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(12) **United States Patent** (10) **Patent No.:** **US 6,286,045 B1**
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(54) **INFORMATION STORAGE AND DELIVERY OVER A COMPUTER NETWORK USING CENTRALIZED INTELLIGENCE TO MONITOR AND CONTROL THE INFORMATION BEING DELIVERED**

(75) Inventors: **Michael John Griffiths**, Broomfield, CO (US); **James David McElhiney**, Ottawa (CA)

(73) Assignee: **Matchlogic, Inc.**, Louisville, CO (US)

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

This patent is subject to a terminal disclaimer.

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*Primary Examiner*—Dung C. Dinh
(74) *Attorney, Agent, or Firm*—James R. Young; Chrisman Bynum & Johnson

(57) **ABSTRACT**

A system for storing information on a computer network and allowing the information to be accessed by terminals connected to the computer network, either directly, or through an intermediary device such as a local or proxy server, includes computer or web sites which store pages requested by terminals for display on the terminals. The pages may include references to banners to be displayed in conjunction with the web pages on the terminal. The terminal initiates access or connection to a desired computer or web site to access a desired page. After the desired page is downloaded, transmitted, or served to the terminal from the computer or web site, the terminal initiates and sends an initial banner request signal to an information server. The information server returns a redirect signal to the terminal telling the terminal the location of the desired banner on the computer network, which may be the information server, the computer site, or some other information server, computer site, or location accessible via the computer network. The terminal then initiates a second banner request signal to the location of the desired banner and the banner is served to the terminal for display on the terminal, unless the requested banner has previously been stored or cached in the terminal's memory or in the memory of a local or proxy server connected to the terminal, in which case the second banner request signal is not sent across the computer network and the banner is loaded directly from the terminal's memory or served to the terminal from the proxy server.

