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(54) INTERNET-BASED CUSTOMER REFERRAL SYSTEM

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U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/366,931

(22) Filed: Aug. 4, 1999

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- (63) Continuation of application No. 08/883,770, filed on Jun. 27, 1997, now Pat. No. 6,029,141.
- (51) **Int. Cl.** *G06Q 40/00* (2006.01)
- (52) **U.S. Cl.** 705/27; 705/10; 705/26

(56) References Cited

U.S. PATENT DOCUMENTS

5,319,542	A		6/1994	King, Jr. et al.
5,537,314	Α		7/1996	Kanter 705/28
5,590,197	Α		12/1996	Chen et al.
5,712,979	A		1/1998	Graber et al.
5,715,314	A		2/1998	Payne et al.
5,717,850	Α	*	2/1998	Apperley et al 714/6
5,717,860	Α		2/1998	Graber et al.
5,724,424	A		3/1998	Gifford
5,745,681	Α		4/1998	Levine et al.
5,812,769	Α	»įk	9/1998	Graber et al 709/228
5,819,285	Α		10/1998	Damico et al.
5,895,454	Α		4/1999	Harrington 705/26

5,901,287 A * 5/1999 Bull et al. 709/218

(Continued)

FOREIGN PATENT DOCUMENTS

WO WO 97/13330 A2 * 4/1997

OTHER PUBLICATIONS

Anonymous, No. 4463978, Dialog File 16 (Gale Group PROMT(R)), "Amazon.com Introduces "Amazon.com Associates"—A New model for Internet-Based Commerce", Business Wire, Jul. 18, 1996, 3 pages.*

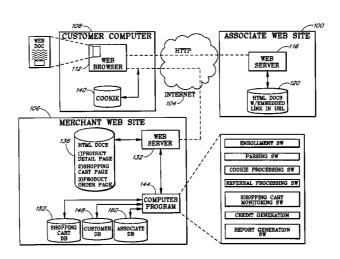
(Continued)

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(57) ABSTRACT

An Internet-based customer referral system enables individuals and other business entities ("associates") to refer customers to a merchant's web site in return for compensation, such as commissions on resulting sales. Entities initially register with the merchant web site as associates, and are provided with instructions for creating links to the merchant web site. An associate may, for example, set up an associate web site (or other information dissemination system) with reviews, recommendations, and/or editorials of specific products in the merchant's online catalog, together with links to associated pages in the catalog. When a user follows such a link and then makes a purchase (as tracked by the merchant web site), the system preferably awards a commission to the associate. The system also preferably generates feedback reports that provide each associate with data regarding the effectiveness of each link provided by that associate.

25 Claims, 14 Drawing Sheets



U.S. PATENT DOCUMENTS

5,991,735	Α	*	11/1999	Gerace		705/10
5,991,740	Α	¥.	11/1999	Messer		705/27
6,065,048	Α	*	5/2000	Higley	· · · · · · · · · · · · · · · · · · ·	709/218
6,141,666	Α	*	10/2000	Tobin	′	715/513

OTHER PUBLICATIONS

Booker et al., "On-line options blooming: Hearts afire on the 'net', Computerworld, Feb. 13, 1995, vol. 29, No. 7, 3 pages.* Kisor, Henry, "BookWire on the Web: A virtual candy store for cyberbibliophiles", Chicago Sun-Times, Jun. 23, 1996, p. 14.* ibic@fddisunsite.oit.unc.edu, Apr. 22, 1996, email communication provided by Amazon.com.*

nicholas@amazon.com, Apr. 25, 1996, email communication provided by Amazon.com.*

tom@localhost by stevens.amazon.com, May 7, 1996, email provided by Amazon.com.*

Foster, Ed, "Can mixing cookies with online marketing be a recipe for heartburn?", InfoWorld, Jul. 22, 1996, vol. 18, No. 30, pp.54.* Resnick, P., Iacovou, N., Suchak, M. Bergstrom, P., and Riedl, J., GroupLens: An Open architecture for Collaborative Filtering of Netnews. Proceedings of ACM 1994 Conference on Computer Supported Cooperative Work, Chapel Hill, NC, pp. 175-186.

Balabanovic, M. and Shoham, Y., Fab: Content-Based, Collaborative Recommendation. Communications of the ACM, vol. 40, No. 3, (Mar. 1997) pp. 66-73.

Can Mixing "Cookies" with Online Marketing be a Recipe for Heartburn? (Infoworld. vol. 18, No. 30) Jul. 22, 1996.

Real Time Travel Info Available Online (Dialog database file 9, document 01107096) Jan. 17, 1995.

Online Growth Virtually Untapped; PC Vendors Taking More Advantage of Booming Sales (Computer Retail Week vol. 4, No. 64, p. 160) Jun. 6, 1994.

Selected document from Books.com Web site describing Book Stacks Unlimited links partner program, downloaded and printed Jun. 20, 1997 and Jun. 23, 1997. 8 printed pages.

Selected documents from Incognito Café Web site describing several on-line bookstore links, undated (5 printed pages).

One-page description of alleged iBill proir art provided to applicants by Internet Billing Company, Ltd.

Reprint of press release titled: "Earthport claims prior art in Amazon patent:" Scripting News, Mar. 2, 2000 (2 pages printed from Internet).

Internet Patent News Service email, dated Feb. 29, 2000.

Copy of Information Disclosure Statement (including exhibits) filed on May 10, 1999, in parent application (No.: 08/883,770).

B. Dunn and S. Kurzrock, "Human Resources Effectiveness Tests for Sales Compensation Plans" The Bankers Magazine, dated Sep.-Oct. 1989, pp. 65-68.

Agreement dated Mar. 1, 1996 between Amazon.com and IBIC. Hoffman, D. L. and Novak, T.P. "Cdnow's approach to marketing," Strategic Direction, dated Oct. 2000, pp. 17-18.

Hoffman, D.L. and Novak, T.P. "When Exposure-Based Web Advertising Stops Making Sense (And What CDNOW Did About It)," eLab, Vanderbilt University, draft date: Jan. 2000, 13 pages.

Hoffman, D.L. and Novak, T.P. "How to Acquire Customers on the Web," Harvard Business Review, May/Jun. 2000, reprint R00305. Complaint dated Jun. 22, 2005 filed in matter of Amazon.com, Inc., et al. v. Cendant Corporation, et al., Case No. CV05-1137 (eleven pages, exhibts omitted).

Declaration of Jason Olim, dated Dec. 21, 2004, in matter of *BTG International, Inc.*, v. *Amazon.com, Inc. et al.*, Case No. 04-1264 (39 pages including exhibits).

Declaration of Jason Olim, dated Apr. 29, 2004 (2 pages).

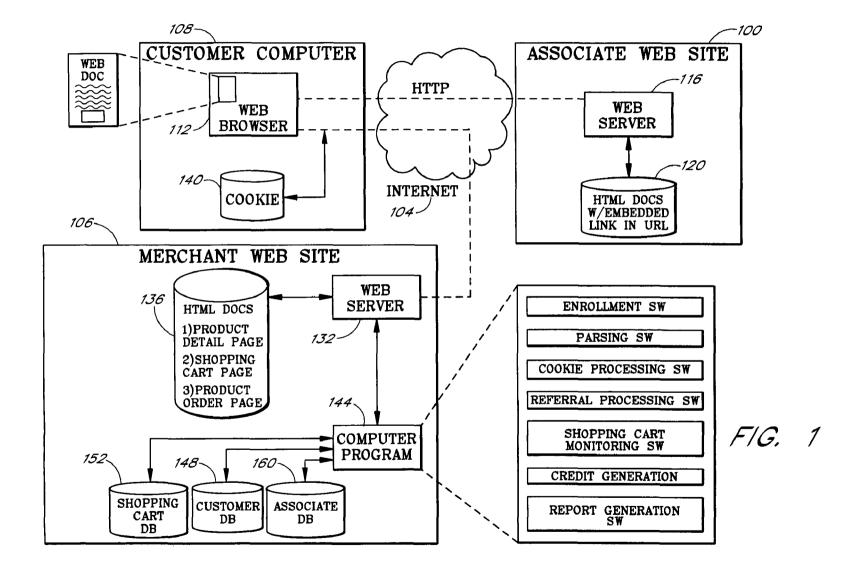
Declaration of Matthew Olim, dated Jul. 13, 2004 (3 pages).

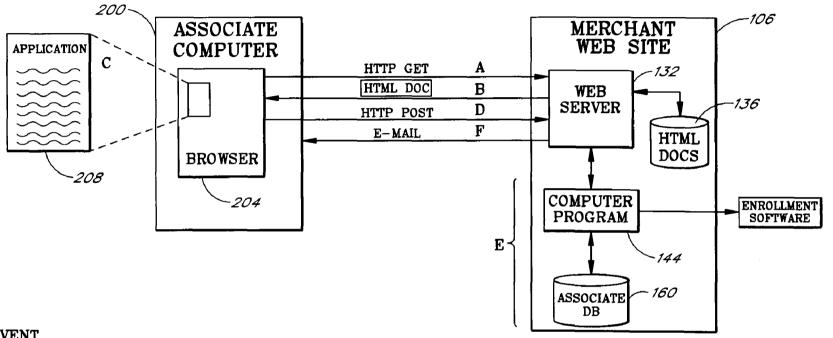
Declaration of Kevin Anderson, dated Oct. 12, 2004 (2 pages).

Press Release titled: "Open Market: Open Market Inc. first to offer complete end-to-end solution for electronic commerce; new company introduces StoreBuilder kit and system to enable merchants to easily build and manage on-line storefronts," DialogClassic Web(tm), File 810: Business Wire, dated Oct. 24, 1994.

