

Intellectual Property Benchmarking Survey: Current And Best Practices For Patent Processing

By M. Rashid Khan, Trevor Thompson, James R. Freedman and Anthony Venturino

Abstract

A survey was conducted on behalf of Chemical Energy Environment and Materials (CEEM) Committee of the Licensing Executive Society.¹ The results show some interesting trends, some of which are unexpected, in current practices in the way organizations manage intellectual properties. The results of the survey along with the possible underlying rationale behind the results are presented. The ultimate goal is to recognize the possible trends and the strategies and identify, if any, the best practices applied in the management of intellectual properties.

Introduction and Background

A brief patent management benchmarking survey was conducted among the member of Licensing Executive members at San Diego during the LES National Meeting in October 2011. The objective of the survey was to better understand the practices that are common in patent processing. The questions included the following areas: time to file (relying on internal and external counsel for drafting), filing strategy, time experienced to have a patent granted, practical feasibility testing, and diligence pursued related to business impact before a patent is pursued. The details of the voluntary survey are provided in Appendix 1.

Survey Methodology

The results of the compilation of the survey presented are mostly based on the LES San Diego Meeting held in 2011. In a workshop in LESI London in 2010, similar issues were discussed, and the survey trends were similar, but there was no formal documentation. Therefore there was a need to receive written responses from the participants. For the 2011 survey:

- Questions were developed by CEEM.
- Survey had only 8 questions.
- Three questions were related to “time to file.”
- The remaining questions were related to other filing aspects.

- Initially emails were sent to all LESI CEEM members during October 2011 with only three responses.
- Requested confidential feedback. The option was given to identify the respondents.

Results and Discussion

Fifty Industry representatives responded to the questions. Representatives from all industries participated. About 20 feedbacks and recommendations were received.

1. Time to File—Internal vs. External Drafting

The survey turned up some interesting results in respect of the time to file the first patent application following receipt of the complete Invention Disclosure Statement. For those applications prepared exclusively by in-house patent departments, half of the total respondents (50 percent) reported that applications take longer than 6 months to prepare (Figure 1). In contrast, when looking at applications prepared by external counsel, a much smaller proportion (12 percent) takes more than 6 months to prepare. Moreover, the typical time period for external counsel to prepare patent applications is 2-3 months (46 percent), whereas the majority of applications prepared internally take 6-12 months (37 percent).

■ M. Rashid Khan, Ph.D, CLP,
Saudi Aramco, Deputy Director,
Technology Program,
Dhahran, Saudi Aramco,
SAUDI ARABIA
E-mail: Rashid.Khan.1@
aramco.com

■ Trevor Thompson,
Karssen, Director,
New Broad Street House,
London, UNITED KINGDOM
E-mail: trevor.thompson@
karssen-ip.com

■ James R. Freedman,
M.I.T. Technology
Licensing Office,
Technology Licensing Officer,
Cambridge, MA, USA
E-mail: jrftlo@MIT.EDU

■ Anthony Venturino,
Novak Druce + Quigg LLP,
Patent Attorney,
Partner,
Washington, D.C., USA
E-mail: anthony.venturino@
novakdruce.com

1. The views expressed are those of the authors rather than their employers.

Figure 1.

If your organization prepares its own patent applications in-house, what is the average time to file from receipt by your Intellectual Property Department of the Complete Invention Disclosure Document TO filing the first application at the Patent Office?

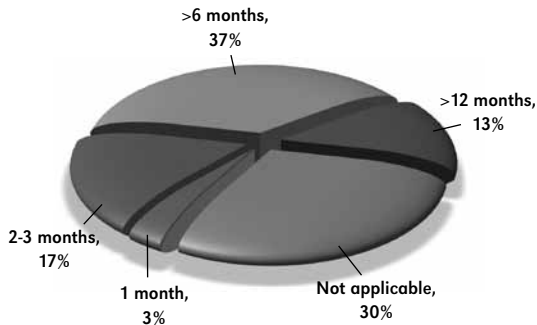


Figure 2.

If your organization has external patent counsel to prepare your patent applications, what is the average time to file from receipt by your external patent counsel of the Complete Invention Disclosure Document TO filing the first application at the Patent Office?

