ABSTRACT

In this thesis, we study certain relationships between graphs and C^* algebras. Indeed, to every directed graph, there corresponds a C^*-algebra which in literature is known as the Cuntz-Krieger algebra. We investigate some relations between graph having sinks or infinite emitters and graph, obtained by applying desingularization process to G. In doing this, we investigated certain effects of this desingularization process on the corresponding Cuntz-Krieger algebra of a directed graph G with sinks or infinite emitters. In later part of the thesis, we also give some results about the stable rank of the Cuntz-Krieger algebras.