



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

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(54) **SCALING PROXY SERVER SENDING TO THE CLIENT A GRAPHICAL USER INTERFACE FOR ESTABLISHING OBJECT ENCODING PREFERENCES AFTER RECEIVING THE CLIENT'S REQUEST FOR THE OBJECT**

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(*) **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).

Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

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(51) **Int. Cl.⁷** **G06F 15/16**; G06F 3/00

(52) **U.S. Cl.** **709/247**; 709/203; 709/217; 345/347

(58) **Field of Search** 395/200.31, 200.32, 395/200.33, 200.47, 200.48, 200.49, 200.76, 200.77; 709/201-203, 217-219, 246-247; 345/347, 352

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33 Claims, 10 Drawing Sheets

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Primary Examiner—Zarni Maung

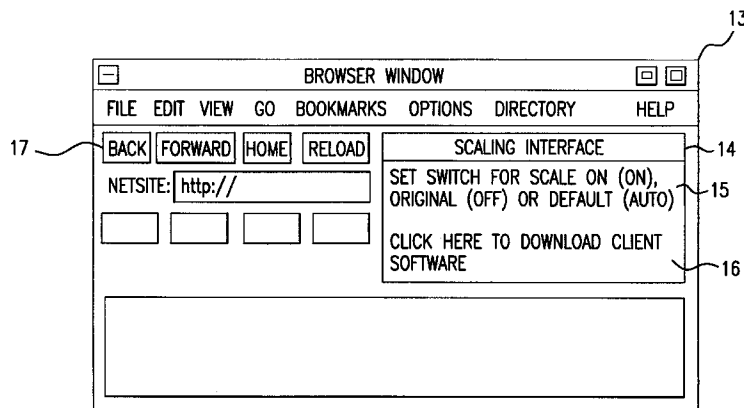
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(57)

ABSTRACT

A system for enhancing data access over a communications link is disclosed. In accordance with a particular embodiment, a system for retrieving an object over a computer network includes a network client with a browser for rendering an object to a user and a user interface enabling the user to establish an encoding preference. A remote scaling server is coupled between the network client and the computer network, and includes a remote proxy and an encode service provider. The remote scaling server is configured to request a user-specified encoding preference from the network client, retrieve an object from the computer network using the remote proxy, encode the object using the encode service provider in accordance with the requested user-specified encoding preference, and transmit the encoded object to the network client using the remote proxy. The disclosed system thus enables users to dynamically influence the trade-off between quality of content and download speed.



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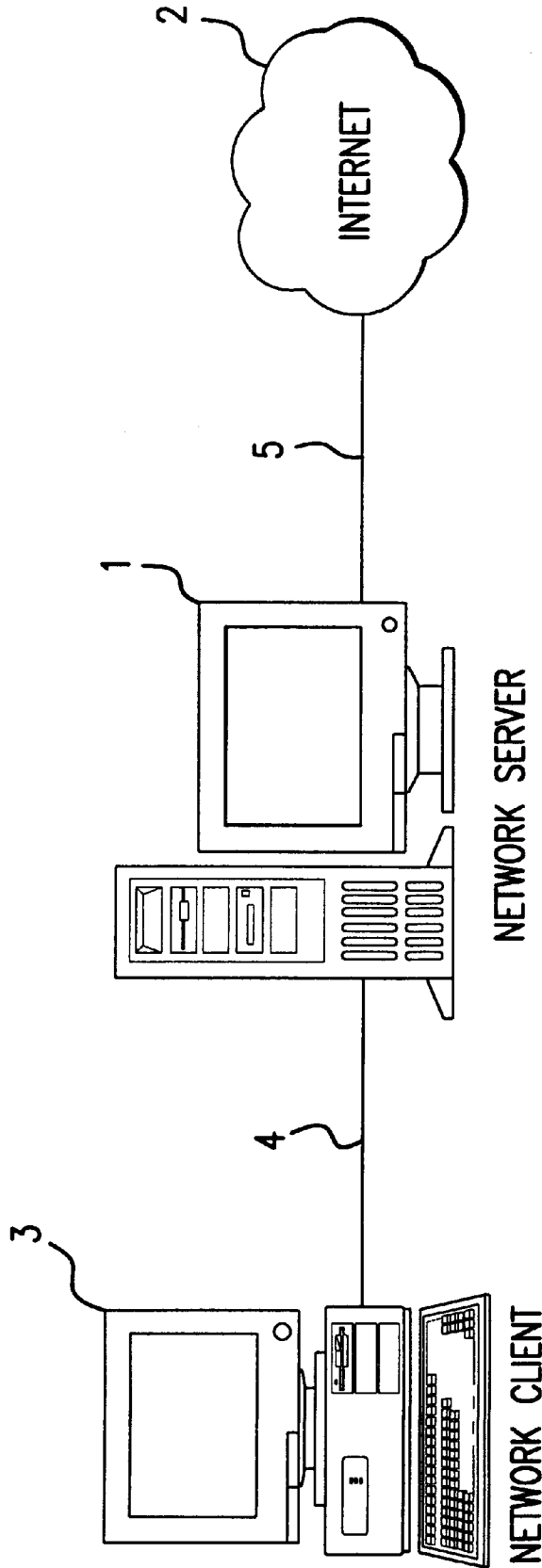


