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

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(45) **Date of Patent:** **\*Nov. 13, 2001**

(54) **USE OF ELECTRONIC SHOPPING CARTS TO GENERATE PERSONAL RECOMMENDATIONS**

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(73) Assignee: **Amazon.com, Inc.**, Seattle, WA (US)

(\* ) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/156,237**

(22) Filed: **Sep. 18, 1998**

(51) **Int. Cl.<sup>7</sup>** ..... **G06F 17/60**; G06F 17/00; G06F 15/173; H04K 1/00; H04H 1/00

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(52) **U.S. Cl.** ..... **705/14**; 233/383; 380/24; 455/3.1; 455/480; 705/14; 705/27; 707/102

(57) **ABSTRACT**

A computer-implemented service recommends products or other items to a user based on a set of items known to be of interest to the user, such as a set of items currently in the user's electronic shopping cart. In one embodiment, the service identifies items that are currently in the user's shopping cart, and uses these items to generate a list of additional items that are predicted to be of interest to the user, wherein an additional item is selected to include in the list based in-part upon whether that item is related to more than one of the items in the user's shopping cart. The item relationships are preferably determined by an off-line process that analyzes user purchase histories to identify correlations between item purchases. The additional items are preferably displayed to the user when the user views the contents of the shopping cart.

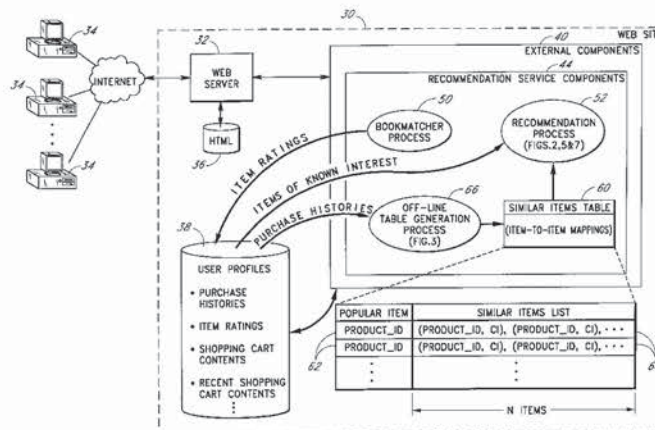
(58) **Field of Search** ..... 235/383; 380/24; 455/5.1, 480; 705/14, 27; 707/3, 102; 709/227

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**42 Claims, 7 Drawing Sheets**



