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

Potential competing interests: No potential competing interests to declare.

Studying citations in patents from the perspective of strategic behaviors, this paper is enlightening and thoughtful in general. Here lists the contributions of this paper and a few advice about its potential issues.

Meaning of the hypothesis

First of all, It is intriguing to point out that inventors or applicants have strategic biases in citations caused by changes of firms and locations. That indeed put forward an innovative way to study citation behaviors, which is not only in the field of patents research but also in papers or others analyses. This topic has a great meaning in the development of patents study without a doubt.

However, there are still some concerns about its significance in practice. Let’s assume the conclusion is true that applicants do avoid citing their own prior inventions after they change company and omit citations to patents in different cities. What will that phenomenon deeply impact the progress of technology and development of firms? Does governments need to regulate or forbid such behaviors Does this phenomenon has difference between disciplines?

And if does, how that difference make a sense It is hard to see these thinking in this paper.

The researching process

Data selection

1 There is no question about the truth and reliability of the data. Nevertheless, introduction about data platforms are insufficient. It would be better if there is a brief introduction about where the author got the patent data, although USPTO is enough authority. And given that the patent's location is settled by the MSA where the highest proportion of inventors, an introduction of MSA is also missing.

2 Considering we are now in 2023, there is no explanation why the range of data is limited from 1976 to 2016. It would be helpful if the chosen reason is added. Besides, the author should admit that the results may be influenced by these limited data.

3 Although the author has explained that abstracts are summaries of patents, it is still not accurate enough to get all those results directly coming from analyses of abstracts. The author should provide examples or researches to prove why it is considered to use abstracts not full texts.
The contents of data are comprehensive as a whole, whereas there lacked an introduction about types of patents. What kind of patents were used here? Which field do they belong to? And why the author chose them in this paper? We have no idea whether the fields of patents will play a role in the conclusions.