Undated article titled "History of Affiliate Marketing," printed from http://www.affiliatemanager.net/article17.shtml on Dec. 27, 2004. Copy of Rule 131 Declaration dated Jul. 31, 2004, including exhibits thereto, submitted in U.S. Appl. No. 09/415,124.

* cited by examiner





EVENT

- A. HTTP GET DOC FROM SERVER
- HTML DOC SENT TO CLIENT
- CLIENT INPUTS DATA ON-LINE
- D. HTTP POST MSG W/DATA FROM ENROLLING ASSOCIATE
- E. WEB SERVER RECEIVES DATA: ENROLLMENT SW PROGRAM PROCESSES INFO CREATING AN ASSOCIATE DB RECORD AND GENERATES UNIQUE STORE ID
- F. ENROLLMENT SW PROGRAM AUTOMATICALLY GENERATES E-MAIL MSG TO ASSOC. COMPUTER W/PROPER LINK INSTRUCTIONS AND UNIQUE STORE ID

F/G. 2

Λ	Associates Program Application
AMAZON.COM Text Only	Contact Information
SEARCH BY Author, Title, Subject Keyword ISBN Advanced Query	Please fill out the name and address of the person in charge of your sponsoring Web site. This is the person to whom we will address all correspondence about your participation in the Associates Program. Contact person's name:
BUY BOOKS Shopping Cart Checkout	Address Line 1:
SUPER ROOM Computer & Internet	Address Line 2:
MILES OF AISLES Business Science Fiction Nonfiction Literary Fiction Romance Children's Books And Many More	City: State: ZIP Code: Phone number:
LISTS Titles in the News Bestsellers Award Winners Amazon.com 500 Hot 20 Mystery 50 Literary 50 Computer 50 Business 50 Science Fiction 50	Contact person's e-mail address: Please fill out the name and address of the person to whom we should send referral fee payments earned through this program. Payee's name:

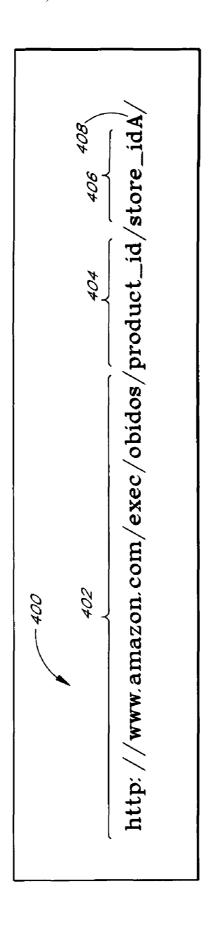
FIG. 3a

ARTICLES & INTERVIEWS Amazon.com Journal Eclectica In Their Own Words SIGN-UP Eyes Expert Editors BIG FUN Win Prizes Wanna Play? Customer Reviews PARTNERS Associates Publishers Authors	Address Line 2: City: State: ZIP Code: Phone number: Payee's e-mail address:
AMAZON.COM About Qur Store Press Clips Join Our Staff Customer Comments Send Us E-mail HELP Help Desk Your Account New User Guide Home	Describe Your Existing Web Site Enter the name and URL of the Web site through which you wish to link to our books. Name of the sponsoring Web site: Home page URL of sponsoring Web site: http:// Describe Your Intended Book Listings: Briefly describe the type of books you intend to list on your site. Add any other brief comments or explanation (try to keep this under 10 lines or so):

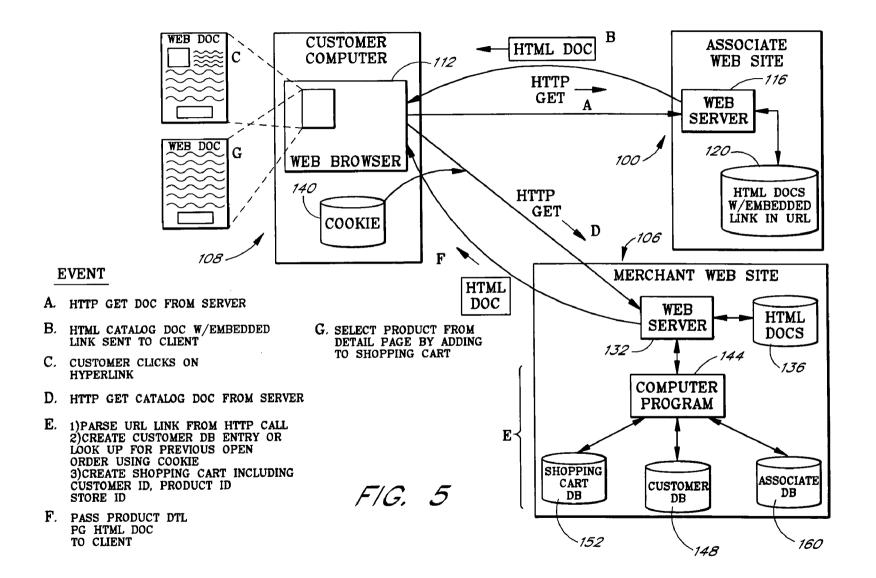
FIG. 3b

	Description and comments:
1	
<u> </u>	
	At some point, we may decide to display your name somewhere on our
	pages during a customer order, e.g. "Good Zookeeping Magazine in
	association with Amazon.com". Please enter the name we should use to refer
	to you if we do so. In the above example, the name you entered would have
	been "Good Zookeeping Magazine". In many cases, we know that this will
	be the same as the name of your sponsoring Web site, but please enter the correct name again here:
	CONTOUR ARMINISTS.
	Enter the name we should use on these pages:
1	
1	
İ	Submit your application
1	Before finalizing and submitting your application, please review the
j .	Operating Agreement, which describes the terms and conditions of your
	participation in the Associates Program. Once you have filled out this form
	and reviewed the agreement, press the "Yes" button to submit your
	application or the "No" button to exit.
	By pressing the "yes" button, you indicate that you want to apply to
	participate in the Amazon.com Associates Program, that you have reviewed
	the Operating Agreement and understand its contents, and that, if
	Amazon.com, Inc. accepts this application, you agree to be bound by the
	terms and conditions of the operating agreement.
	Yes, I want to participate
	No, I do not want to participate

FIG. 3c



F/G. 4









Terrain Skiing:

How to master tough skiing, like the experts!

Feb. 26, 2008

You've been through ski school and are a good skier -- on groomed terrain. Now what? How do you take your skills into difficult terrain and snow conditions? Seth Masia, long-time SKI Magazine writer and a veteran of the Squaw Valley Ski School, provides insight into how experts make tough conditions look easy -- and how you can, too. The book emphasizes terrain absorption and cross-over skills that are especially useful for skiers adopting the new supersidecut skis.

Selected as the official manual of the North American Ski Training Center.

-608

"Covers snow conditions like crust, ice, and powder, and terrain situations like bumps, trees and chutes in ways that are succinct and to the point. Skiers want outcome-specific instruction and this book gives it." -- Dave Merriam, SKI Magazine instruction editor and head coach of the PSIA Demonstration Teams.

"Full of mountain smarts and savvy." -- Snow Country

\$12.95. Contemporary Books ISBN 0-8092-3202-2

Click here to order Terrain Skiing!

606-

FIG. 6

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<HR>
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<H2>New Titles</H2>

<H3>Terrain Skiing:</H3>

<H4>How to master tough skiing, like the experts! </H4>

<H4>By Seth Masia</h4>

You've been through ski school and are a good skier -- on groomed terrain. Now what? How do you take your skills into difficult terrain and snow conditions? Seth Masia, long-time Ski Magazine writer and a veteran of the Squaw Valley Ski School, provides insight into how experts make tough conditions look easy-- and how you can too. The book emphasizes terrain absorption and cross-over skills that are especially useful for skiers adopting the new supersidecut skis.

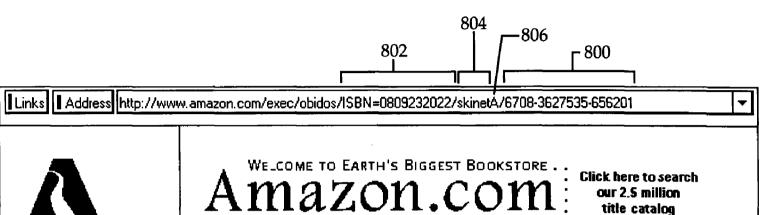
Selected as the official manual of the North American Ski Training Center

"Covers snow conditions like crust, ice, and powder, and terrain situations like bumps, trees and chutes in ways that are succinct and to the point. Skiers want outcome-specific instructions and this book gives it." — Dave Merriam, Ski Magazine instruction editor and head coach of the PSIA Demonstration Teams.

"full of mountain smarts and savvy." -- Snow Country

\$12.95. Contemporary Books ISBN 0-8092-3202-2<P>
Click here to order Terrain Skiing!
<HR>

FIG. 7



AMAZON, COM

Text Only

SEARCH BY

Author, Title, Subject Keyword ISBN Advanced Query

BUY BOOKS

Shopping Cart Checkout

SUPER ROOM

Computer & Internet

mazon.com



Terrain Skiing: How to Master Tough Skiing Like the Experts

by Seth Masia

Paperback

Published by Contemporary Books Publication date: August 1, 1996 Dimensions (in inches): 8.26 x 5.56 x .37

ISBN: 0809232022

List: \$12.95 ~ Our Price: \$10.36 ~ You Save: \$2.59 (20%)

Availability: This item usually ships within 24 hours.

