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Boer et al.

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MULTIRATE WIRELESS DATA COMMUNICATION SYSTEM

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Int. Cl.⁶ H04Q 1/30; H04L 12/28

U.S. Cl. 395/200; 370/349; 370/342; 370/465; 375/202; 375/206; 375/347

Field of Search 370/349, 342, 370/338, 465; 375/202, 206, 347, 349;

395/200.13, 200.1

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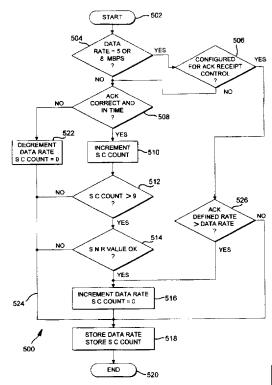
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Primary Examiner-James P. Trammell Assistant Examiner-Shah Kaminis Attorney, Agent, or Firm-Christopher N. Malvone

ABSTRACT

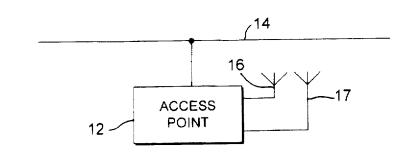
A wireless LAN includes first stations adapted to operate at a 1 or a 2 Mbps data rate and second stations adapted to operate at a 1,2,5 or 8 Mbps data rate. The 1 and 2 Mbps rates use DBPSK and DQPSK modulation, respectively. The 5 and 8 Mbps rates use PPM/DQPSK modulation. All four data rates use direct sequence spread spectrum (DSSS) coding. All transmitted messages start with a preamble and header at the 1 Mbps rate. The header includes fields identifying the data rate for the data portion of the message. and a length field. For a 2 Mbps transmission the length field identifies the number of bytes in the data field. For a 5 or 8 Mbps the length field identifies the number of bytes in the data field which, if transmitted at 2 Mbps, would take the same transmission time of the data field, and is thus a fraction 3/5 or 3/8 of the actual number of the bytes. With this arrangements, all the stations are interoperable in a co-existent manner in the LAN.

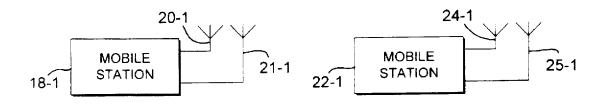
6 Claims, 6 Drawing Sheets

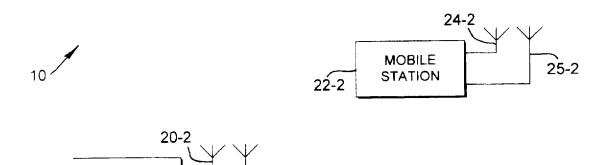


Samsung Ex. 1204 (Samsung v. Rembrandt)









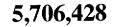
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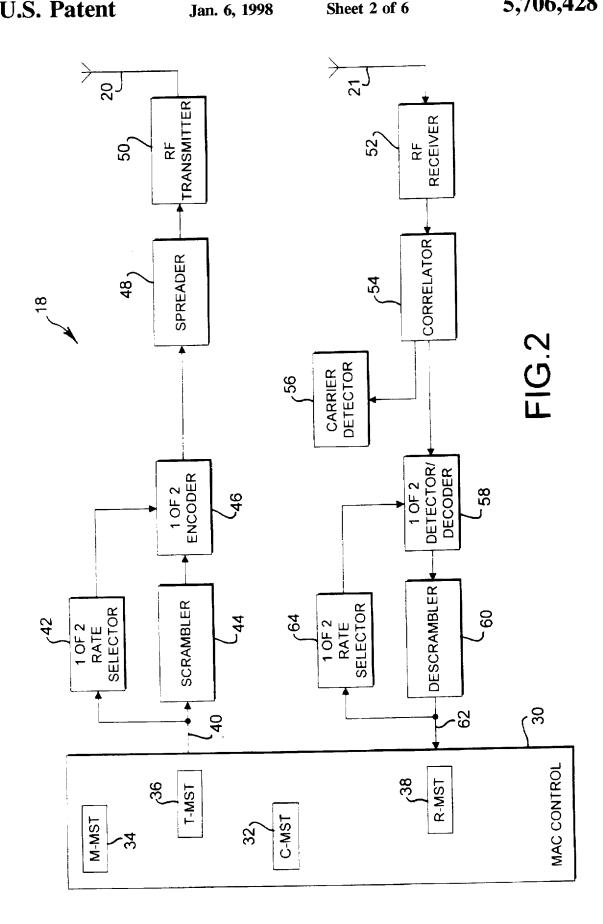
FIG.1

