Cochlear implants have become a standard treatment modality for sensorineural hearing loss. In this review article, assembly and function of a cochlear implant are described. Cochlear implants replace the normal inner ear by transforming acoustic sound signals into electric stimuli and deliver these to the auditory nerve. Speech processors translate the acoustic signal of the microphone into one that fits electrostimulation of the auditory system. In multiple steps, the signal has to be analyzed and processed to fit the demands of electrical stimulation. The speech processor then sends commands and the energy for stimulation to the implanted parts via a transcutaneous high frequency radio link. The implant refers the information as electrical stimuli to each electrode contact.
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