Add it to your Shopping Cart

(You can always remove it later...)

FIG. 8

U.S. Patent

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Sheet 11 of 14

FIG. 9

COOKBOOK§ Welcome to the new StarChefs Cookbook Store. Thanks for stopping in! We're filling our shelves to offer you books from the starchefs and cookbook authors we feature as well as others. Best of all is that because of our association with Amazon Books we can get any book you want, at any time of day or night...24 hours a day. They can even be giftwrapped and delivered with a note for an epicurean friend! Don't forget to bookmark this page as we will be adding new books all the time! Daniel Boulud David Burke Darina Allen The Complete Book Cooking With Cooking with Daniel Boulud David Burke of Irish Country Cooking: Traditional and Wholesome Hardcover Hardcover Recipes from Ireland Published by Random House Published by Knopf Hardcover Published by Penguin USA --Order This CookBook -- Order This CookBook --Order This CookBook -- More CookBook Info -- More CookBook Info -- More CookBook Info 1000 more

FIG. 10a

Links | Address | http://www.amazon.com/exec/obidos/ISBN=0679404090/StarChefsCookbooA/6708-3627535-656201

ÁMAZÓN, CÓM

Text Only

SEARCH BY

Author, Title, Subject

Keyword

ISBN

Advanced Query

BLIY BOOKS

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Checkout

SUPER ROOM

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Cooking With Daniel Boulud

by Daniel Boulud, Todd France (Photographer)

1 Edition

Hardcover, 385 pages

Published by Random House

Publication date: November 1, 1993

Dimensions (in inches): 10.31 x 8.35 x 1.03

ISBN: 0679404090

List: \$50.00 ~ Our Price: \$35.00 ~ You Save: \$15.00 (30%)

Availability: On Order, usually ships within 1-2 weeks.

Add it to your Shopping Cart

(You can always remove it later...)

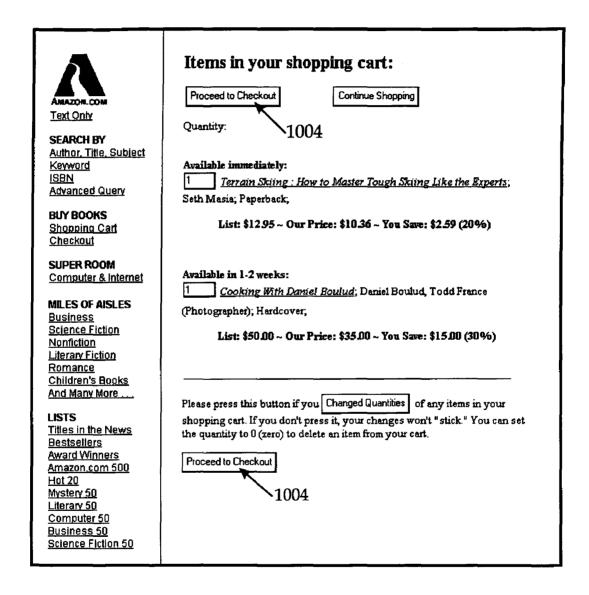


FIG. 10c

INTERNET-BASED CUSTOMER REFERRAL SYSTEM

This application is a continuation of application Ser. No. 08/883,770, filed Jun. 27, 1997 U.S. Pat. No. 6,029,141.

FIELD OF THE INVENTION

This invention relates to electronic commerce. Specifically, this invention relates to information processing methods for marketing and selling goods via the Internet or other interactive network.

APPENDICES

Included as Appendices A and B are documents that illustrate a preferred embodiment of the invention. These materials form part of the disclosure of the specification.

BACKGROUND OF THE INVENTION

With the increasing popularity of the Internet and the World Wide Web, it has become common for merchants to set up Web sites for marketing and selling goods. One example of such a Web site is the online bookstore site of AMAZON.COM, the assignee of the present invention. Via this site, consumers can access and place orders from an online book catalog that includes millions of titles.

One problem commonly encountered by online merchants is an inability to effectively market goods via their Web sites. Because the customer cannot physically inspect the products via the Web site, and typically cannot talk to a salesperson, it is desirable that the site provide access to product reviews, product ratings, and other information that can be relied on by the customer to make an informed decision. In many cases, however, the merchant lacks the resources needed to generate or otherwise obtain such information, especially if the merchant sells a large and diverse selection of goods. For example, it would not be practical for AMAZON.COM to prepare reviews of all, or even a significant portion of, the millions of titles available on the AMAZON.COM site.

Another problem commonly faced by online merchants is an inability to efficiently attract potential consumers to their Web sites. One way of attracting consumers has been to market the site through television, newspaper and Internet advertisements. However, advertising a site using conventional methods can be expensive, and can consume significant human resources. In addition, it is often difficult or impossible to evaluate the effectiveness of a given advertisement

The present invention addresses these and other problems.

SUMMARY OF THE INVENTION

The present invention provides a software system and method for enabling an Internet sales entity, referred to herein as the "merchant," to efficiently market and sell goods in cooperation with Web sites or other network sites of respective business partners, referred to herein as "associates." The system and method are implemented in part by software that runs on the merchant's Web site. Through this site, an entity can enroll (via an automated registration process) as an associate, and can then disseminate catalogs (Web documents, PUSH documents, e-mail newsletters, 65 etc.) that include the associate's reviews and/or recommendations on specific products sold by the merchant.

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In accordance with one aspect of the invention, the associate catalog documents include product-specific hyperlinks, referred to herein as "referral links," that allow potential customers to link to the merchant's Web site to initiate purchases of such products from the merchant. Each referral link is provided within the catalog document in association with referral information that is transmitted to the merchant's site when a user (customer) clicks on the referral link. This referral information preferably includes the unique ID of the associate (assigned upon enrollment) and the unique ID of the selected product. Referral processing software running on the merchant site uses this information to identify the associate that referred the customer to the merchant site, and to identify the product selected from the associate's catalog. If the customer subsequently purchases the selected product from the merchant site (e.g., by filling out an order form page and submitting the order), the referral processing software automatically credits the referring associate for the referral by, for example, applying a commission 20 to an account of the associate. In one implementation, the referral commission is automatically generated based on a fixed percentage of the merchant's selling price, and is paid to the associate electronically on a periodic basis (such as every calendar quarter).

In accordance with another aspect of the invention, the merchant site implements an automated associate enrollment process for allowing individuals and business entities to register as associates. The enrollment process is implemented in part by Web pages that are transmitted to the computer of the associate applicant, and by enrollment software that runs on the merchant site. During the enrollment process, the applicant is presented with an online business agreement (in the form of a Web page) that sets forth the terms and conditions of doing business with the merchant. In addition, the applicant is presented with an online form that requests various information, such as the name, payment address and e-mail address of the applicant and a description of the proposed associate Web site. In one implementation, the enrollment software includes text scanning code that automatically scans the completed form for pre-specified words and phrases (vulgarities, etc.) that may give rise to a rejection of the application, and flags the application for further (human) review when such a word or phrase is found.

As part of the online registration, the application is processed (either automatically or by a staff member of the merchant), and the enrollment software generates and assigns a unique associate ID to the applicant, and stores this ID (together with other associate information) in an associate database of the merchant site. In addition, the enrollment software generates and sends an e-mail message to the associate with instructions for placing referral links within catalog documents.

In a preferred embodiment, the merchant site includes code that maintains a unified shopping cart data structure ("shopping cart") for each ongoing customer shopping session. For each ongoing shopping session, the shopping cart maintains a record of at least: (i) the products that are currently selected by the customer for prospective purchase, and (ii) the referral source (if any) of each such product. In one implementation, each shopping cart persists on the merchant site for an extended period of time (such as one week) following the most recent access by the customer, thereby allowing the customer to conduct extended shopping sessions. To purchase the products represented within the shopping cart, the customer proceeds to a "check out" area of the merchant site and submits an order. Software running

on the merchant site then uses the information collected within the shopping cart to identify, and appropriately credit the account of, each associate that provided a corresponding referral.

An important benefit of the shopping cart feature is that it 5 allows the customer to select products from multiple different sites, and then perform a single check-out to purchase all of the selected products. Another benefit is that it provides an efficient mechanism for crediting the accounts of the associates at the time of purchase. Although the use of a 10 shopping cart provides certain advantages, the referral tracking and crediting features of the invention can be implemented without the use of a shopping cart.

In one implementation, the various components are provided on the Web site of AMAZON.COM as part of the 15 first appears. AMAZON.COM Associates Program. Through this program, an individual or business entity can register as an AMAZON.COM associate, and can then set up a Web site to market customized subsets of the books (typically in a particular area of expertise) available from the AMAZON- 20 .COM site. For example, a computer company can set up a site (or add an area to an existing site) to recommend and sell selected books on computer programming languages, and a Cajun chef can set up a site to recommend and sell selected books on New Orleans style cooking. The associate is in turn 25 OPERATION paid a commission or other consideration based on the referrals that result in actual purchases. Because AMAZON-.COM handles the various tasks associated with processing orders from customers (including shipping, collections, and customer service), the associate need only be concerned with 30 the administration of the associate Web site.

An important benefit of the invention is that it allows the task of marketing the merchant's products to be efficiently distributed among entities that have established reputations and exposure within their respective fields. Another benefit 35 the detailed description: is that it provides an efficient mechanism for exposing the merchant's Web site to the public, by encouraging others (associates) to set up outgoing links to the merchant's site.

