
Hands-on counsel

Traditionally, the job of in-house counsel is to protect innovation rather than to encourage it. However, with the right mindset, those in the role can also play a critical role in the inventive process itself

By **Michael T Moore**

Innovation is rarely an accident. It is a discipline cultured through exercise, repetition, continual improvement and learning. With time and effort, it can become second nature.

In-house counsel have a pivotal part to play in teaching innovation, fostering collaboration and generating measurable and monetisable assets from this important process. This article discusses how in-house counsel can become asset builders, advocates for and partners with their stakeholders, in order to reap maximum return from the innovation process.

While the term 'engineer' is used in this article, it applies equally to software developers, scientists, technicians, technologists and anyone in the creative technical arts.

In-house counsel can and should lead innovation from within

In-house counsel are the primary legal point of contact for many engineers and technical contributors within a corporation or research organisation. Thus, they are well positioned to educate their stakeholders regarding invention practices and to build a culture of innovation from within. By doing so, they can demonstrate leadership, create valuable assets for the organisation and assist engineers with

highlighting their technical achievements and developing their careers.

New hires/acquirees

When new technical hires join or employees are brought on board through acquisitions, it is worthwhile for in-house counsel to invest time in educating the new team members regarding the company's innovation policies. This might include teaching new members how to identify new ideas or solutions, effectively document their work and quickly bring it to the legal team and patent committee (or equivalent review body) for consideration.

In a first-inventor-to file (United States) or first-to-file (rest of the world) regime, it is doubly important to identify, document and protect inventions quickly in order to reduce risk of loss of priority date to an external inventor or organisation.

Many in-house counsel may have observed – as I have personally – that a virtuous cycle begins when new inventors get a first taste of successful innovation through filing a patent and seeing the peer recognition and career opportunities that result. It soon becomes second nature to such inventors to submit their new ideas regularly and hopefully have them approved for filing as a patent application.

Experienced staff

Even in an established organisation, it is helpful to refresh innovation practices periodically with existing staff within the inventor community. By providing regular training sessions and reminders to this community and establishing a good working relationship with them, individual inventors are more likely to bring forth their ideas for consideration. In-house counsel can effectively use these sessions to teach experienced engineers or product

architects how to rethink what they might consider as innovations. The goal of this training is to help them, as the subject-matter experts, to identify a broad range of potentially patentable ideas within their new products and designs and help in-house counsel to weigh which should be pursued for patent protection.

Reset expectations

In many cases it is helpful to reset expectations of what constitutes a patent-eligible invention. There is frequent misunderstanding (particularly in the scientific and software community) as to what is potentially patentable (ie, it need not be a warp drive, teleportation device or photon torpedo type of invention to merit protection). In particular, it is valuable to promote thoughtful analysis and in-person discussion with the inventor before stating conclusions or dismissing ideas offhand. Some experienced technologists may express a viewpoint of ‘seen it all before’, which can lead to premature filtering out of potentially valuable ideas, particularly when an existing technique is refined and applied to a novel or interesting context.

Collaboration

In-house counsel can encourage innovation by taking the time to develop good professional and technical relationships with inventor communities. Rather than merely waiting for idea disclosure submissions to percolate into the legal department, in-house counsel can walk the halls (ie, venture deep into the technical

ranks and R&D labs to chat with engineers about what projects and products they are working on and collaborate where possible). In-house counsel can and should engage with the rank-and-file engineers doing the substantive product development work, not just the ‘champion inventors’ who already know how to innovate and submit their inventions.

Trusted partners

In-house counsel should identify subject-matter experts and innovation promoters within the technical community and cultivate trusted relationships and rapport with them through dialogue, engagement and spotlighting their creativity. These experts and promoters can be powerful allies, as they usually have an established reputation and loyal following within the technical community. As a prelude to invention harvesting, in-house counsel may sit in on product development or architecture meetings to see technical scenarios being addressed and problems solved in real time. This provides them with an opportunity to suggest additional avenues of development, expand the scope of product concepts and identify key innovation points in the product. This provides valuable fodder for future patent harvesting.

