Faithful representations of graph algebras via branching systems

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Abstract. We continue to investigate branching systems of directed graphs and their connections with graph algebras. We give a sufficient condition under which the representation induced from a branching system of a directed graph is faithful and construct a large class of branching systems that satisfy this condition. We finish the paper by providing a proof of the converse of the Cuntz-Krieger uniqueness theorem for graph algebras by means of branching systems.