Because the associate enrollment and referral tracking/ credit functions are automated in whole or in part, these 40 benefits can be realized with minimal supervision by the merchant. In addition, because the compensation provided to the associates is performance-based (e.g., based on the number of referrals that result in actual sales), the merchant need not be concerned with the existence of large numbers 45 of associates that provide relatively small numbers of referrals.

BRIEF DESCRIPTION OF THE DRAWINGS

These and other features and advantages of the invention will now be described with reference to the drawings of certain preferred embodiments, which are intended to illustrate and not to limit the invention, and in which:

FIG. 1 is a high-level architectural drawing illustrating the 55 primary components of a system that operates in accordance with the present invention.

FIG. 2 is an architectural drawing and flow diagram illustrating the enrollment function of the system.

FIGS. 3a-3c are respective screen displays further illus- 60 trating the enrollment function.

FIG. 4 illustrates a URL format used to embed referral links within Web documents in accordance with the invention.

FIG. 5 is an architectural drawing and flow diagram 65 illustrating a referral transaction sequence in accordance with the present invention.

FIG. 6 is a screen display illustrating an HTML catalog document of the associate's Web site.

FIG. 7 is an HTML listing illustrating a preferred method for embedding a referral link within a catalog document of an associate's Web site.

FIG. 8 is a screen display illustrating an HTML catalog document detail page of the merchant Web site.

FIG. 9 is a screen display illustrating a preferred shopping cart processing method in accordance with the present invention.

FIGS. 10a-10c are screen displays illustrating HTML documents of the merchant Web site.

In the drawings, the first digit of each reference number indicates the Figure number in which the referenced item

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

To facilitate a complete understanding of the invention, the description of the preferred embodiment is arranged within the following sections:

- 1. GLOSSARY OF TERMS AND ACRONYMS
- 2. OVERVIEW OF SYSTEM COMPONENTS AND
 - 3. ASSOCIATE ENROLLMENT FUNCTION
 - 4. REFERRAL TRANSACTION FUNCTION
- 5. UNIFIED SHOPPING CART FUNCTION
- 6. REPORT GENERATION FUNCTION
- 7. CONCLUSION

1. GLOSSARY OF TERMS AND ACRONYMS

The following terms and acronyms are used throughout

Client-Server. A model of interaction in a distributed system in which a program at one site sends a request to a program at another site and waits for a response. The requesting program is called the "client," and the program which responds to the request is called the "server." In the context of the World Wide Web (discussed below), the client is a "Web browser" (or simply "browser") which runs on a computer of a user; the program which responds to browser requests by serving Web pages is commonly referred to as a "Web server."

Hyperlink. A navigational link from one document to another, or from one portion (or component) of a document to another. Typically, a hyperlink is displayed as a highlighted word or phrase that can be selected by clicking on it using a mouse to jump to the associated document or documented portion.

Hypertext System. A computer-based informational system in which documents (and possibly other types of data entities) are linked together via hyperlinks to form a user-navigable "web."

Internet. A collection of interconnected (public and/or private) networks that are linked together by a set of standard protocols (such as TCP/IP and HTTP) to form a global, distributed network. (While this term is intended to refer to what is now commonly known as the Internet, it is also intended to encompass variations which may be made in the future, including changes and additions to existing standard protocols.)

World Wide Web ("Web"). Used herein to refer generally to both (i) a distributed collection of interlinked, userviewable hypertext documents (commonly referred to as Web documents or Web pages) that are accessible via

5

the Internet, and (ii) the client and server software components which provide user access to such documents using standardized Internet protocols. Currently, the primary standard protocol for allowing applications to locate and acquire Web documents is HTTP, and the 5 Web pages are encoded using HTML. However, the terms "Web" and "World Wide Web" are intended to encompass future markup languages and transport protocols which may be used in place of (or in addition to) HTML and HTTP.

Web Site. A computer system that serves informational content over a network using the standard protocols of the World Wide Web. Typically, a Web site corresponds to a particular Internet domain name, such as "amazon.com," and includes the content associated with a 15 particular organization. As used herein, the term is generally intended to encompass both (i) the hardware/ software server components that serve the informational content over the network, and (ii) the "back end" standard or specialized components, that interact with the server components to perform services for Web site

HTML (HyperText Markup Language). A standard coding convention and set of codes for attaching presentation and linking attributes to informational content within documents. (HTML 2.0 is currently the primary standard used for generating Web documents.) During a document authoring stage, the HTML codes (referred to as "tags") are embedded within the informational content of the document. When the Web document (or HTML document) is subsequently transferred from a Web server to a browser, the codes are interpreted by the browser and used to parse and display the document. Additionally in specifying how the Web browser is to display the document, HTML tags can be used to create links to other Web documents (commonly referred to as "hyperlinks"). For more information on HTML, see Ian S. Graham, The HTML Source Book, John Wiley and Sons, Inc., 1995 (ISBN 0471-11894-4).

HTTP (HyperText Transport Protocol). The standard World Wide Web client-server protocol used for the exchange of information (such as HTML documents, and client requests for such documents) between a browser and a Web server. HTTP includes a number of different types of messages which can be sent from the client to the server to request different types of server actions. For example, a "GET" message, which has the format GET <URL>, causes the server to return the 50 document or file located at the specified URL.

ISBN (International Standard Book Number). A numerical identifier associated with books, pamphlets, educational kits, microforms, CD-ROM and braille publications in circulation throughout the world. The ISBN is 55 a ten-digit number assigned to each published title that provides an unduplicated, internationally recognized "identity."

URL (Uniform Resource Locator). A unique address which fully specifies the location of a file or other 60 resource on the Internet. The general format of a URL is protocol://machine address:port/path/filename. The port specification is optional, and if none is entered by the user, the browser defaults to the standard port for whatever service is specified as the protocol. For 65 example, if HTTP is specified as the protocol, the browser will use the HTTP default port of 80.

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Cookies. A technology that enables a Web server to retrieve information from a user's computer that reveals prior browsing activities of the user. The informational item stored on the user's computer (typically on the hard drive) is commonly referred to as a "cookie." Many standard Web browsers support the use of cookies.

PUSH Technology. An information dissemination technology used to send data to users over a network. In contrast to the World Wide Web (a "pull" technology), in which the client browser must request a Web page before it is sent, PUSH protocols send the informational content to the user computer automatically, typically based on information pre-specified by the user.

2. OVERVIEW OF SYSTEM COMPONENTS AND OPERATION

FIG. 1 illustrates the general architecture of a referral hardware/software components, including any non- 20 system that operates in accordance with the present invention. The system includes a customer computer 108, an associate Web site 100, and a merchant Web site 106, all of which are linked together by the Internet 104. The customer computer 108 may be any type of computing device that allows a user ("customer") to interactively browse Web sites via a Web browser 112. For example, the customer computer 108 may be a personal computer (PC) that runs the Windows NT operating system.

> The merchant Web site 106 is a site that provides various functionality for allowing customers to purchase products, including products selected from the Web sites of associates. Typically, this site will be operated by a business entity (referred to herein as the "merchant") that handles the various order processing, shipping, collections, and customer service tasks associated with the sale of goods. In an implementation described herein, the merchant Web site 106 is the site of AMAZON.COM.

> As described below, the site 106 includes enrollment software that implements an online registration process for allowing other entities (individuals, companies, etc.) to register as associates. An entity enrolling as an associate provides the merchant Web site 106 with a completed, online registration application that is processed by an enrollment software program ("SW") at the site 106. The enrollment software creates an entry in the associate database 160 according to the information provided by the enrolling

> The associate's Web site 100 is the site of an entity that has registered with the merchant, via the online registration process, to market a subset of the merchant's goods in return for compensation (preferably a performance-based commission). Typically, this site is owned and operated by an individual or business entity ("associate") that is not in the same business as that of the merchant. For example, in the context of the AMAZON.COM Associates Program, the associate may be an individual that is in the business of rating mystery novels.

> As described below, because the merchant handles the tasks of processing online orders, shipping products, collecting payment, and providing customer service, the associate need not be concerned with these tasks. Thus, the associate can effectively become an online retailer immediately, by simply enrolling as an associate and setting up a Web site.

In addition, because the merchant Web site 106 includes software for automating the primary functions of doing business with associates (such as associate enrollment, refer-

ral transaction processing, and commission tracking and payment), the architecture allows the merchant to do business with large numbers (e.g., thousands) of associates with minimal supervision by the merchant. Further, because the commissions paid to the associates are performance-based, there is little or no downside to the merchant to enrolling marginally-productive associates that provide relatively small numbers of referrals.

In operation, the customer accesses the associate's Web site 100 using a standard Web browser 112, such as Microsoft's Internet Explorer or Netscape's Navigator, which uses the HTTP protocol to communicate with a Web server 116 of the associate's site 100. The Web server 116 accesses a local store of catalog documents 120 (in the form of HTML or "Web" documents) which can be requested, retrieved and viewed by the customer via the Web browser 112. These catalog documents 120 include information generated by the associate about the various products featured on the associate's Web site 100. Preferably, this information includes editorial descriptions, reviews, and/or recommendations of the products that assist customers in making informed purchasing decisions.

The catalog documents 120 served by the associate's site 100 include special hyperlinks (to Web pages of the merchant Web site 106) for allowing consumers to select products for prospective purchase. Typically, one such hyperlink is provided for each product displayed on the associate's Web site 100. Alternatively, a hyperlink may be provided for a group of products. When a customer selects (e.g., clicks on) the hyperlink associated with a particular product, the customer is automatically connected to the merchant Web site 106, and presented with various options (included within Web pages 136 served from the merchant Web site 106) for allowing the customer to purchase the selected product from the merchant. The hyperlink thus serves as a referral mechanism for referring the customer to the merchant Web site 106.

