

PATENT NO. 349884

**AN APPARATUS AND METHOD FOR WIRELESS PERSONAL AREA NETWORK
AND WIRELESS BODY AREA NETWORK USING MAGNETIC COUPLING**

APPLICATION NO. 2724/DEL/2011

APPLICANT

Indian Institute of Technology, Delhi

ABSTRACT

The present invention provides an apparatus and method for magnetically coupled wireless network (magnetically coupled wireless personal area network or magnetically coupled wireless body area network). In the present invention information is transferred through resonant magnetic coupling between the magnetically coupled nodes. Multiple magnetically coupled nodes connect simultaneously to at least; me magnetically coupled node by using orthogonal magnetic field and/or orthogonal.

INVENTOR

Bose Ranjan

Indian Institute of Technology, New Delhi

CLAIM 1

An apparatus for magnetically coupled wireless network (magnetically coupled wireless personal area network or magnetically coupled wireless body area network) comprising at least one node capable of magnetically coupling with neighboring nodes and inter-node distance dependent on magnetic coupling range; wherein the said apparatus transfers information through resonant magnetic coupling between the magnetically coupled nodes; and multiple magnetically coupled nodes connect simultaneously to at least one magnetically coupled node by using orthogonal magnetic field and/or orthogonal codes.