

(19) **United States**

(12) **Patent Application Publication**
Chen et al.

(10) **Pub. No.: US 2004/0103371 A1**

(43) **Pub. Date: May 27, 2004**

(54) **SMALL FORM FACTOR WEB BROWSING**

(52) **U.S. Cl. 715/513; 715/514**

(76) **Inventors: Yu Chen, Beijing (CN); Wei-Ying Ma, Beijing (CN); Ming-Yu Wang, Beijing (CN); Hong Jiang Zhang, Beijing (CN)**

(57) **ABSTRACT**

A large web page is analyzed and partitioned into smaller sub-pages so that a user can navigate the web page on a small form factor device. The user can browse the sub-pages to find and read information in the content of the large web page. The partitioning can be performed at a web server, an edge server, at the small form factor device, or can be distributed across one or more such devices. The analysis leverages design habits of a web page author to extract a representation structure of an authored web page. The extracted representation structure includes high level structure using several markup language tag selection rules and low level structure using visual boundary detection in which visual units of the low level structure are provided by clustering markup language tags. User viewing habits can be learned to display favorite parts of a web page.

Correspondence Address:
LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

(21) **Appl. No.: 10/306,729**

(22) **Filed: Nov. 27, 2002**

Publication Classification

(51) **Int. Cl.⁷ G06F 15/00**

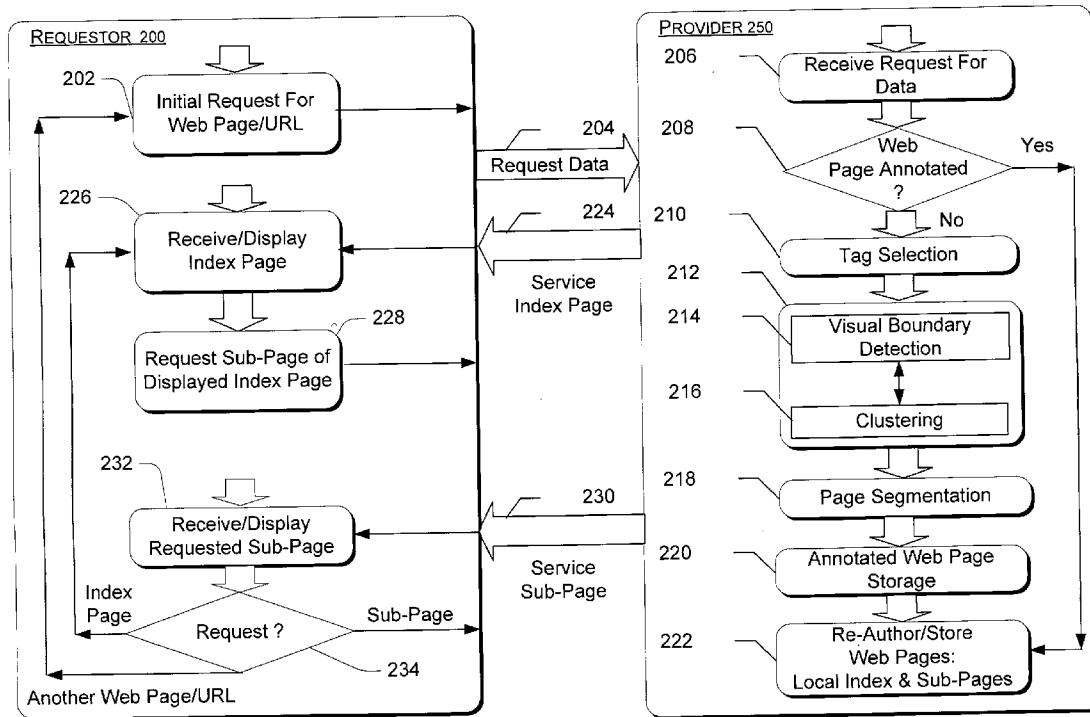


Fig. 1

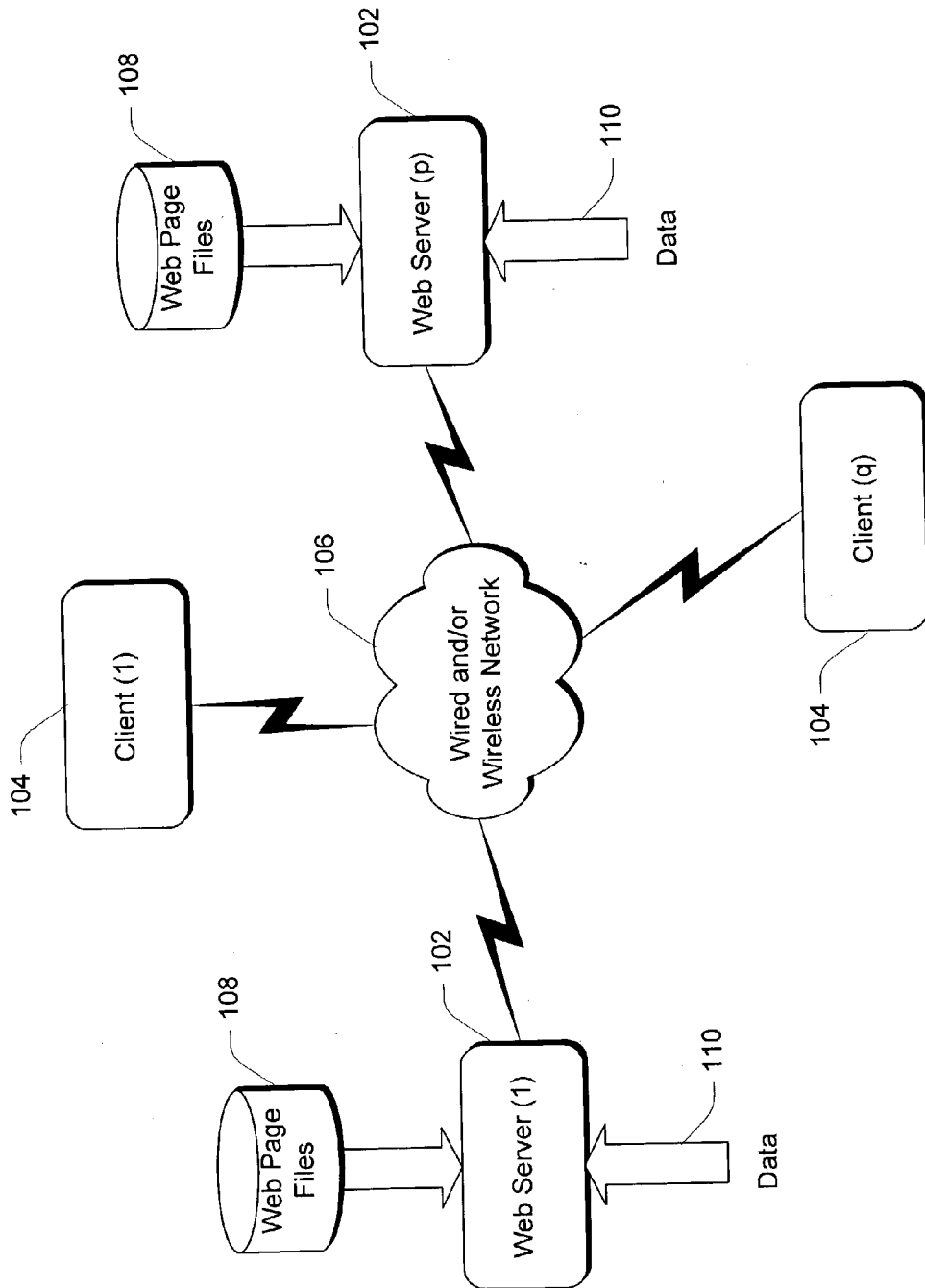


Fig. 2

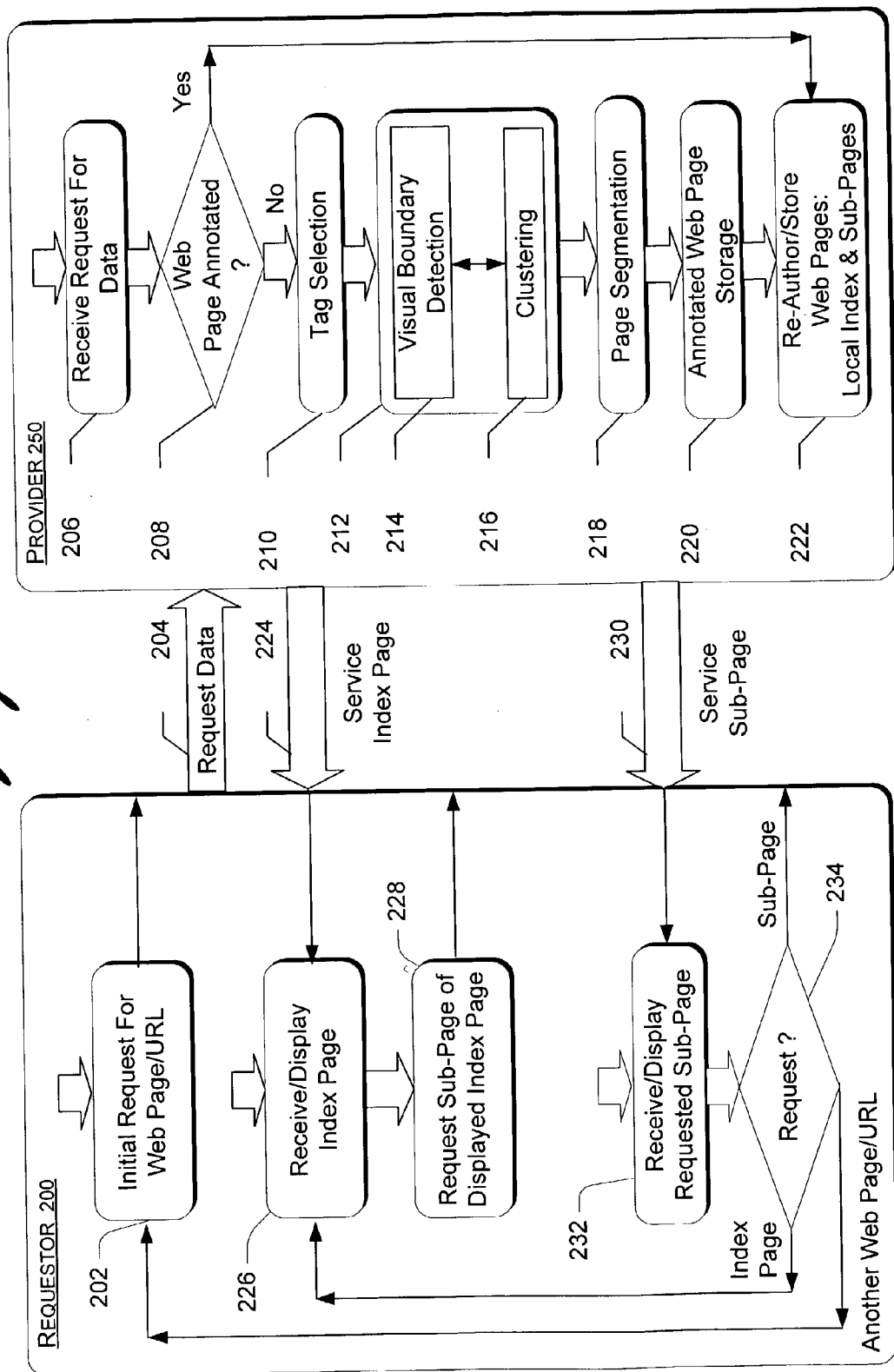
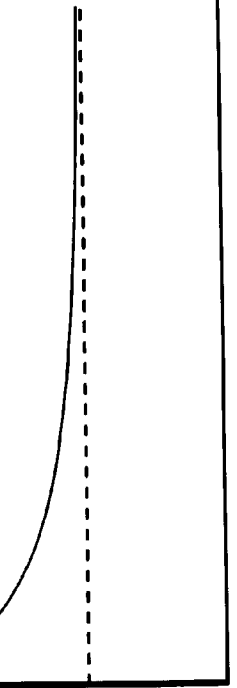


