



ACHIEVING HIGH-QUALITY PATENTS

LexisNexis intellectual property expert
Peter Vanderheyden explains the
importance of full-text search when
protecting valuable IP assets.

A recent survey by LexisNexis revealed that 90 percent of legal professionals agree that not being able to access the right information at the right time is a huge waste of time.

Furthermore, 97 percent of legal professionals believe a research tool that returns the most comprehensive results is important.

Finding the exact data needed is especially important in the world of intellectual property. Research has always been key when it comes to developing, maintaining and protecting intellectual property. However, the world is smaller and more immediately engaged as the economy and competition have become global.

There used to be a finite number of available electronic resources for patent prior art searching. Now, patent and non-patent prior art is readily available across the Internet, and includes seminars, journals, product manuals, newspapers, etc.—any and every form of communication needs to be checked.

The challenge is twofold. First, the determination must be made if the sources being searched are the most appropriate sources. Second, once the most relevant sources have been selected, each source must be searched effectively by checking all details included in the source data.

Of course, in the patent space 'close' is not good enough; it's all about finding the needle in the haystack. Importantly, the search must include the most comprehensive field of haystacks.

That's why full-text searching is so critical. Full-text searching provides the ability to evaluate the entire text of a patent or other forms of prior art. Searching just the abstracts or relying on indexes isn't sufficient and can be costly.

Abstracts and index databases of patents and scientific journal articles describe inventions about as well as the description on the back of a book tells the whole story—it's not judging a book by its cover. The devil is in the details, no more so than in the patent world where details matter. When the relevance of prior art can hinge on a single word, every word matters.

Details—the ones that could make or break a patent application—are not likely to be listed in the abstract of a patent application or even a proprietary abstract. Solid patent applications typically have a cursory description in the abstract, with claims available only in the full text.

Journal abstracts can provide a general idea of a technology, compound or process, but they rarely include patentable details regarding the novelty or application of the subject art. Even if they did include some level of this detail, they are highly unlikely to cover sufficient information to allow 'someone of average skill in the art' to create or replicate the subject technology.

Patent abstracts from the actual patent—as well as proprietary patent abstracts—have their limitations. Primary among them is the length

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of the abstract. By definition, it is an abbreviation of the document and, thus, meaningful words are not included. In the case of US patent abstracts, there is a constraining size limit, which dramatically restricts detailed coverage.

In the case of proprietary abstracts, there are three challenges. First, the abstract is one individual's interpretation of the technology. It is highly likely that the writer, no matter how good, will miss some nuance of the technology that could be important to the search. Second, proprietary abstracts are prohibitively expensive to use and, thus, access to them is typically limited within a law firm or corporate enterprise, and nearly inaccessible to the small enterprise or individual inventor. Finally, proprietary abstract and index systems require extensive search training and expertise that few people have or can afford to acquire. Without deep experience with these systems, they are fraught with error and can potentially provide the user with a false sense of security.

Furthermore, relying on the indexing systems of patent grants and applications is an inadequate way of conducting prior art research. Indexing methods, both human and machine, are neither error-free nor uniformly precise. That's not to say that using indexing methods is not helpful in the search process; they can help narrow a search or give general insight into a technology area. However, relying on indexing alone as a primary limiter is not a suf-

ficient means of conducting a prior art search for a specific patentable technology or claim.

The US Patent and Trademark Office (USPTO) classification system is a good example. The classification system is robust and does a good job in segmenting technology to allow a general view of patents by technology. But even this complex, robust classification system comes with limitations.

For example, a patent applicant may plan to file a patent on a new boot technology—the sole of a hiking boot. In researching prior art, the filing attorney may limit their search to the USPTO class that covers boots. However, the sole of the boot may be made of a compound that can be used in other applications—like a rubber compound that is used in the production of automobile tires and perhaps has been disclosed as a traction-enhancing compound in a prior patent. Searching by just the class (index) with keywords may eliminate this use, and therefore a lot of time and effort could be wasted and risk incurred by this limited evaluation. Expanding the search to include all patent abstracts would also likely miss this prior art.

