

CHAPTER 1

INTRODUCTION

RED TACTON was developed on 30 August 2005 by a seven-person research team led by Yuichi Kado, executive manager of the Smart Devices Laboratory at NTT's Microsystems Integration Laboratories, in Atsugi, west of Tokyo.

Redtacton is a Human Area Networking technology, which is under development that uses the surface of the human body as a safe, high speed network transmission path. It is completely distinct from wireless and infrared technologies as it uses the minute electric field emitted on the surface of the human body.

The initial ways for the data transmission is done through wired networks. The speed of transmitting data is in terms of kilobytes per second and the accuracy is affected by the non linearity and disturbances of the media (That is in wires). Later this task is performed by wireless networks. The speed is not much accelerated but the accuracy is developed. To attain high speed and accuracy a new concept of data transmission is coming into existence that contains human surface area as a media. The powerful and minute electric field present on the human surface can be used as media for transmission of data. This typical task is achieved by using the device REDTACTON.

The Red Tacton chips will be embedded in machines and contain a transmitter and receiver built to send and accept any form of data stored in a digital format .The chips can take any type of file such as mp3 music file or mail and convert it into a form that takes the form of digital pulses that can be read and passed through a body's electric field. The chips in receiver devices read these changes and convert the file back into its original form.

Meaning of Redtacton

TACTON: - “touch-act-on” Meaning “action triggered by touching”.

RED: - It is an auspicious color according to Japanese culture.

RED TACTON is a new Human Area Networking technology that uses the surface of the human body as a safe, high-speed network transmission path. Technically, it is completely distinct from wireless and infrared. A transmission path is formed at the moment a part of the human body comes in contact with a RED TACTON transceiver. Using RED TACTON, communication starts when terminals carried by the user or embedded in devices

are linked in various combinations according to the user's natural, physical movements. Communication is possible using any body surfaces, such as the hands, fingers, arms, feet, face, legs or torso. REDTACTON works through shoes and clothing as well.

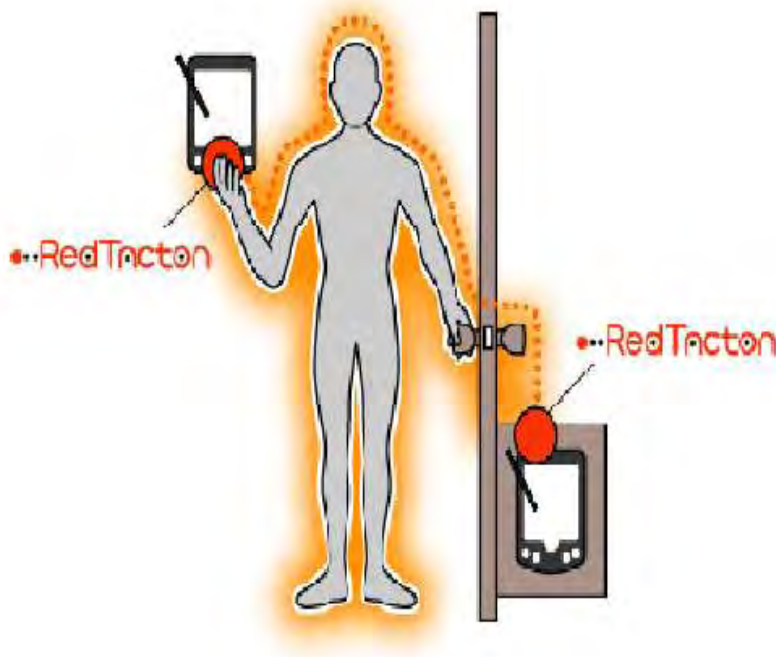


Fig 1.1: shows a person opening a door with the help of an RED TACTON device.