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**Border et al.**

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(54) **SYSTEM AND METHOD OF READING  
AHEAD OF OBJECTS FOR DELIVERY TO  
AN HTTP PROXY SERVER**

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patent is extended or adjusted under 35  
U.S.C. 154(b) by 765 days.

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(51) **Int. Cl.**<sup>7</sup> ..... **G06F 15/167**

(52) **U.S. Cl.** ..... **709/213; 709/203; 709/201**

(58) **Field of Search** ..... **709/201-203,**  
**709/238, 225, 226, 229, 213; 711/117,**  
**118, 122, 137**

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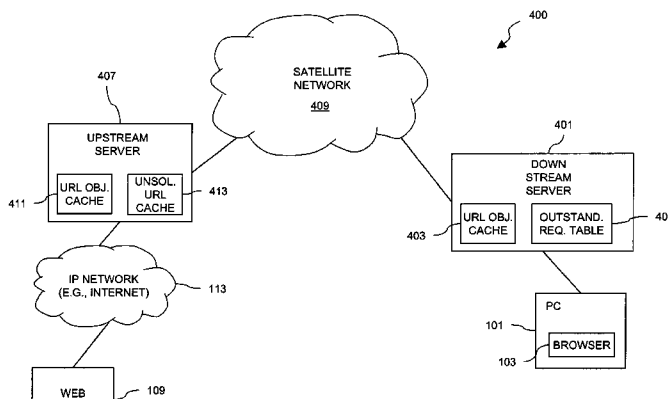
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(57) **ABSTRACT**

A communication system for retrieving web content is  
disclosed. A downstream proxy server receives a URL  
request message from a web browser, in which the URL  
request message specifies a URL content that has an embed-  
ded object. An upstream proxy server receives the URL  
request message from the downstream proxy server. The  
upstream proxy server selectively forwards the URL request  
message to a web server and receives the URL content from  
the web server, wherein the upstream proxy server forwards  
the URL content to the downstream proxy server and parses  
the URL content to obtain the embedded object prior to  
receiving a corresponding embedded object request message  
initiated by the web browser.

