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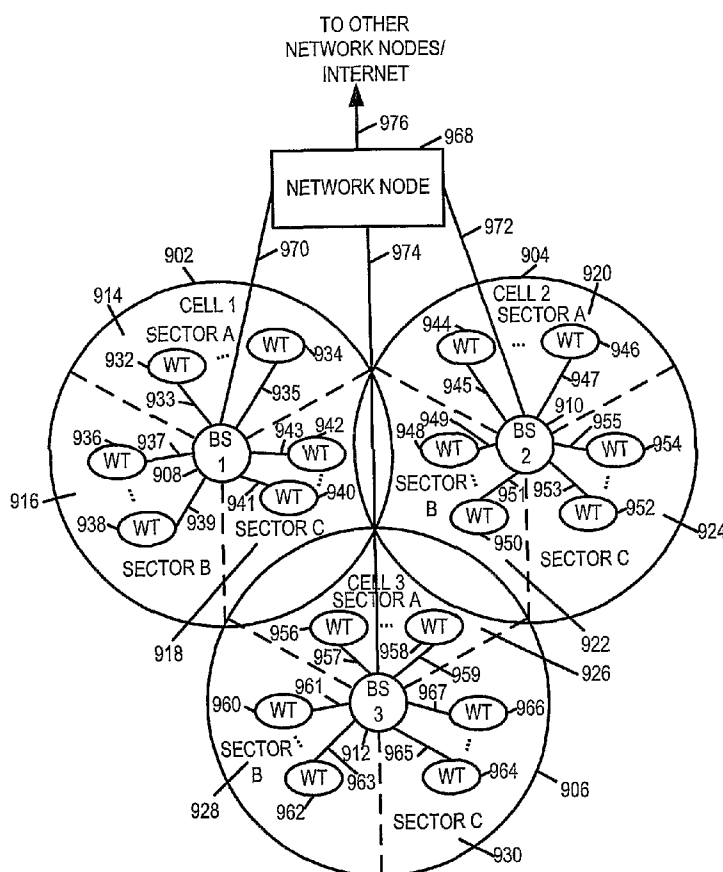
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(54) **Title:** ENHANCED BEACON SIGNALING METHOD AND APPARATUS

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(57) **Abstract:** Methods and apparatus for using high power narrow signals, e.g., tones, for communicating transmitter information without putting the full transmission power available into the transmitted tone or tones are described. User data is transmitted in parallel with transmitter information in many embodiments with the user data being allocated more than 20% of the transmitter's maximum output power in many cases. By using an amount of power on the tones used to communicate transmitter information while simultaneously transmitting user data with more than 20% of the available transmission power, efficient bandwidth utilization is achieved while still ensuring a high probability that the transmitter information signals will be received and detectable using simple energy detection techniques and without the need for timing synchronization with the transmitter to be achieved for success interpretation of the transmitter information.



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