To further complicate matters, some form of rules change could still be implemented by the USPTO. In addition, patent reform legislation continues to work its way through the US Congress (at the time of this article being written). Regardless of what legislative or rules changes that are eventually put into effect, it is highly

THE BOTTOM LINE IS THIS: THE WHOLE REASON TO DO A PRIOR ART SEARCH IS TO FIND A POTENTIALLY SMALL, SINGLE ELEMENT WITHIN THE PRIOR ART THAT COULD MAKE OR BREAK AN APPLICATION OR HELP INVALIDATE A COMPETITIVE PATENT.

likely that identifying prior art and linking that prior art to a specific claim will become more of a burden for the applicant or examiner or both. Additionally, it may be up to the applicant to explain how the claim is unique in relation to the prior art.

Accordingly, the importance of full-text searching will only increase in necessity.

The patent world realises this and is more interested than ever in full-text searching. Since the onset of patent information on the Internet in the mid-1990s, when access to abstracts and bibliographic information was a valuable novelty, the ability to search the entire patent document became a reality and a necessity. The abstracts—once considered “good enough” in conducting patent research—have become more and more commoditised.

Full-text searching is, quite simply, the most robust, important method of research in the intellectual property world.

Full-text searching includes the patent elements in the broader context of the invention or the article, so the reader can understand the full implications of the technology, process, and/or steps of the invention as they were expressed by the inventor.

The benefits of full-text searching are numerous. For example, all claims can be uncovered, not just the main claim that might be summarised in the abstract. Of paramount importance in prior art searching are the examples included in the patent; these examples are only found within the complete text of the application.

Timeliness is another key benefit. Abstracts and indexes databases take time to compile, whereas full-text searching is often available within days of publication. For attorneys with little time to oppose an application, the time is not there to wait for the abstract or indexing to become available.

Full-text searching is the only solution for attorneys to construct bullet-proof patent applications. Because every word is indexed, it is possible to find obscure terms or phrases that could be the key to ensuring prior art is discovered.

Full-text searching can disclose the many nuances of the technology or its application that cannot adequately be covered in an abstract or summary. Finding data included in tables, formulae and other graphics is only possible with full-text searching capabilities. It's the details and specific language of a claim and/or prior art that eventually may determine the validity of a patent. At this level, even a single word change can make all the difference.

As information becomes more global, ensuring a patent is defensible internationally is increasingly important. Full-text searching allows searching in the original language, eliminating ‘lost in translation’ errors. In order to search patent databases globally, patent attorneys must have access to full-text patents across the globe.

LexisNexis® offers a suite of intellectual property solutions that include access to both patent and non-patent prior art, including lexis.com®, PatentOptimizer™, and TotalPatent™ solution offerings. The TotalPatent service has the broadest collection of full-text patents available today. TotalPatent customers have access to 22 full-text databases—virtually all the major patent authorities around the globe—in order to view and search the claims that make an invention patentable.

Additionally, a robust collection of bibliographic information with images, citations, legal status, and patent family collections all in one place ensures patent attorneys are comprehensively searching patent prior art. Further, full-text searches into non-patent literature can be launched directly from the full text within PatentOptimizer or TotalPatent, or can be accessed directly through lexis.com.

The bottom line is this: the whole reason to do a prior art search is to find a potentially small, single element within the prior art that could make or break an application or help invalidate a competitive patent. It is not about looking for a pile of documents to print and read. It's the proverbial search for the needle in the haystack...but if there is only access to a hand-

ful of hay, the efficacy of the search is greatly compromised and risk can be increased.

LexisNexis can be found at
www.lexisnexis.com.



Peter J. Vanderheyden

Peter Vanderheyden, vice president of Global Intellectual Property for LexisNexis, brings more than twenty-five years of leadership in the industry. In his role, Mr. Vanderheyden is responsible for the growth and development strategy of LexisNexis services and solutions for intellectual property professionals.

With a proven track record of translating customer needs into successful businesses, Mr. Vanderheyden integrates business planning, marketplace needs, teams and technology to consistently deliver innovative strategies and customer-focused solutions.

Prior to LexisNexis, Mr. Vanderheyden held a number of leadership positions in the industry including vice president of marketing and business development for IP.com and consulting engagements helping companies develop strategic business plans for both “start-up” and product re-launched businesses.

Mr. Vanderheyden spent more than 16 years with IBM in a variety of executive positions including financial leadership of a trading area and as a solutions development executive. During this time, he founded the Delphion Company as a spin-off from IBM focusing on an innovative and efficient method for researching intellectual property information.

He is a published author of journal articles and has spoken at industry conferences on intellectual property. Mr. Vanderheyden holds a Bachelor of Science degree in business from the University of Minnesota.