**4 Claims, 7 Drawing Sheets**



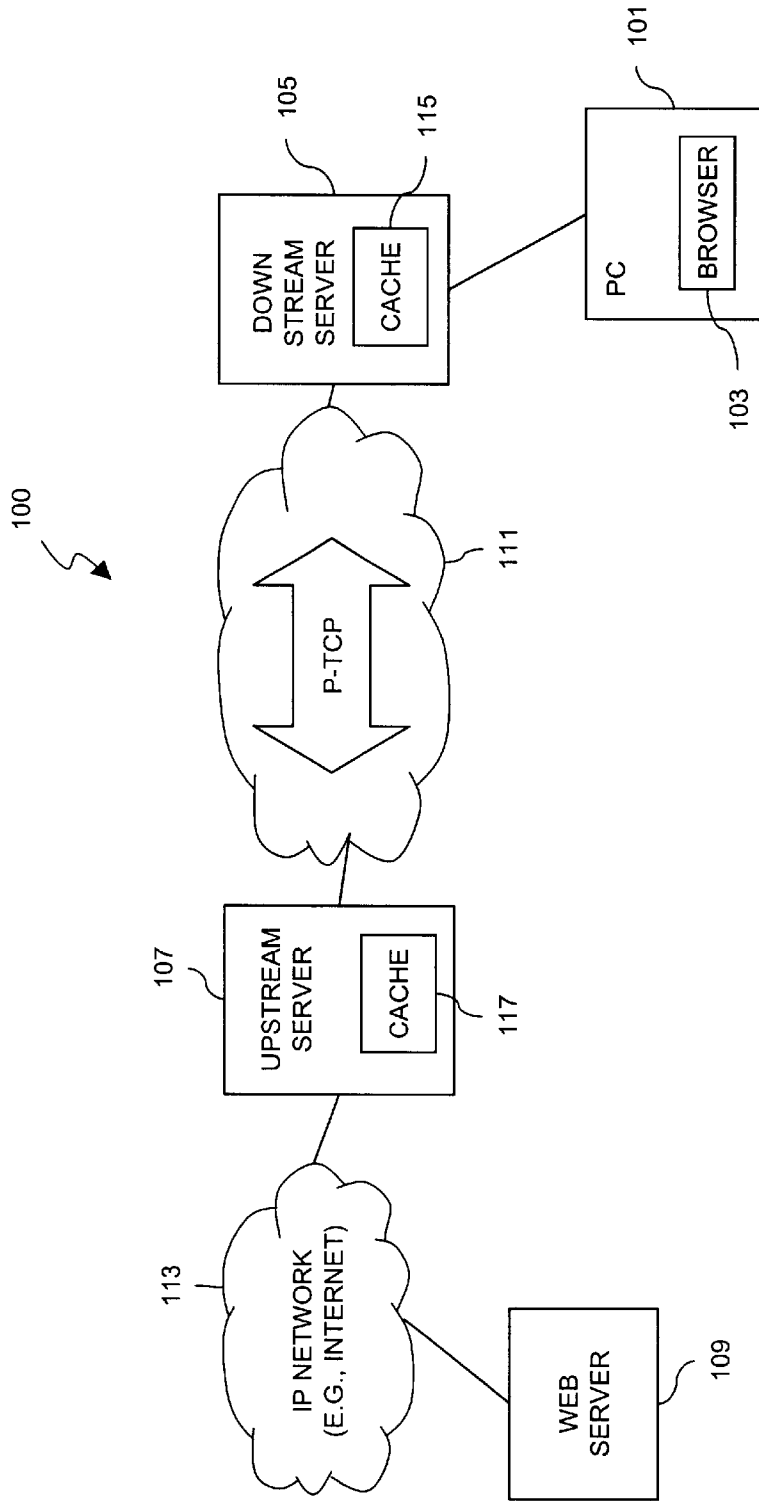


FIG. 1

