CLAIMS

1. A mobile wireless broadband network interface card (MWBNIC) device for networking electronic devices and broadband nodes to deliver data comprising:

a circuit board;

wireless radio antennas for wirelessly interfacing with wireless broadband routers connected to Gwahanza Local Area Network Managers and servers by wires;

a broadband radio filter coupled to the wireless radio antennas;

at least one amplifier for enhancing outgoing and incoming signals;

a modulator for converting the outgoing digital signals into analog for radio transmission;

at least one processor on the circuit board;

a demodulator for converting incoming signals into digital for processing;

a dedicated cache memory for temporarily storing last N data packets from one of the wireless broadband routers for networking with a next one of the wireless broadband routers to be connected to, to maintain data packet continuity;

a network packet controller chip coupled to the dedicated cache memory;

a modulator and demodulator to control data packets in and out of the MWBNIC device;

a packet control protocol software embedded in the network packet controller chip coupled to the at least one processor for networking wireless nodes and delivering data to electronic devices in motion over broadband spectrums;

a mechanism for determining signal strength of nodes in range coupled to the network packet controller chip and the at least one processor for switching nodes;

a frequency up or down converter coupled to the network packet controller chip for switching to a frequency of the next wireless broadband router to be connected to;

a table with node locations in each WAN and pre-calculated values of coordinates for each short distance of one meter or less that are extracted for determining which nodes to switch to;

an interface to a user device from where power control and other commands are sent to the at least one processor for execution; and

a plurality of data ports coupled to the at least one processor, and the modulator and demodulator through the network packet controller chip to allow for interaction of said devices being networked and input output.

2. The MWBNIC device of claim 1, further comprising modules to write data to memory and compare said data wherein said modules connects to at least one broadcasting K-Node when in motion.

3. The MWBNIC device of claim 2, wherein the memory, further comprising data structures, simultaneously receives data packets from multiple nodes with identifiers that distinguish the nodes when said nodes transmit data via at least one input port wherein said modules instantaneously saves the last N packets from each of the nodes that are connected to in memory to the data structures and deletes the previous N data packets replacing the packets with new packets.

4. The MWBNIC device of claim 2, wherein data packets in the MWBNIC device received by a network control protocol that assigns communication or networking ports are divided into two categories of networking and user device service data, wherein said packets in each category are received at different frequencies that are assigned specific ports.

5. The MWBNIC device of claim 4, wherein the networking data packets further comprise packet ids or identifiers that are received from every other node at specific frequencies, wherein a connecting MWBNIC device easily finds a frequency under which to connect to the next K-Node.

6. The MWBNIC device of claim 4, wherein each type of service data received through the MWBNIC device comprises packet identification, wherein said service data flows through a designated port at specific ranges of frequencies.

7. The MWBNIC device of claim 1, wherein the network packet controller chip coupled to the at least one processor, modulator, demodulator and external ports utilizes an embedded packet control protocol that manages connectivity and data transmission within the MWBNIC

device, wherein the MWBNIC device is built into devices as an internal modem or external plug and play modem.

8. A network packet controller chip coupled to a modulator, demodulator, at least one converter and filter in the MWBNIC device of claim 1 comprising an embedded packet control protocol, wherein the packet control protocol comprises data structures, temporarily stores a last N data packets from a connected K-Node at anytime and deletes a previous N data packets in a dedicated memory, wherein new data packets replace deleted packets for packet continuity.

9. The network packet controller chip of claim 8 comprising different memory locations and modules, wherein the embedded packet control protocol, allocates different memory areas for each data type that is delivered during device hop from one K-Node to another, wherein said data types comprise networking and user device service data packets.

10. The network packet controller chip of claim 9, wherein the packet control protocol is further configured to execute from the network packet controller chip in the MWBNIC device and identify data packets by packet ID, wherein the next packet selected for processing comprises an ID of a higher magnitude than the previous one.

11. The network packet controller chip of claim 10, wherein the packet control protocol configured to maintain order and continuity of packets from different nodes and compare the packet ID from a previous K-Node to the packet ID of the newly connected to K-Node, wherein said packet control protocol sets a packet with ID X-1 as previous data packet and one with packet ID X as current data packet.

12. The network packet controller chip of claim 11, wherein the packet control protocol further configured to push data packets onto at least one stack in cache and pop the last packet for comparison to the first data packet from a newly connected to K-Node, wherein said packet control protocol maintains packet order based on packet Id, K-Node ID and frequency.