As described in detail below, the special hyperlinks (also referred to herein as "referral links") of the associate's catalog documents are provided in association with additional information (embedded in a pre-defined format within the associated URL) that is transmitted to the merchant Web site 106 in response to selection of the link. In one implementation, this information includes a unique identifier of the associate (assigned upon enrollment) and a unique identifier of the selected product (such as the ISBN of a book). A computer program 144 of the merchant Web site 106 uses this information to identify the associate that was the source of the referral, and to credit the sale (referral) to the associate if the customer subsequently purchases the product (or group of products). (In other implementations, the crediting of the associate may occur without regard to whether the product is purchased.) Commission payments can then be paid to the associates on a periodic basis (such as once a month). In one implementation, the commission payments are made electronically, via the computer program 144, without the need for involvement by the merchant.

In one implementation, the merchant Web site **106** comprises a product information database (not shown) that stores product pricing information. The computer program **144** of the merchant site **106** uses this pricing information to calculate the proper commission or referral payment.

Although the implementation described herein uses monetary commissions to compensate the associates for referrals, other forms of compensation can be used. For example, 8

an associate (and/or the associate's customers) could be given a discount on products or services sold by the merchant

In one implementation of the merchant Web site 106, selection of a referral link causes a product detail page 136 to be displayed on the customer computer 108. This detail page 136 is served by the merchant Web site 106, and includes various information provided by the merchant (price, inventory, standard product description, etc.) about the selected product. From this page, a hyperlink can be selected that allows the selected product to be added to a customer "shopping cart."

The shopping cart is a customer-specific data structure that is generated and maintained (within a shopping cart database 152) by executable code of the merchant site 106. The database may be any type of data repository including, for example, an SQL table or ASCII text file. The information stored within the shopping cart includes a list of the products that have been selected by the customer for prospective purchase, together with an identifier of the referring associate (if any) corresponding to each such product. In one implementation, each shopping cart persists on the site 106 for an extended period of time (such as one week) following the most recent access by the customer, allowing the customer to conduct extended shopping sessions. When the customer proceeds to a check-out area of the merchant site 106 and submits an order for the selected products, the associate identifiers stored within the customer's shopping cart are used to appropriately credit the accounts of the referring associates. Although the shopping cart implementation provides an efficient mechanism for tracking and crediting referral events, referrals can alternatively be credited without the use of a shopping cart, such as by crediting the associate at the time of, or during the same shopping session as, the referral.

Because the identity of the customer is normally unknown to the merchant Web site 106 at the time of the referral event, the site 106 uses cookies technology to identify the customer, so that the customer can be associated with any existing shopping cart created during previous visits to the site 106. This process involves retrieving the cookie 140 from the customer computer 108 with the Web server 132, and then executing a computer program 144 that compares the cookie against information stored in a customer data structure 148. If no shopping cart exists for the customer, or if no cookie exists on the customer computer 108, a shopping cart structure is created for the user. Any of a variety of alternative techniques can be used to identify the customer, including prompting the customer for a user ID, and/or using URL information returned by the customer's Web browser.

Although the embodiment described herein uses Web technology to disseminate the catalog documents, any of a variety of document types and electronic dissemination technologies can be used. For example, the associate's catalog documents may be in the form of hypertextual e-mail messages that are disseminated by a list server, or PUSH documents disseminated by a PUSH server. As interactive television, video-on-demand, and Web TV technologies continue to evolve, it is contemplated that the "catalog documents" will include video advertisements that are displayed to the customer on a television screen. Further, although hypertextual catalog documents are preferably used, it is possible for an associate to use non-hypertextual catalogs (including paper-based product catalogs) that simply instruct the customer to manually enter the appropriate URL (including the referral information) into a browser program.

In addition, although the system is described in the context of "the" associate's Web site, it should be recognized that a given associate can disseminate its catalog documents (using the single associate ID assigned during online registration) from multiple different sites, including sites that use 5 different document formats and transfer protocols. Further, although the system is described herein in the context of a merchant that sells products, it will be recognized that the architecture can also be used to sell services, including online services that are provided over the Internet.

As will be appreciated by those skilled in the art, the use of the URL-embedded referral information to identify the associate allows the associate to be identified, and properly credited for the referral, with a high degree of reliability. For example, in contrast to conventional user tracking tech- 15 niques, the present method allows the associate to be reliably identified even if the associate Web site 100 operates behind a firewall. In addition, the method provides a high degree of flexibility to the associate. For example, the associate can change to a different Internet service provider, and can use 20 or switch between multiple catalog dissemination techniques (Web, e-mail, PUSH, etc.), without affecting the ability of the merchant Web site 106 to identify and credit the associate. Moreover, the associate can freely modify its product offerings—without the need for involvement by the 25 merchant—by simply updating product descriptions and corresponding referral links within the catalog.

A significant benefit of the architecture is that it allows the task of marketing the merchant's products to be efficiently distributed among entities that have established reputations 30 and exposure within their respective fields. In the context of the AMAZON.COM Internet bookstore, for example, a well-established computer company can set up an associate site (or an area of an existing site) to recommend its favorite books on programming languages; and an Italian chef can 35 set up a site to recommend his favorite cookbooks on Italian cooking. In implementations that involve sales of other types of products (such as audio/video equipment), the associates may, for example, include testing laboratories that publish test results.

Because the associate enrollment and referral tracking functions are automated (in whole or in part), the referral services provided by the associates take place with little or no human supervision or intervention by the merchant. In addition, because the payments to the associates are performance-based (e.g., based on the number of sales resulting from associate referrals), the merchant need not be concerned with the effectiveness of any given associate site.

The system and method also provide an efficient mechanism for exposing the merchant and the merchant Web site 50 106 to the public by encouraging others (associates) to set up outgoing links to the merchant's Web site. For example, this may be beneficial where the merchant Web site 106 is configured to support direct sales (i.e., sales that do not involve referrals from associates), as is this case with the site 55 of AMAZON.COM.

The various components and functions of the referral system are described in further detail below.

3. ASSOCIATE ENROLLMENT FUNCTION

As indicated above, the merchant Web site 106 includes automated enrollment software (FIG. 1) for allowing an entity to apply, via the Internet, to operate as an associate. The registration process may include the following: (i) the 65 presentation of an online business agreement to the applicants, (ii) the use of an automated "agent" to scan the

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application text for key inputted terms, including vulgarities and other terms that may serve as a basis for denying the application, (iii) the automated generation and assignment of a unique associate ID (also referred to herein as the "store ID") to an applicant, and (iv) the automated electronic transmission of referral link embedding instructions to the applicant.

FIG. 2 illustrates the general flow of information between components when an associate applicant uses a computer 200 to enroll as an associate. The computer 200 includes a conventional Web browser 204 which communicates with the merchant Web server 132 using the HTTP protocol. The Web server 132 accesses a local store 136 of HTML documents (Web pages) which can be requested, retrieved and viewed by the applicant via the Web browser 204. These documents may, for example, include information about registering online to become an associate. Access to the merchant Web site 106 and the enrollment function is available to any client computer 200, and the enrolling associate is not required to have an established Web site at the time of enrollment.

As further illustrated in FIG. 2, the enrolling associate begins the enrollment function by selecting the proper hyperlink from the merchant Web page 136 containing online registration instructions. The merchant Web server 132 accesses a local store of HTML documents 136 and returns an online registration application document 208 (also shown in FIGS. 3a-3c) to the enrolling associate's Web browser 204. The enrolling associate can then fill out the detailed online application form 208.

Referring to FIGS. 3a-3c, a preferred embodiment of the online application form 208 is shown. The application requests information about the enrolling associate, including the Web server to be used for the associate's Web site, the associate Web site's descriptive name, and the e-mail address of the enrolling associate. Many alternative formats to the online application form are possible and FIGS. 3a-3c are only representative of the types of information that may be requested.

With further reference to FIG. 2, once the electronic application form 204 is completed by the enrolling associate, it is sent from the associate's computer 200 to the merchant Web server 132 for further processing. As will be appreciated by those skilled in the art, other forms of enrollment processing may be used, including but not limited to regular mail and electronic mail. In addition, although the automated enrollment function is preferably handled by the same computer system that handles the referral processing function, these functions could be performed by dedicated, physically distinct computer systems or sites.

In response to submission of the enrollment form, the merchant Web server 132 initiates a computer program 144 comprising enrollment software that processes the information contained on the electronic application form 208. In one implementation, an agent is used to scan the application text for pre-specified terms, and to flag the application for further review (such as by a staff member) if such a term exists. If no such term is found, and the application is complete, the enrollment software automatically accepts the application.

As part of this online registration, once the application has been processed (either automatically or with human intervention), the enrollment software generates a unique store ID to be assigned to the associate. In addition, the enrollment software creates a database entry corresponding to the enrolling associate and stores the store ID and the information provided by the enrolling associate as a unique entry in an associate database 160. The database may be any type of

data repository including, for example, an SQL table or ASCII text file. This database entry allows the merchant Web site 106 to properly track and credit associate referrals, as further described below.

Next, the computer program 144 automatically formats and transmits an electronic mail message to the e-mail address of the approved associate. This electronic mail message provides detailed information about setting up an associate's Web site, including instructions on how to create HTML documents with referral links. These instructions specify a predefined format for embedding the store ID and unique product IDs with the HTML link structures. In addition, the e-mail message includes the unique store ID (generated by the enrollment software), and includes instructions on obtaining unique product IDs. The associate can obtain the unique product IDs by browsing the merchant Web site 106. Alternatively, the unique product IDs may be obtained by the associate through a specific electronic mail request, or may be provided by the merchant Web site when the initial electronic mail response is sent. A preferred set of $\ ^{20}$ linking instructions that are sent to new associates is included as Appendix A.

