185 B1	9/2001	Ko et al.		2002/0130900 A1	9/2002	Davis	345/744
6,292,186 B1	9/2001	Lehman et al.	345/335	2002/0161879 A1	10/2002	Richard	709/223
6,297,819 B1	10/2001	Furst		2003/0051027 A1	3/2003	Aupperle et al.	709/224
				2003/0069944 A1	4/2003	Barlock et al.	709/220
				2004/0041836 A1	3/2004	Zaner et al.	345/751
				2004/0165007 A1	8/2004	Shaftron	
				2005/0273718 A1	12/2005	Naas	715/745

2008/0163202	A1	7/2008	Kembel et al.	717/178
2008/0229217	A1	9/2008	Kembel et al.	715/760
2010/0235757	A1	9/2010	Kembel et al.	715/745
2010/0257442	A1	10/2010	Kembel et al.	715/234
2012/0117479	A1	5/2012	Kembel et al.	715/736

OTHER PUBLICATIONS

Alexa general faqs, 4 pages, www.alexa.com/whatisalexa/faq.html#general, Jan. 1999.

"Custom Explorer Bars Give Sites an Edge," 2 pages, www.microsoft.com/Windows/le/IE5/custom.asp, Jan. 1999.

"Flexibility Across the Web," 2 pages, www.microsoft.com/Windows/le/IE5/choice.asp, Jan. 1999.

"Web Accessories Overview," 2 pages, www.microsoft.com/workshop...er/accesory/overview/overview.asp, Jan. 1999.

"Browser Extensions Overview," 2 pages, www.microsoft.com/workshop/browser/ext/overview/overview.asp, Jan. 1999.

Alexa Technology, 4 pages, www.alexa.com/support/technology.html, Jan. 1999.

"Creating Custom Explorer Bars and Desk Bands," 13 pages, www.microsoft.com/workshop/browser/ext/overview/Bands.asp, Jan. 1999.

Alexa Internet Tour, 1 page, www.alexa.com.whatisalexa/index/html, Jan. 1999.

"Revolutionary Ad Model," Advertise on Alexa, 1 page, www.alexa.com/company/advertise.html, Jan. 1999.

"The Alexa Service Appears on Your Desktop in Its Own Window," 1 page, www.alexa.com/tour/overview.html, Jan. 1999.

"Know More About the Sites You Visit," 1 page, www.alexa.com/tour/site_stats.html, Jan. 1999.

"Find Related Web Sites," 1 page, www.alexa.com/tour/related_links.html, Jan. 1999.

500,000 Sites and Growing:, 1 page, www.alexa.com/tour/archive.html, Jan. 1999.

"Research Tools at Your Fingertips," 1 page, www.alexa.com/tour/eb.html, Jan. 1999.

"Reporting," 1 page, www.alexa.com/company/reporting.html, Jan. 1999.

"Alexa Internet's Related Links Integrated Into Netscape Browser," 1 page, www.alexa.com/company/netscape.html, Jan. 1999.

"Demographics," alexa.com/company/demographics.html, Jan. 1999.

"Ads Appear in the Pop-up and on the Bar," 1 page, www.alexa.com/company/adspecs.html, Jan. 1999.

"Alexa Why Crawl," 1 page, www.alexa.com/support/why_crawl.html, Jan. 1999.

GIF Image 590x329 pixels, Alexa, 1 page, www.alexa.com/tour/images/alexa_overview.gif, Jan. 1999.

"It's X-treme!," Alexa, PC Magazine: The Best of 1998, 1 page, www.zdnet.com/pcmag/special/bestof98/internet5.html, Jan. 1999.

"Search While You Surf," PC Magazine: Search the Web, 1 page, www.zdnet.com/pcmag/features/websearch98/surf.html, Jan. 1999.

MindSpring, MyYahoo, pp. 1-16, www.mindspring.com/myyahoo/contents.htm, Dec. 1997.

Morrison, XML Unleashed, Sams Publishing, Dec. 21, 1999.

Flanagan, JavaScript; The Definitive Guide, 3rd Ed., O'Reilly, Jun. 1998.

Patent Application entitled "Parallel Web Sites", U.S. Appl. No. 09/192,633, filed Nov. 16, 1998.

Microsoft Computer Dictionary, Fifth Edition, 2002, Definition of "Web Browser".

Williams, Margot, "Cyberspace Calendars: The Web's Growing Date Base", Nov. 30, 1998, *The Washington Post*, p. 1.

Bott, Ed., et al., "Special Edition Using Windows 95 with Internet Explorer 4.0", Publisher: Que, Feb. 17, 1998, pp. 585 and 435.

McFedries, Paul, "Windows 98 Unleashed", Publisher: Sams, May 12, 1998, pp. 594-596.

