On Two Representative Strategies for Channel Assignment in a FDMA/TDMA Cellular System

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ABSTRACT: For channel assignment in FDMA/TDMA cellular radio systems, the so-called frequency exhaustive and resource exhaustive strategies are the two representative ones, the ideas of which are taken from the node coloring algorithms. Answered here are two important questions for each strategy: the existence of a search order guaranteeing an optimal assignment and the availability of a polynomial-time procedure.