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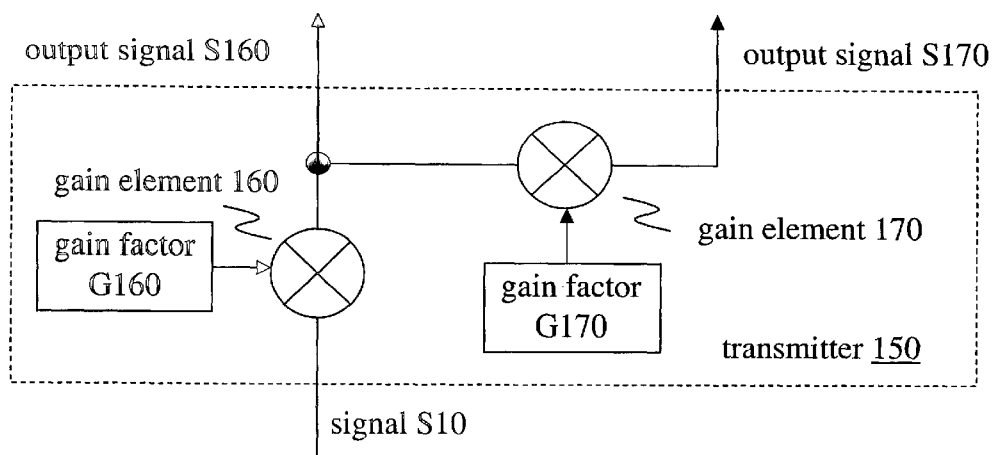
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(54) Title: METHOD AND APPARATUS FOR TRANSMIT POWER MODULATION IN A WIRELESS COMMUNICATION SYSTEM



(57) Abstract: An apparatus according to one embodiment of the invention includes a transmitter. The transmitter comprises a first gain element configured and arranged to modulate a radio-frequency signal according to a first gain factor to produce a first output signal; and a second gain element configured and arranged to modulate the radio-frequency signal according to a second gain factor to produce a second output signal, wherein a magnitude of the first gain factor varies over time, and wherein a magnitude of the second gain factor varies over time with respect to the magnitude of the first gain factor. Each of the modulated signals is coupled to a respective antenna. The combined radiation pattern of the antennas varies in an angular direction over time. In a system according to one embodiment of the invention, a base station including such an apparatus receives channel quality indications from mobile units and schedules data transmissions to the mobile units accordingly.



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