

Claims:

1. A computerized system for continuously monitoring, detecting and identifying active virtual mobile base-stations which are not part of a radio access network (RAN) topology but yet transmit on mobile operator's different frequency bands, based on active mobile network measurements, comprising:
 - a. a configuration topology database for providing data related to an active site of a mobile network;
 - b. a processing unit including at least one processor configured to execute instructions stored in a memory, and the processing unit being configured to be in communication with said database, for:
 - b.1) receiving data files from radio access elements of the radio access network (RAN) of said mobile network and collecting its network configuration topology data;
 - b.2) collecting event data messages sent between different components in the mobile network and related to mobile subscribers of said mobile network and being transferred between mobile subscriber equipment (UEs) and radio access network elements;
 - b.3) comparing mobile subscriber's event data with said network configuration topology data; and
 - c. a virtual base-station identification detector, for:
 - c.1) receiving from said processing unit comparison results representing a mismatch between the data corresponding to different and multiple radio access network configuration topologies and the mobile subscriber's event data, said comparison results being indicative of virtual base-station activity; and
 - c.2) generating an identification and profile data file of said virtual base-station, based on said comparison results.

2. A system according to claim 1, wherein the virtual base-station that communicates with the mobile subscriber equipment (UEs) via Air Interface is not a part of mobile operator's wireless radio access telecommunication transmitting sources.
3. A system according to claim 1, wherein the processing unit processes and analyzes virtual base-station measurements reported by mobile subscriber user equipment to build the identification profile of the virtual base-station.
4. A system according to claim 1, wherein the processing unit processes and analyzes mobile and network measurement data essentially on-line.
5. A system according to claim 1, wherein the data files are data files which comprise real-time event messages transferred between the mobiles' user equipment and different radio access network elements.
6. A system according to claim 1, wherein the processing unit comprises:
 - a. a profile decoder for building said virtual base-station profile from measurements reported by the mobile subscriber equipment (UEs); and
 - b. a decompounder for comparing said virtual base-station data profile with an active base-station in the mobile network as measured in the event measurement file and reported in the configuration topology file.
7. A system according to claim 6, wherein the decompounder extracts the virtual base-station data from the mobile user equipment's measurements at any given report record.

8. A system according to claim 6, wherein the decompounder includes one or more decoders, adapted to analyze the data files received from each mobile network, in parallel.
9. A system according to claim 6, wherein the decompounder further compares the event measurements data from the mobile subscriber equipment (UEs) with the network topology data for detecting virtual base-station measurement data.
10. A system according to claim 1, further comprising a history database containing history data record definitions of any track record of virtual base-station identification event including event handling definitions and track recording.