List of All Relevant Patents

Issued patents exclusively invented and owned by Ted Anderson

- 1. 6,700,544 Near-field plasma reader. This patent covers near field plasma antenna RFID. A lab. prototype near field RFID reader will be built in June 2008 and a commercial prototype built in August 2008.
- 2. <u>6,870,517</u> Configurable arrays for steerable antennas and wireless network incorporating the steerable antennas. This is the most important patent in that it covers most of our smart plasma antenna as you will see in the video. This patent covers our built and performing plasma reflector antenna, our built prototype plasma frequency selective surface, and our built prototype smart (intelligent) plasma antenna (in video) are covered by this patent. Applications are IED defeaters, last mile smart antennas, base station antennas, and RFID scanners. We are released our first commercial prototype of this smart plasma antenna in November, 2007. In regard to IED "defeater" applications of our intelligent plasma antenna:

As an IED defeater based on this patent, our smart plasma antenna has the remarkable ability of being directed at a target in milliseconds. Therefore, it can locate and be focused on a cell phone before the cell phone has completed dialing the central operator. Therefore, it has the capability of finding and disabling a cell phone before the cell phone has completed the dial-up. We have demonstrated operation of a plasma antenna in the pulsed mode at 2 megawatts, limited by the output power of the power supply.

We expect to have an IED defeater built by May 2008, last mile applications by September 2008 and base station applications by December 2008.

- 3. <u>6,922,173</u> Reconfigurable scanner and RFID system using the scanner. This patent covers far field RFID applications of patent, 6,870,517 above. A lab. prototype of a far field RFID reader in June 2008 and a commercial prototype in August 2008.
- 4. 7,292,191 Tunable plasma frequency devices. Covers optimal performance of all plasma antenna technologies in regards to minimizing power consumption, minimizing noise, and maximizing aperture. We have used parts of this invention in patient 6, 870,517. Parts of this invention such as the operation in the afterglow of the plasma and pulsing the plasma to save power are used in patent 6, 870,517. This is a supporting patent for the primary patent number 6, 870,517, but the aperture enhancement aspects of this patent could make it a revolutionary patents if true. The mathematical theory shows that to be true, but we have not tested it experimentally. The experiments on plasma antenna aperture enhancement will be done by May 2008.

5. 20050110691 Configurable arrays for steerable antennas and wireless network incorporating the steerable antennas. 11/024254. Cleared recently for issuance (given a notice of allowance) but no patent number assigned yet. CIP of patent 2. above: 6,870,517 . Covers phased array plasma antennas and complex plasma frequency selective surfaces. We have built laboratory prototypes. Commercial prototypes will be built by December 2008.

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<u>6.</u> 20070285022 <u>Tunable Plasma Frequency Devices 11/841,022</u> published patent application, CIP of patent 4 above: <u>20050280372</u>. **Strengthens patent number 10** / **872892 above.**

Provisional patent, Ted Anderson and Igor Alexeff

7. Application Serial Number 60/990,830, Filed 11/28/2007, Plasma Device with Low Noise