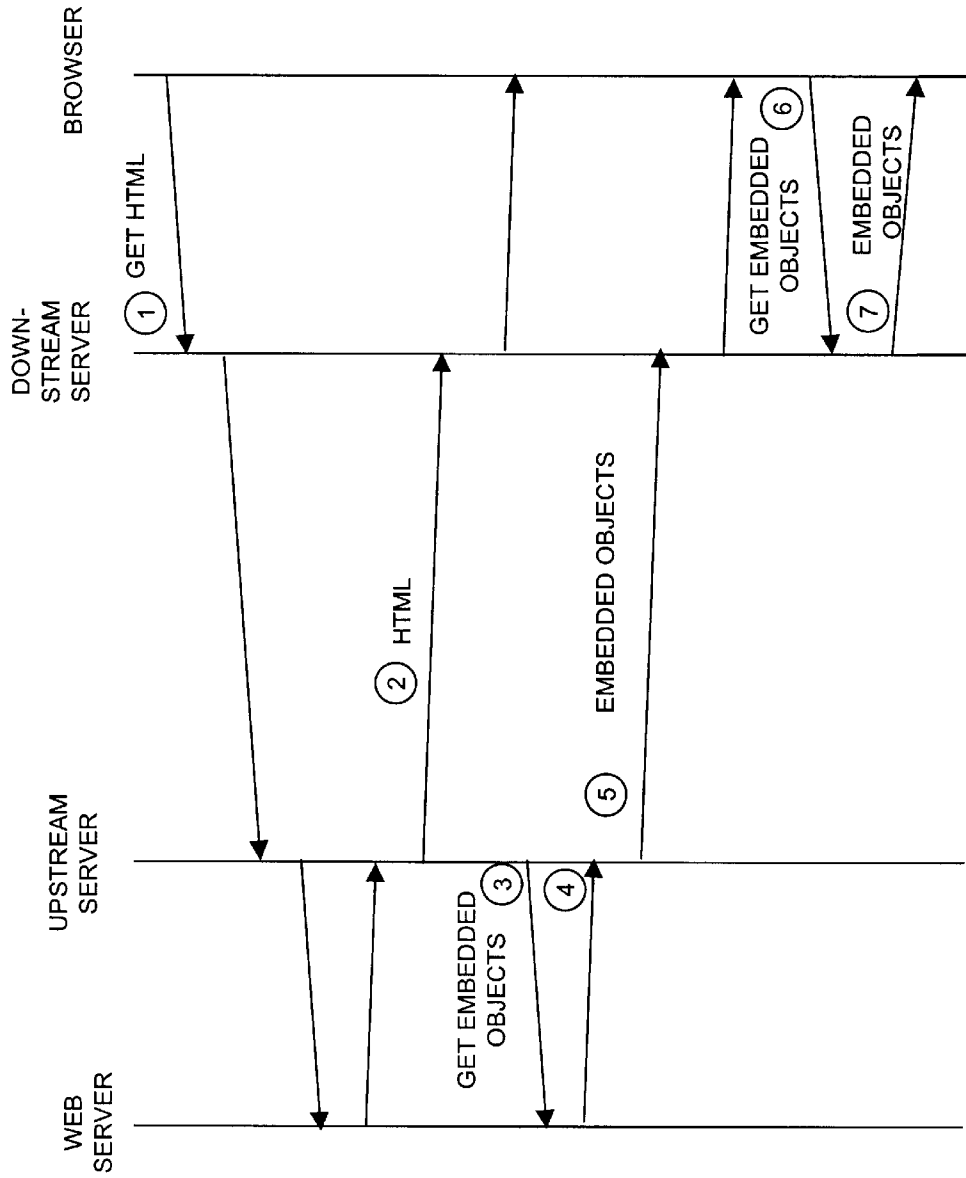
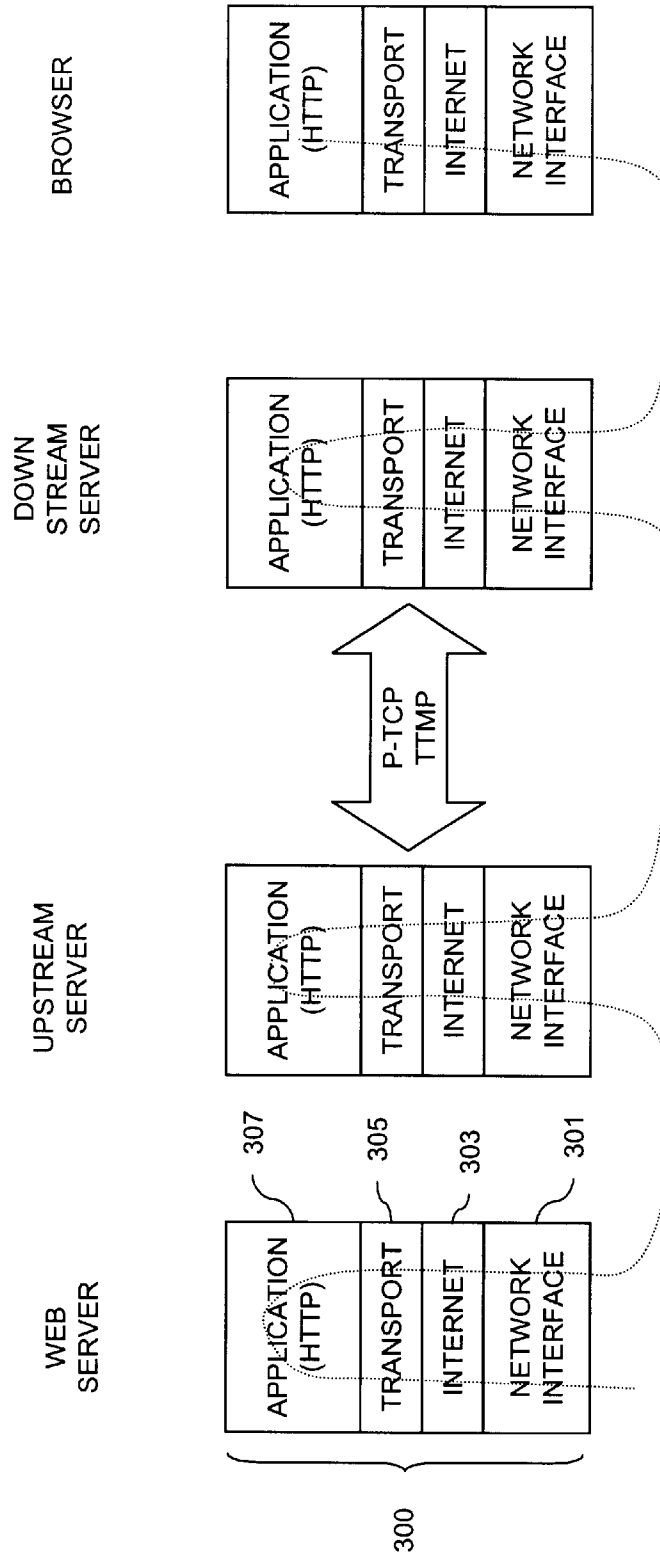


