UNIVERSITI TEKNOLOGI MARA

HEALTH CARE:

DEVELOPMENT OF BIOMEDICAL SLEEP INDUCER WITH GEO-MAGNETIC FIELD SIGNAL

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A project report submitted in partial fullfillment of the requirements for the award **Diploma of Electrical Engineering (Electronics)**

FACULTY OF ELECTRICAL ENGINEERING

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DECLARATION

" I declare that this report entitled "BIOMEDICAL SLEEP INDUCER" is the result of my own group research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in candidature for any other degree. "

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Firstly, thanks a lot to our beloved family because encourage us and give us spirit to do this project. Also to my supervisor, that help us a lot when we had problem with our project. Everything we refer to him and he never avoid to help us. Last but not least, also thankful to our beloved lectures and friends that also help and encourage us.

ABSTRACT

There is nothing quite as pleasant as being able to relax completely whenever it is desired. In today's competitive world mental stress is acute problem. As a result insomnia is occurring all over the world. The lack of restful sleep can affect our ability to carry out daily responsibilities. As a consequence, this can lead to memory problems, depression, irritability and an increased risk of heart disease and automobile related accidents. In most of the cases people use heavy dose drug to get rid of this problem which is very harmful for human body. There is much adverse effect because in one stage people get addicted to this. In the recent time researchers are trying to solve this using electromagnetic field therapy. With the continuity of previous researches, we have designed a circuit which creates and radiates an electromagnetic field through a radiator coil and creates an environment helpful for sound sleep. This project presents the motivation behind this project and describes the prototype developed for a low-cost and user-friendly system that helps to fight against insomnia by creating an electromagnetic field.

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