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(54) **CHANNEL ESTIMATION FOR COMMUNICATION SYSTEMS**

Related U.S. Application Data

(76) Inventors: **Alok Kumar Gupta**, Carlsbad, CA (US); **Rajiv Vijayan**, San Diego, CA (US)

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Correspondence Address:
Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714 (US)

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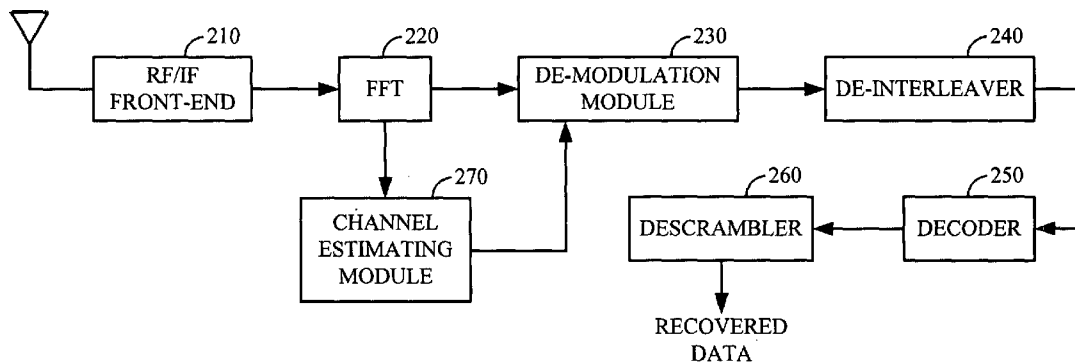
(52) **U.S. Cl. 375/340**

(57) **ABSTRACT**

An improved channel estimation is disclosed. In one embodiment, initial channel estimation is performed using known training data sequence. The data packet received is demodulated based on the initial channel estimates, de-interleaved and decoded. The decoded data is then re-encoded, interleaved and modulated to generate additional training symbols for updating the channel estimates throughout the received data packet.

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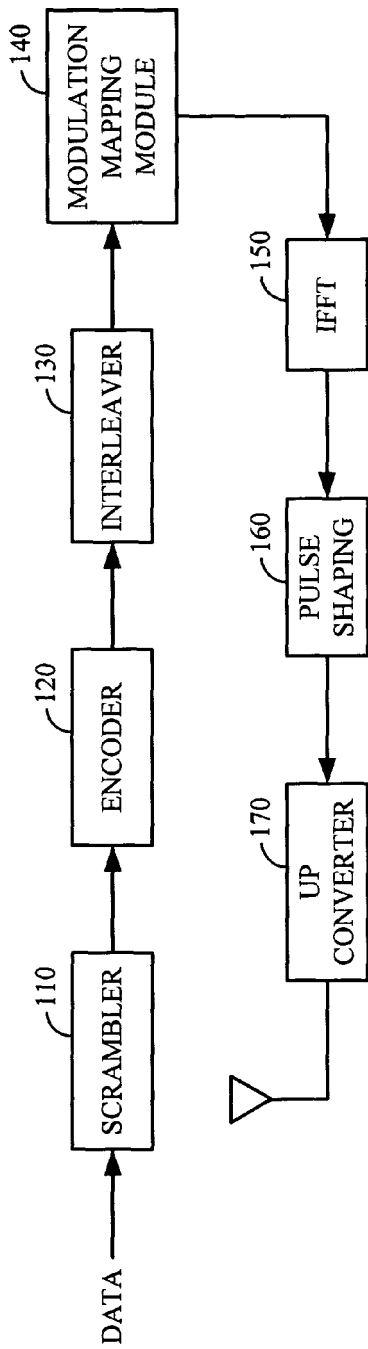