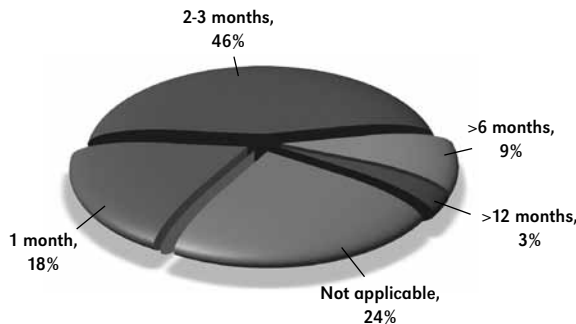
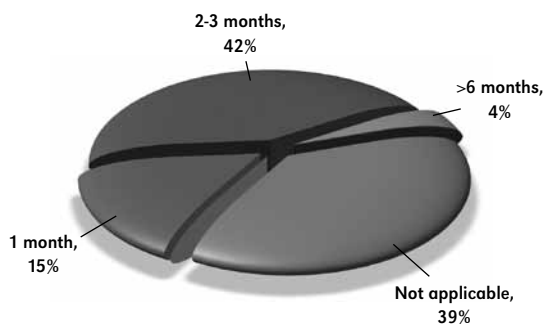


Figure 3.

If you are an external patent counsel, what is the average time from receipt by you of the Complete Invention Disclosure Document to prepare and file the first application at the Patent Office?



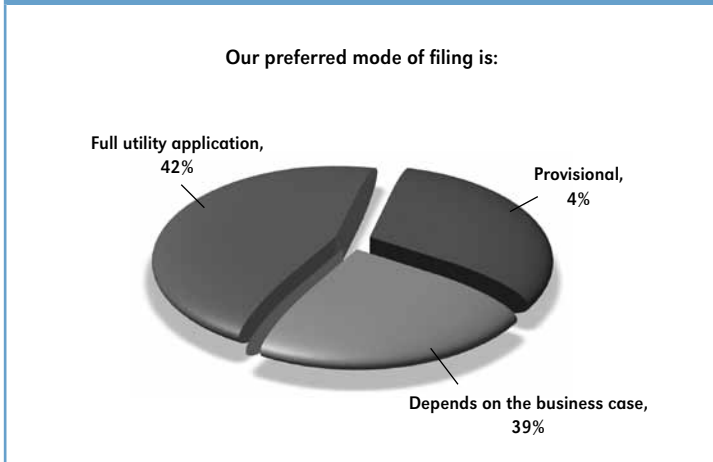
The differences are more apparent when considering extremes, namely those applications that are prepared in a relatively short period of time or those that have an extended gestation period. Only a very small proportion (3 percent) of respondents indicated that applications prepared by external counsel required more than 12 months, compared with four times as many (12 percent) for applications prepared by in-house counsel. A similar picture appears in terms of the rapid turnaround of Invention Disclosure Statements, with only 3 percent of respondents indicating that applications prepared internally were filed within 1 month, whereas 18 percent of external counsel prepared applications were prepared in the same time period (Figures 2 and 3).

This may provide an indication of the broader workloads on internal counsel where the process of drafting new applications is sidelined by a wider range of business pressures, including the need to identify inventions and compiling supporting documentation. In certain instances, it is to be expected that internal counsel may engage external counsel for those applications which have already been identified as being urgent.

It seems likely also that different targets are applied for in-house patent departments when compared to their external counsel counterparts. One possible measure employed for in-house counsel could, for example, be the total number of applications filed annually, and this may emphasize the identification of new inventions compared to completing drafts internally. In contrast, the objectives faced by external counsel are likely to be more focused, typically based on billing targets, placing greater emphasis on the need to complete the drafting process and place the applications on file. Certainly, the survey results point towards, a shorter turnaround for external counsel, with more than half of respondents (57 percent) reporting that applications were filed within 6 months of receiving the Invention Disclosure Document (IDD), with only a very small minority of 4 percent taking longer than 6 months.

Whilst the survey sought feedback on the average time required to file the first application, this does not readily identify the bimodal patent filing strategy that may be required to avoid self-publication. This

Figure 4.



approach is adopted by the remainder (24 percent) depending on the business case for the related invention. It is expected that business factors to be considered would include the confidence in the invention (can it be reduced to a commercial product) and its relevance to the business (is the invention part of core market).

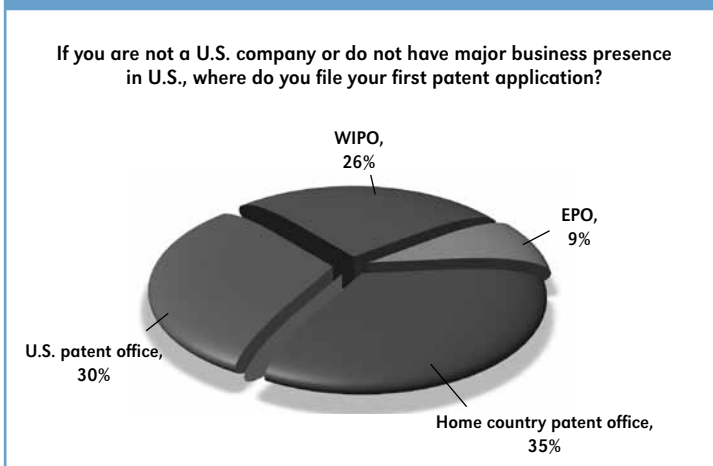
The National Office was highlighted by more than a third of respondents (35 percent) as being their preferred Office of first filing. This approach typically provides a straightforward route to obtaining a priority date whilst enabling a preliminary view to be formed on patentability based on the results of a search by the National Office. Thus, a cost-effective filing strategy can be implemented with an indication of the likelihood of success being established before the expenses associated with overseas filings are incurred. The need for foreign filing licenses can also be avoided, which may be significant in those sectors relevant to national security.