13. The MWBNIC device of claim 1, further configured to send a connection request to multiple wireless K-nodes in range, wherein said request comprises MWBNIC identification and other data that is transmitted to the nodes for authentication.

14. The MWBNIC device of claim 13, wherein the mechanism for determining signal strength, receives data packets from wireless K-Nodes through at least one communication port and determines the strongest signal strength to connect to.

15. The MWBNIC device of claim 14, further configured to connect to the nodes with the strongest signal strength until a new node with greater strength is encountered in the device's direction of travel, wherein said device drops the one with the least strength after authenticating to a new node as the device gets out of range of the K-Node's networking frequency.

16. The MWBNIC device of claim 2, further configured to receive data packets broadcasted by nodes with a time to leave attribute and utilize arrival time to determine the signal travel time, wherein multiplication of signal travel time with signal speed provides node distances and hence coordinates of said nodes for connection.

17. The MWBNI device of claim 16, further configured to read pre-determined and tabulated positions data, wherein said data provides the MWBNIC device with the next node to connect to based on the node's calculated distance and coordinates.

18. The MWBNIC device of claim 4, further configured to connect automatically to different nodes each through a different frequency filter establishing more than one simultaneous connection, wherein data flow, network range check, and signal strength check of said nodes takes place concurrently.

19. The MWBNIC device of claim 2, further configured to be instructed by the Gwahanza Local Area Network Manager what node to connect to next, wherein frequency of the said broadcasting K-Node in range or signal strength and a connection code are utilized.

20. The MWBNIC device of claim 19, further configured to be instructed by the Gwahanza Local Area Network Manager to connect to a next K-Node based on the MWBNIC device's position or coordinates from the nearest nodes, wherein pre-determined and tabulated position data of said K-Nodes stored on the MWBNIC device or read from the Gwahanza is utilized to connect.

21. The MWBNIC device of claim 5, wherein the data packets transmitted to the MWBNIC are received via at least one input port, wherein said data packets are converted to digital format for use by a device in which the MWBNIC is installed.

22. The MWBNIC device of claim 18, wherein said MWBNIC device converts outgoing digital data into a form that is transmittable over the airwaves.

23. The MWBNIC device of claim 3 is configured within auxiliary devices including mobile phones, tablets, laptop computers, televisions, vehicles, cameras, navigation devices and any that requires wireless networking; as a connecting modem wherein said input ports are designated for different services at specific ranges of frequencies.

24. The MWBNIC device of claim 3 is configured to plug into external ports of devices including USB and Firewire as a plug and play modem, wherein said data packets from multiple nodes maintains connectivity and deliver services.

25. The MWBNIC device of claim 23 is configured with at least one external port, wherein said port connects to wires including fiber optics.

26. The network packet controller chip of claim 9, wherein the packet control protocol is configured to interact with a mini database on the MWBNIC device that stores temporary information from the network, wherein said data stored in the database is utilized to complete a network connection.

27. The network packet controller chip of claim 9, wherein the packet control protocol is configured to interact with a file on the MWBNIC device that stores temporary information from the network, wherein the data stored in the file is utilized to complete a network connection.

28. A method of connecting and switching a mobile device with a mobile wireless broadband network interface card (MWBNIC) device on a wireless network from one K-Node to another utilizing a Gwahanza Local Area Network manager, wherein a Network Control Protocol (NCP) that determines the mobile device's location and direction of motion relative to the wireless K-Nodes in range in conjunction with the K-Node frequencies, wherein said NCP directs the MWBNIC device to the next K-Node to connect to for service, and wherein the K-Node runs a Card Control Protocol over broadband spectrums including Wi-Fi.

29. The method of claim 28, wherein the Gwahanza Local Area Network manager generates a connection code that said Gwahanza Local Area Network manager appends to the connecting device's identity along with the Gwahanza's ID and the next K-Node ID, wherein said NCP submits via a wire to the next K-Node a connection request for authentication.

30. The method of claim 29, wherein said Gwahanza Local Area Network manager submits the same connection request to the connecting device via the K-Node or Net Extender said device is wirelessly connected to, wherein the device broadcasts the connection request over a Wi-Fi network and the request is picked and processed by the next K-Node or Net Extender for authentication and service.

