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(54) **APPARATUS AND METHOD FOR CONTENT
AND CONTEXT PROCESSING OF WEB
SERVICE TRAFFIC**

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G06F 17/30 (2006.01)

G06F 15/16 (2006.01)

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(52) **U.S. Cl.** **719/317**; 705/37; 707/4;
707/5; 707/10; 709/202

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719/318, 310, 311, 328; 709/201–207, 223,
709/217–219, 224; 718/108; 707/1–10;
715/513; 705/37

See application file for complete search history.

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Primary Examiner—Meng-Ai An

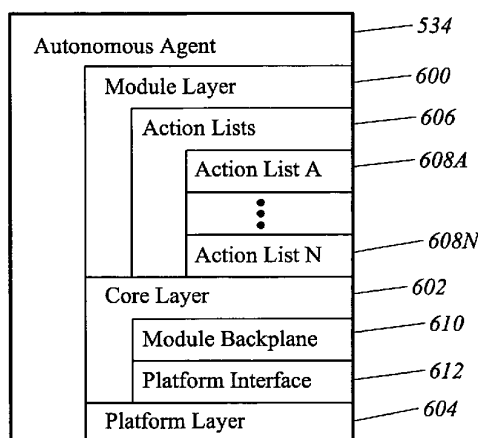
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(57) **ABSTRACT**

A method of supplementing the operations performed by a
web service includes operating an autonomous software
agent. The autonomous software agent receives a request
directed to a web service and identifies a web service input
operation associated with the request. The web service input
operation is associated with a set of input actions. The input
actions are executed prior to directing the request to web
service. The autonomous software agent may also receive a
response from the web service. A web service output opera-
tion associated with the response is identified. The web ser-
vice output operation is associated with a set of output
actions. The output actions are executed prior to directing the
response to a client.

11 Claims, 13 Drawing Sheets



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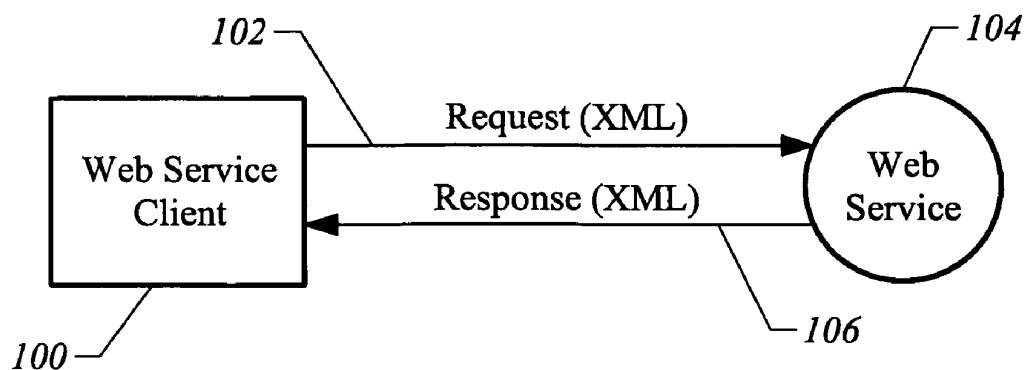


FIG. 1
(Prior Art)

