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(54) **SYSTEM AND METHOD FOR SYNCHRONIZING DATA TRANSMISSION FROM MULTIPLE WIRELESS BASE TRANSCEIVER STATIONS TO A SUBSCRIBER UNIT**

(52) **U.S. Cl.** ..... 455/422; 455/452; 455/456; 455/502

(57) **ABSTRACT**

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The invention includes an apparatus and a method for transmitting sub-protocol data units from a plurality of base transceiver stations to a subscriber unit. The method includes estimating time delays required for transferring the sub-protocol data units between a scheduler unit and each of the base transceiver stations. The method further includes the scheduler unit generating a schedule of time slots and frequency blocks in which the sub-protocol data units are to be transmitted from the base transceiver stations to the subscriber unit. The time delays are used to generate the schedule. The time delays can be used to generate a look ahead schedule that compensates for the timing delays of the sub-protocol data units from the scheduler unit to the base transceiver stations. The sub-protocol data units are wirelessly transmitted from the base transceiver stations to the subscriber unit according to the schedule. The time delays can be estimated by time-stamping sub-protocol data units before sub-protocol data units are transferred from the scheduler unit to the base transceiver stations, and estimating the time delays by comparing the times the sub-protocol data units are actually received by the base transceiver stations with the time-stamping.

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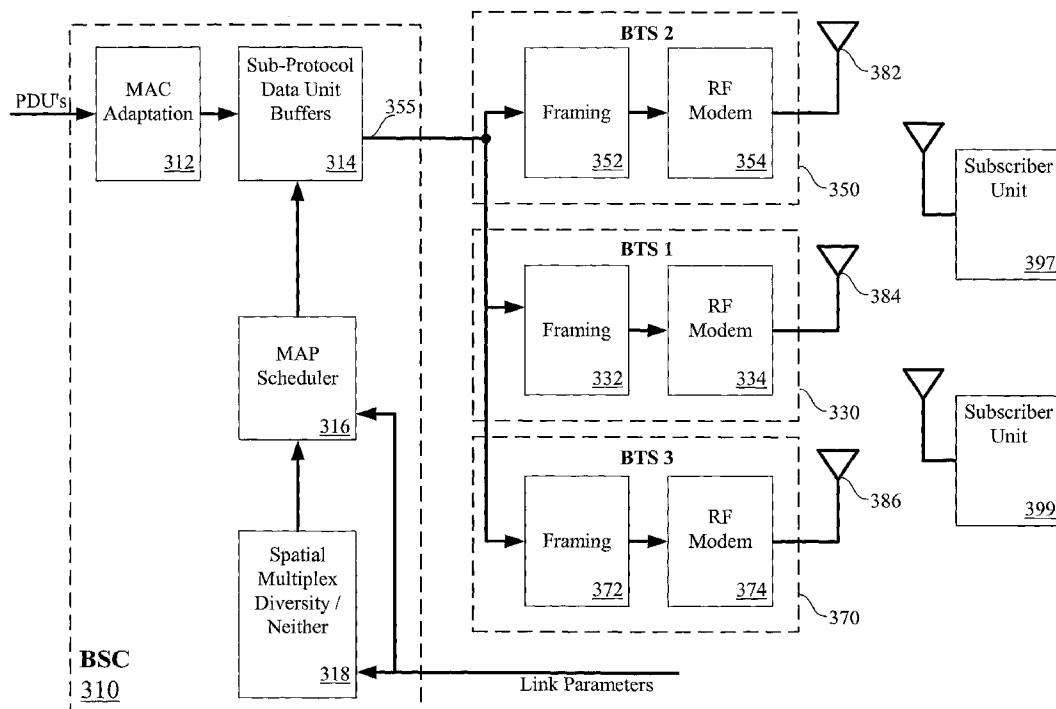
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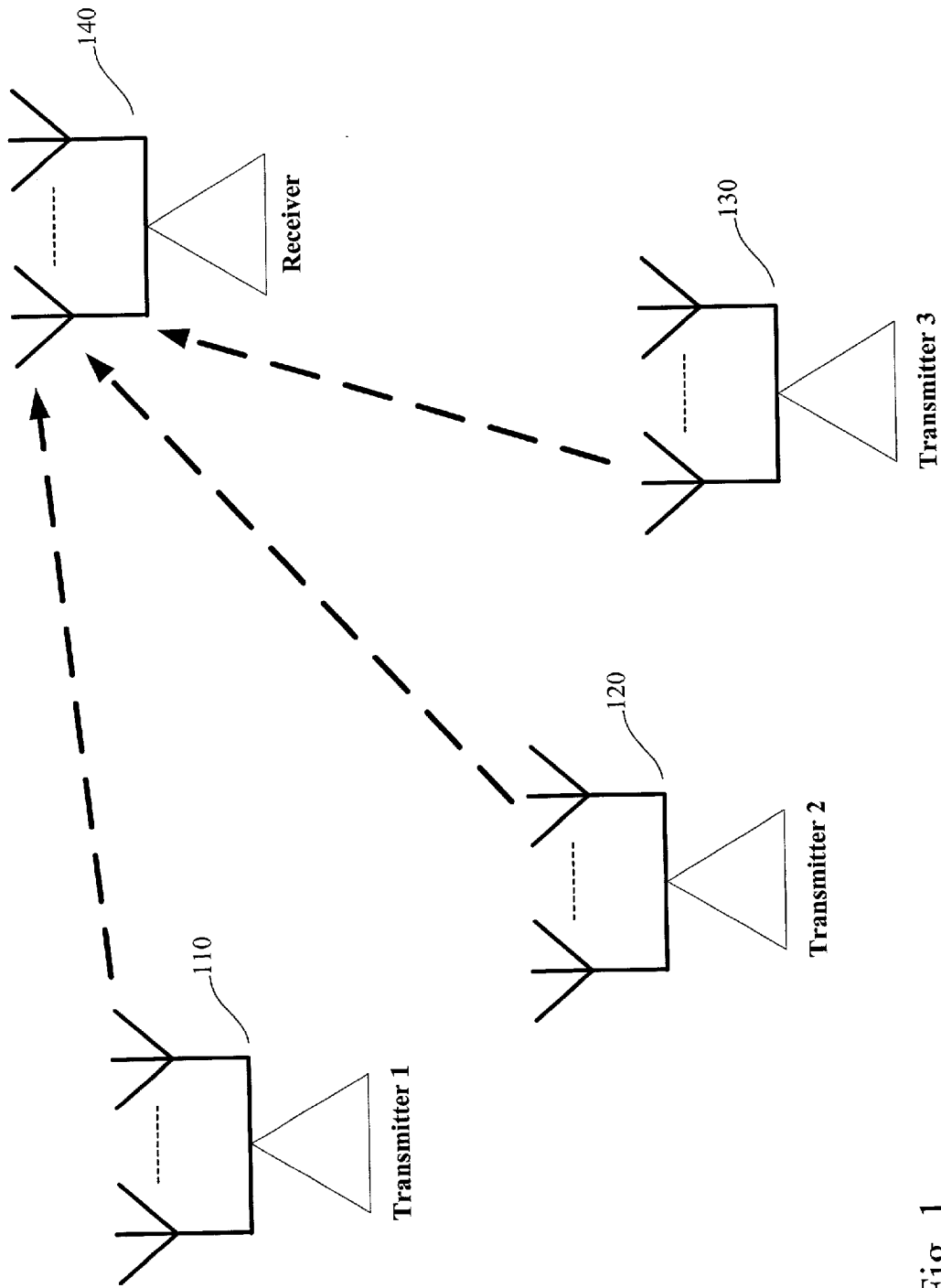


Fig. 1  
(Prior Art)