FIG. 4 illustrates a preferred format of a URL 400 used by an associate to create a referral link to the merchant Web site. This format is recognized by parsing software (FIG. 1) that runs on the merchant Web site. The URL 400 comprises the merchant Web server information 402, the unique product ID 404, the unique store ID 406, and an associate commission scheme ID 408. The unique store ID 406 represents the information created and stored in the associate's database during the associate enrollment process described above. In the AMAZON.COM implementation, the unique product ID 404 is the ISBN of a book that is available from the AMAZON.COM Web site. The associate commission scheme ID is an optional feature that can be used to specify a commission percentage or method for calculating the referral commission.

Upon receipt of the special linking instructions, the associate can begin to build the content (catalog documents) of the associate's Web site, including the descriptions of the products to be featured on the site. An associate can begin to refer customers to the merchant Web site 106 at anytime; however, no credit may be given to the associate for referred customers until the associate has included properly-formatted referral links within its product catalog. Additionally, referral credit may be withheld if the merchant has not yet authenticated and qualified the associate Web site for business.

4. REFERRAL TRANSACTION FUNCTION

A preferred method for processing referral events will now be described with reference to FIGS. 5-7. Referring to FIG. 5, which depicts an example sequence of events, a 55 customer accesses an associate's Web site 100 via the customer computer 108. The customer computer 108 includes a conventional Web browser 112 which communicates with the associate's Web server 116 using the HTTP protocol. As depicted by events A and B, the Web server 116 accesses a local store of catalog documents 120 (Web pages) which can be requested, retrieved and viewed by the customer via the Web browser 112. As described above, these catalog documents 120 include information about the various products featured at the associate's Web site 100. 65 Preferably, this information includes editorial descriptions, reviews, and recommendations generated by the associate.

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FIG. 6 illustrates an example HTML catalog document (Web page) 120 in accordance with the present invention. The customer views the product catalog document 120 via the Web browser 112 in order to select a particular product (book) offered through the associate's Web site 100. In this example, the catalog document 120 comprises a graphic icon 600 that is a scaled-down replica of an actual book cover. The graphic icon 600 also functions as a hyperlink, allowing the customer to click on the icon with a mouse in order to link to the merchant Web site 106. The document 120 includes the title 602 and author of the book 604, and includes an editorial description and recommendation of the book 606 from the associate. The catalog document 120 also contains another textual hyperlink 608, allowing the customer to link to the merchant Web site 106 and initiate referral transaction processing. Typically, the associate's product catalog (which may include multiple catalog pages) contains several referral links (with different product IDs), each corresponding to a different product sold by the mer-

FIG. 7 is an HTML source code listing which illustrates a preferred format for including a referral link within an HTML catalog document. The source code of FIG. 7 corresponds to the product catalog document 120 illustrated in FIG. 6. In this example, the referral link (included between the HTML anchor tags "A" and "/A") consists of the URL http://www.amazon.com/exec/obidos/ISBN=0809232022/ skinetA/ and the corresponding textual description "Click here to order Terrain Skiing!." The URL is identified as such by the standard HREF (hypertext reference) tag. The portion of the URL preceding "skinetA" uniquely identifies a product detail page (of the AMAZON.COM site) of a book having an ISBN of 0809232022. As described below, the "skinetA" portion of the URL identifies both the referring associate and a commission scheme. The referral link is included within the document such that selection by the customer of the text "Click here to order Terrain Skiing!" causes the Web browser 112 to transmit the URL on the Internet 104 via a standard HTTP message.

Further referring to FIG. 5, upon clicking or otherwise selecting the referral link 608 of the associate's catalog document 120 (event C), the Web browser 112 communicates with the merchant Web server 132 (events D-F) to access HTML documents 136 of the merchant Web site 106.

Initially, the customer is shown a product detail page that provides detailed information about the selected product, and allows the customer to add the selected product to the shopping cart (described below). The Web server 132 also serves Web pages (including dynamically-generated pages) that display and allow the customer to edit the contents of the shopping cart, and that allow the customer to proceed to a check-out area to order the selected products.

Once the customer has linked to the merchant Web site 106, the customer can use the navigational controls of the Web browser 112 to return to the associate's Web site 100. In addition, the detail page and/or the shopping cart page may be provided with a hyperlink to allow the customer to return to the associate's Web site 100. Another alternative is for the associate Web site 100 to be created using an HTML frame format. The bottom frame can be designated as the target area frame for the merchant's Web site 106. The top frame can provide navigational controls for the customer to return to the associate's Web site 100 after selection of a particular product at the merchant's Web site 106. This allows the customer to maintain an associate's Web page frame while viewing and processing product purchases at the merchant's Web site 106.

Following the referral event, the customer can browse the merchant Web site **106** for additional products, and can add these products to the shopping cart. In one configuration option, the referring associate is given commission credit for all additional products thereafter selected (during the current 5 browsing session) from the merchant Web site **106**, assuming the customer subsequently purchases these products. In another configuration option, the associate is only credited for the purchase of the product that was the subject of the referral.

The sequence of events that takes place when the customer clicks on the referral link 608 will now be described in greater detail. Before the product detail page 136 is sent to the customer's Web browser 112, the merchant Web server 132 initiates a computer program 144 to conduct 15 several processing steps. As depicted by event E1 in FIG. 5, the computer program 144 executes parsing software (FIG. 1) to parse the URL passed to the merchant Web server 132. The parsing software extracts the unique product ID (ISBN), the unique store ID associated with a particular associate, 20 and an optional associate commission ID from the URL data string. For example, if the URL string is

http://www.amazon.com/exec/obidos/ISBN=0809232022/mystoreA/,

the parsing software parses the string to extract the unique product ID (ISBN) of 0809232022, the unique store ID of "mystore," and the commission ID of "A." In one implementation, the software **144** uses the commission ID to calculate an appropriate commission (e.g. 10% of merchant's sales price) to apply to the associate's account. As described below, if the customer subsequently adds the selected product to the shopping cart, the extracted information is recorded within a shopping cart data structure that corresponds to the customer.

5. UNIFIED SHOPPING CART FUNCTION

As discussed above, the present invention provides a system for maintaining a unified shopping cart that stores 40 product information associated with product referrals from multiple Web sites, and keeps track of the sources (associates) of such referrals. One benefit of this feature is that it enables the customer to perform a single "check out" to purchase products from multiple Web sites. Additionally, 45 this feature allows the merchant Web site 106 to accurately track and credit each associate, on a per-product-sale basis, that has referred a customer. For example, if, upon "checkout" from the merchant Web site 106, the customer has three books listed in the shopping cart, each of which resulted 50 from a referral from a different associate Web site, each associate will be credited for its respective referral. While the shopping cart feature is particularly useful in the context of the disclosed referral system, the feature can also be applied to other types of Internet shopping systems that 55 support shopping from multiple Web sites, including systems that use remote "agents" to monitor Web sites based on pre-specified selections of the customer.

The data structures and processing steps that implement the shopping cart will now be described with further reference to FIG. 5. As indicated above, the shopping cart maintains a customer-specific record of the products that have been selected by the customer, including the identities of any associate Web sites that acted as referral sources with respect to such products. Preferably, the computer program 65 144 maintains this information in a data structure that is stored on the Web site 106 for an extended period of time

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(such as one week) since the last access to the shopping cart by the user. This allows the customer to discontinue and later resume a shopping session without loss of the shopping cart data

Upon customer selection of a referral link, the computer program 144 utilizes the customer cookie information 140 passed through an HTTP call to determine whether the particular customer (or technically, the customer computer 108) already has an open shopping cart (event E2). As part of this process, the computer program 144 executes cookie processing software (FIG. 1), which assigns a unique customer ID to the customer based on the cookie information 140. If the customer's Web browser 112 does not support the use of cookies (or if the cookies feature is disabled) the program 144 uses URL information received from the Web browser to generate the customer ID.

The customer ID is in turn used by the software 144 to identify any shopping cart currently associated with the customer. If no shopping cart exists for the customer, a new shopping cart structure (which includes the customer ID) is generated within the shopping cart database 152. The customer ID is also stored in a customer database 148. The algorithm used by the program 144 to generate the customer IDs is such that a cookie retrieved from the same customer computer will consistently produce the same customer ID. Thus, assuming the customer always uses the same computer to access the merchant site 106, and that the browser 112 supports the use of cookies, the customer will be assigned the same customer ID, and will be associated with any existing shopping cart.

In one implementation, once the customer has been referred to the merchant site 106 and the customer ID has been determined, the merchant site dynamically includes this ID within hyperlinks of the detail page and other Web pages that are sent to the customer computer 108. When the customer subsequently selects such a link (such as to add a selected product to the shopping cart), the customer ID is automatically transmitted to the merchant site 106 as part of the HTTP message. This allows the merchant site 106 to identify the customer (and shopping cart) without the need to re-request the cookie from the customer computer.

During the process of displaying detail pages and allowing the customer to add products to the shopping cart, neither the merchant site 106 nor the associate sites have access to the customer's personal information (name, address, credit card number, etc.). Thus, the system advantageously allows the customer to shop anonymously. Only when an order is actually submitted does the merchant site 106 obtain access to the customer's information, and at no time is the information provided to the associate sites.

