Careful does it

It is incumbent on practitioners and applicants to take care in drafting and prosecuting applications, says Bea Koempel-Thomas of Lee & Hayes

Passage of the American Invents Act (AIA) in 2011 shifted the US from 'first to invent' to first inventor to file', with applicants arguably feeling increased pressure to race to the patent office. This race sometimes leads to questionable decisions related to search or self-selecting for patent submissions by inventors. Rush to file, but don't rush blindly.

The Alice Corp v CLS Bank (2014) and Mayo Collaborative Services v Prometheus Laboratories (2012) decisions have caused much uncertainty around patentable subject matter eligibility in the US. Since this area is in flux, it is important that the attorney receives full disclosure to apply their knowledge and experience in determining what to include in the patent application, how to focus the description, and proper claim scope.

Off-the-cuff inventor searches are usually too product-focused and often miss crucial prior art. A quality search can help identify which innovations merit the cost of filing a patent application. While low-cost searches are available, many are completed outside of the US. For inventions made in the US, this can be problematic because: (i) sending invention information outside of the US can violate export restrictions related to unauthorised transmission of US technology; and (ii) having a search conducted outside of the US increases the chance that the person who performs the search is not fluent in the technology and/or not fully versed in US patent law. Enlisting a patent practitioner to conduct and/or review a search before patenting can save time and money overall, according to the American Intellectual Property Lawyers Association (AIPLA) Economic Survey in 2015.

Good lab-notebook practices can help ease tensions between limited budgets, limited time, and achieving complete invention disclosures that lead to better patent applications. Even if the client decides not to file or decides not to include an innovation in an application due to patentable subject matter eligibility concerns or business interests, careful and consistent entries in research notebooks can provide corroboration of invention and serve as evidence for derivation hearings and litigation, to support prior user rights, and for asserting the one-year grace period for US filing by documenting that the inventors were indeed the first to invent. To maintain confidentiality, each new experiment should begin in a new record; describe



work completely, concisely, and clearly; include supporting documents and data from experiments; if results may be open to interpretation, provide an interpretation of data and results; and identify the submitter, samples, methods or algorithms, the date, and the inventor and a witness' signature.

Invention disclosures should describe inventions fully—no hiding the best part from the practitioner. During invention disclosure meetings, attorneys must ask themselves, "am I getting a full disclosure?" Ask questions, and repeat understanding of the invention in the drafter's own words (rather than the inventors' words) to help ensure understanding.

Patents represent a contract between applicants and the public. Patent applications must fully disclose inventions including how to make and use them as the "quid pro quo" for the limited monopoly granted by a patent, according to Chisum on Patents, citing the 1989 US Supreme Court decision in Bonito Boats v Thunder Craft Boats. However, how applications are drafted can differ greatly, and different approaches have their place depending on the goals for the patent. A large, comprehensive, patent application, for example, an omnibus application, can describe multiple inventions related to a product. While drafting such applications can take longer and incur greater upfront costs than drafting sharply focused applications, they can have several benefits. First, the applicant can put competitors on notice of the breadth of innovation while saving multiple application fees. Second, an omnibus application can provide room to manoeuvre as the technology matures by providing support for a greater variety of implementations and levels of detail. Third, by including multiple innovations in a single application the applicant can file a series of continuation applications in the US. Applicants can also employ different claiming strategies and may prompt the US examiner to issue a restriction requirement.

After restriction, not all patents issuing from the application need expire together, and common ownership need not be maintained. However, even if an omnibus application does not garner a restriction, the applicant can follow the traditional route for extending pendency of the application family by filing a series of continuation applications. To avoid excess claims fees, one can include example clauses or a claim support section that reproduces each of a full complement of claims as clauses within the body of the specification; such example clauses in multiple dependent form can be particularly helpful for prosecution outside the US. Note, such sections are not necessary, and in a perfect application these pages represent unnecessary redundancy. However, in view of the rush so often involved with drafting, the prophylactic effect provided by a support section may be well worth the few extra pages.

