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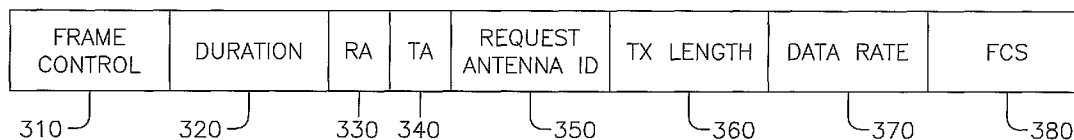
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(57) Abstract: In a wireless communication system having smart antennas and comprising a plurality of wireless transmit/receive units (WTRUs), a method and apparatus for transmitting and receiving data comprises a first WTRU transmitting a request for antenna (RFA) frame to a second WTRU. The second WTRU receives the RFA frame and determines a preferred antenna to receive a dataframe transmission. The first WTRU transmits the dataframe on the preferred antenna.

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