Bluetooth headset works described technique

Bluetooth technology works Bluetooth wireless technology is a short-range communications system intended to replace the cables connecting portable devices and / or fixed electronic devices. The main features of the Bluetooth wireless technology is a powerful, low power consumption, and low cost. Many of the features of the core specification are optional features, in order to achieve product diversity. Bluetooth core system includes a radio frequency transceiver, baseband and protocol stack. The system can provide the equipment connected services, and support for the various categories of data exchanged between these devices. Bluetooth RF (physical layer) running at 2.4GHz ISM band, without the need to apply for a permit. The system uses a frequency hopping transceiver to prevent interference and fading, and provides multiple FHSS (Frequency Hopping Spread Spectrum) carrier. The RF operating binary frequency modulation shaped, reducing the complexity of the transceiver. The symbol rate of 1 megabit per second operator (Msps), support the bit rate of 1 megabit per second (Mbps); enhanced data rate, total air support 2 or 3Mb / s bit rate. These patterns are called "basic rate" and "enhanced data rate". In normal operating circumstances, the synchronization to the common clock and hopping pattern of a group of devices will share a physical radio channel. The synchronization reference device known as the master device. All other equipment is called from the device. A group of devices synchronized in this way to form a piconet (piconet). This is the basic form of communication for Bluetooth wireless technology. Devices in the piconet use a specific frequency hopping pattern, the figure based on a specific algorithm to determine by the Bluetooth specification addresses the specific fields and master clock. The basic hopping Figure sort of pseudo-random 79 frequencies in the ISM band. Hopping pattern can be adjusted to exclude part of the frequency jamming equipment. Adaptive frequency hopping technique improves Bluetooth technology with static

(non-hopping) ISM systems coexistence state (when both coexist). The physical channels are multiplexed is divided into time units called slot. Data time slot in the form of data packets transmitted between Bluetooth-enabled devices. If conditions permit, the number of consecutive slots can be assigned to a packet. Hopping occurs when the transmission or reception of data packets. Bluetooth technology by using time division duplex (TDD) program provides full-duplex transmission effect. Physical channel of a link, channel and associated control protocol layer. More than one channel in the physical channel and the link-level as the physical channel, a physical link, logical transmission, logical link and L2CAP channel. The physical link may be formed within the physical channel between any two transmission equipment, and can be bi-directional transmission of data packets. Piconet physical channel, there are some restrictions on which devices can form a physical link. Each from a physical link between the device and the main equipment. Does not directly form a physical link between devices in the piconet. Physical link as the transmission of one or more logical link layer support unicast synchronous, asynchronous and isochronous traffic and broadcast traffic. The traffic on the logical link through possession Explorer scheduling functions assigned time slot differentiation to the physical link. In addition to user data, logical link also load the baseband and the control protocol of the physical layer. Link Management Protocol (LMP). Active devices in the piconet have a default asynchronous connection-oriented logical transport for transport LMP protocol signaling. Due to historical reasons, this is referred to as the ACL logical transport. Each time a device joins the piconet will create a default ACL logical transport. Can create additional logical transmission needed to isochronous streaming. LMP to control the operation of the devices in the piconet link management function, and provides services to manage the lower layers (radio layer and baseband layer) architecture. LMP protocol can only load the default ACL logical transport and the default broadcast logical transport. In the baseband layer above, L2CAP layer for applications and services based on

the extraction of the channel. It can perform segmentation and reassembly of the application data, and perform multiplexing or demultiplexing of a plurality of channels through a shared logical link. L2CAP has a protocol control channel, the load on the default ACL logical transport. Application data can be submitted to the L2CAP protocol load support the the L2CAP protocol of any logical link.