FIG. 1

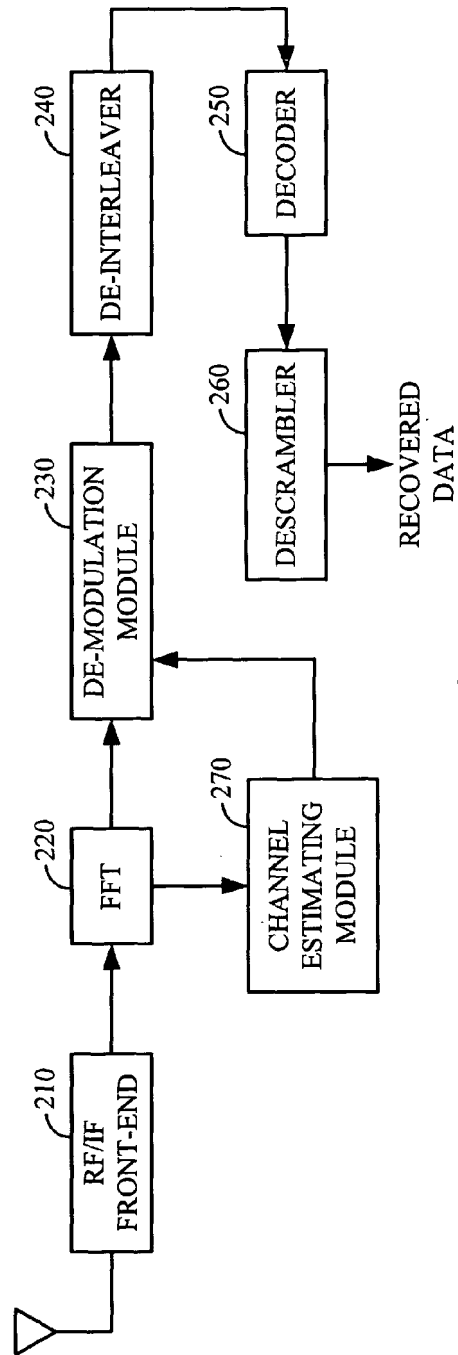


FIG. 2

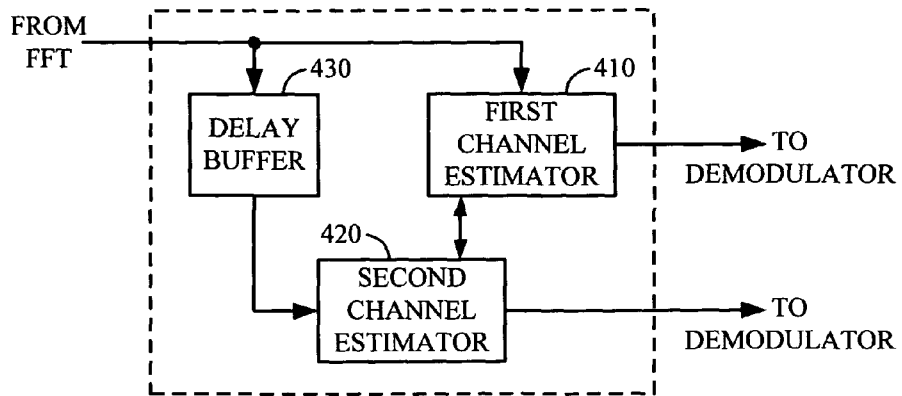


FIG. 4