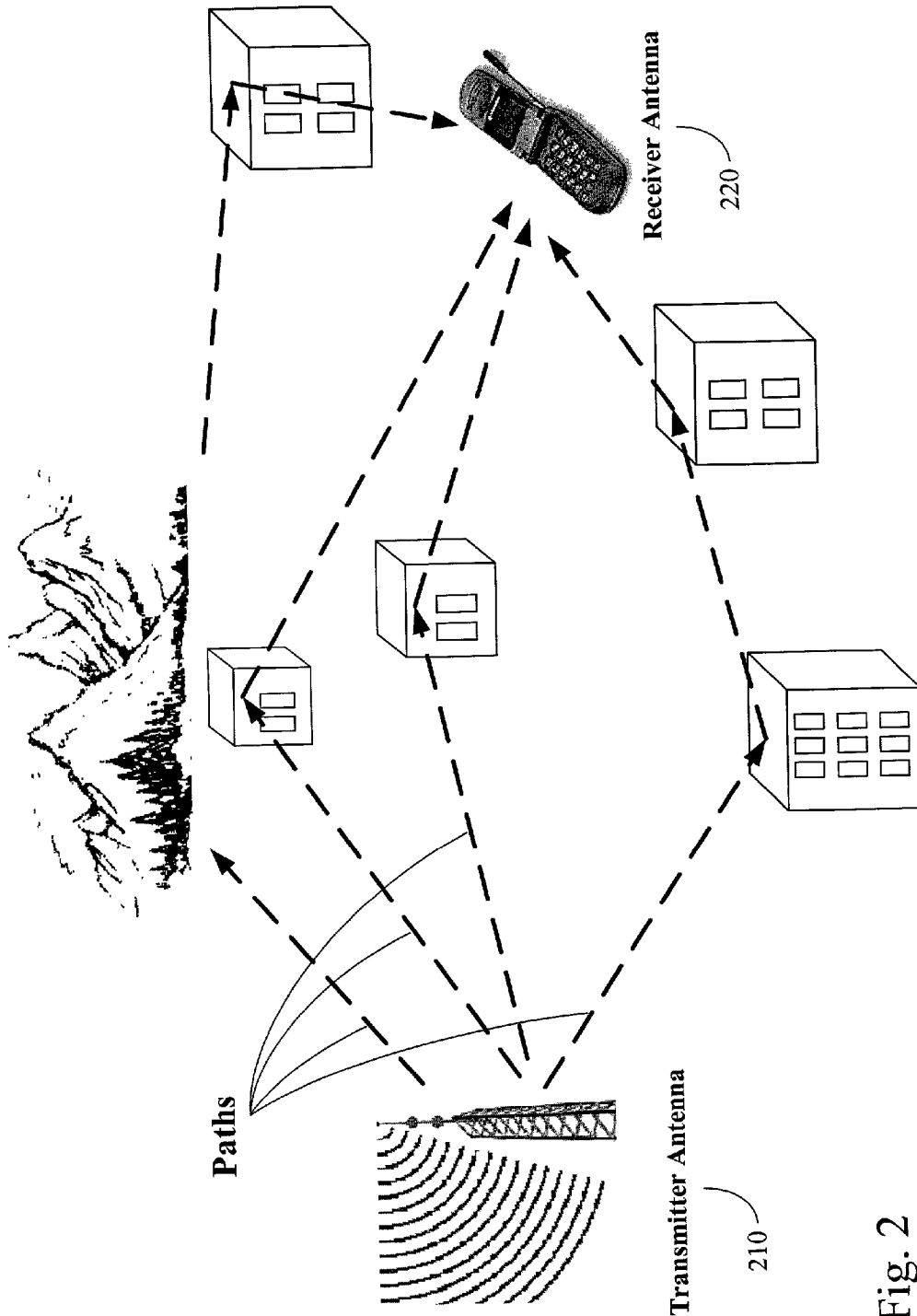


Fig. 2  
(Prior Art)