McFedries, Paul, "Windows 98 Unleashed", Publisher: Sams Publishing, May 12, 1998, pp. xix, xx, xxi, xxiv, 2-4, 44-46, 69, 70, 79, 80, 97-116, 148, 158-163, 251, 551, 787-792, 799-807, 885, 899, 900, and 904-906.

McCrickard, D. Scott, et al., "Supporting Information Awareness Using Animated Widgets", Proceedings of the 7th USENIX Tel/Tk Conference, Feb. 14-18, 2000, 12 pages.

"Streaming Internet Technologies", *PR Newswire*, May 18, 1999, 2 pages.

"NewsEdge Delivers the Power of Real-Time News in a Browser", *Business Wire*, Nov. 9, 1998, 3 pages.

McCartney, Terrance Paul, "End-User Construction and Configuration of Distributed Multimedia Applications", *ProQuest Dissertations and Theses*, 1996, 197 pages.

"Microsoft Eyes Marimba's Castanet", by CNET News.com Staff, Dec. 24, 1996, printed from <http://news.cnet.com/Microsoft-eyes-Marimbas-Castanet/2100-1001_3-257491.html>, 2 pages.

Williams, Dennis, "Application Delivery on a Grand Scale", *Network World Fusion*, Mar. 22, 1999, printed from <<http://www.networkworld.com/reviews/0322revmarimba.html>>, 4 pages.

Whitehead et al., "WEBDAV: IETF Standard for Collaborative Authoring on the Web", Sep. and Oct. 1998, Retrieved from the Internet <URL:ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=722228>, pp. 1-7 as printed.