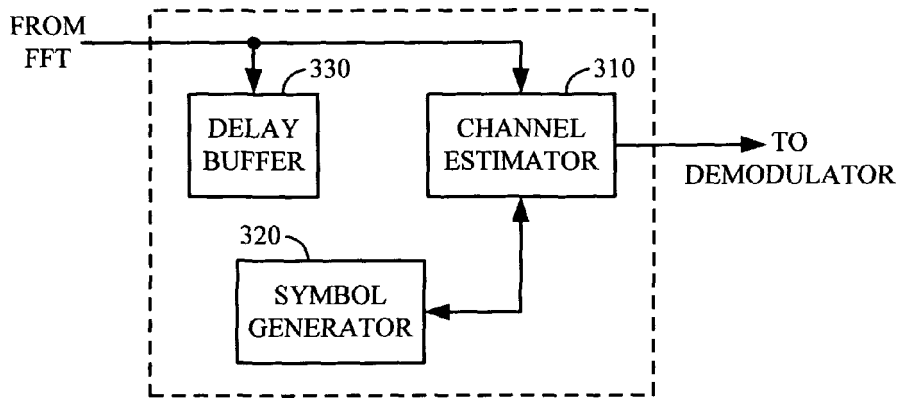


FIG. 3

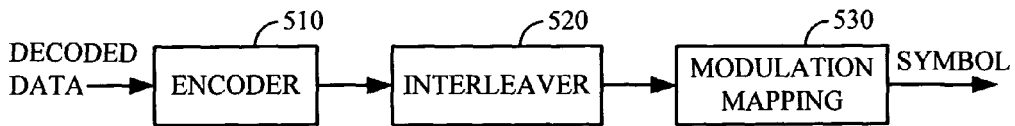


FIG. 5

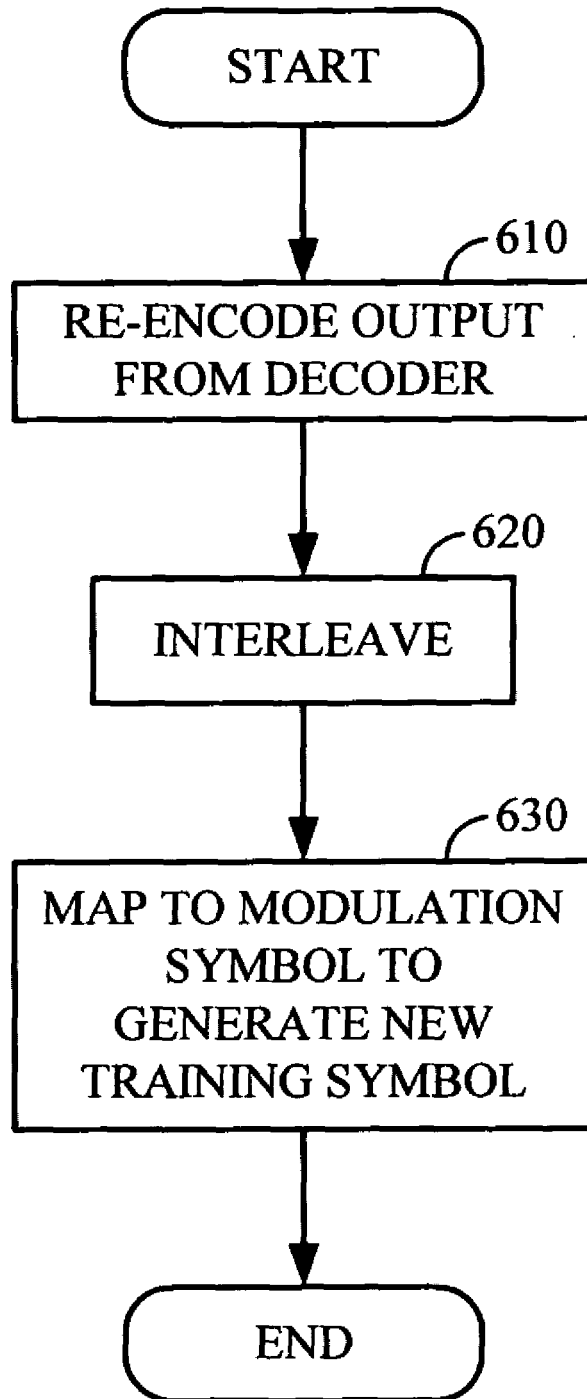