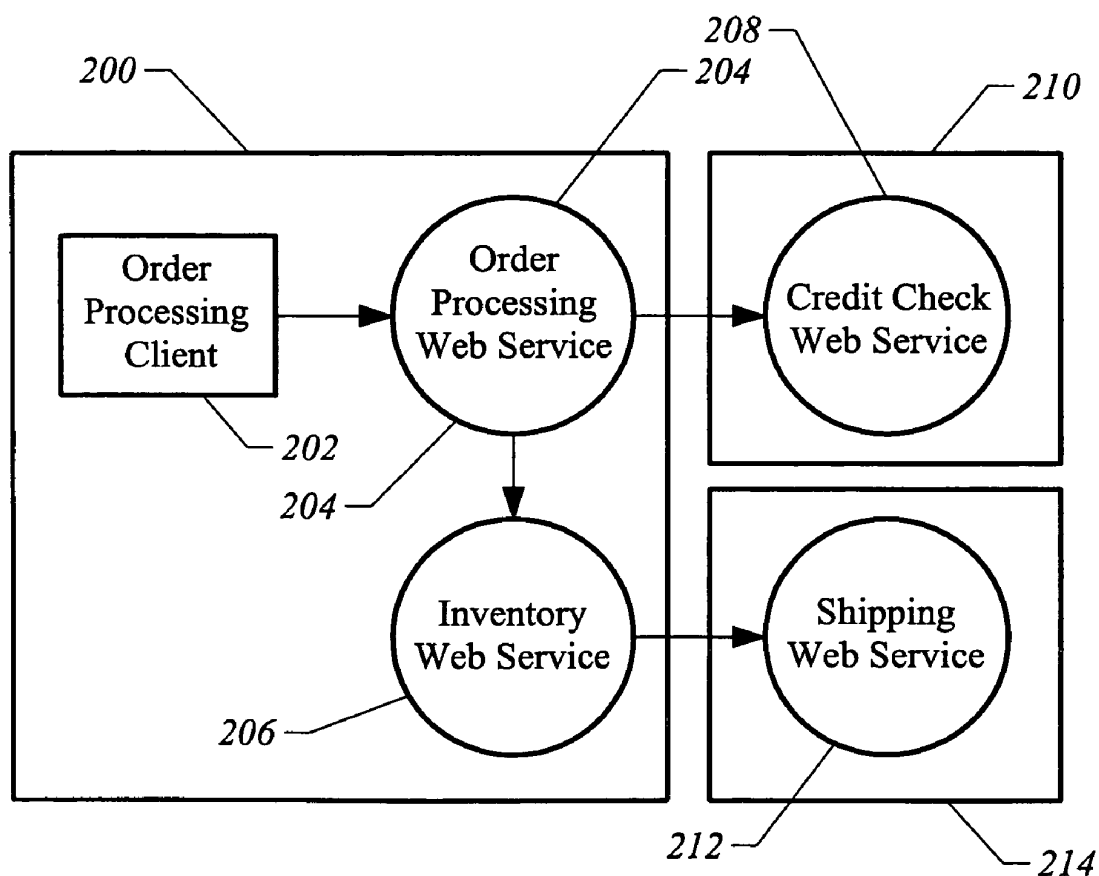


FIG. 2
(Prior Art)

