Construct well-covered block-cactus graphs

Wu-Hsiung Lin

Department of Applied Mathematics, National Yang Ming Chiao Tung University

Abstract

A graph is *well-covered* if every maximal independent set is also maximum; and is *α-excellent* if every vertex is contained within a maximum independent set. The class of *block-cactus graphs*, consisting of graphs whose every block is a clique or a cycle, is a superclass of both block graphs and cactus graphs. We propose recursively constructive methods to characterize well-covered block-cactus graphs and α-excellent block-cactus graphs.

Keywords: well-covered, α-excellent, block-cactus graphs.

E-mail address: wuhsiunglin@nctu.edu.tw