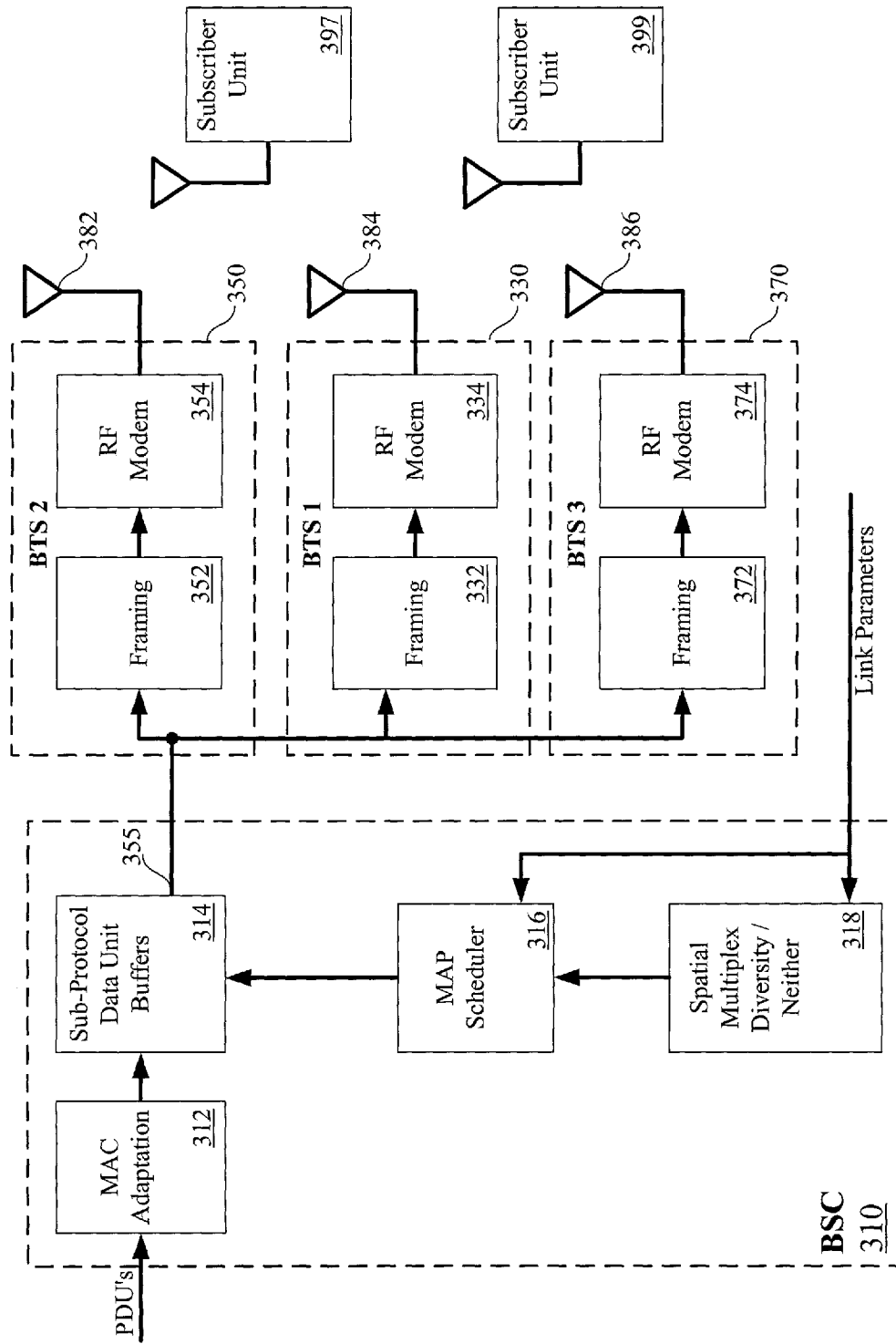


Fig. 3

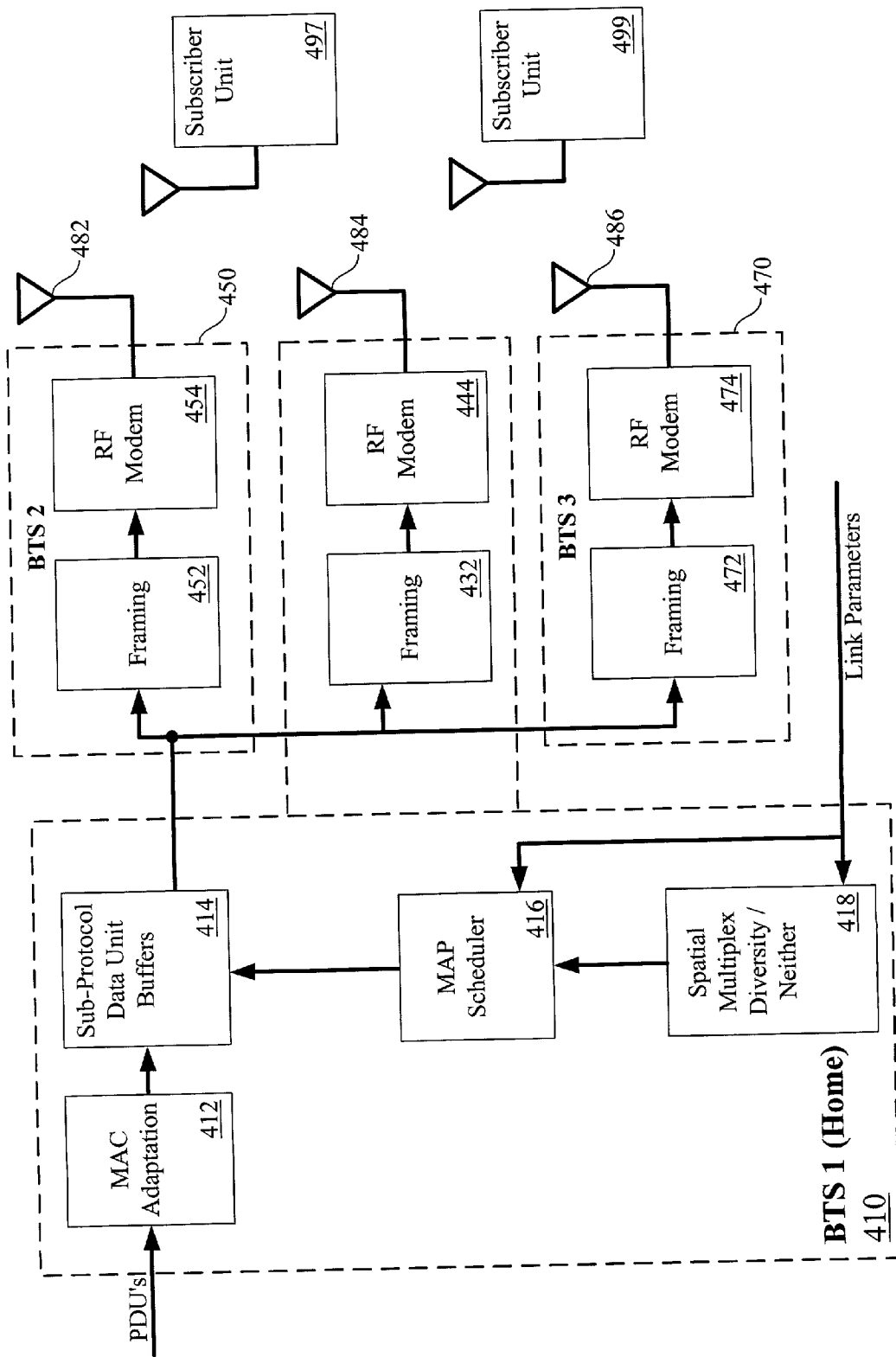


Fig. 4

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