

Measuring invention cooperation using patent information in Colombia

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Patents can be used as innovative output indicators, as well as indicators of cooperation between organizations using the co-patent network of innovators which looks at assignees connected through joint application to a patent (Graf & Henning, 2009). Other authors have also analysed university-industry cooperation through patent data (Balconi & Laboranti, 2006; Motohashi, 2008; Hong, 2008; Xu, 2010), the main hypothesis behind these studies is that patents reflect the level of technological innovation of a country or a region.

In this extended abstract we intend to show the results of an exercise that tries to connect Colombian innovators through patents, using social network analysis, in order to understand the relationships among interacting units (Cantner & Graf, 2006). The analysis is made using data from the WIPO through the PCT system, the USPTO of the United States and the EPO from the European Union.

The network analysis suggests that the actors involved in innovative activities in Colombia are highly disconnected. The density of the network was very small and a high fragmentation was found. The results are in line with other studies of Latin American innovation activities: linkages are weak, the system is highly disconnected and firms show low levels of centrality as compared to universities (Marotta, Mark, Blom, & Thorn, 2007).