Fig. 3: Header/Footer Detection

$N = \text{base_threshold} + F(\text{Height/Width})$, where
 $F(x) = a/(b * x + c)$



$x = \text{Height/Width}$

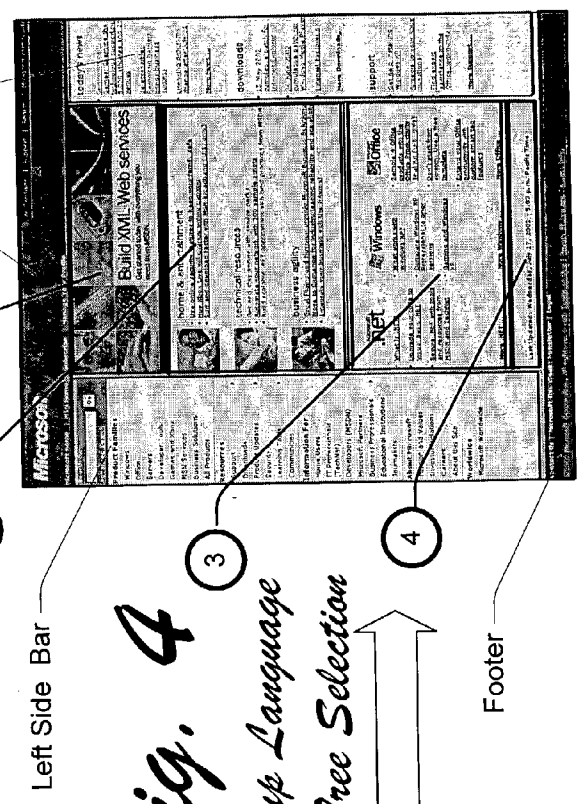


Fig. 4
 Markup Language
 Tag Tree Selection

