

(12) United States Patent

Rohrabaugh et al.

(54) SCALABLE DISPLAY OF INTERNET CONTENT ON MOBILE DEVICES

Inventors: Gary B. Rohrabaugh, Bellingham, WA

(US); Scott A. Sherman, Bellingham,

Assignee: Gary Rohrabaugh, Bellingham, WA

(US)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 376 days.

This patent is subject to a terminal dis-

claimer.

(21) Appl. No.: 11/045,757

(22)Filed: Jan. 28, 2005

(65)**Prior Publication Data**

> US 2005/0131887 A1 Jun. 16, 2005

Related U.S. Application Data

- Division of application No. 09/878,097, filed on Jun. 8, 2001, now Pat. No. 7,210,099, which is a continuationin-part of application No. 09/828,511, filed on Apr. 7, 2001, now abandoned.
- Provisional application No. 60/217,345, filed on Jul. 11, 2000, provisional application No. 60/211,019, filed on Jun. 12, 2000.
- (51) Int. Cl.

G06F 17/00 (2006.01)

U.S. Cl. 715/815; 715/760; 715/234; 715/239; 715/249

715/700-864 See application file for complete search history.

(10) **Patent No.:**

US 7,461,353 B2

(45) Date of Patent:

*Dec. 2, 2008

(56)References Cited

U.S. PATENT DOCUMENTS

5,966,135 A 10/1999 Roy et al.

(Continued)

FOREIGN PATENT DOCUMENTS

WO PCT/US01/40920 12/2001

(Continued)

OTHER PUBLICATIONS

http://www.w3.org/TR/1999/WD-SVG-19990211/-Pub Feb. 11, 1999 by W3C pp. 1-7 (A complet details can be down load at by the provides URL above).*

(Continued)

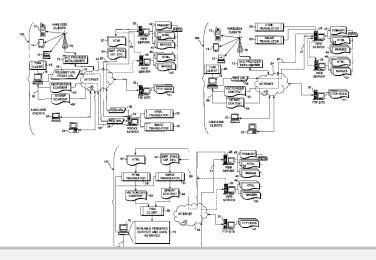
Primary Examiner—Doug Hutton Assistant Examiner—Quoc A Tran

(74) Attorney, Agent, or Firm-Law Office of R. Alan Burnett; R. Alan Burnett

(57)**ABSTRACT**

Mobile devices enabled to support resolution-independent scalable display of Internet (Web) content to allow Web pages to be scaled (zoomed) and panned for better viewing on smaller screen sizes. The mobile devices employ softwarebased processing of original Web content, including HTMLbased content, XML, cascade style sheets, etc. to generate scalable content. The scalable content and/or data derived therefrom are then employed to enable the Web content to be rapidly rendered, zoomed, and panned. Moreover, the rendered displays provide substantially the same or identical layout as the original Web page, enabling users to easily navigate to selected content and features on familiar Web pages. Display lists may also be employed to provide further enhancements in rendering speed. Additionally, hardwarebased programmed logic may be employed to facilitate various operations.

319 Claims, 22 Drawing Sheets



EXHIBIT

Petitioner - Motorola

PX 1001



U.S. PATENT DOCUMENTS

6,01	1,905	\mathbf{A}	1/2000	Huttenlocher et al.
6,05	7,854	A	5/2000	Davis, Jr. et al.
6,18	5,625	В1	2/2001	Tso et al.
6,30	0,947	B1	10/2001	Kanevsky
6,42	1,733	В1	7/2002	Tso et al.
6,46	6,203	B2	10/2002	Van Ee
6,54	6,397	В1	4/2003	Rempell
6,61	5,212	B1	9/2003	Dutta et al.
6,64	2,925	B2 *	11/2003	Roy et al 345/427
6,67	4,445	B1 *	1/2004	Chithambaram et al 345/619
6,85	7,102	B1	2/2005	Bickmore et al.
6,88	6,034	B2 *	4/2005	Blumberg 709/217
7,21	9,309	B2	5/2007	Kaasila et al.
2001/004	17428	$\mathbf{A}1$	11/2001	Hunter
2002/01	12237	A1	8/2002	Ketts
2004/004	19598	A1	3/2004	Tucker et al.
2005/014	14256	A1	6/2005	Blumberg

FOREIGN PATENT DOCUMENTS

WO PCT/US01/40920 6/2002

OTHER PUBLICATIONS

Combined Printout of HTML Help Files for Opera 3.60 (HTML pages printed to PDF docs and combined), Available on May 12, 1999.

