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# ABSTRACT BOOK

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#### The Locating-Chromatic Number of Comb Production of Trees

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#### Abstract

The proper -coloring of is a function where for two adjacent vertices and in . Let be the partition of vertices of induced by , where having all vertices with color . For a vertex of , the color code of is an ordered -tuple where for. If all distinct vertices of have distinct color codes, then is a locating -coloring of . The locating-chromatic number of , denoted by is the least integer such that there is a locating -coloring in . Let be a graph of order . The comb product of two graphs and , denoted by , is a graph obtained by taking one copy of and copy of , and grafting the -th copy of at the fixed vertex of to the -th vertex of . In this paper, we will discuss the locating-chromatic number of comb product of trees.

Modeling Of Exposure Electromagnetic Field From Base Transceiver Stations Mobile Phone Based On Protection Of Society Settlement In Medan

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#### Abstract

Service provider of Mobile phone in Medan much build towers of Base Transceiver Station in society settlement area, either built by each service provider or using the tower sharing. The existence of a Base Transceiver Stations in the society settlement area will resulting the accumulation of exposure electromagnetic fields from Base Transceiver Station which will impact negatively on health, and the environment around the tower. Therefore it is necessary to do protection of the people against exposure of electromagnetic field by mathematical modeling of electromagnetic field to exposure from the Base Transceiver Station with boundary conditions threshold of power density appropriate WHO regulation. This mathematical model is a mathematical mapping of exposure electromagnetic field from Base Transceiver Station on society settlement areas in Medan based on protection of the population. Discussion and recommendation is required as input for making the matematical model and the result as input for the regulation of telecommunications in Medan.

Keywords: Modeling, Exposure Electromagnetic Field (EMF), Base Transceiver Station, Protection of Population, Society Settlements, Medan.