18-2

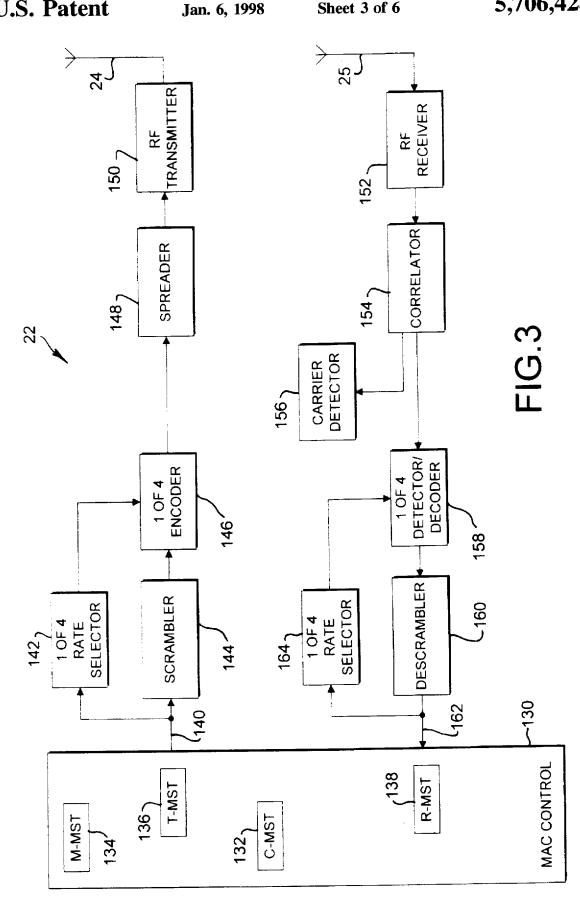
MOBILE

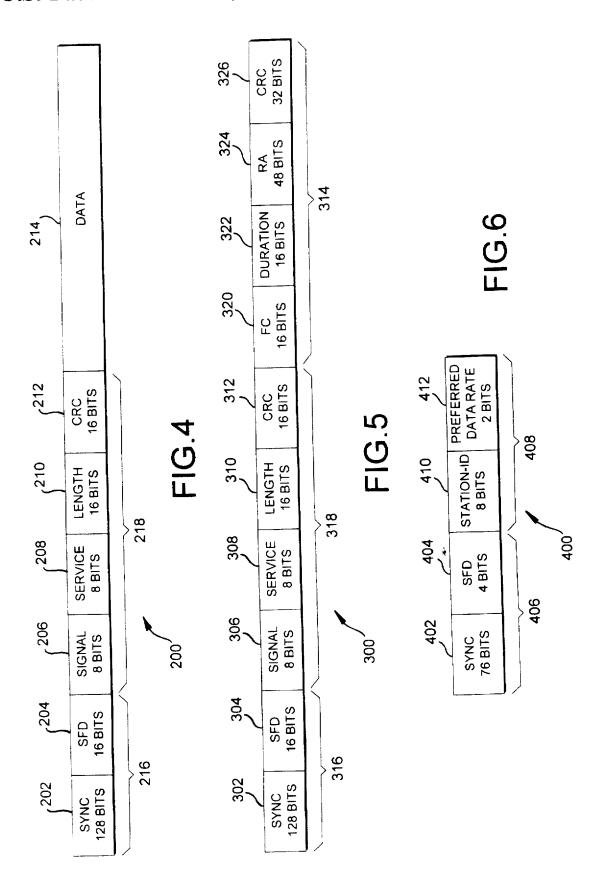
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