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Measuring the Heart Pulse Rate of a Human Body Using a Smart Textile Panel

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Abstract

In today's world people have been using a large number of portable electronic devices in medical diagnosis. Of particular note are the portable heart measuring meters, insulin measuring units etc. But today the world is moving towards the path of integration of portable sophisticated devices with clothing to achieve simultaneous multi tasking approaches. The concept of electronics collaboration with textiles, called "Electronic Clothing", has come to play in many areas. This paper explores this phenomenon from a textile point of view. What are the possibilities of integrating electronics into wearable clothing? How can the functionalities of clothing be improved with the presence of health related issues? These questions are being addressed here and the ways of integrating electronics into textile structures are also discussed. Necessary steps to textile research and the current trends of clothing will be taken into consideration with possible future trends and challenges.