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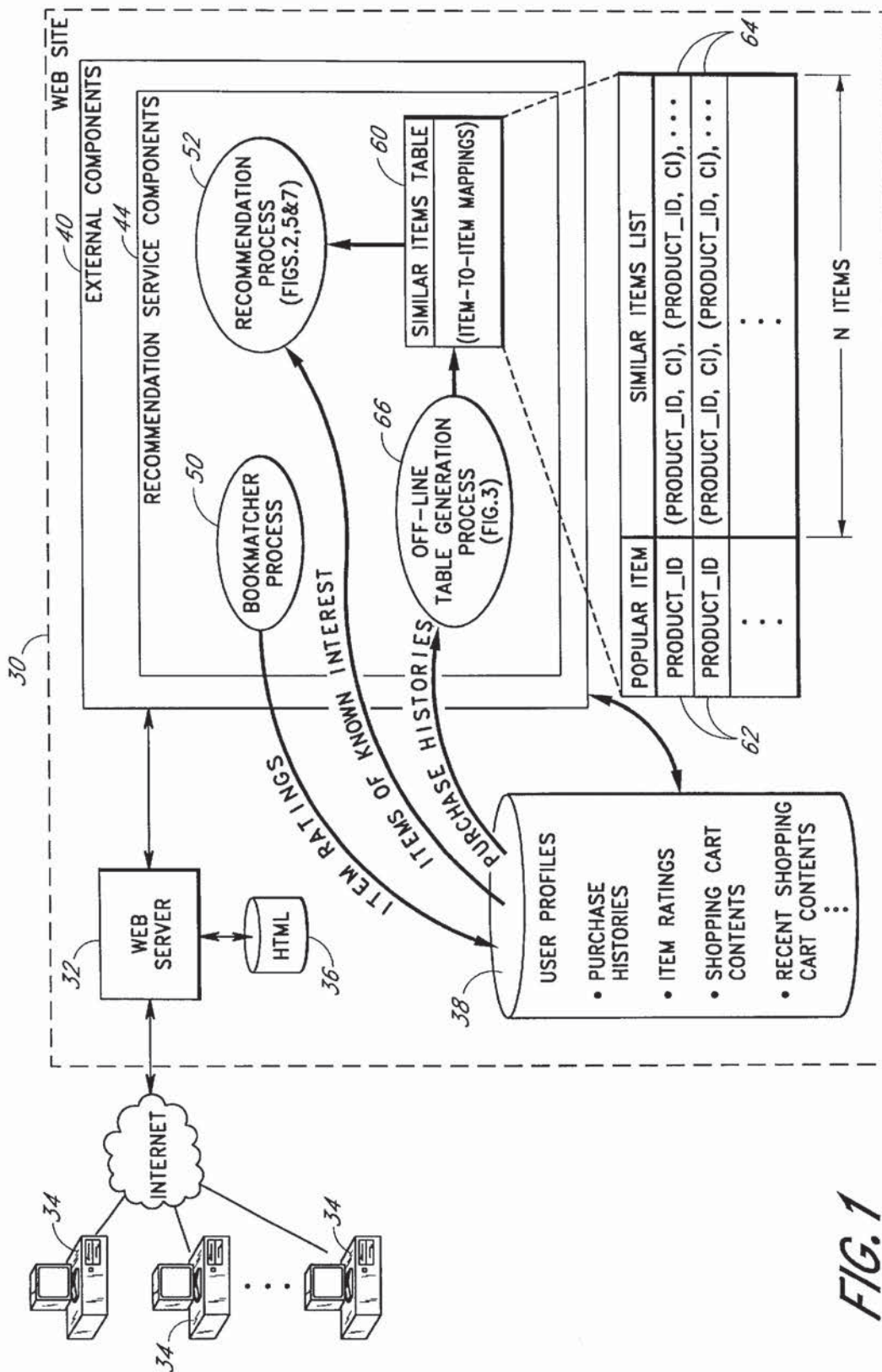


