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(54) **METHOD AND SYSTEM FOR MESSAGE-ORIENTED SEMANTIC WEB SERVICE COMPOSITION BASED ON ARTIFICIAL INTELLIGENCE PLANNING**

(75) Inventors: **Zhen Liu**, Tarrytown, NY (US); **Anand Ranganathan**, White Plains, NY (US); **Anton V. Riabov**, Ossining, NY (US)

(73) Assignee: **International Business Machines Corporation**, Armonk, NY (US)

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G06F 7/00 (2006.01)

(52) **U.S. Cl.** **707/802; 707/608**

(58) **Field of Classification Search** **707/999.007, 707/802, 608**

See application file for complete search history.

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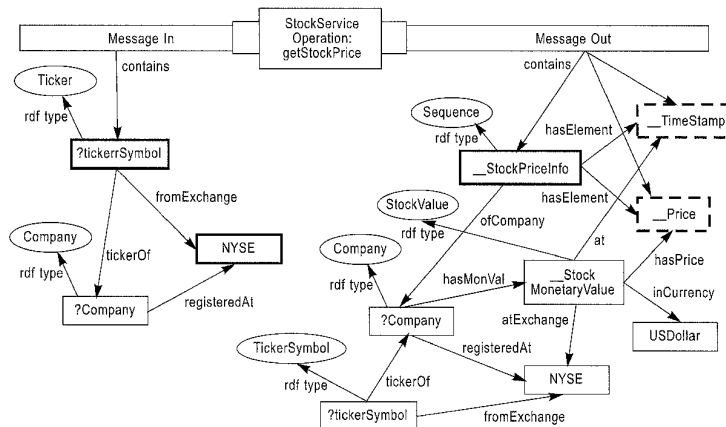
Primary Examiner — Hung T Vy
Assistant Examiner — Phuong Thao Cao

(74) *Attorney, Agent, or Firm* — William J. Stock; F. Chau & Associates, LLC

(57) **ABSTRACT**

A method for modeling a web service operation, includes: defining an input message pattern that describes input requirements of a web service operation, wherein the input message pattern includes a set of variables representing data elements that must be contained in a message input to the web service operation, and a graph pattern that semantically describes the data elements that must be contained in the message input to the web service operation; and defining an output message pattern that describes an output message of the web service operation, wherein the output message pattern includes a set of variables and exemplars that represent data elements contained in the output message, and a graph pattern that semantically describes the data elements contained in the output message.

17 Claims, 5 Drawing Sheets



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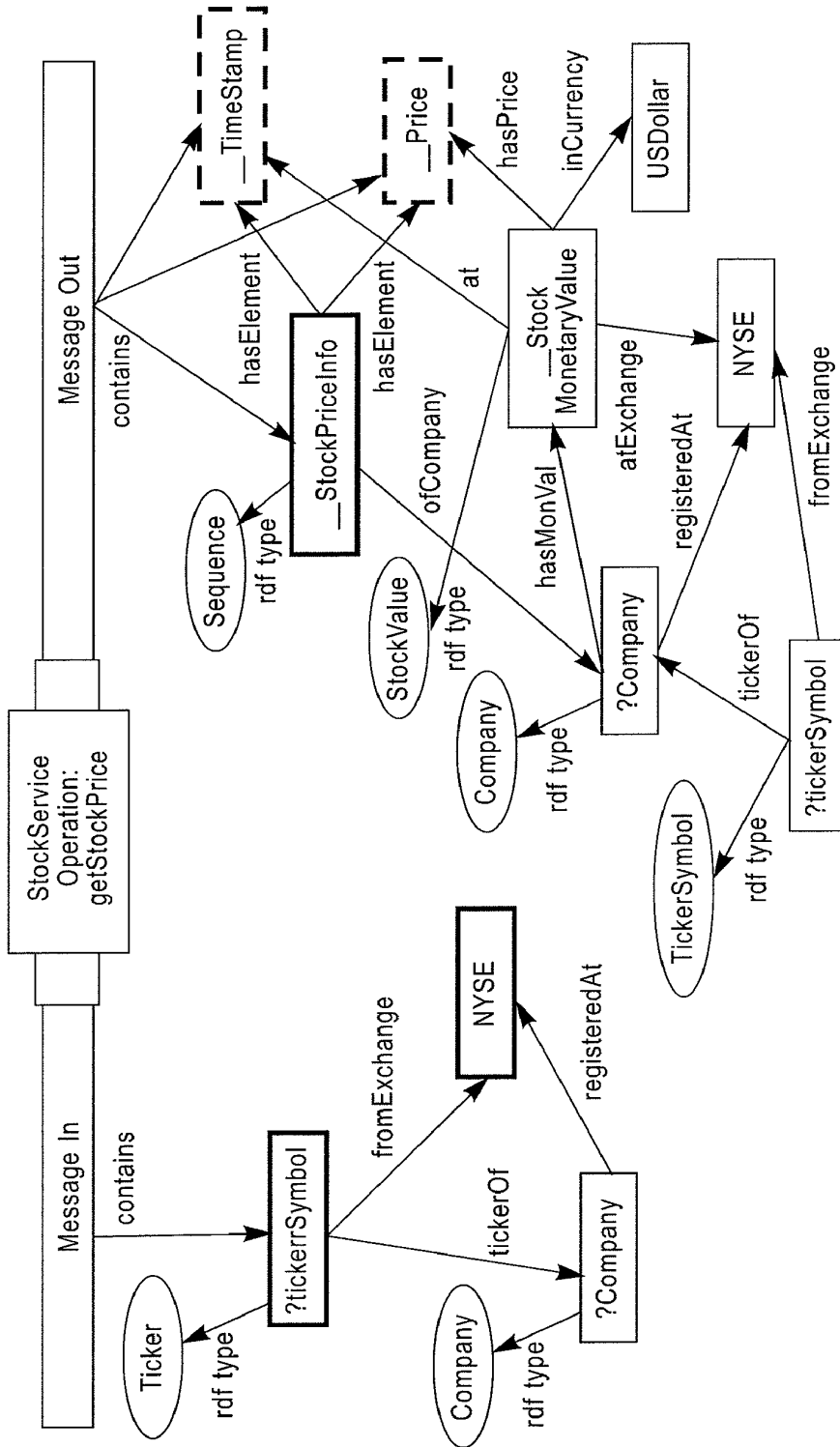