Cross-pollination

Large organisations often operate in a silo environment, which can limit innovation to within the bounds of the silo. In-house counsel can address this by providing an overlap of expertise between silos or units. For example, when solving a semiconductor interface problem, they can invite experts with both system-on-chip or component expertise and system-level expertise. By exploring a technical problem from multiple perspectives, new aspects and potential solutions are uncovered, with related opportunities for innovation.

Accelerating invention harvesting

Invention harvesting is a formal process whereby counsel (usually in-house counsel but occasionally outside counsel) engage in discussion about innovation ideas with a technical team and record those ideas for potential patent filing.

In-house counsel can accelerate this process and increase productivity by challenging the engineers with a difficult problem related to their business or product and prompting them to suggest solutions (engineers love to demonstrate how smart they are, almost as much as attorneys love to demonstrate how right they are).

In-house counsel nuts and bolts: running an effective patent harvest

One of the most effective ways in which in-house counsel can help to identify ideas for potential patent filings is to run a patent harvest with the engineers working on new technology projects or products. Some practical concerns around patent harvesting include the following:

- Number of attendees – the harvest participation rate and productivity improve when ideas suggested by one engineer spark related or new ideas by other engineers in the room. Often, the most productive results are obtained with 10 to 20 attendees, as this gives each attendee the opportunity to propose at least one idea during the session.
- Adequate time – during the harvest, in-house counsel and the engineers may want to delve into the technical details

of ideas, so a one to two-hour session is ideal for this effort. Longer sessions may result in participants ‘tuning out’, so two 90-minute sessions are often more productive than one three-hour session, for example.

- Availability – determine ahead of time whether there are any other obligations (eg, chip tape-out deadline, software delivery date) that may take priority for engineers or their management around the scheduled harvest time, as this may affect participation and interest.
- Support – request and obtain management support for their team’s participation in the harvest, as this shows commitment to the participating engineers and encourages attendance and interest.

- Effective questions can include the following:
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“What’s the hardest problem you had to solve in the past quarter?” – most engineers have at least a couple of difficult technical problems to tackle per quarter. Asking them to relate the recent problems they successfully solved can provide a fountain of innovation ideas, which are often relevant to a company’s product portfolio.
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“This may be the perfect solution, but what’s the next cheapest/easiest solution?” – while a best solution often maximises the performance of a product and is the most glamorous invention, a ‘good enough’ solution is also valuable and important to protect. This may be covered in an alternative embodiment within a patent application or, on occasion, may warrant a separate patent application of its own. By covering all or the most commercially feasible ways of solving a problem, in-house counsel can build up a more valuable and complete patent portfolio which provides greater product protection against copyists and also increased licensing leverage.
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“If your budget were halved, how would you solve this problem? Would you need an entirely different approach?” – it is often said that necessity is the mother of invention and nothing creates necessity like the lack of a scarce resource, such as money. Challenging engineers to solve a problem with half the budget or technical resources can provide some creative ideas.
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“In five years, will people still be doing it this way? Will this solution even matter?” – as new technologies become available or the cost of existing technologies falls, it can enable entirely new products and markets, which may render existing solutions obsolete. A corollary of this is that where a current solution depends on the availability of an existing

technology or platform, a market shift away from that platform can require an innovative solution.

Other techniques for accelerating invention harvesting and generating invention disclosures include setting specific goals for innovation with your internal business unit clients. By establishing mutually agreed metrics for invention disclosures and patent filings with engineering management along with commitments to meet them, the metrics will likely be propagated down into individual engineers’ annual or quarterly goals. This can be quite effective, as people generally perform according to what they are measured against and rewarded for.

In-house counsel can spur healthy competition between groups in order to foster innovation. People as individuals and teams as a whole can be motivated to peak performance with some healthy competition and friendly challenges.