FIG. 6

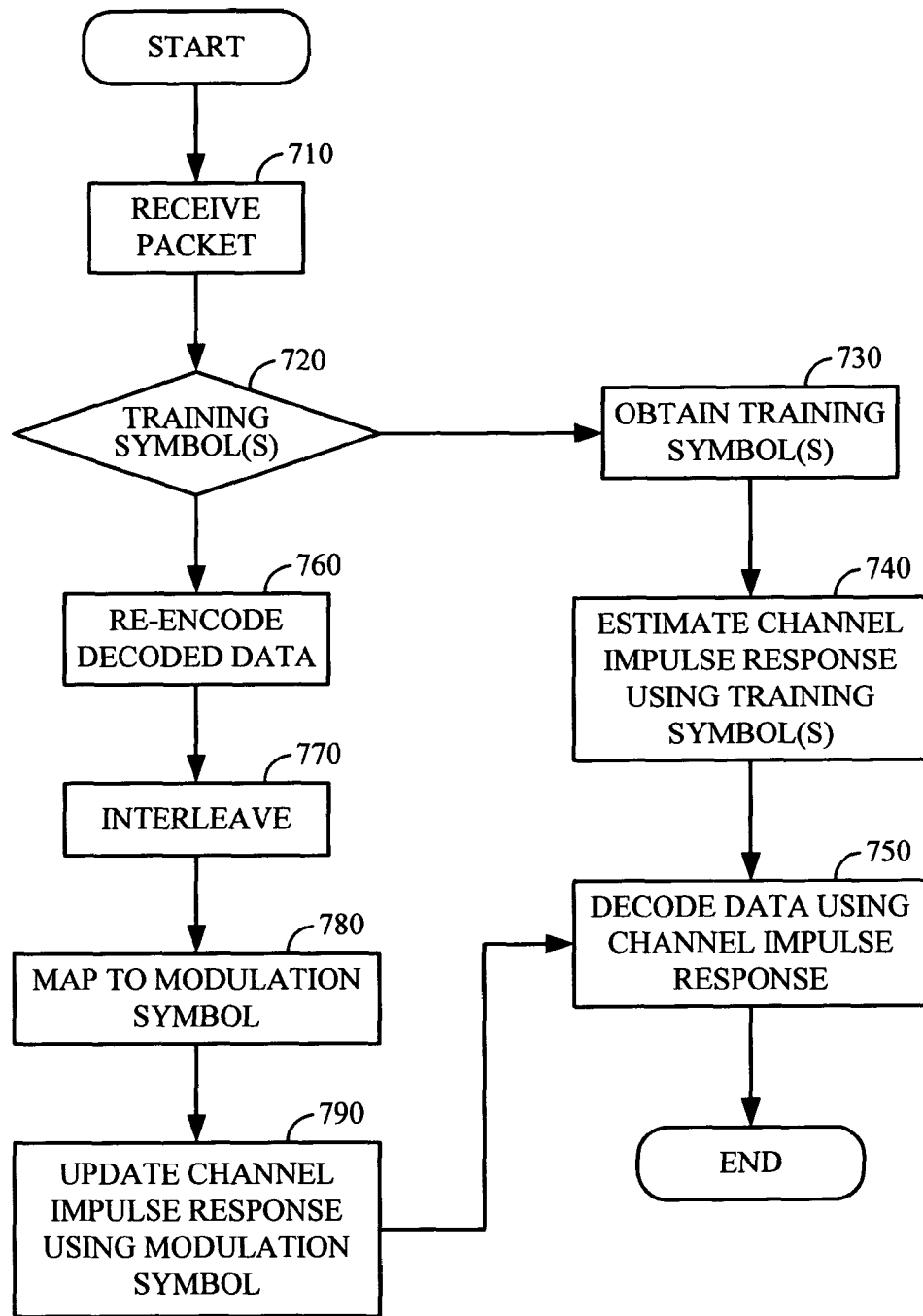


FIG. 7

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