

# Importance of citation analysis to IP portfolio management

*It is imperative that organisations know who is citing them and why. Such analysis can provide insight into competitor activity, identify potential partners, and help protect IP portfolios, writes Susan E Cullen, Consulting Practice Director at Thomson Reuters*

The examination of your company's intellectual property portfolio in its competitive space provides a systematic way of understanding what's happening in the marketplace, as well as aligning product development and R&D strategies with market opportunities.

When your patents or applications are cited on the application of another entity, it can be a sign that that entity is improving your technology, finding other ways to extract value from your technology, identifying different ways of solving the same problem, "changing the game" so the problem you solved is no longer relevant, acknowledging potential licensing opportunities or being notified by a patent examiner that they are infringing on your rights.

When conducting citation analysis of your patent portfolio, you want to look at who is citing your documents, how often they are citing them, and what kinds of technology they are developing.

In a portfolio citation analysis, references can be conceptualised as links that join the present to the future. By looking at citation information through a variety of lenses, such as ownership, technical area or use, it is possible to project how others are building on your technology to develop their own.

## Who's citing whom?

Two groups who may cite your patents or applications are other patent applicants or patent examiners. If another applicant cites your patent (as occurs in US practice), this is a voluntary citation where the applicant is essentially asserting that his invention is patentable over your earlier invention. By contrast, an examiner's reference is involuntary in the sense that it was not raised by the applicant. Examiners' references may either be simply for information or may actually challenge patentability.

In the EPO and in WIPO (PCT, WO) examination offices, citations are entirely examiner driven and published search reports from the examiners give reasons for their references. By contrast, the USPTO asks applicants to provide references along with the application. The examiner can supplement these and since 2000 US examiner references have been differentiated from applicant references, but the reasons for the examiner's added references are not explained within the published document.

## Segmenting your portfolio

If you or your client has a small to medium-sized patent portfolio, it is recommended that you monitor all the patents and applications that are in it.

If your portfolio is large, it may be more practical to segment the portfolio so that more critical patents and applications can be selectively monitored. Some important portfolio segments may be patents or applications that cover:

- Currently successful products.
- Potentially important new products in development.
- Technology you already license.
- Technology with licensing potential.

If you first focus on monitoring citations to patents and applications in these four areas, you will be protecting your most valuable assets. Then, if resources permit, you can return to the rest of your portfolio for broader analysis.

Citations of your portfolio can be thought of as downstream analysis. Downstream citation analysis leverages examiner and applicant expertise to highlight what is happening in the technology area since the descriptions of your inventions were published. As you perform a downstream assessment, ask the following questions:

- Who is citing your technology?
- What kind of downstream technology are they developing?
- What is the amount and rate of activity?
- Which of your patents is most highly recognised?
- Can the closer downstream art be isolated by identifying adverse (X or Y) examiner references?

By answering these questions, you are gathering the information you need to make strategic decisions about R&D direction, improving your value as a supplier, licensing opportunities and enforcement. Without it, you could be missing important opportunities or be blindsided.

## How to monitor citation portfolio-wide

For monitoring downstream citation, the citation tree is a high-impact visualisation tool that can be found on Aureka and Thomson Innovation, two Thomson Reuters products. Starting from a base document, the citation tree can look backward or forward at the references linked to the base document through citation. The tree can include several generations of references, allowing you to get a view that emphasises both the players in the field and the directions they may be taking. The documents in the tree can be further probed by searching (eg, claims) and documents of interest can be colour-coded to call attention to aspects most meaningful to you.

While citation trees start from a single document, Aureka citation reporting covers many documents, even a whole portfolio, and gives you an aggregated view that summarises the downstream (or upstream) collections. You can also create reports that identify highly cited documents and single out those documents worthy of exploration through the citation tree tool. For analysis of large document sets, the information on the citing (or cited) references may be exported into a tool like Microsoft Excel® where systematic analysis that addresses your specific questions may be carried out.

After you have a clear idea of your current downstream picture, you should keep your monitoring evergreen by setting up alerts that will automatically notify you whenever one of your essential patents is cited. Alerts can easily check for new citations and ensure you are informed early enough to take action if required.

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