**ABSTRACT**

***Red Tacton***

We may have imagined the future as a place crawling with antennas and emitters, due to the huge growth of wireless communications and it gives an idea of using our body as a data transmission. Thus NTT labs, the Japanese telecom group had developed a revolutionary technology called “Red Tacton”.

“Red Tacton” gives a whole new meaning to the term “networking”. It is a new Human Area Networking technology which uses the surface of the human body, as a safe and high speed data transmission path.  Red Tacton is a new technology that is completely different from wireless and Bluetooth or Infrared, as  it does not rely on electromagnetic or a light wave to transmit data, also users can narrowly limit signal recipients rather than broadcasting to all devices within given range . It makes use of weak electric fields on the surface of the body. Here, the human body acts as a transmission medium supporting IEEE 802.3 half-duplex communication at 10Mbit/s.

Focusing on the natural feeling of life, inevitability and sense of security conveyed by touching, Red Tacton (Red-Warmth, T-Touch, and Acton-Action) lets people transfer data to each other by means of handshake or a slap on the back and relief by touching in daily life.

A transmission path is formed at the moment, when a part of the human body is get contact with a Red Tacton transceiver. On separating the ends, the contact between the receiver and body, ends the communication. The Red Tacton chips, which will be embedded in various devices, contain a transmitter and receiver build to send and accept data stored in a digital format. The chips can take any type of file such as mp3 music file or mail and convert it in to the digital format (in the form of digitals pulses) that can be passed and read through a human being. The chip in receiver decodes these tiny pulses and converts the file back into its original form. The main component of the transceiver is an electric-field sensor implemented with an electro optic crystal and laser light.

Through Red Tacton our body can be used for linking our mobile phone or MP3 player to a cordless headphone, digital camera to a PC or printer, and all the accessories we carry around. This network linking is possible using any body surfaces, such as the hands, fingers, arms, feet, face, legs,etc . Red Tacton works even through shoes and clothing. Using Red Tacton enable devices, music from our digital audio player in our pocket would pass through our clothing and suits over our body to headphones in our ears. Instead of fiddling around with the cable to connect your digital camera to your computer you could transfer pictures just by touching the PC while the camera is around your neck and since data can pass from one body to another you could also exchange electronics business cards by shaking hands, trade music files by dancing cheek to cheek or swap phone numbers just by kissing.

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