www.ijemr.net ISSN (ONLINE): 2250-0758, ISSN (PRINT): 2394-6962

Vandana Publications
IJEMR

Volume-7, Issue-2, March-April 2017
International Journal of Engineering and Management Research
Page Number: 544-546

Wireless Power Transfer

Sai Pallavi.Akkisetti[1],Krishnarao.Kundeti[2]
[1]Assistant. Professor,Department of EEE,PSCMRCET,Vijayawada,Andhra Pradesh, INDIA
[2]Assistant Professor, Department of EEE,VGTN,NUNNA,Andhra Pradesh, INDIA

ABSTRACT
We cannot imagine the world without electric power. Generally the power is transmitted through wires. This paper describes an original idea to eradicate the hazardous usage of electrical wires which involve lot of confusion in particularly organizing them. Imagine a future in which wireless power transfer is feasible: cell phones, household robots, mp3 players, laptop computers and other portable electronics capable of charging themselves without ever being plugged in, freeing us from that final, ubiquitous power wire.

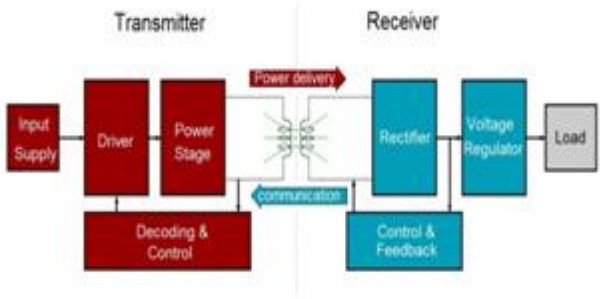
***Keywords*--**Imagine a future in which wireless power transfer is feasible

I. INTRODUCTION

Some of these devices might not even need their bulky batteries to operate. This paper includes the techniques of transmitting power without using wires with an efficiency of about 95% with non-radiative methods. Due to which it does not effect the environment surrounding. These techniques Includes resonating inductive coupling in sustainable moderate range. The coupling consists of an inductor along with a capacitor with its own resonating frequency. In any system of coupled resonators there often exists a so-called “strongly coupled” regime of operation. If one ensures to operate in that regime in a given system, the energy transfer can be very efficient. Another technique includes transfer of power through microwaves using rectennas. This is particularly suitable for long range distances ranging kilometers. With this we can avoid the confusion and danger of having long, hazardous and tangled wiring. This paper as a whole gives an effective, high performance techniques which can efficiently transmit the power to the required area varying in distances .

II. SHORT DISTANCE INDUCTION

These methods can reach at most a few centimetres distance. The action of an electrical transformer is the easy instance of wireless energy transfer. The primary and secondary circuits of a transformer are electrically isolated from each other. The transfer of energy takes place by electro magnetic coupling through a process known as mutual induction. (An added benefit is the capability to step the primary voltage either up or down.) The electric toothbrushh charger is an example of how this principle can be used.A toothbrush's daily exposure to water makes a traditional plug-in charger potentially dangerous. Ordinary



Electrical connections could also allow water to seep into the toothbrush, damaging its components. Because of this, most toothbrushes recharge through inductive coupling.