31. The method of claim 30, wherein the Card Control Protocol in the next K-Node or Net Extender receives a device connection request from a Gwahanza Local Area Network Manager and stores the request in memory, and receives a connection request from the MWBNIC device over a Wi-Fi network or other broadband spectrum, wherein the card control protocol compares the connection request submitted by the device to the connection request submitted by the Gwahanza Local Area Network Manager and authenticates the device to switch to the K-Node to maintain data continuity.

32. The method of claim 28, wherein said Gwahanza Local Area Network manager determines the next node for the MWBNICdevice to connect to based on wavelength or frequency at which the wireless K-Node is communicating.

33. The method of claim 31, wherein said Gwahanza Local Area Network manager receives the device connection request from a wireless node via a wire and verifies the device by reading device records on a server utilizing the Network Control Protocol, wherein said connection request submitted to the Gwahanza Local Area Network manager generates temporary network data which is stored on the MWBNIC device.

34. The method of claim 33, wherein the Gwahanza Local Area Network manager receives service requests from connecting devices and assigns data ports based on type of service requested, wherein the Network Control Protocol in the Gwahanza Local Area Network manager assigns an application port for both the device and Gwahanza Local Area Network manager connection; and data packets are received at different frequencies for each service.

35. The MWBNIC device of claim 3, wherein said Packet Control Protocol establishes connectivity by comparing the identifiers of the K-Nodes to connect to and saves the incoming signals from those nodes to buffer for authentication and process.

36. The MWBNIC device of claim 7, further configured to concurrently write to and delete from different data structures or memory locations that temporarily store incoming data, wherein said packet control protocol, card control protocol and network control protocol, networks said modem and wireless K-Nodes.

37. The MWBNIC device of claim 23, further configured to network devices on wi-fi nodes to deliver services while in motion connects from one wi-fi node to another, wherein said services are subdivided into categories specifying the type of data transmitted, the respective frequencies and assigned ports.

38. The MWBNIC device of claim 23, wherein the connecting modem in the auxiliary devices is authenticated by the Gwahanza Local Area Network Manager through a K-Node or

Net Extender node on a Wi-Fi network to transmit data, wherein the modem simultaneously connects to more than one wireless network node to maintain data continuity when a device is in motion and when switching from one wireless data source to another.

39. A system comprising:

protocols for maintaining packet order and continuity for devices in motion and stationary on a network by facilitating authentication, node switching while in motion, and data transmission;

a Gwahanza Local Area Network Manager that runs a Network Control Protocol, a K-Node router that runs the Card Control Protocol and servers all connected by high speed transmission wires;

a Net Extender that connects to Wi-Fi nodes and other broadband spectrums, wherein the Net Extender, resides in homes or offices to provide network extension to other devices wirelessly or by wires;

a mobile wireless broadband network interface card (MWBNIC) device built into auxiliary devices as a connecting modem that simultaneously connects to more than one wireless node on a Wi-Fi network for service and networking;

a Network Packet Controller Chip with an embedded Packet Control Protocol, coupled to a processor in said MWBNIC device for networking electronic devices and broadband nodes to deliver data on broadband spectrums including Wi-Fi and cellular networks;

a connection code that changes for every connection request to enhance security; and

a plurality of data ports coupled to the processor, modulator and demodulator through the Network Packet Controller Chip, memory and user interfaces for requesting for services and displaying output.

40. The system of claim 39, wherein the Net Extender further comprises physical ports that are connected to by Ethernet, Fiber, USB and other device ports to transfer data, wherein the Net Extender device is embedded with a Card Control Protocol that receives a connection request from the MWBNIC device on a Wi-Fi network and acts as an independent K-Node router providing access to the device, in addition to home or office devices including televisions,

computers and accessories; on the Wi-Fi network, wherein the Net Extender wirelessly connects to K-Node routers and Gwahanza Local Area Network Manager.

41. The system of claim 40, wherein the Card Control Protocol utilizes a connection request from the Gwahanza Local Area Network Manager stored in memory and authenticates a mobile wireless broadband network interface card in motion to switch from one node to the next Net Extender where data stream follows, wherein the Network Control Protocol embedded in the Gwahanza Local Area Network Manager determines the next Net Extender or K-Node to connect to, to maintain packet continuity.

42. The system of claim 41, wherein the Gwahanza Local Area Network Manager stores logs of wireless nodes on local area networks including geo-locations and radii under which the nodes perform well, wherein the logs of geo-locations of the nodes and radius under which said nodes perform well determines which wireless node to connect to, to sustain the Mobile Wireless Broadband Network Interface Card data continuity based on position and direction.