FIG. 2

FIG. 3



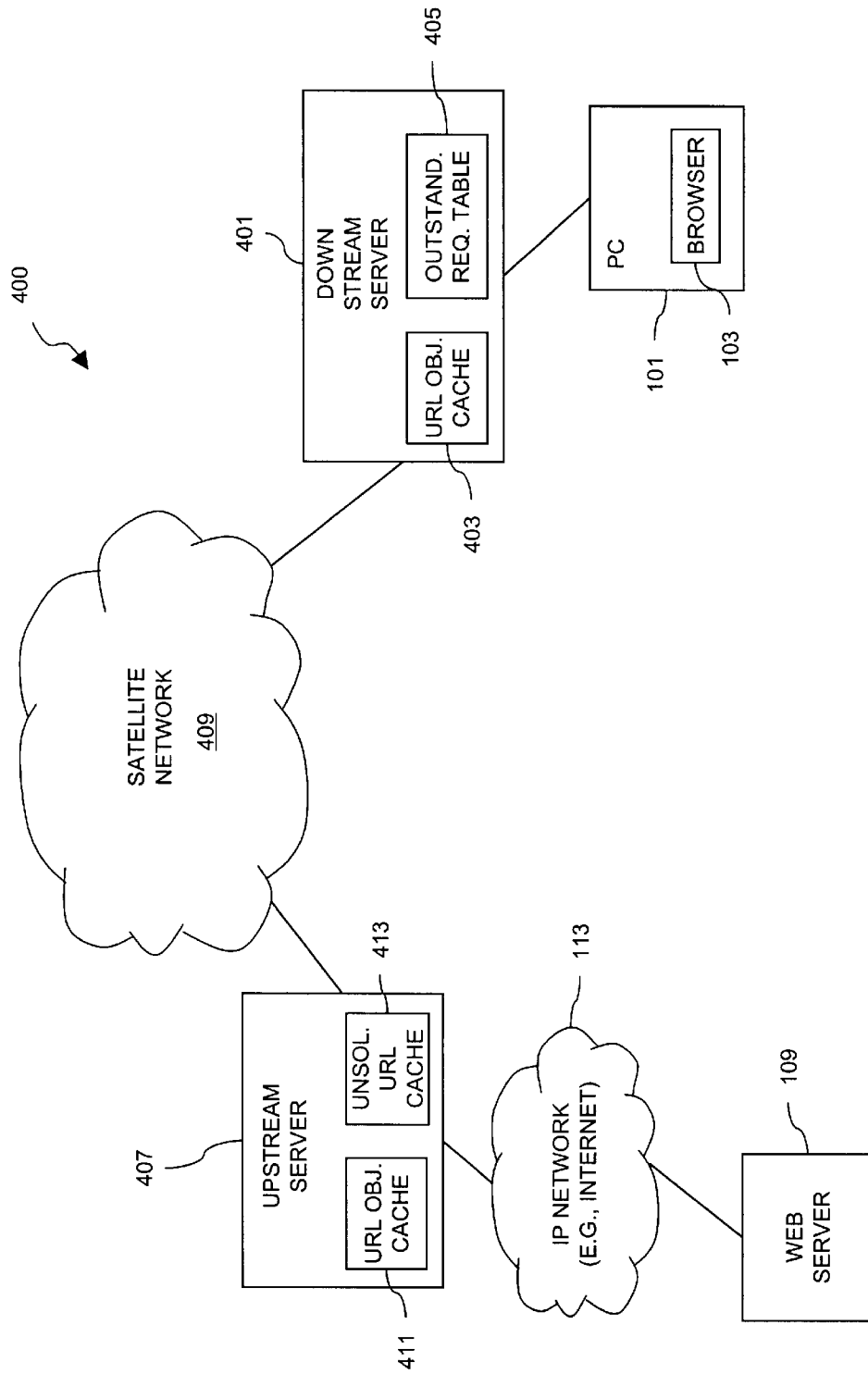


FIG. 4

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