**78 Claims, 3 Drawing Sheets**

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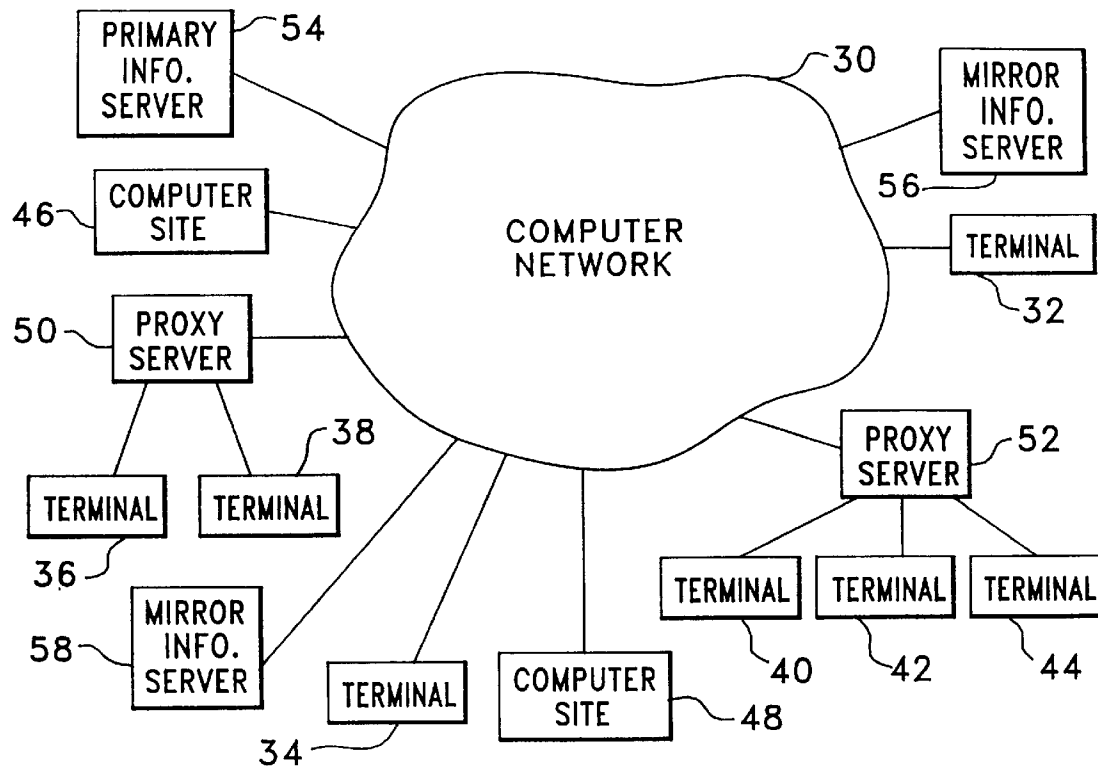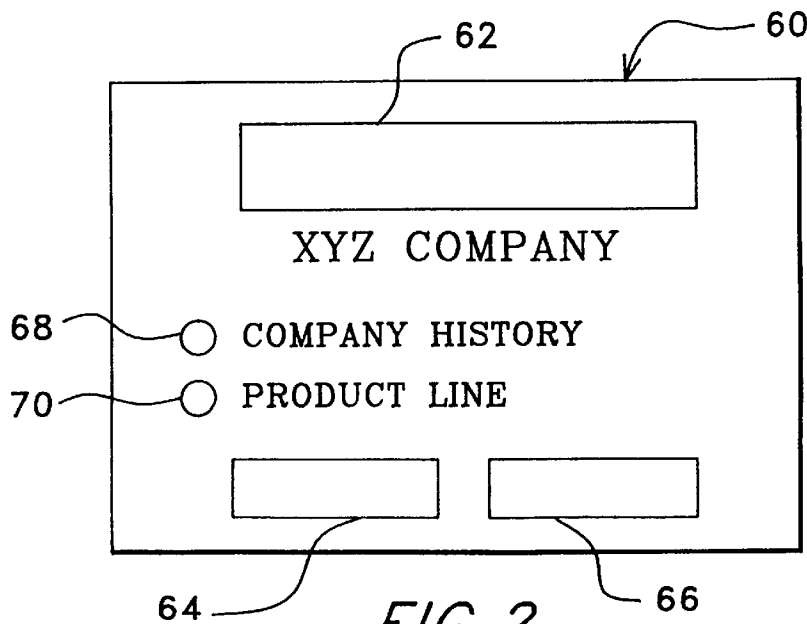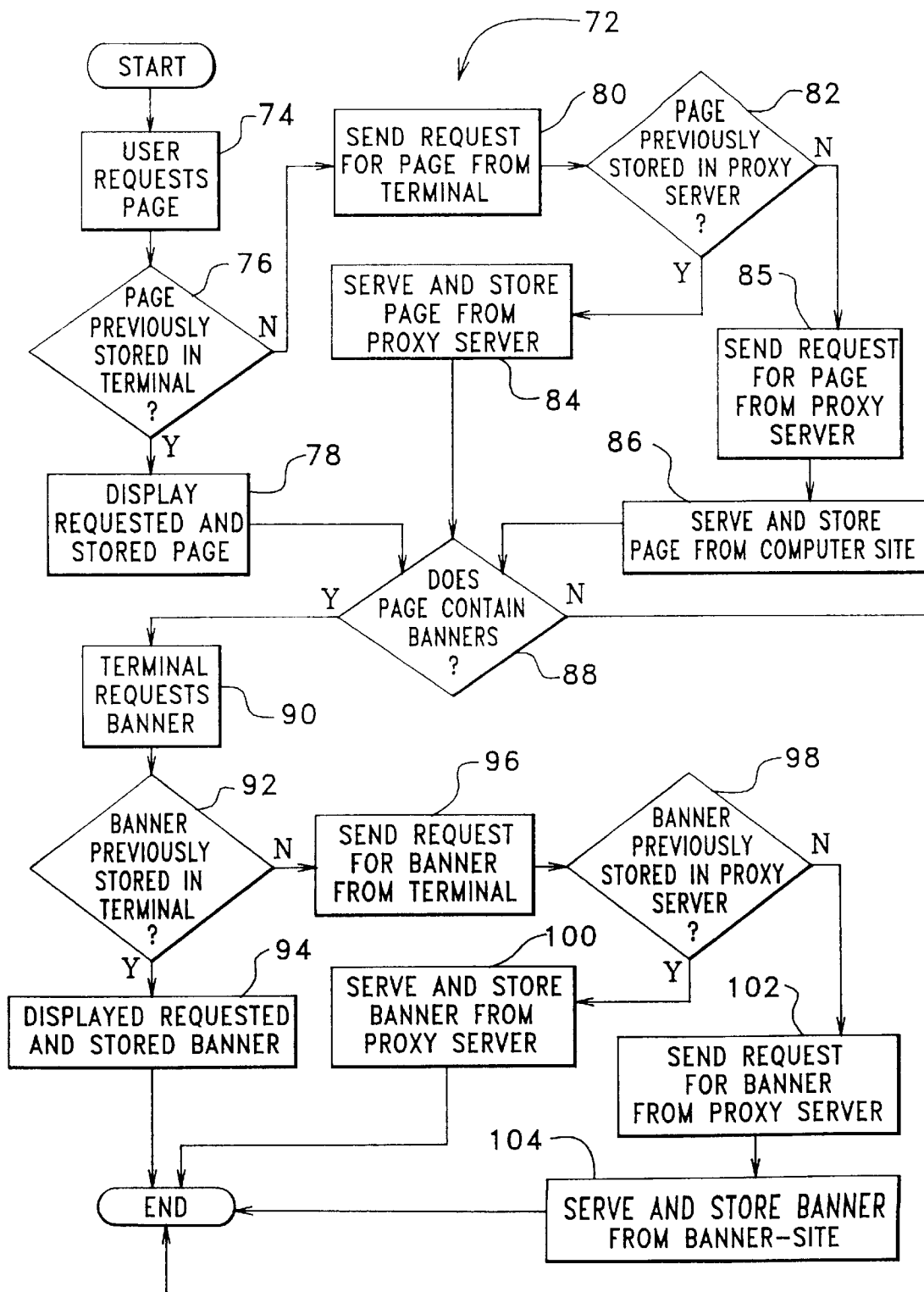
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PRIMARY INFO. SERVER — 54

