

EXHIBIT F



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

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(54) **METHOD AND SYSTEM FOR FRAME FORMATS FOR MIMO CHANNEL MEASUREMENT EXCHANGE**

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(73) Assignee: **Broadcom Corporation**

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

(21) Appl. No.: **12/506,053**

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(65) **Prior Publication Data**

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Related U.S. Application Data

(63) Continuation of application No. 11/052,353, filed on Feb. 7, 2005, now Pat. No. 7,564,914.

(60) Provisional application No. 60/636,255, filed on Dec. 14, 2004.

(51) **Int. Cl.**
H04B 1/00 (2006.01)

(52) **U.S. Cl.** **375/130**

(58) **Field of Classification Search** 375/267, 375/316, 340, 347, 349, 299; 370/338, 401; 455/101, 132, 296

See application file for complete search history.

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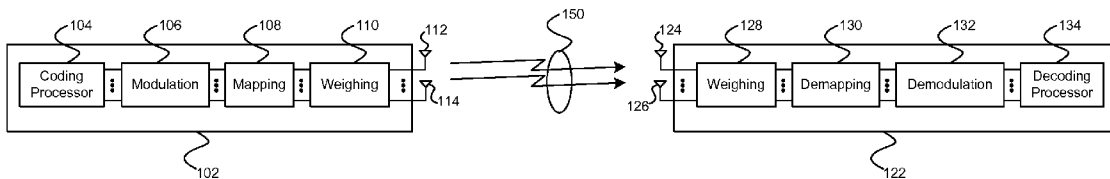
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(57) **ABSTRACT**

A method and system for frame formats for MIMO channel measurement exchange is provided. Aspects of a method for communicating information in a communication system may comprise transmitting data via a plurality of radio frequency (RF) channels utilizing a plurality of transmitting antenna, receiving feedback information via at least one of a plurality of RF channels, and modifying a transmission mode based on the feedback information. Aspects of a method for communicating information in a communication system may also comprise receiving data via a plurality of receiving antenna, transmitting feedback information via at least one of the plurality of RF channels, and requesting modification of a transmission mode for the received data in transmitted response messages comprising the feedback information.