With further reference to FIG. 5, the shopping cart is stored as a table or data structure within the shopping cart database 152, along with individual product selections made by customers. If the customer has an existing shopping cart, the computer program 144 will create another product selection entry within the shopping cart database 152, as indicated generally by event E3. If the customer does not have an existing shopping cart, then the computer program will create a new shopping cart data structure within the shopping cart database 152. The product selection entry within the shopping cart database 152 includes the store ID and product ID. If a product is selected directly from the merchant Web site 106, the corresponding store ID field may be blank or encoded with merchant-specific information. Other information may be stored in the shopping cart to implement the specific business procedures of the particular merchant.

When the customer subsequently purchases a product or products contained in the shopping cart, the associate's unique store ID maintained in the associate data structure 160 is used to appropriately credit the associate's account. During this process (or at the time of the referral) the 5 computer program 144 determines whether the store ID represents a valid (enrolled) associate in the associates database 160. The processing at the merchant Web site 106 maintaining the associate's store ID in the shopping cart allows the system to obtain pricing information for a product 10 and associate. In this way, the computer program 144 can be configured to generate special discounts or pricing incentives to the customer or associate depending on a particular business relationship.

The shopping cart stored in the shopping cart database 15 152 is maintained by the computer program 144 running at the merchant Web site 106 that monitors the open entries (non-closed shopping carts) in the shopping cart database 152. The shopping cart database 152 includes the customer ID, the date the shopping cart was opened (open date), and 20 the date last accessed (touch date). The shopping cart database is monitored by the computer program 144 to purge all shopping carts that have been inactive (untouched) for a pre-defined period of time, such as one week.

FIG. 8 illustrates an example of an HTML catalog document (Web page) 136 corresponding to the product detail page. After processing a referral URL, the merchant Web server 132 sends the detail page 136 to the customer's Web browser 112 to provide the customer with additional information about the selected product. The product detail page 30 includes the merchant's information (price, standard description, etc.) about the selected product. The product detail page 136 is shown with the URL passed to the customer Web browser 112 from the merchant Web server.

The URL (shown at the top of FIG. 8) comprises the 35 unique customer ID 800 (obtained from the customer's cookie or URL information), the product ID 802 (shown as the ISBN of the Terrain Skiing book), the store ID 804 (shown as the "skinet" Web site), and the associate commission ID 806 (the letter "A"). Once the customer has 40 reviewed the product detail page 136, the customer can select the "Add it to your Shopping Cart" hyperlink 808. When the customer clicks on this hyperlink 808, the merchant Web server 132 returns a dynamically-generated HTML document that displays the contents of the shopping 45 cart

FIG. 9 illustrates an example HTML document 136 (Web page) corresponding to the customer shopping cart. The customer shopping cart document 136 displays information about the products currently selected by the customer for 50 prospective purchase. In this example, the selection item 902 is displayed to the customer as the "Terrain Skiing" book previously selected. From this page 136, the customer may leave the shopping cart page, without proceeding to checkout, by either selecting the "continue shopping" link 904 or 55 by using a Web browser navigational control to proceed to a different Web page.

FIG. 10a represents another associate's Web site where the customer can view products featured with editorial comments. For purposes of this example, it may be assumed 60 that the customer proceeded directly to this site (e.g., by selecting a "favorite places" URL) from the shopping cart page of FIG. 9. If the customer selects the hyperlink 1000, the merchant Web server returns the product detail page for the "Cooking with Daniel Boulud" book, as illustrated in 65 FIG. 10b. The customer may then add this book to the shopping cart by selecting the "Add it to your Shopping

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Cart" hyperlink 1002, and the customer will then be brought to the shopping cart Web page illustrated in FIG. 10c. The shopping cart now has product selection items corresponding to the two books selected by the customer during the shopping session, and each of these product selection items is stored in the shopping cart database to uniquely identify the respective associate that made the referral. When the customer selects the "Proceed to Checkout" hyperlink 1004 on the shopping cart Web page, the merchant Web site returns a form document (not shown) that allows the customer to specify payment information, shipping information, and other information needed to process the order.

As illustrated by the above example, one customer shopping cart can have line items (corresponding to book selections) from many different associate Web sites. In addition, the shopping cart can include line items of books that have been selected directly from the merchant. As described above, because the shopping cart keeps track of each referral, the referring associates can efficiently be credited for their respective referrals upon order submission, without the need for the customer to perform multiple "check-outs."

The merchant Web site includes credit generation software for calculating associate referral credit. Referral credit may be calculated in any of a number of ways depending on the associate and merchant business relationship, and may be provided to the associate on a periodic basis, such as at the end of each calendar quarter. For example, the associate may be paid a fixed percentage of the list selling price. As indicated above, commission payments may be made automatically using an appropriate electronic payment method.

As will be appreciated from the foregoing, the shopping cart feature of the system enables the customer to view the entire shopping experience as a seamless, automated shopping session. The seamless nature of the session allows the customer to shop for products based on the marketing expertise of the associates, while conveniently utilizing the merchant's order fulfillment resources.

6. REPORT GENERATION FUNCTION

The merchant Web site also preferably includes report generation software (FIG. 1) that automatically generates and transmits associate feedback reports to respective associates, based on information stored by the merchant Web site. The software can be configured to generate the reports on a daily, weekly, monthly and/or annual basis. The information contained within these reports enables the associates to evaluate the effectiveness of their Web sites on a perproduct basis.

One report produced by the AMAZON.COM site is the "Weekly Activity Report." An example of such a report is included as Appendix B. This report provides information about the number of books ordered through the associate's referral links, the number of selections (hits) of each referral link, and the amount of referral credit earned on orders in the time period.

Various other types of information can be provided within the feedback reports to assist the associates in conducting business. For example, the reports can provide anonymous demographic data about the customers that made purchases from the associate site, including the geographic regions (as determined from shipping addresses) of such customers. Additionally, the reports can provide special notices, including notices about books that pay lower referral credit to associates, and any problems occurring with an associate's referral links. The report generation feature also may provide associates with the ability to access an on-line menu to

generate custom feedback reports (such as a report of the number of referrals during a specific period of time), or to set up a report profile that specifies the content, format and frequency of the automated reports.

7. CONCLUSION

While the invention has been described herein with reference to certain preferred embodiments, these embodiments have been presented by way of example only, and not 10 to limit the scope of the invention. Accordingly, the scope of the invention should be defined only in accordance with the claims that follow.

In the following claims, reference characters used to designate claim steps are provided for convenience of 15 description only, and are not intended to imply any particular order for performing the steps.

APPENDIX A

Date: Tue, 24 Jun 1997 02:11:28 -0700 (PDT)

To: mystore@aol.com

Subject: Amazon.com Books: Thank you for your application

Cc: associates@amazon.com

Thanks for submitting your application to participate in the Amazon.com Associates Program. Your application has been temporarily approved. We'll contact you by e-mail once we have reviewed and approved your application.

Important: Be sure to save this email message—you will need some of the information here to properly set up your links to Amazon.com. You can set up your Web site now. You have been assigned a unique Associates ID. You'll use this ID when linking your sponsoring Web site into our catalog; detailed instructions are included at the end of this message.

Your unique Associates ID is: mystore.

USING THE AMAZON.COM BRAND NAME

As you may already know, Amazon.com has received a great deal of very positive press coverage since we opened. From The Wall Street Journal, Newsweek and the Associated Press to PC Magazine and WebWeek, mainstream and industry press alike have helped to make the Amazon.com brand name one of the more well-known among Internet cites.

Our extensive advertising campaign reaches users of many major Web services and search tools, and our printed ads are found in places like the New York Times Review of Books. You should consider using not only our name but one of the logos or banners found on our site at:

http://www.amazon.com/exec/obidos/subst/assoc-art.html so that your visitors have the chance to recognize our name as a familiar and trustworthy Internet retailer working in association with you. SUGGESTIONS FOR SUCCESSFUL PRESENTATION:

We've put a page on our Web site filled with suggestions for building a great online bookstore. These tips are taken from our most successful Associates, and we highly recommend reading them. Follow the link on our home page to "Build Your Own Bookstore", and from there link to "Build a Great Bookstore". You can also connect directly at this URL:

http://www.amazon.com/exec/obidos/subst/assoc-success-tips.html HOW TO LINK INTO OUR CATALOG:

You can use any sort of book descriptions, review material and graphics that you like when describing books on your Web site. All we need is a separate link into our catalog for each book you wish to recommend. You may add or remove these links at any time without our prior approval; as long as they follow the prescribed format we'll detect them automatically when they are used.

Each link to our catalog will be the same except for the ISBN of the book.

You'll see the "isbn=" part of the link at the end of each example below. To find the ISBN of the book you wish to list, use our Web site and search.

for that book with any of our search tools. The ISBN for each edition (hardcover, paperback, book on tape) is displayed on the detail

Remember—you may change which books you list whenever you like. You won't need our permission and it's not even necessary to advise us of the changes--they'll be automatically detected and commissioned properly.

EXAMPLE:

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APPENDIX A-continued

For each book you recommend, link it to us like this: http://www.amazon.com/exec/obidos/ISBN=1234567890/mystoreA/

Note: You *must* use a capital A at the end of this link, not a lower-case a.

Of course, the ISBN will change for each book. Do not include any spaces

spaces or dashes in the ISBN when making these links. Also, make sure to check our catalog first—we can only sell what's listed there. VERY IMPORTANT: If you copy the URL of a book page from our Web site and modify it to fit the format above, be sure to remove the 19-character shopping cart ID that appears at the end of the bookmarked

copied URL. Your store code should immediately follow the ISBN as in the example above. If you leave this in your modified links, they will not work properly.