FIG. 1

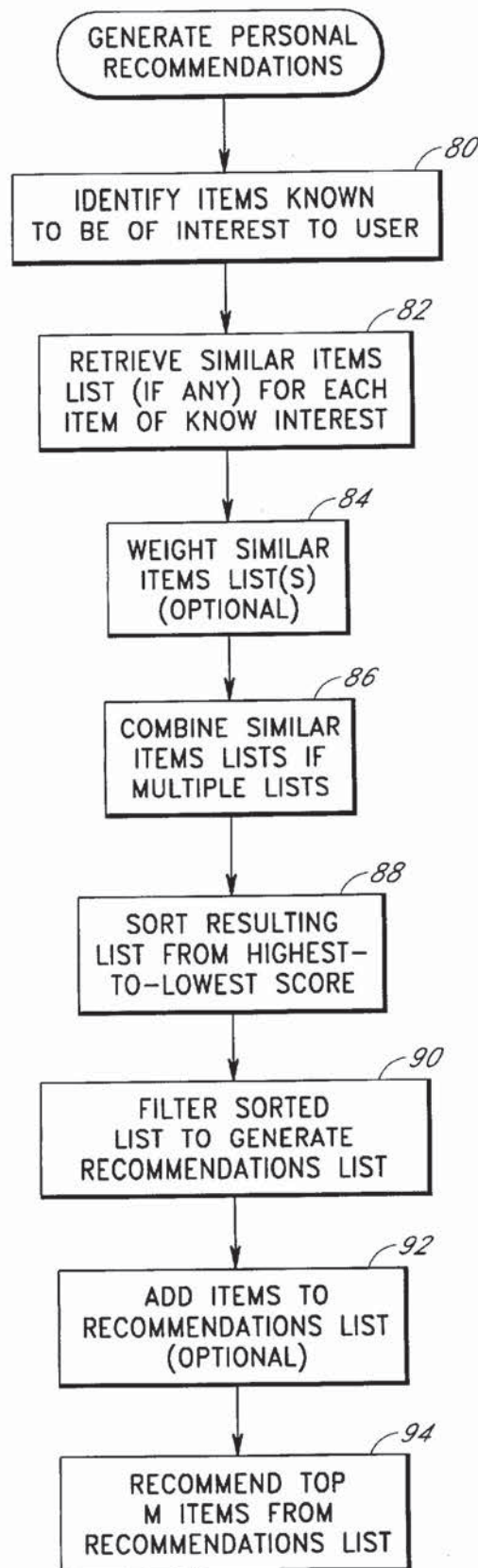


FIG. 2

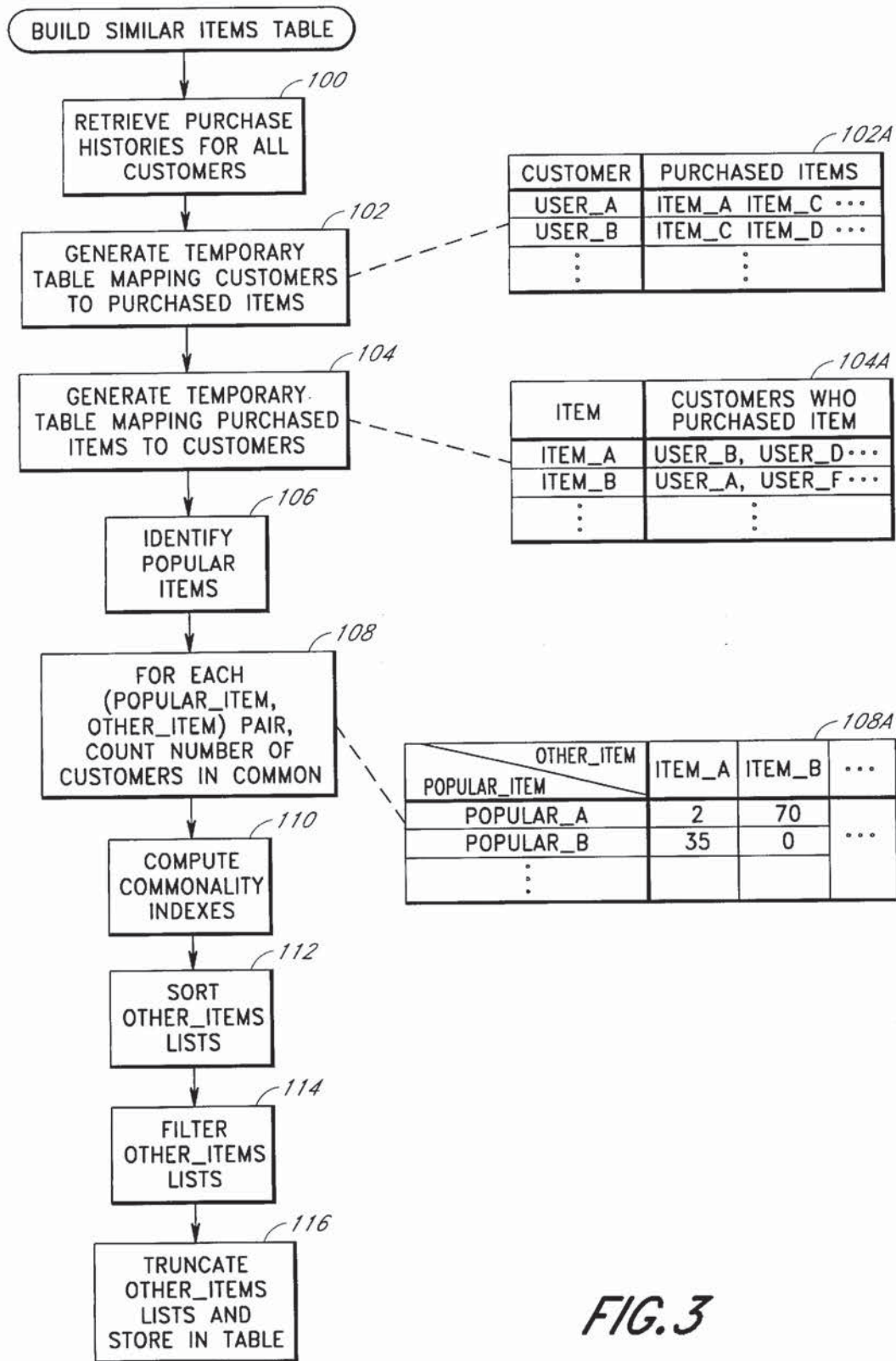


FIG. 3

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