FIG. 1

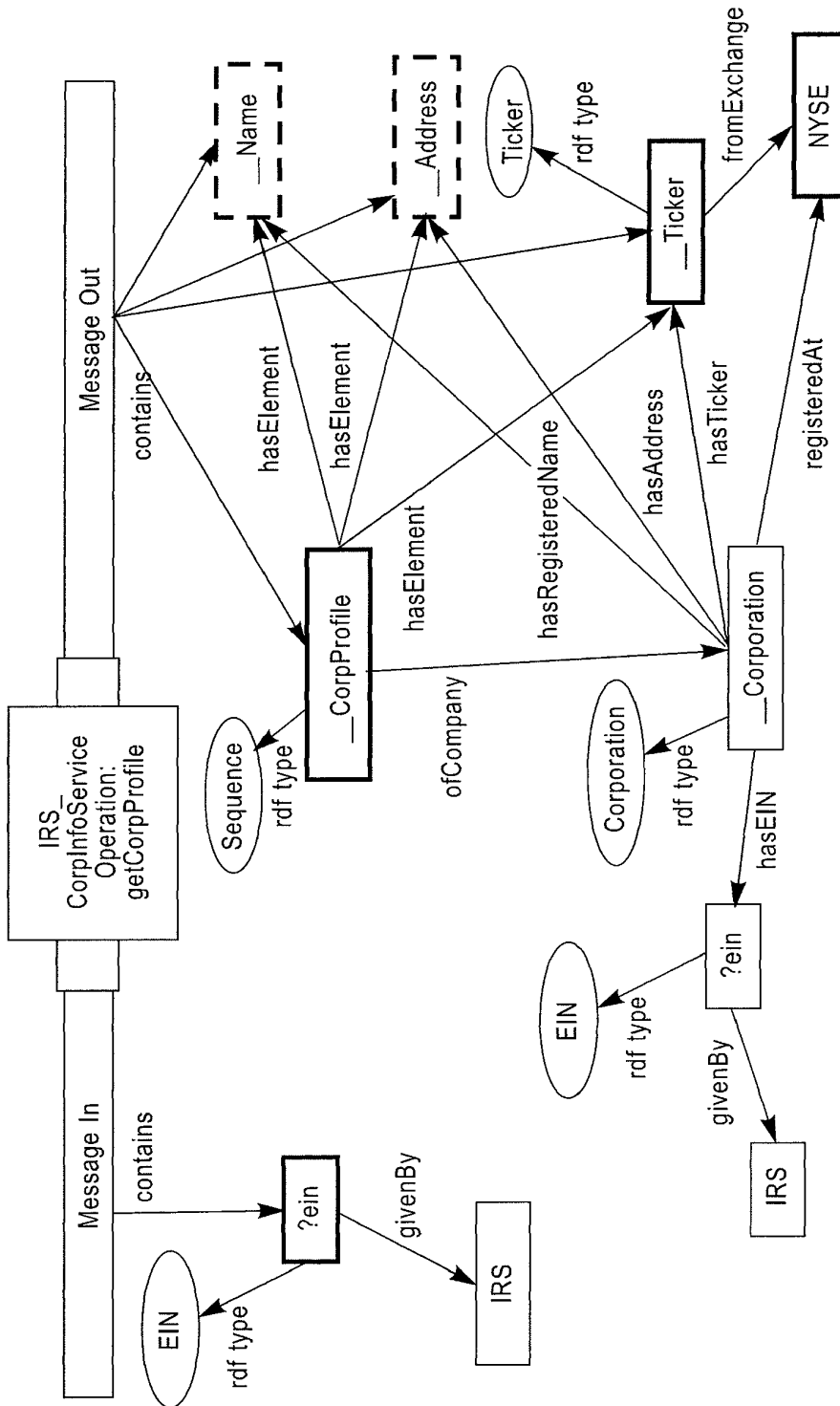


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