The information we have about your Web site is as follows:

Contact e-mail Address:

mystore@aol.com

Contact address: John Doe

1234 East Road

Anytown

WA

12345

Payee e-mail address:

mystore@aol.com

Payee address:

20

25 Doe Enterprises, Inc.

1234 East Road

Anytown WA

12345

Description of books you intend to list:

30 Business Books - How to Business Books

Sponsoring Web site name:

Sponsoring Web site URL:

Your Web site name, in the format we may use on our website:

Mystore – Anytown, WA in association with Amazon.com Books If you have any questions, you can e-mail us at associates@amazon.com and we'll be happy to help.

Once again, thanks for your application.

Sincerely,

Associates staff

Amazon.com Books

http://www.amazon.com/

2.5 million titles, consistently low prices

APPENDIX B

Amazon.com Associates Program

Weekly Activity Reports

Every week, we e-mail our Associates a detailed activity report so that they can track the effectiveness of their efforts. A sample of the report shows what you can expect to receive weekly:

Sample Weekly Activity Report

Last Week's Sales Results

Note: This report includes a column labeled "ORDERED," which is the weekly number of copies for which orders have been placed through your special links. Only after these orders are paid for and shipped will they actually count toward your referral fee. Some of these orders may later be canceled, customers' credit cards may be declined, and occasional returns should be expected; in any of these cases, the referral fee will not be earned.

be earned.

The column labeled "HITS" represents the number of times one of your visitors clicked on a book (this column can help you gauge your visitors' interest in the books you are selling).

The column labeled "REFERRAL FEE" represent the referral fees

oyour site has earned on orders. Please remember that we pay you based on orders *shipped*, so your actual Referral Fee may be somewhat lower than the fee stated here.

Look for special notices in the titles listed below. They can help you track books that may not pay referral fees and identify certain problems with the link format you may be using

1 indicates that this item is currently being featured at a discount of more than 30%.

2 indicates that this item is "special order" or carries no discount

APPENDIX B-continued

Other notes may indicate problems with a l	ink format or items no longer
carried in our catalog.	
Quarter-to-Date Books Ordered:	105
Quarter-to-Date Qualified Book Revenue:	4266.46
Quarter-to-Date Referral Fees:	519.04
Click-throughs and sales by individual book	k for the week of 12-Jan-97
through 18-Jan-97	
Store ID mystore	

ISBN	HITS	ORDERED	YOUR FEE	TITLE
0534517072	4	2	1.70	**2** Earth Online: An Internet Guide 2 sold at 0% off list price of 16.95
0672309599	3	0	0.00	Microsoft SQL Server 6.5 Dba Survival G
0764530038	2	0	0.00	Danny Goodman's JavaScript Handbook
0789704927	355	11	65.99	Building Delphi 2 Database Applications 11 sold at 20% off list price of 49.99
0789704943	2	0	0.00	Using VRML
0789707500	1	0	0.00	Delphi 2 Tutor: The
				Interactive Seminar
1568302894	110	_6	8.10	**1** Creating Killer
				Web Sites: The A sold at 40% off the list price of 45.00
Totals:	477	19	75.79	F
Number of Visitors on 19-Jan-97			68	
Number of V			65	
Number of V			54	
Number of V			59	
Number of V			50	
Number of V			47	
Number of Visitors on 25-Jan-97				
Total Visitors	this w	eek	375	

NOTE: A "Visitor" is a person who click on book links from your site, and is counted as 1 visitor (above) regardless of the number of different titles they click on. We keep track of this by watching their shopping cart ID, which remains the same for every book they click on. A "Hit" is any person clicking on a book link, and each click is counted as 1 hit. If the same visitor click on 5 different titles, we record 1 visitor and 5 hits. Therefore, you should expect the number of visitors to be lower than the total number of hits.

What is claimed is:

1. In a system in which a business entity provides at least 45 one link to a merchant's web site, a computer-implemented method for providing feedback to the business entity on an effectiveness of the at least one link, comprising:

tracking user referral events resulting from user selection of the at least one link, said link pointing to a page that corresponds to a purchasable item within an electronic catalog of the merchant's web site, wherein the at least one link is provided within a second electronic catalog that is disseminated by the business entity, said second electronic catalog describing, and providing respective 55 links to the merchant's web site for purchasing, each of multiple items;

for each user referral event, tracking a referred user's activity to determine whether the user completes a purchase transaction with the merchant; and

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generating and providing to the business entity an electronic report which indicates at least (a) a number of the user referral events which occurred over a selected period of time, and (b) a quantity of resulting purchase transactions, such that the business entity can evaluate 65 the effectiveness of the link based on both a frequency with which the link is selected and a frequency with

which users who select the link make purchases, whereby the electronic report enables the business entity to refine content of the second electronic catalog over time to improve performance;

wherein the method is performed by a computer system under the control of software.

- 2. The method as in claim 1, wherein the electronic report indicates user referral events and resulting transactions separately for each of multiple links from a web site of said business entity to the merchant's web site.
- 3. The method as in claim 2, wherein the merchant compensates the business entity for referral events that result in transactions, and the electronic report indicates an amount of compensation earned by the business entity separately for each of the multiple links.
 - 4. The method as in claim 2, wherein each of the multiple links corresponds to a different respective item sold by the merchant, and the electronic report includes identifiers of the items
 - 5. The method as in claim 1, further comprising providing, within the electronic report, demographic data about at least some of the users that accessed the merchant's web site using the at least one link.
- 6. The method as in claim 1, further comprising providing an online menu which enables the business entity to customize the report.
 - 7. The method as in claim 1, wherein generating and providing to the business entity the electronic report comprises transmitting the electronic report by electronic mail.
 - 8. The method as in claim 5, wherein the demographic data includes anonymous data regarding geographic regions of users that accessed the merchant's web site using the at least one link, as determined based on shipping addresses of the users.
 - **9**. The method as in claim **1**, wherein the second electronic catalog comprises one or more web pages of a web site operated by the business entity.
 - 10. The method as in claim 1, wherein the second electronic catalog is disseminated by the business entity to customers by email.
 - 11. In a system in which a business entity provides multiple item-specific links to a merchant's electronic catalog, a computer-implemented method for providing feedback to the business entity on an effectiveness of the item-specific links, comprising:

tracking user referral events resulting from each of the multiple item-specific links, wherein each of the multiple item-specific links is provided within a second electronic catalog that is disseminated by the business entity, said second electronic catalog describing a selected subset of the items in the merchant's electronic catalog;

tracking activity of referred users to identify user referral events that result in purchases; and

generating and providing to the business entity an electronic report which separately indicates for each of the multiple links at least (a) a number of the user referral events that occurred over a period of time, and (b) a quantity of purchases resulting from such user referral events, said electronic report capable of being used by the business entity to refine the second electronic catalog over time to improve an effectives thereof;

wherein at least some steps of the method are performed by a computer system.

12. The method as in claim 11, wherein the merchant compensates the business entity for referral events that result

in purchases, and the report indicates an amount of compensation earned by the business entity separately for each of the multiple links.

- 13. The method as in claim 11, wherein each item-specific link corresponds to a different respective item that is avail- 5 able for purchase from the merchant's electronic catalog, the electronic report includes identifiers of items to which the item-specific links correspond.
- 14. The method as in claim 11, further comprising providing, within the electronic report, demographic data about 10 at least some of the users that accessed the merchant's catalog using the item-specific links.
- **15**. The method as in claim **11**, wherein generating and providing to the business entity the electronic report comprises transmitting the electronic report by electronic mail. 15
- 16. The method as in claim 14, wherein the demographic data includes anonymous data regarding geographic regions of users that accessed the merchant's electronic catalog using the item-specific links.
- 17. The method as in claim 11, wherein the business entity 20 disseminates the second electronic catalog by electronic mail.
- 18. The method as in claim 11, wherein the second electronic catalog consists of one or more web pages of a web site of the business entity.
- 19. The method as in claim 11, wherein each of the multiple item-specific links points to a respective item detail page of the merchant's electronic catalog, and corresponds to a respective item that may be purchased from the merchant's electronic catalog.
- 20. The method as in claim 11, wherein the method is performed by a computer system under the control of software.
 - 21. A computer system, comprising:
 - a first web site that hosts an electronic catalog of items, 35 and provides functionality for users to purchase the items, said first web site comprising a server;
 - a tracking system that tracks user referral events resulting from each of a plurality of item-specific links from a

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- second web site to the first web site, and tracks associated user activity to determine whether each such user referral event results in a purchase from the first web site, wherein the second web site describes, and provides respective item-specific links to the first web site for purchasing, each of multiple items; and
- a report generation system that uses activity data generated by the tracking system over a period of time to generate an activity report for a provider of the second web site, said activity report separately indicating, for each of the plurality of item-specific links, at least (a) a number of user referral events that resulted from the respective item-specific link, and (b) a number of purchases attributable to the respective item-specific link, said activity report capable of being used by the provider of the second web site to modify, and improve performance of, the second web site.
- 22. The computer system of claim 21, wherein each of the plurality of item-specific links corresponds to a different respective item in the electronic catalog, and is encoded with a first identifier of the respective item and a second identifier of the second web site, and wherein the tracking system uses the first and second identifiers to generate the activity data.
- 23. The computer system of claim 21, wherein the first web site includes a database that contains shipping addresses of users, and the report generation system uses the shipping addresses to generate, and include within the activity report, anonymous information about geographic locations of users that followed said item-specific links to the first web site.
- 24. The computer system of claim 21, further comprising a component that transmits the activity report electronically to the provider of the second web site.
- 25. The computer system of claim 21, in combination with said second web site.

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