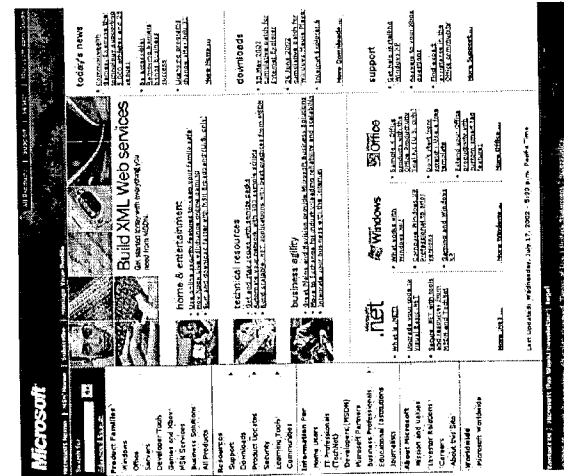


Fig. 5: Visual Boundary Detection

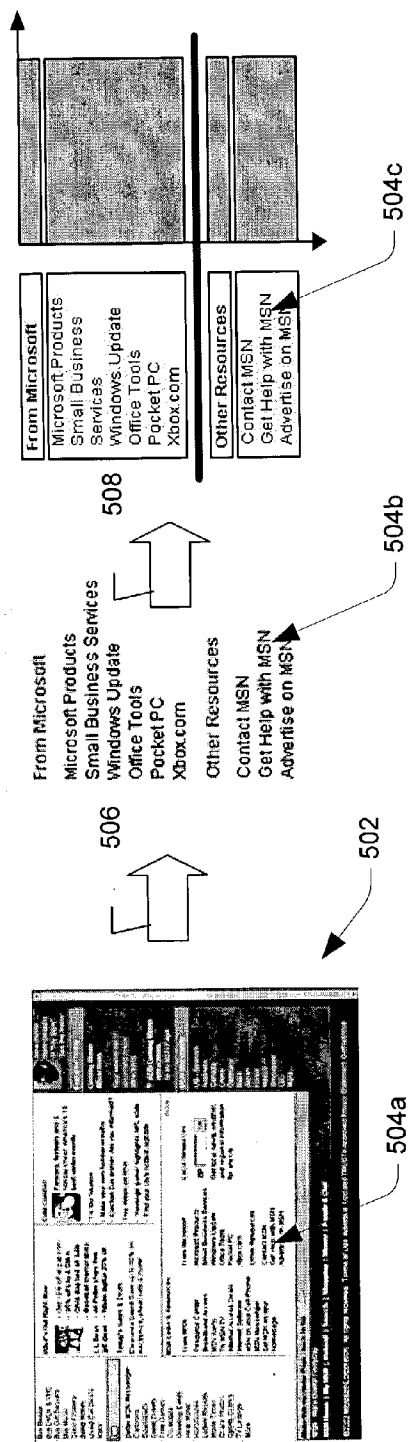
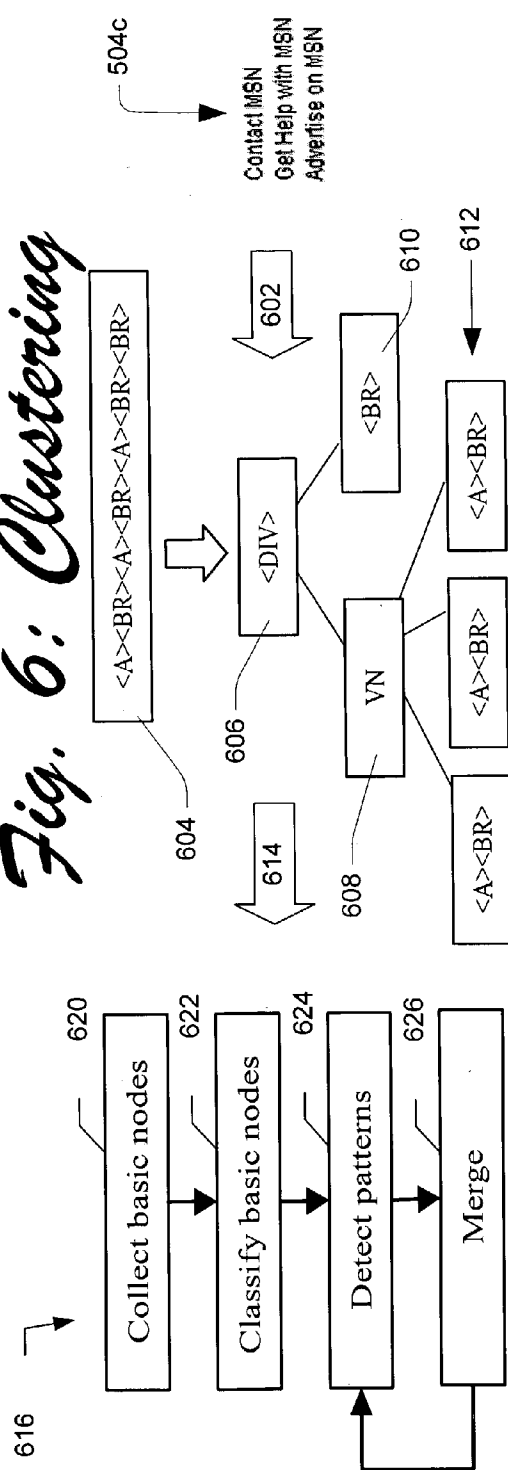


Fig. 6: Clustering



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.