A consideration when filing provisional applications is also the maturity of the technology. In the case of research institutions, a larger proportion of first filings might reasonably be expected to be provisional applications due to the early stage of the research. The availability of the one-year grace period provides time to develop the claims for a later non-provisional application whilst retaining flexibility.

It is interesting to note the relatively high proportion of applicants (30 percent) based outside the USA (and not having a major business presence in the U.S.) that utilize the U.S. Patent and Trademark Office (U.S. PTO) as the office of first filing. This is likely a reflection of the continued commercial importance of the U.S., possibly coupled with the operating language of English (which is expected to have been the primary language of the respondents in view of data sample—London and San Diego). Moreover, for patent applicants based outside of the USA, the prestige and stature associated with granted U.S. patents may also hold appeal.

The proportion of respondents filing directly at the World Intellectual Property Office is significant (26 percent) with only a relatively small proportion filing directly at the European Patent Office (9 percent). The obvious appeal with filing an international application is the availability of provisional protection on a global stage combined with the availability of a

Figure 5.



could, for example, require that a proportion of applications are prepared rapidly to beat an impending public disclosure and the remainder distributed over a longer time period. Anecdotal evidence suggests that this strategy may fall on the shoulders of an internal licensing officer and sometimes even the inventors, rather than the patent attorney.

2. Filing Strategy

The preferred filing strategy identified by almost half of respondents (46 percent) is to file a full utility application, but a significant proportion (30 percent) elects to file a provisional application. These findings are supported by analysis of U.S. patent filings, which identified that more than 1/3 of recently issued utility patents of U.S.-origin claim priority to at least one provisional application*. A case-by-case

Figure 6.

My average time to receive the first patent granted after filing?

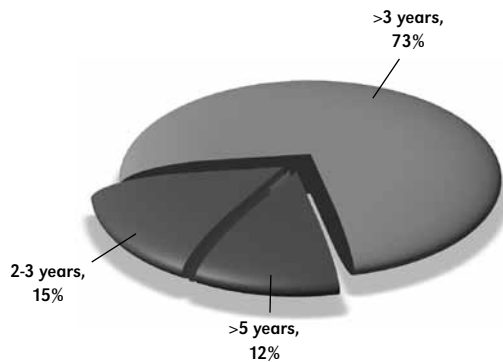


Figure 7. Years In Prosecution: Filing To Issue

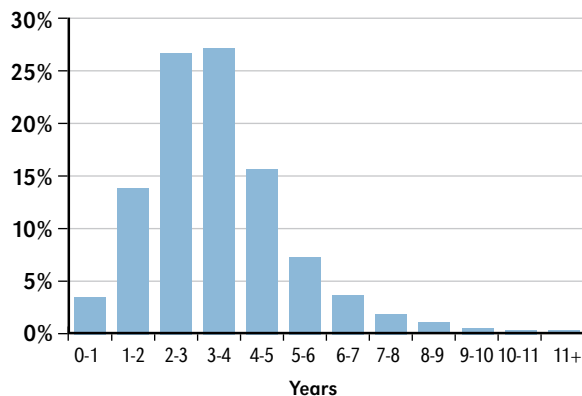
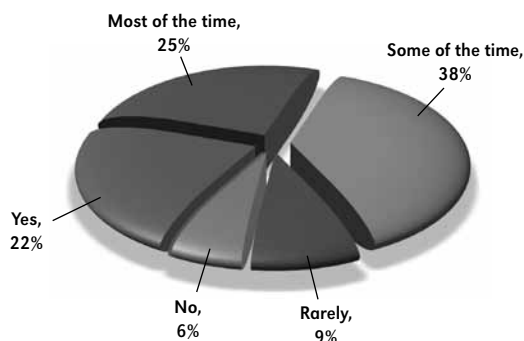


Figure 8.

Were inventions pretested to obtain data to prove the invention works before filing as a patent application?



detailed search. (Indeed, the possibility of electing a preferred International Searching Authority remains available in many jurisdictions.) The official fees for filing a European application are comparable to those for an international application, and the smaller geographical cover may explain the lower proportion of respondents filing at the EPO.