* cited by examiner

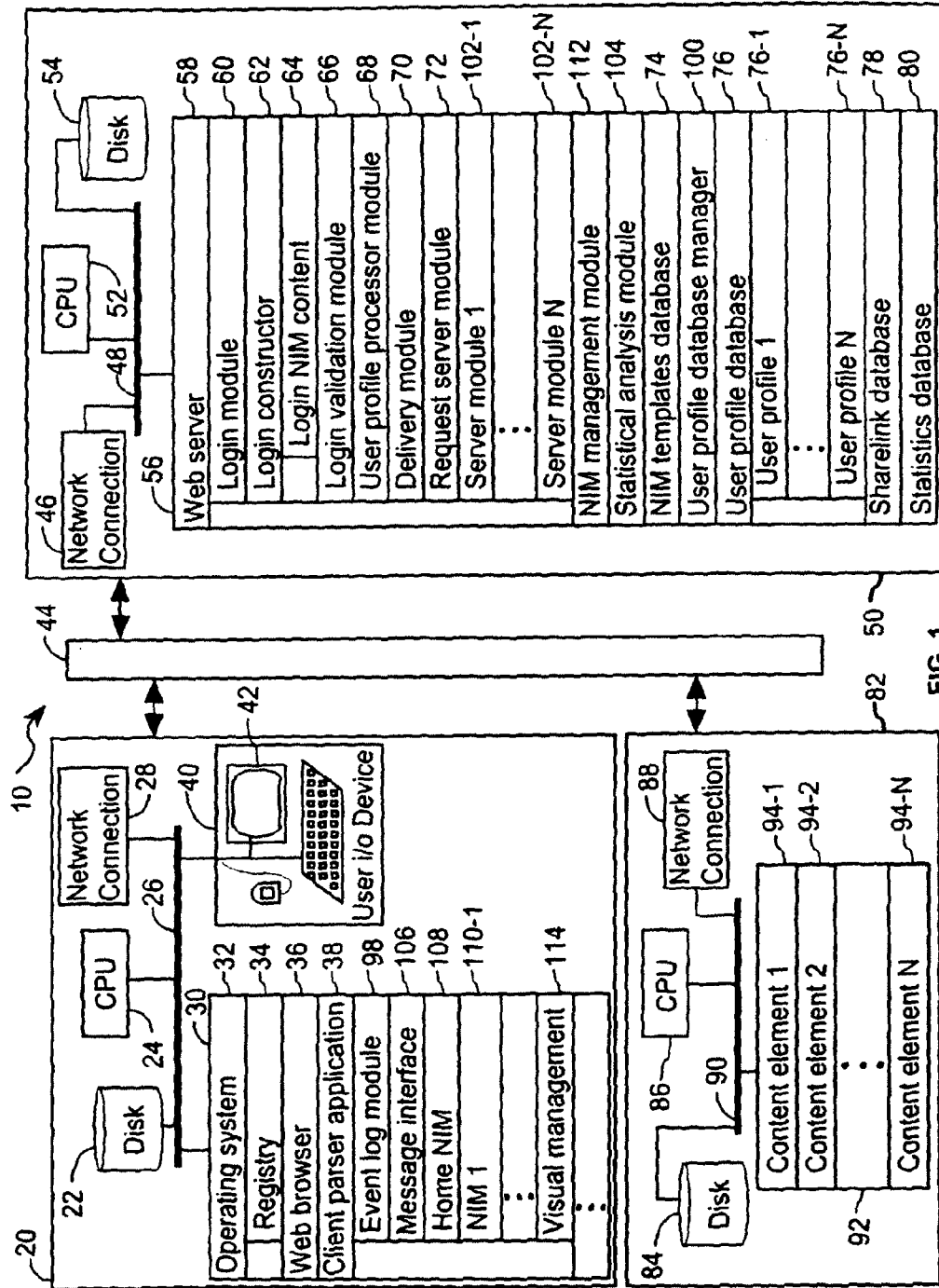


FIG. 1

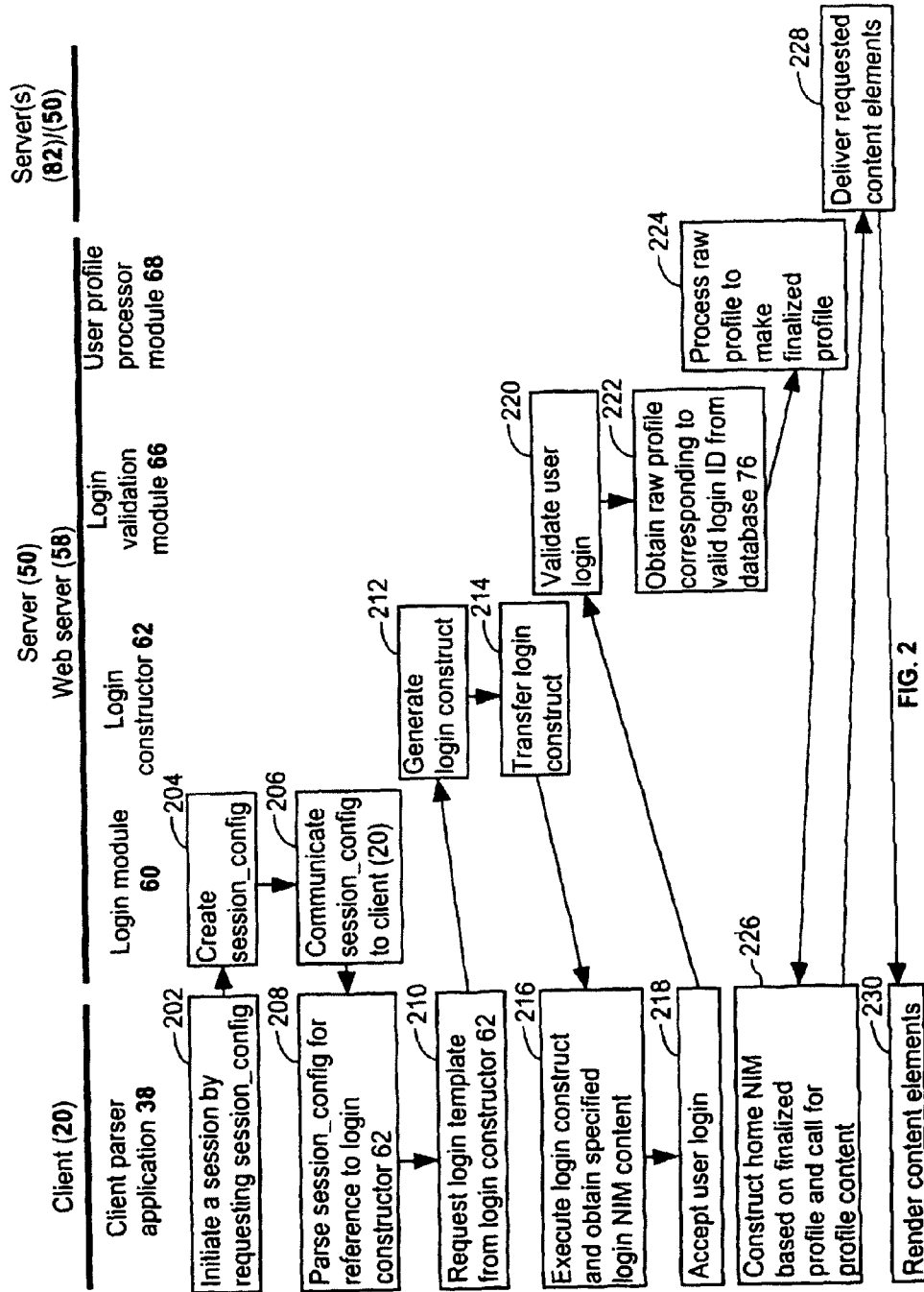


FIG. 2

Explore Litigation Insights

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

Real-Time Litigation Alerts



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

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

Advanced Docket Research



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

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

Analytics At Your Fingertips



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

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

API

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

LAW FIRMS

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

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

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.