Broad and vague are not the same, according to case law: "A broad claim is not indefinite merely because it encompasses a wide scope of subject matter provided the scope is clearly defined." (MPEP §2173.04) However, a broadly worded and insufficiently detailed description can limit the ability to focus claims or distinguish from prior art: "For example, disclosure of only a method of making the invention and the function may not be sufficient to support a product claim other than a product-by-process claim." (MPEP §2163).

By fully describing each aspect of the innovation, the application can support claiming multiple innovations at varying levels of granularity. Include as much technical detail as possible, including for alternate implementations/embodiments and examples of substitute parts. Failing to describe each invention with the necessary level of detail can render the application irreversibly defective.

"The description needed to satisfy the requirements of 35 U.S.C. 112 'varies with the nature and scope of the invention at issue, and with the scientific and technologic knowledge already in existence." (MPEP §2163). A well-drafted application should include useful ranges for all parameters, a source for the parameter's value, actions taken based on relative values in the range, and what entity or actor would perform the action. Everything within the scope of the claims must be enabled.

Consider definitions in patent applications, including for 'well-known' terms of art because meanings shift over time. "Clearly setting forth a different definition of the term in the specification" can rebut "the presumption that a term is given its ordinary and customary meaning" (MPEP §2173.01). Whether to include definitions is somewhat controversial. The recent expansive application of 35 USC §112(f) has led some practitioners to include definitions so the doctrine of equivalents can be favourably employed, to control interpretation, and to avoid amendment during prosecution.

Consider the value and goals for first-filed claims, including the importance of early issuance, whether separate aspects of the innovation can represent different inventions, and whether the applicant intends to pursue the application outside of the US. In some instances, greater value may come from more focused initial claims versus broad claims.

Applicants may avoid, or at least minimise, the headaches and cost of dealing with a later-filed, but earlier-issued patent by filing focused claims in a programme such as the US Patent and Trademark Office's (USPTO) Prioritized Patent Examination Program, commonly known as Track-1, to expedite issuance, then use a concurrently- or later-filed continuation to pursue broader claims. Two programmes that are less-costly than Track-1 are the Patent Prosecution Highway (PPH) or the Patent Cooperation Treaty version and the Full First Action Interview (FFAI) pilot. Making the prosecution as effective as possible through strategic amendments, examiner interviews, persuasive arguments, the use of affidavits, and filings under the after-final consideration pilot (AFCP) 2.0 can all help expedite prosecution. Patent practitioners can learn to work with patent examiners to manage prosecution flow. Key is the examiner count system, which is how the USPTO measures the productivity of its examiners. Since the agency grants examiners a larger amount of credit for work earlier in prosecution, the patent practitioner can manage behaviour to leverage the count system. For example, even without participation in the FFAI programme, an early interview can help the applicant and examiner come to an understanding about allowable subject matter sooner.

In addition to complicating examiners meeting their production requirements, omnibus applications often include more complex language in the specification and claims, which can tax the USPTO's search resources. Moreover, the classification system has struggled to keep up with sprawling technology areas, which limits the ability of some examiners to become subject matter experts to the extent of their predecessors.

In some cases, this may contribute to lower quality examination as examiners are forced to look for the proverbial needle in a haystack. Further complications for examination have come from shifting legal and, in some cases, technical standards during prosecution. Recent changes in the application of 35 USC §101 are the most prevalent example, but likewise changes in the application of 35 USC §112 have led to what were once thought to be well-understood terms of art being treated as nonce words much different than applicants and the patent drafters had ever intended. Thus, early steps to educate the examiner about an application can help focus the examiner's search, and lead to an earlier, properly scoped notice of allowance. It is incumbent on practitioners and applicants to take care in drafting and prosecuting modern patent applications. **IPPro**

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