

Review of: "Strategic Citations in Patents: Analysis Using Machine Learning"

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Potential competing interests: No potential competing interests to declare.

In this paper, unsupervised machine learning algorithm Doc2Vec was used to measure the similarity of patent texts, and a detailed comparative study was conducted through data trends to confirm the existence of citation behavior bias of patent inventors. However, the author's in-depth research in related fields is insufficient, and it lacks the innovative explanation of the research. The research significance of this paper is not clear enough, relevant arguments lack necessary verification, and the credibility of the conclusion is insufficient.

The validity of Doc2Vec model and Word2Vec model to measure patent similarity needs comparative verification.

Some abbreviations and model formula parameters are not explained, such as MSA and NLP.

Part of the figure combination is not good. For example, the last sentence of the first paragraph of Part 3 should be marked "See Figure B.2". The third paragraph of Part 3 is not seen with Figure B.1. In figure4.1, the rate of self-citation before and after the change of firm is compared instead of the MSA change.

The content of the first line of the paper on page 4 is missing.

Lack of the analysis of relevant research and existing problems, lack of innovation.

It is of little practical significance to use this machine learning algorithm to analyze patent strategic citation behavior, and how to improve and utilize this phenomenon needs to be further studied.

The relevant arguments lack necessary verification and the conclusion lacks credibility.