Screenshots compilations of Web pages using Opera 3.60, including: www.Altavista.com—May 1, 1999 www.cnet.com—May 8, 1999 www.excite.com—May 8, 1999 www.nytimes.com—Apr. 22, 1999 www.softsource.com—Apr. 17, 1999 www.utexas.edu—Apr. 27, 1999 www.uspto.gov—May 5, 1999 www.yahoo.com—May 8, 1999.

Benjamin B. Bederson et al., Pad++: A Zoomable Graphical Sketchpad For Exploring Alternate Interface Physics, Sep. 19, 1995, http://www.cs.unm.edu/pad++.

Benjamin B. Bederson et al., A Zooming Web Browser, SPIE 1996, http://www.cs.umd.edu/hcil/jazz/learn/papers/spie-96-webbrowser.pdf.

Specification for Simple Vector Format (SVF) v1.1 Jan. 16, 1995. Specification for Simple Vector Format (SVF) v2.0 Dec. 6, 2000, http://www.svf.org/spec.html.

Changes to SVF, (Date unknown).

Scalable Vector Graphics (SVG) Specification, W3C Working Draft Feb. 11, 1999 WD-SVG-19990211, http://www.w3.org/TR/1999/WD-SVG-19990211/ (HTML format—initial page).

Scalable Vector Graphics (SVG) Specification, W3C Working Draft Apr. 12, 1999 WD-SVG-19990412, http://www.w3.org/TR/1999/WD-SVG-19990412/ (HTML format—initial page).

Scalable Vector Graphics (SVG) 1.0 Specification, W3C Candidate Recommendation Nov. 2, 2000.

Introduction to SVG, part of WD-SVG-19990211, http://www.w3.org/TR/1999/WD-SVG-19990211/intro. html#Document

Steve Mulder, Sneak Peak at SVG, Mar. 4, 1999, http://www.webmonkey.com/99/10/index3a.html?tw=eg1999102.

Janus Boye, SVG Brings Fast Vector Graphics to Web, Jul. 29, 1999 http://www.irt.org/articles/js176/.

Vector Markup Language (VML), World Wide Web Consortium Note May 13, 1998, NOTE-VML-19980513, http://www.w3.org/TR/1998/NOTE-VML_19980513.

Precision Graphics Markup Language (PGML), World Wide Web Consortium NOTE Apr. 10, 1998, NOTE-PGML-19980410, http://www.w3.org/TR/1998/NOTE-PGML-19980410.

Rick Graham, Mobile SVG at BitFlash Inc., May 2001, http://www.w3.org/Talks/2002/1007-DI-Helsinki/bitflash/index.html.

U.S. Appl. No. 60/296,327 Available on PAIR.

U.S. Appl. No. 60/288,287, filed May 2, 2001. Available on PAIR—electronic copy previously filed via IDS submission of Sep. 18, 2007.

U.S. Appl. No. 60/296,275, filed Jun. 5, 2001. Available on PAIR—electronic copy previously filed via IDS submission of Sep. 18, 2007.

U.S. Appl. No. 60/296,237, filed Jun. 5, 2001. Available on PAIR—electronic copy previously filed via IDS submission of Sep. 18, 2007.

U.S. Appl. No. 60/296,274, filed Jun. 5, 2001. Available on PAIR—electronic copy previously filed via IDS submission of Sep. 18, 2007.

U.S. Appl. No. 60/296,284, filed Jun. 5, 2001. Available on PAIR—electronic copy previously filed via IDS submission of Sep. 18, 2007.

U.S. Appl. No. 60/296,231, filed Jun. 5, 2001. Available on PAIR—electronic copy previously filed via IDS submission of Sep. 18, 2007.

U.S. Appl. No. 60/296,224, filed Jun. 5, 2001. Available on PAIR—electronic copy previously filed via IDS submission of Sep. 18, 2007.

U.S. Appl. No. 60/296,426, filed Jun. 5, 2001. Available on PAIR—electronic copy previously filed via IDS submission of Sep. 18, 2007.

U.S. Appl. No. 60/296,273, filed Jun. 5, 2001. Available on PAIR—electronic copy previously filed via IDS submission of Sep. 18, 2007.

