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# Technology Maps in Energy Applications Based on Patent Trends: A Case Study

**Authors :** Juan David Sepulveda

**Abstract :** This article reflects the current stage of progress in the project “Determining technological trends in energy generation”. At first it was oriented towards finding out those trends by employing such tools as the scientometrics community had proved and accepted as effective for getting reliable results. Because a documented methodological guide for this purpose could not be found, the decision was made to reorient the scope and aim of this project, changing the degree of interest in pursuing the objectives. Therefore it was decided to propose and implement a novel guide from the elements and techniques found in the available literature. This article begins by explaining the elements and considerations taken into account when implementing and applying this methodology, and the tools that led to the implementation of a software application for patent revision. Univariate analysis helped recognize the technological leaders in the field of energy, and steered the way for a multivariate analysis of this sample, which allowed for a graphical description of the techniques of mature technologies, as well as the detection of emerging technologies. This article ends with a validation of the methodology as applied to the case of fuel cells.

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