CLAIMS

1. A remedial device for the reduction or elimination of the potentially harmful effect on humans or animal life caused by exposure to electromagnetic fields produced by devices that are operated by a battery and transmit RF signals, comprising: a module for a detection and an analysis of the RF signals,

wherein said module determines a protocol and mode of operation of the remedial device;

wherein the module determines a power level of the RF signal;

wherein, when the presence of potentially harmful radiation is detected, the detection activates a remedial signal generator; and

wherein the remedial device is contained in a personal communication device.

2. The remedial device according to claim 1, wherein the module determines a duration of the RF signal.

3. The remedial device according to claim 1, wherein the module is powered by the battery.

4. The remedial device according to claim 1, wherein the RF signals are analysed to differentiate between voice and data transmissions.

5. The remedial device according to claim 4, wherein the remedial device differentiates between voice and data communication modes of communication protocols.

6. The remedial device according to claim 5, wherein the communication protocols included GSM, 3G, 4G and Wi-Fi.

7. The remedial device according to claim 5, wherein the differentiation is performed by a microcontroller that is programmed to detect the voice and data communication modes.

8. The remedial device according to claim 1, wherein the remedial signal generator is switched on according to the radiation detected and a strength of the remedial signal generator is tailored to the nature of the radiation that has been detected.

9. The remedial device according to claim 8, wherein the strength of the remedial signal is tailored to a strength of the radiation that has been detected.

10. The remedial device according to claim 1, wherein the module includes an antenna.

11. The remedial device according to claim 10, wherein the RF signals are detected by the antenna and conveyed to a micro-controller.

12. The remedial device according to claim 11, wherein the RF signals are rectified.

13. The remedial device according to claim 1, wherein the RF signals detected are amplified to provide a required range for analysis.

14. The remedial device according to claim 1, wherein a timer is provided to control an interval between detections.

15. The remedial device according to claim 14, wherein the timer is activated for an interval that is small enough to preserve battery life while still allowing analysis of the RF signals detected.

16. The remedial device according to claim 1, further comprising:

I. an RF antenna;

II. a microcontroller that operates the module and the remedial signal generator; and

III. a coil for applying a remedial signal field generated by the remedial signal generator.

17. The remedial device according to claim 16, wherein the power management of the remedial device is implemented by software executed by the microcontroller.

18. The remedial device according to claim 1, wherein the personal communication device is battery powered.

19. The personal communication device according to claim 18, wherein the remedial device is incorporated inside a handset of the personal communication device.

20. The remedial device according to claim 1, wherein a battery of the personal communication device contains the remedial device.

21. The remedial device according to claim 1, wherein the personal communication device is a mobile phone.

22. A remedial device for the reduction or elimination of the potentially harmful effect on humans or animal life caused by exposure to electromagnetic fields produced by devices that are operated by a battery and transmit RF signals, comprising: a module for a detection and an analysis of the RF signals,

wherein the module determines a protocol and/or mode of operation of the remedial device; and

wherein, when the presence of potentially harmful radiation is detected, the detection activates a remedial signal generator; and

wherein the module measures a variation in time of an amplitude of a low frequency envelope of the transmitted RF signals.

23. A remedial device for the reduction or elimination of the potentially harmful effect on humans or animal life caused by exposure to electromagnetic fields produced by devices that are operated by a battery and transmit RF signals, comprising:

I. a module for a detection and an analysis of the RF signals; and

II. a timer to control an interval between detections;

wherein, when the presence of potentially harmful radiation is detected, the detection activates a remedial signal generator;

wherein the module determines a power level of the RF signal; and

wherein the timer further controls measurements of the power level of the RF signal to determine an averaged power over a predetermined duration.

24. The remedial device according to claim 23, wherein a strength of the remedial signal is tailored to a strength of the radiation that has been detected.