It is worthwhile identifying even small improvements, as in the aggregate they can add up to a portfolio of substantial utility. By stacking incremental improvements of a few percent here and a few percent there, the boost to aggregate performance can be considerable and generate a valuable IP portfolio.

Recognition is key to motivation

It is important to recognise and celebrate the achievements of your inventor community. This may be done on a quarterly basis (eg, quarterly business overview) and also in a more formal annual manner (eg, an annual inventor award dinner or trip). Engineers value recognition among peers and a reputation for technical expertise, sometimes even more than financial rewards. Visual badges of creativity (eg, patent plaques to hang on the wall or patent ‘building blocks’ to stack on one’s desk) often have meaning for engineers and can lead to healthy competition in order to accumulate more than one’s peers.

Announce inventor successes to both the engineering community and also (more importantly) to management and executive ranks. Link the invention process to business and product success, as innovation and resulting patents rarely occur without executive sponsorship through R&D investment and allocation of staff and lab resources by executives. A great research idea without funding or support rarely results in successful innovation.

In-house counsel nuts and bolts: patent harvesting across geographical boundaries

Harvesting across geographical boundaries can be challenging, particularly if there are potential communication barriers.

- If possible, travel directly to the site where you intend to harvest from.
- Otherwise, use high-quality videoconferencing facilities for clearer communication with the engineering team.
- If the harvest is to be held by telephone, identify and get commitment from a local technical champion to be in the room with the engineers and run the harvest locally.



“It is important to recognise and celebrate the achievements of your inventor community”

Culture counts too

One of the easiest and least expensive ways that in-house counsel can encourage participation by engineers is by being easy to work with. There is frequently a feeling of separation (‘us versus them’) between the technical staff and the corporate legal department. In-house counsel can promote a culture of engagement by reducing bureaucracy and bringing the engineers as close as possible to the innovation and patenting process. They should consider reviewing their internal patent process to remove unnecessary process delays and hierarchical approval steps. These can stall ideas, discourage inventors and lead to a perception of a black hole or log-jam on the legal side.

There is also an important human element to this. In-house counsel should train their patent support and paralegal team to be customer focused and easy to interact with, to provide timely responses and relevant status information to inventors, and generally to be seen as innovation partners rather than bureaucrats or functionaries. Particularly in a corporate environment where the legal department is usually a general and administrative function, in-house counsel must provide internal clients with the same level of customer service as would be expected from outside counsel.

Further, as in-house counsel it is helpful to be respectful, sensitive and courteous to stakeholders. This is often demonstrated by being diplomatic (but fair and honest) when conveying disappointing news. When a new inventor submits his or her first invention disclosure, the manner in which he or she is handled may colour his or her perception of the invention and patenting process, potentially for the rest of his or her career. This is particularly true outside the United States, where in some business cultures a harshly delivered ‘no’ can be perceived as a personal failure by the engineer and discourage future invention disclosures. This may be a long-term loss to the company and limit the engineer’s future invention potential.

In-house counsel should similarly educate stakeholders on a patent review committee or technical review boards, so that they do not inadvertently shoot down junior inventors or their invention submissions.

Walking the walk and talking the talk

In-house counsel often have a technical background of some kind and it helps to speak to this when building a relationship

with the inventor community. When engineers see that in-house counsel can speak their language and in particular relate to them and contribute value in technical discussions, their respect for them and willingness to engage usually increase.

How do in-house counsel generate value across the organisation?

In-house counsel can demonstrate value to the organisation as a whole and also to individual stakeholders through the innovation process. They should be able to explain clearly to each group of stakeholders how they benefit from participating in and supporting the innovation and patenting process.