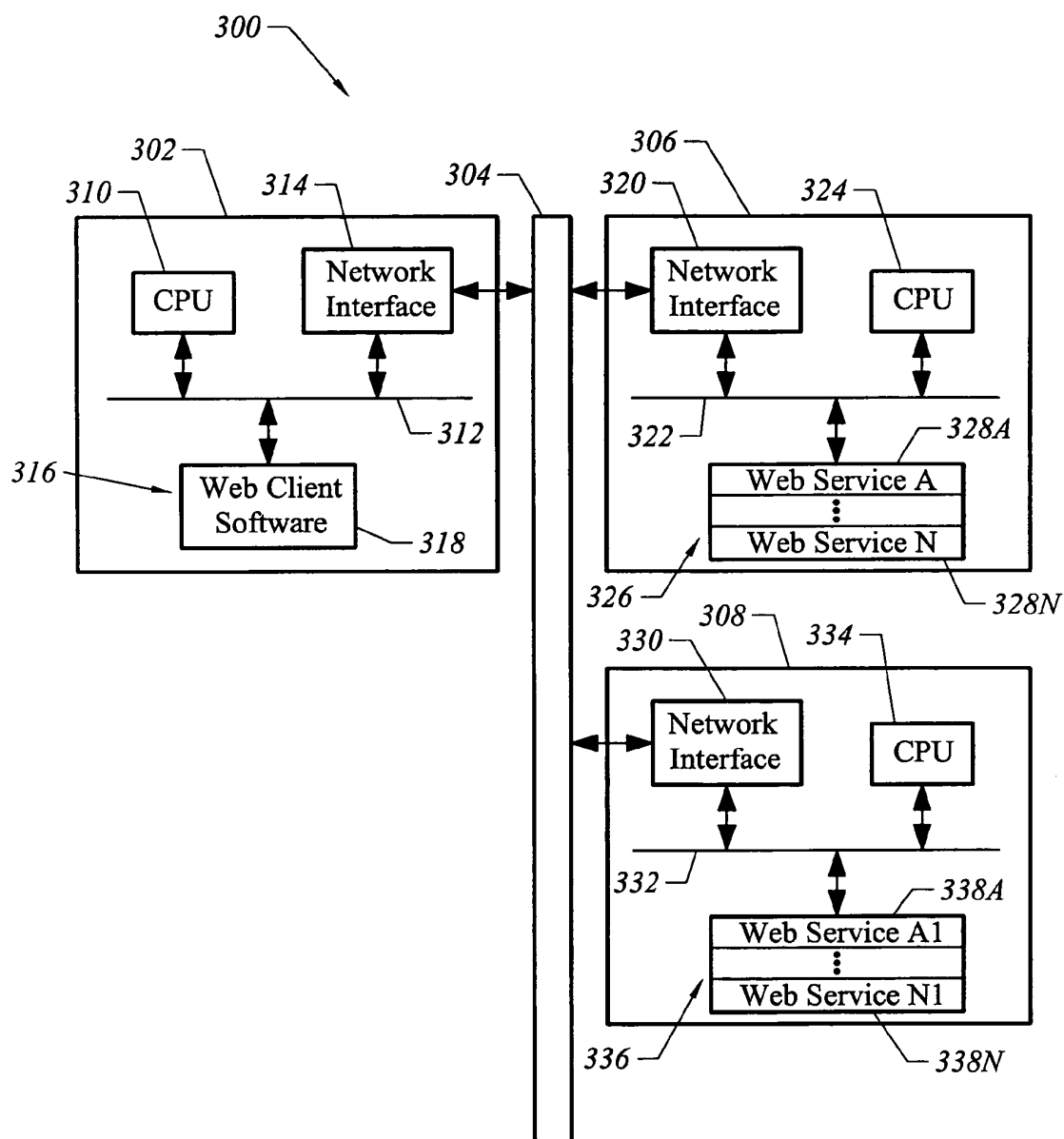


FIG. 3
(Prior Art)

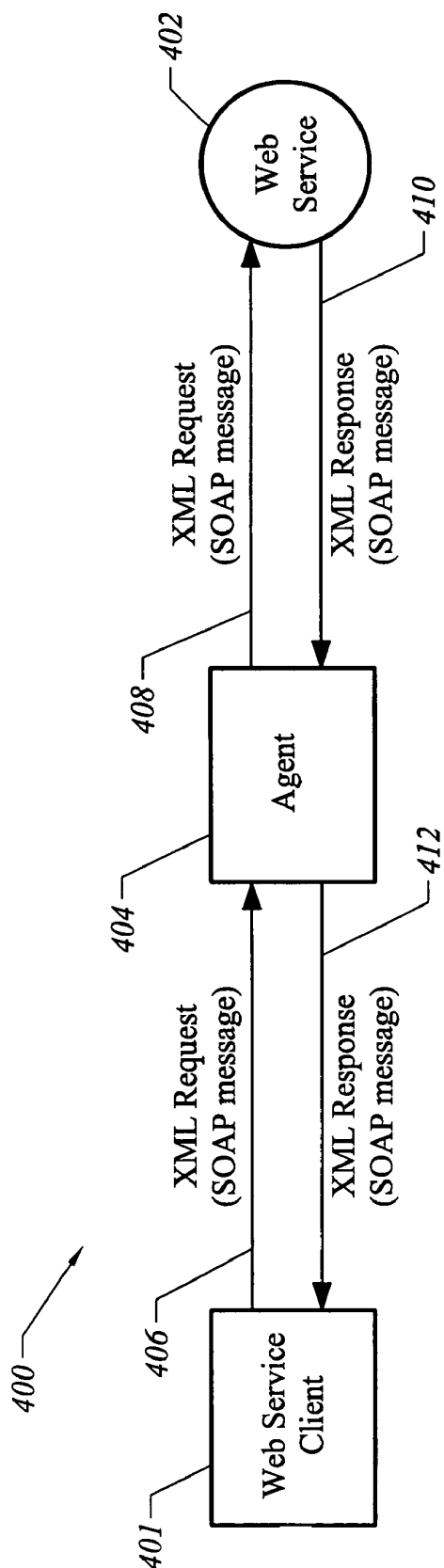


FIG. 4

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