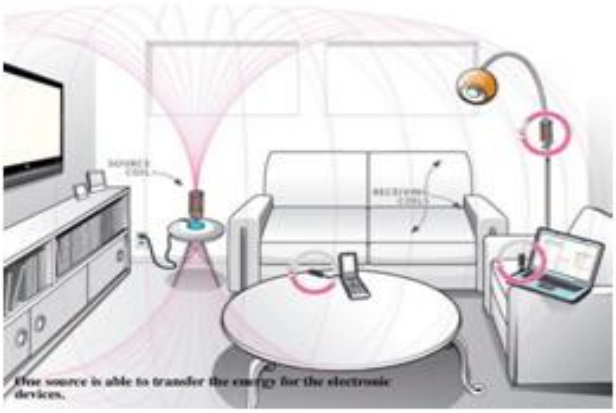


Fig.1.Shot distance wire less transmission

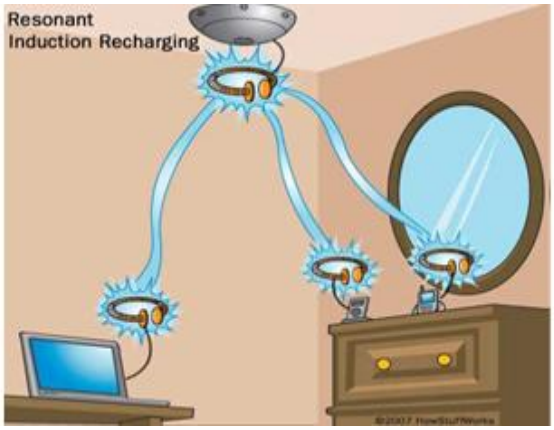


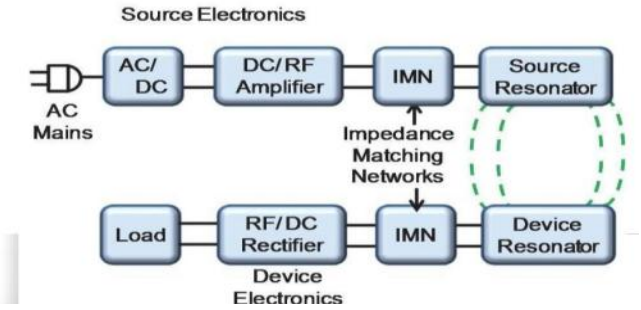
Fig.2 Indcution Reacharging

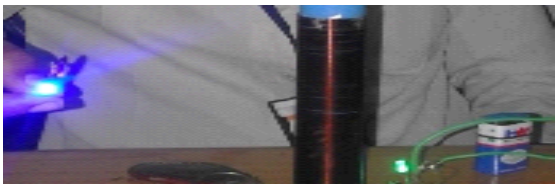
III. TRANSMITTER AND RECIVER

This is used for energy transfer to other places and devices.The below fig as observed.This is like that indution input and output electrical energy source transformation.

IV. WORKIN PRICIPLE

Electricity and magnetic waves magnetic waves to electrical by using physics property.





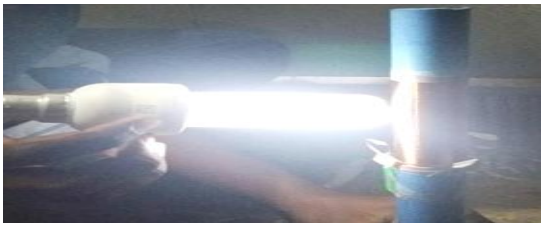


Fig3. Power transfermation to load

V. ADVANTAGES

1. Good range, safety.
2. Fairly flow of great deals with cable
3. No wire
4. Maintaence cost is low
5. To avoid battery need.

VI. TO RANGE WITRICITY

1. It can be perform electric transmission 2cm to 3 or 4 cm.\
2. It will be extend to more distance to future scope.

3. Current wireless technology
4. Bluetooth
5. Wi –fi
6. Satellite communication
7. Cordless mouse, keyboard, mobiles..etc.

VII. CONCLUSION

In this project early stage with small distance. But future it will be invite to above 10Cm.and also more long distance.Entire world will be operate with out wire is very safe and to reduce somany critical situations. In this process is very sued for present generation.

REFERENCES

[1] American society of electrical engineers.
[2] Benson, Thomas W., "Wireless Transmission of Power now Possible"
[3] U.S. Patent 787, 412, "Art of Transmitting Electrical Energy through the Natural Mediums".
[4] Dombi J., (1982): Basic concepts for a theory of evaluation: The aggregative operator. European Jr. Operation Research 10, 282-293
[5] IEEE Power Systems Relaying Committee (PSRC). (1999). IEEE Guide for Protective Relay Applications to Transmission Lines, IEEE Std.C37.113-, pp.31.
[6] M. Aurangzeb, P. A. Crossley, P. Gale. (2000). Fault Location on a Transmission Line Using High Frequency travelling waves measured at a single line end in power engineering society .
[7] H. Khorashadi-Zadeh, M. Sanaye-Pasand. (2006). Correction of saturatedcurrent transformers secondary current using ANNs, IEEE Trans. PowerDelivery, 21, 1, pp. 73–79.

.