FIG.1

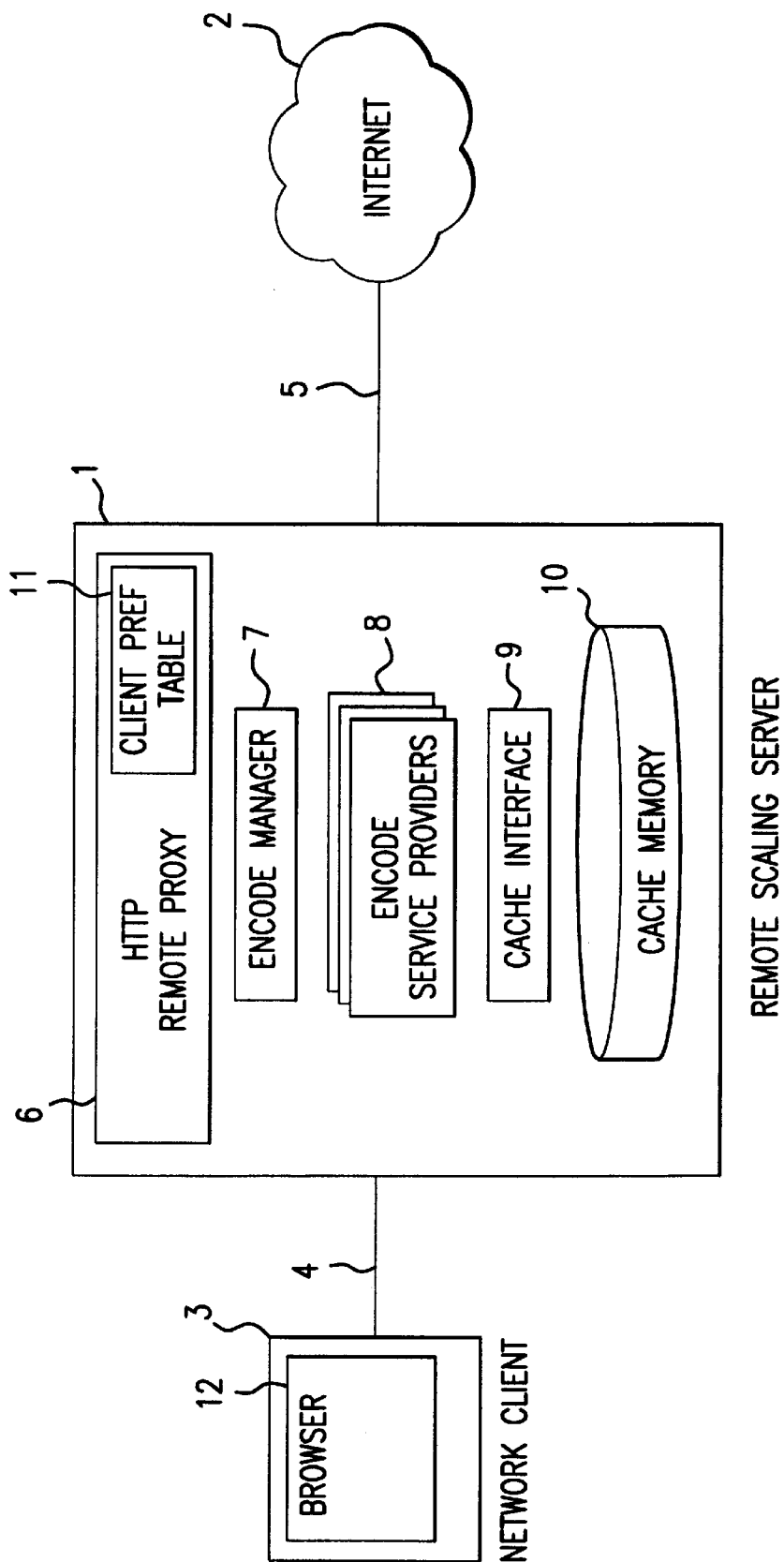


FIG.2

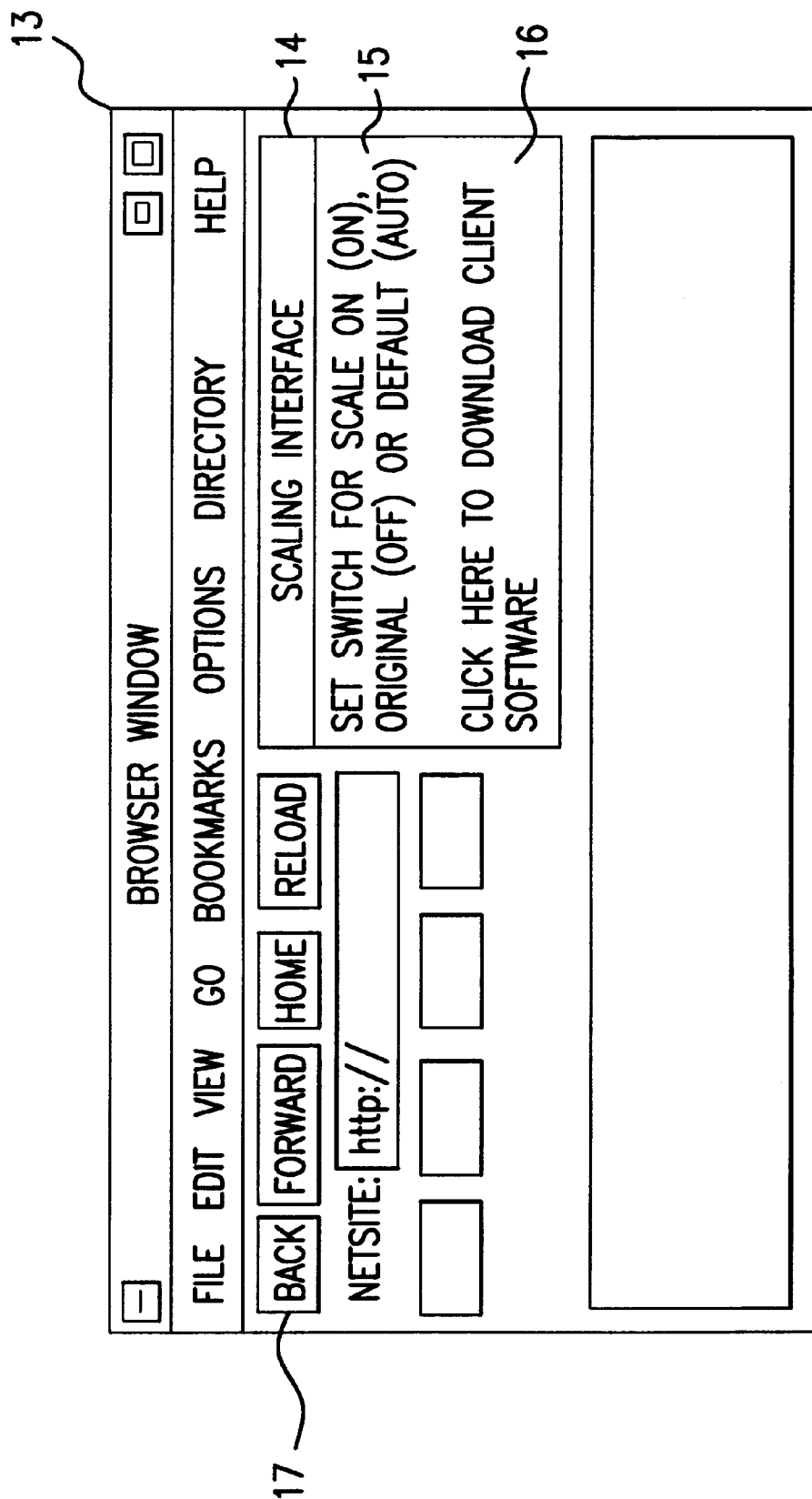


FIG.3

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