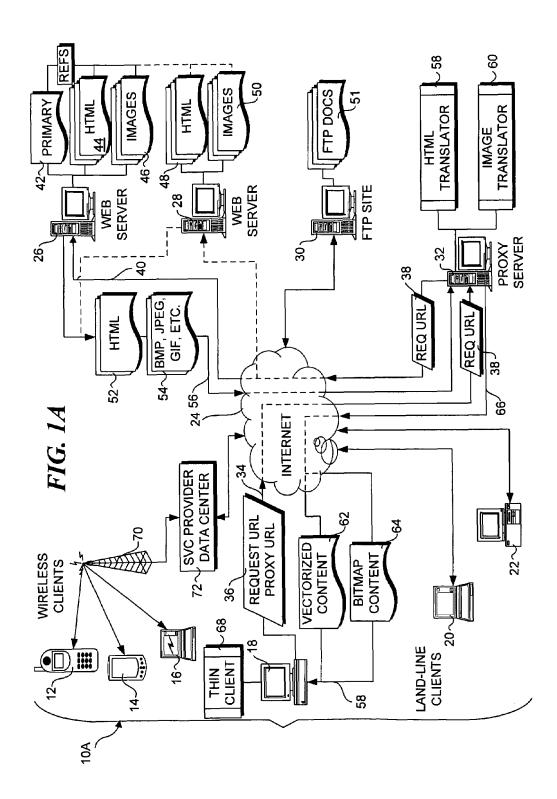
U.S. Appl. No. 60/296,283, filed Jun. 5, 2001. Available on PAIR—electronic copy previously filed via IDS submission of Sep. 18, 2007.

U.S. Appl. No. 60/296,281, filed Jun. 5, 2001. Available on PAIR—electronic copy previously filed via IDS submission of Sep. 18, 2007.

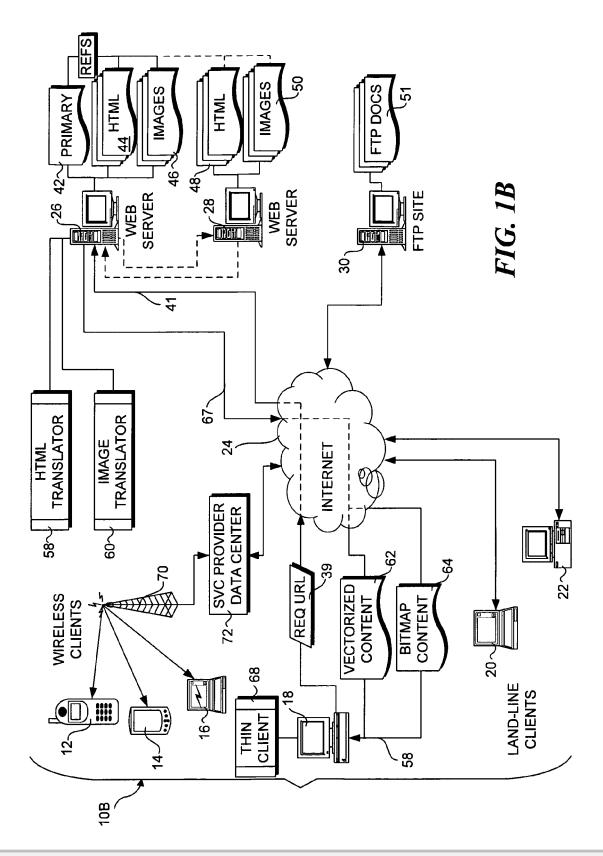
U.S. Appl. No. 60/296,327, filed Jun. 5, 2001. Available on PAIR—electronic copy previously filed via IDS submission of Sep. 18, 2007.

* cited by examiner

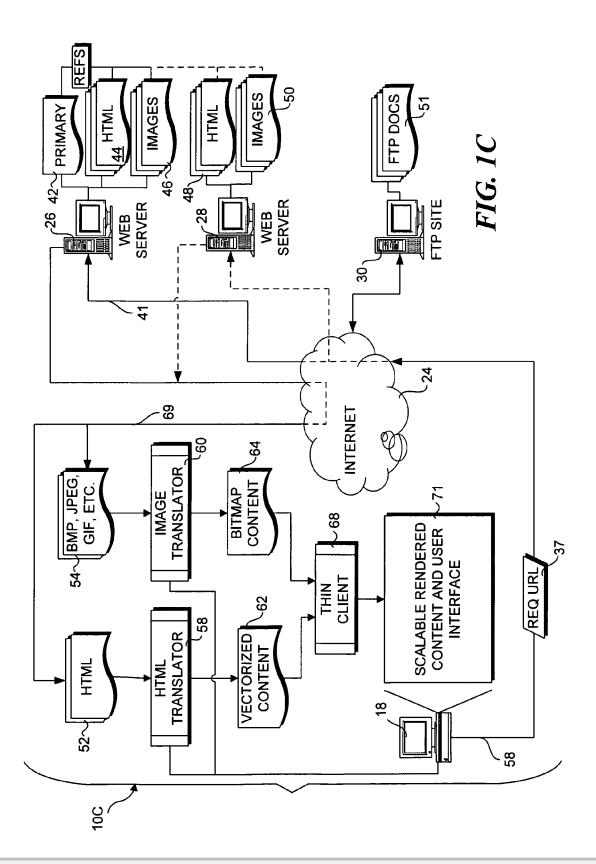














DOCKET

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.

