

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

Asia Mahdi Naser Alzubaidi¹

1 Kerbala University

Potential competing interests: No potential competing interests to declare.

Overall, this paper seem clear and concise. However, there are a few potential issues with the study that could be fixed

- 1. The study solely looks at one type of patent, with no comparison group. This makes it difficult to draw conclusive conclusions about whether the trends that have been noticed are the result of strategic conduct or merely natural variance in citation patterns.
- 2. The study finds associations between specific citation patterns and prospective strategic activity, although it is unclear whether these patterns create the action or are merely associated with it.
- 3. The introduction presents a clear research question and methodology, and it is well-written with no significant errors. However, the author could go on to explain why innovators would be tempted to leave out the most important sources. Although the author mentions that citing proximate patents limits the scope of the patent and reduces its value, they could elaborate and provide concrete examples on how this occurs in practice.
- 4. the author uses the first person singular pronoun "I" frequently in the introduction. The use of it is generally discouraged in academic writing. For example, instead of "I find evidence using patent text similarity there exists strategic incentives to leave out citations," the author could write "Evidence suggests that strategic incentives exist to leave out citations, as revealed by patent text similarity."
- 5. Overall, the description of the data sources is clear and informative. However, The data sources are limited to patents granted between 1976 and 2015, which may not be sufficient for certain research questions. It would be helpful to explain why this time frame was chosen and acknowledge any limitations that may arise from it.
- 6. The Doc2Vec section might also use a more critical examination of the advantages and disadvantages of using Doc2Vec in this particular study. What are some of the potential biases or weaknesses of using patent abstracts as input data for Doc2Vec, for example? What are some viable Doc2Vec algorithm alternatives or adjustments that could improve the study's results?
- 7. A research article must not only give data in the form of figures and tables, but also include a full discussion of the findings. Readers may be left wondering what the importance of the data is and how it connects to the study question or hypothesis if the results are not discussed. A research paper should explain how the data and tables presented support or reject the study hypothesis or topic in clear and straightforward terms.moreovere, a research paper's discussion section is critical for this goal since it allows the authors to provide a thorough analysis of their findings and explain their consequences.
- 8. The paper's conclusion appears to summarize the study's primary findings. It may be improved, though, by providing



greater context on the ramifications of the findings and their broader relevance. For example, the conclusion may highlight how the findings contribute to our understanding of information transfers across enterprises and the impact of mobility on innovators' behavior. Furthermore, the conclusion could address the study's limitations and suggest avenues for future research.