TWO DISJOINT INDEPENDENT DOMINATING SETS IN GRAPHS WITH BOUNDED DEGREE

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We continue the study of existing in a given graph G two disjoint independent dominating sets. We prove that it is NP-complete to decide whether a given graph with the maximum degree bounded by 4 has two disjoint independent dominating sets. We constructively characterize all connected subcubic graphs not containing two disjoint independent dominating sets.

Keywords: independent domination number; vertex partition.

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