30

MIRROR INFO. SERVER

46 — COMPUTER SITE

COMPUTER NETWORK

56

TERMINAL

32

50 — PROXY SERVER

38

TERMINAL

TERMINAL

36

PROXY SERVER — 52

58 — MIRROR INFO. SERVER

TERMINAL

COMPUTER SITE

48

TERMINAL

TERMINAL

TERMINAL

34

40

42

44

*FIG. 1*

62

60

XYZ COMPANY

68 — ○ COMPANY HISTORY

70 — ○ PRODUCT LINE
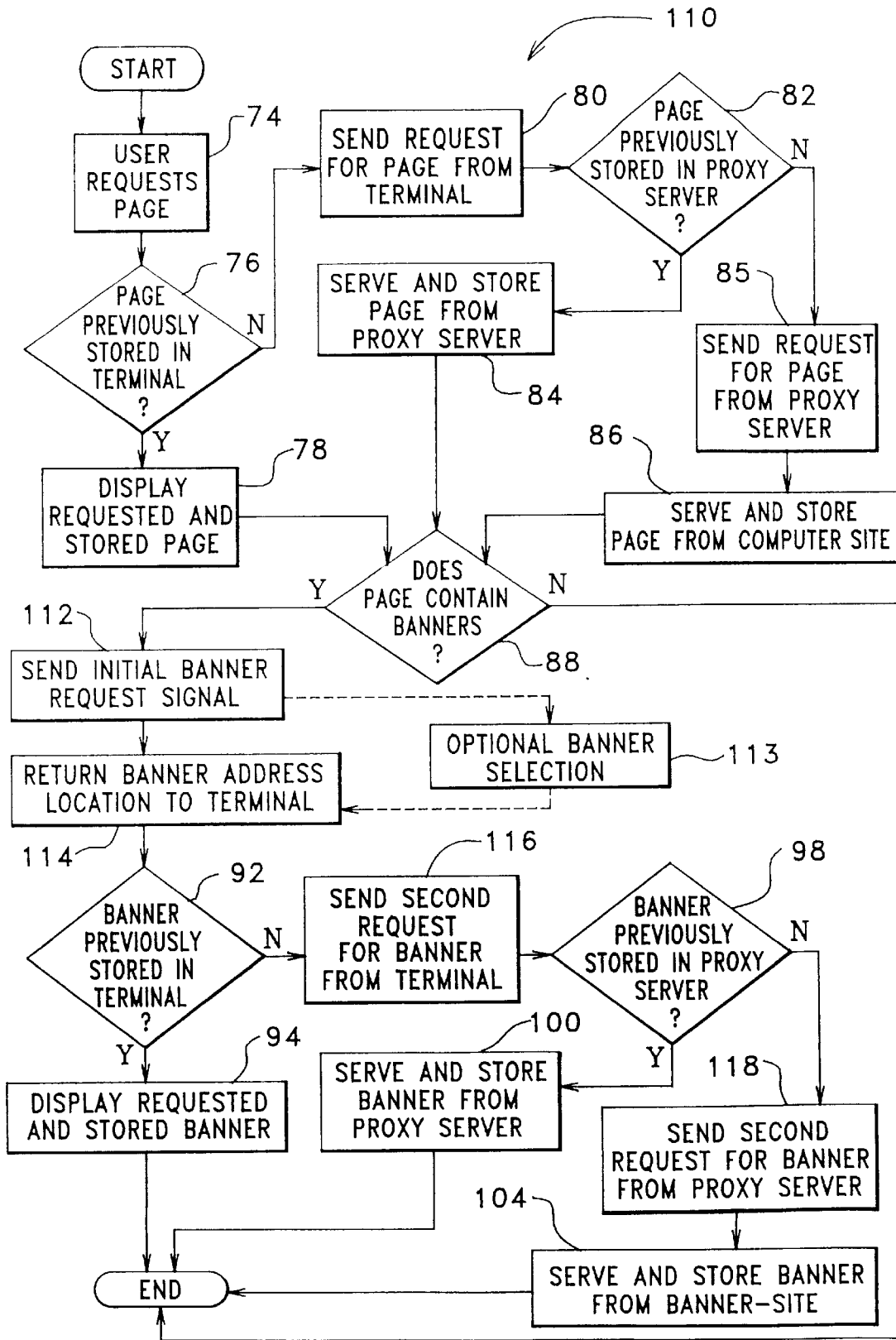
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66

*FIG.2*

*FIG.3*

*(PRIOR ART)*

FIG.4

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