BLG111E-Introduction to Computer Engineering

Paper Evaluation

Title of the paper: RFID: An evolution of change, from World War II to the consumer marketplace
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Brief summary of the paper

Radio frequency identification (RFID) is a close range communication technique that uses resonance field to power the microprocessor which sends encrypted data to a receiver. This technology used in Word War II for different protocols to communicate for the first time. All of the components including antenna, microprocessor, and encryption protocol forms RFID tag. This tags and readers for RFID can be hidden anywhere. But the biggest issue is readers' or field generator's cost. Even though RFID tags cost as little as US$0,05, readers cots over US$800. And also RFID tags use a proprietary encryption, which means readers can get data only from specific tags. Another expense is the software which controls RFID tags and how it effects the system RFID used. RFID has a lot of applications in gaming industry, payments and wireless power. In game industry, developers uses RFID enabled figures to sell in game content or to carry character info so players can take their account with them in a toy. Another usage of RFID is payment methods. Near-Field-Communication (NFC) is an application of RFID on smartphones. With NFC, payments can take place with only a cellphone. This technology takes place right now in some places in the word. But developers have to adapt other standards to make this technology popular around the word. Another area to use RFID is energy harvesting. Since RFID tags powered wirelessly, it can be used for charging other types of devices. RFID devices can reuse the extra radio waves in order to do that. But this requires adaptive antenna frequency modification which means that device can adjust itself to the strongest signal.

Comments related to the paper

RFID has a lot of benefits but I don't think that wireless power can be achieved trough this technology. First of all use of energy harvesting from other radio frequencies will be interfering with others' signal. This interfere to the signal might cause connection loss or slow connection to that person. This is disrespectful and overrides people's rights. RFID in payment is getting popular but this is not enough for me. I still can't buy a coffee or use public transportation with only a touch with my smartphone. NFC payment methods must be accepted by people and it must be extended all around the word.

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