22 Claims, 9 Drawing Sheets



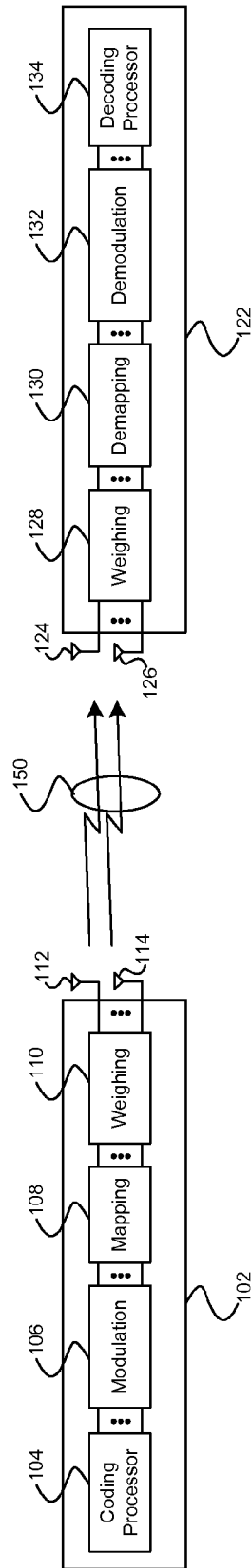


FIG. 1

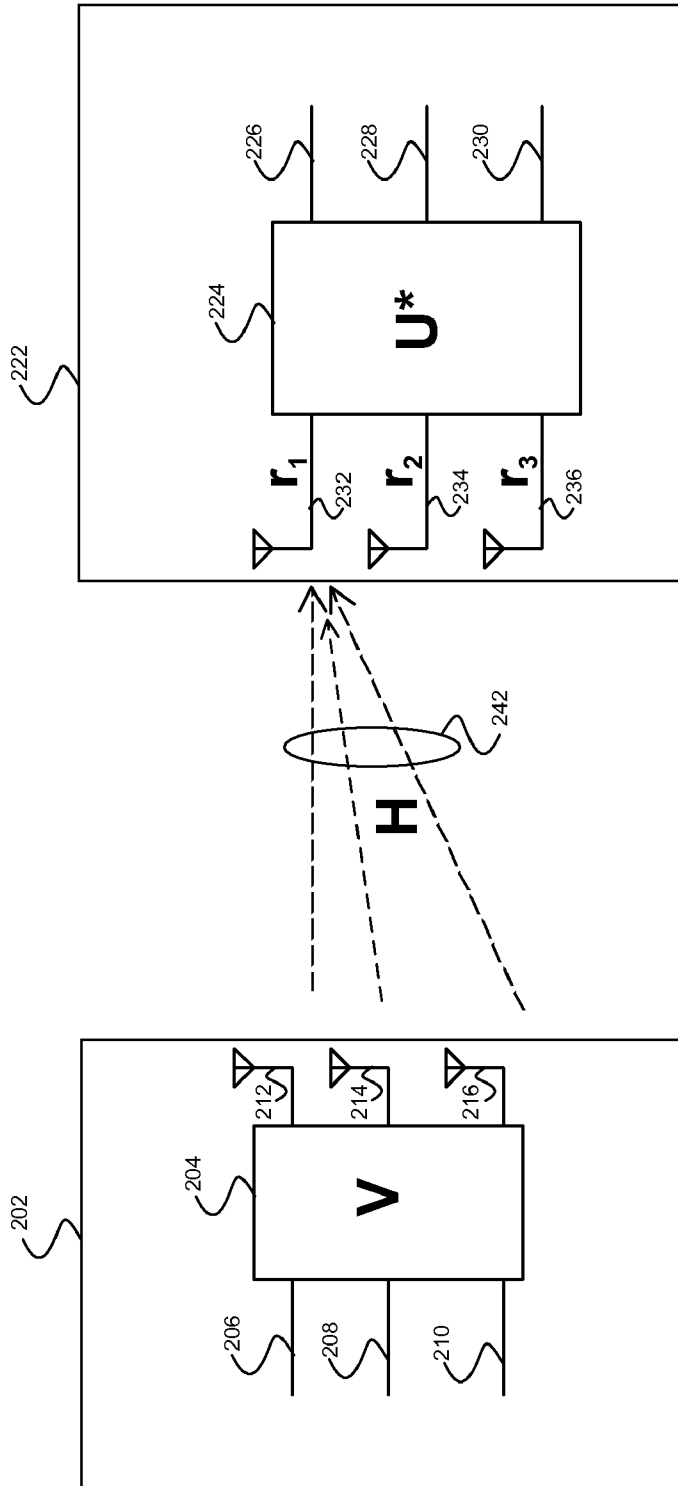


FIG. 2

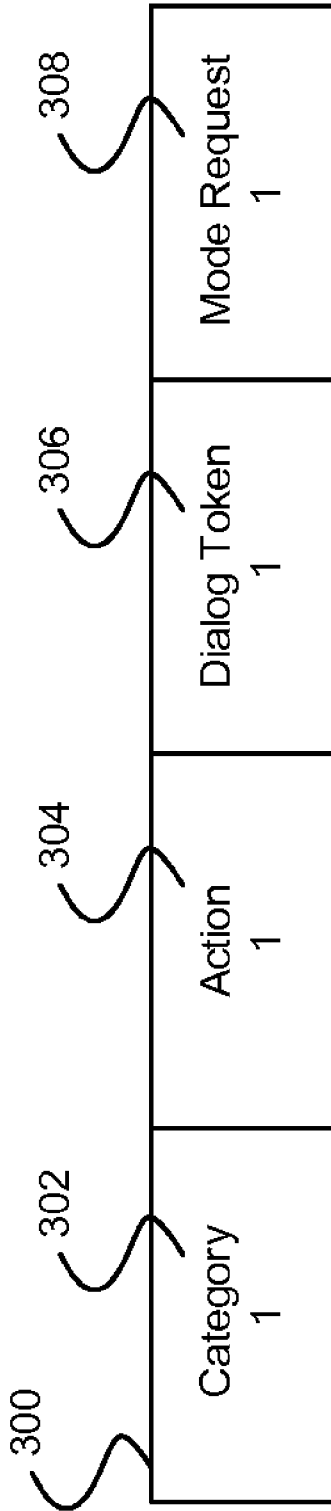


FIG. 3

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