Claims

1. A method for coexistence and spurious mitigation in multicom platforms, comprising:
    a) receiving signals from a plurality of communication devices;
    b) analyzing the received signals to identify spurious emissions and interferences;
    c) generating a mitigation plan based on the analysis; and
    d) transmitting the mitigation plan to the communication devices for mitigating the spurious products.
2. The method of claim 1, further comprising:
    a) defining a number of signals and their corresponding frequencies from the plurality of communication devices;
    b) defining bands of interest by determining the channel frequency and its bandwidth;
    c) generating a Binary Coded Decimal (BCD) code and a sign for each signal frequency per BCD code;
    d) analyzing the defined signals and their frequencies to identify spurious emissions and interferences within the defined bands of interest;
    e) generating a mitigation plan based on the analysis, wherein the mitigation plan includes a spurious map; and
    f) transmitting the mitigation plan including the spurious map to the communication devices for mitigating the spurious products.
3. The method of claim 2, wherein defining a number of signals further includes selecting from Local Oscillator (LO), Intermediate Frequency (IF), Clock (CLK), or Crystal Oscillator (XTAL) signals.
4. The method of claim 1, further comprising determining the frequency, power, and timing characteristics of the received signals to identify the spurious emissions and interferences.

5. The method of claim 1, further comprising assigning specific frequency bands or channels to the communication devices to minimize the spurious emissions and interferences.
6. The method of claim 1, further comprising adjusting transmission power levels of the communication devices to reduce the spurious emissions and interferences.
7. The method of claim 1, further comprising implementing time-division or frequency-division multiplexing techniques to avoid collisions and interferences between the communication devices.
8. The method of claim 1, further comprising dynamically updating the plan based on changes in the operating environment or performance of the communication devices.
9. A system for coexistence and spurious mitigation in multicom platforms, comprising:
    a) a plurality of communication devices;
    b) a receiver configured to receive signals from the communication devices;
    c) a unit configured to analyze the received signals to identify spurious emissions and interferences;
    d) a unit configured to generate a mitigation plan based on the analysis, wherein the mitigation plan including a spurious map; and
    e) a transmitter configured to transmit the mitigation plan to the communication devices for mitigating the spurious products.
10. The system of claim 9, wherein the unit configured to analyze the received signals further comprises a signal processing unit for determining the frequency, power, and timing characteristics of the received signals to identify the spurious emissions and interferences.
11. The system of claim 9, wherein the unit configured to generate a plan further comprises a unit for assigning specific frequency bands or channels to the communication devices to minimize the spurious emissions and interferences.

12. The system of claim 9, wherein the unit configured to generate a plan further comprises a unit for adjusting transmission power levels of the communication devices to reduce the spurious emissions and interferences.
13. The system of claim 9, wherein the unit configured to generate a plan further comprises a unit for implementing time-division or frequency-division multiplexing techniques to avoid collisions and interferences between the communication devices.
14. The system of claim 9, wherein the unit configured to generate a plan further comprises a unit for dynamically updating the plan based on changes in the operating environment or performance of the communication devices.
15. The system of claim 9, wherein the unit configured to generate the mitigation plan is further configured to generate the spurious map based on Binary Coded Decimal (BCD) code and sign permutations.