Value to engineers

In-house counsel play a critical role in helping engineers to identify, clearly express and protect their valuable technical contributions. They can inspire engineers to ‘look beyond their cubicles’ and abstract point solutions and potentially expand the market applicability of their inventions. Further, in-house counsel can bypass organisational silos and introduce technologists with relevant expertise, ideas or valuable knowledge to contribute – thus facilitating innovation that may normally not have otherwise taken place. It is very helpful to promote interaction (both

In-house counsel nuts and bolts: getting the most bang for your buck

Value-added practices that can be used by in-house counsel include the following:

- Use your outside counsel as a resource:
 - Leverage outside counsel as a resource, particularly where they have subject-matter expertise in a new product/subject area.
 - Outside counsel may agree to collaborate with the processes of patent harvesting and drafting disclosures, with an understanding that they receive the resulting work.
 - If your outside counsel have particular technical expertise in a relevant area, invite them to the harvest to help spur ideas or suggest additional areas to explore.
- Plan, budget and build portfolios across jurisdictions for maximum market leverage.
- Cut back to encourage growth – identify when to prune across a portfolio for maximum long-term benefit.

History and institutional knowledge
Organisation
Innovative measure
Protect revenue



Management

Promote visibility
Discussion
Cultivate ideas



Engineers

professional and social) between groups with varied areas of expertise.

In-house counsel can circulate good ideas and solutions across the organisation for maximum cross-pollination. This in itself may spur wider adoption of the innovation within the organisation and seed the development of related ideas.

In-house counsel can help engineers with building their careers and recognition and, of course, their wall of patent plaques. As previously mentioned, these plaques are a visual symbol of achievement and often spur friendly competition and further innovation.

Value to management

Each layer of management has a specific set of concerns that in-house counsel can help to address.

Executive management is primarily concerned with protecting existing revenue and profitability, and growing future revenue by expanding markets, geographies and product offerings. Executive management is often concerned with having a strong IP defensive posture in the event of actual or threatened litigation and the ability to stop potential copies or cheap substitutes (clones or knock-offs) from stealing market share.

Mid-level management is usually concerned with the success of specific projects and teams and demonstrating that their efforts provide value to the company. Evidence of successful invention harvests and patent filings are a useful metric to indicate the level of innovation in the group.

In-house counsel can help to address these management concerns by developing strong patents to protect revenue generated by relevant products. Building select portfolios of key patents across relevant markets and jurisdictions can be a strong disincentive to competitors attempting to copy your products. Strong patents can provide valuable leverage in a cross-licensing discussion, where it is not just about the number of arrows in the quiver, but rather how sharp they are and whether they will shoot straight. Quality counts and in-house counsel are primarily responsible for ensuring this.

Value to the organisation

Engineers, management and attorneys often change companies or organisations every few years, or more frequently in hot markets. In contrast, a patent portfolio lasts 20 years or longer with term extensions. A well-tended innovation culture will reap rewards for the organisation and build the reputation of the inventor(s). In-house counsel can encourage engineers to build a

Action plan



In-house counsel are uniquely positioned to help identify and promote innovation within organisations:

- By training and working with both new hires/acquirees and experienced staff to identify and disclose their inventions, in-house counsel can establish a pipeline of intellectual property and innovation.
- By collaborating and building trust with technical staff and promoting ideas through cross-pollination, promising

innovations may be identified and harvested.

- Guided questioning of technical clients (engineers) and recognition of their successes can bolster this activity.
- By clearly identifying value to management, technical staff and the organisation as a whole, in-house counsel can win support and resources for innovation harvesting, leading to successful results for the organisation and its stakeholders.

legacy of invention at the organisation that will last for many years, even if they move on in their career.

Promoting innovation

Promoting innovation and protecting the resulting inventions and related intellectual property are key roles provided by in-house patent and IP counsel. In-house counsel can generate long-term value and strategic advantage for the company through developing a strong IP portfolio built on a solid base of innovation. Further, every good patent issued adds a measurable financial asset to the company's balance sheet. Fundamentally, the role of in-house counsel is to be asset builders for the company and stewards of shareholder value. *iam*

Michael T Moore is deputy general counsel, intellectual property at Rambus