3. Time to Grant of a Patent

The majority of respondents (73 percent) indicated that the average time for the first patent to grant was in excess of 3 years. A not insignificant proportion (12 percent) indicated an average period of more than 5 years. It is accepted that the patent process is time consuming, but it is perhaps surprising that the average time before grant of a first patent is so long after the first filing. A proportion of respondents are enjoying a reduced average time of 2-3 years from first filing. Although data was not collected, one explanation for the reduced time to grant may be increased interaction with the responsible examiners; for example, through interviews and conference calls, with a view to expediting proceedings. Our findings in respect of the time to grant from filing (Figure 6) are consistent with data provided by U.S. PTO (Figure 7).

The U.S. PTO chart shows a pendency histogram for patents issued in October and November of 2011. The median pendency is 3-4 years. Ninety-eight percent issued within nine years of filing. The data show that roughly 44 percent of the filed patents are granted within 3 years or less (Figure 7). In our case, 73 percent claim to take over 3 years in granting a patent after filing (Figure 6).

Practical Feasibility Testing of Inventions Prior to Filing

With a view to establishing the commercial factors determining the timing of first filing, the survey also sought to determine what proportion of inventions underwent feasibility pre-testing before a first filing was made. The survey asked whether inventions were routinely assessed prior to filing to determine their workability and also whether a business plan was implemented to determine their commercial viability.

In view of the investment (both in terms of management time and financial costs) it is not altogether surprising that a large proportion of respondents (22 percent) confirmed

that inventions undergo workability testing prior to first filing. A quarter of respondents (25 percent) confirmed that workability testing was a factor in most cases prior to patent filing, with the largest proportion of respondents (38 percent) confirming that workability testing was undertaken some of the time. Perhaps due to the nature of the inventions, a small proportion of respondents (9 percent) rarely undertook workability testing and a minority of respondents (6 percent) not undertaking any such testing. Feasibility results and test data are essential part of enablement requirement before a patent can be granted.

It is recognized that the term “pre-testing” in the survey question was open to interpretation, extending from basic research to prove underlying concepts through to working prototyping. It would be interesting to explore the varying degrees of work undertaken prior to patent filing in a separate study.

4. Business Considerations Prior to Filing—or Wall Decoration?

A similar story unfolds in terms of the business considerations undertaken prior to first filing. More than a third of respondents (39 percent) confirmed that a business plan was prepared in all or most cases before a first filing was made. Interestingly, the same proportion of respondents (39 percent) rarely or never prepared a business plan prior to processing the patent application. Approximately one fifth of respondents (22 percent) prepared a business plan only some of the time. Not an insignificant part of the participants (13 percent) indicated that there was no business plan prior to filing, and the patent was “a wall decoration.”

5. Licensing Negotiations

Almost two thirds (63 percent) of respondents agreed that licensing negotiations and deals were best performed as part of a team effort, made up of intellectual property experts with support from legal, technical and business experts. Roughly equal proportions of the remainder of respondents, felt that negotiations and deals were best undertaken by only one group: business experts (16 percent), legal experts (11 percent) and technical experts (10 percent).

In view of the spread of data, it seems likely that a range of specialist advisers can be consulted during the course of licensing negotiations. This perhaps reflects the reality that there is no such thing as a standard licensing negotiation.

Concluding Remarks

The following tentative conclusions can be drawn based on this brief study:

- Organizations that use in-house patent drafting are generally less efficient in “time to file” than those who use external Counsel based on this survey.
- Nearly 50 percent of the organizations use utility applications as the preferred mode of filing.
- Over 73 percent wait over 3 years for getting patent granted. 12 percent take over 5 years.
- Nearly 50 percent of the patents did not go through any pretest to prove that invention works before filing a patent application.
- Before a patent was processed, only 39 percent of the time was there a business plan.

Figure 9.

Were there business plans to use the inventions internally or as commercial products before filing as a patent application?

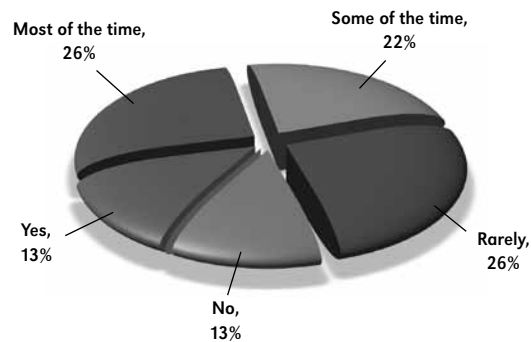


Figure 10.

In your opinion, licensing negotiations and deals in any company are done most effectively primarily by:

