

Meet the middlemen

Over recent years a number of new business models for making money out of IP have emerged and along with them have come the IP intermediaries. They may not be universally loved, but they show no signs of going away. In fact, we can expect to see many more evolve

By **Raymond Millien** and **Ron Laurie**

Over the last three decades, there has been a shift from a labour-driven economy to a knowledge-based economy. Illustrative of this fact is that, for the first time since the industrial revolution, the percentage of American workers employed in manufacturing has fallen below 10% and, according to an article in *The Economist* in September 2005, may be as little as 5%. Consequently, intangible assets produced by a more highly skilled and services-orientated workforce have emerged as the most powerful asset class, overtaking traditional capital assets such as real property, plant and equipment.

Independent research conducted by Ned Davis Research for Ocean Tomo LLC has demonstrated that nearly 80% of the value of a US publicly traded company now comes from intangible assets. This is an inversion from 30 years ago when only 20% of a company's value came from intangible assets, and is significant because the largest component (or subset) of intangibles is intellectual property. Further, data showing that small businesses generate 13 to 14 more patents per employee than large firms would empirically suggest that this 80% figure applies, if not more so, to smaller (and private) companies as well.

We are no longer in the era when feudal lords (ie, a small handful of large old-economy companies) controlled all the (intellectual) property and those who were without property had no rights. In those times, a well-developed legal landscape defining the rights associated with IP did not exist and those without (intellectual) property had virtually no say in the licensing and

enforcement of such rights. The IP marketplace has matured (and continues to do so) and in 2006, IP-related damage awards and settlements in the US totalled US\$3.4 billion and global IP licensing revenue approached US\$90 billion as early as 2003.

Established IP business models

Given that IP feudal lords no longer rule, one can say that we are currently in an era of IP for the masses. The IP marketplace now operates according to the economic golden rule – those with the gold (ie, IP rights) can now make the rules.

Necessarily, the evolving IP marketplace has been accompanied by a change in the players within the marketplace. Traditionally, in the feudal lord period, such players were overwhelmingly patent lawyers and large patent owners (with a few smaller or individual players making the occasional appearance and splash). Today, however, the cast of players has grown. That is, this new era is characterised by the rise of market-maker intermediaries who seek to make IP a liquid asset class and, of course, profit from it.

Who are these new players? Well, they are generally referred to as IP intermediaries because they are neither the IP creators nor the IP consumers (eg, licensees and purchasers). These intermediary business models, however, attempt to perform one or more services, or offer one or more products that connect the IP creators and the IP consumers.

Patent licensing and enforcement companies (PLECs)

These are entities that own one or more patent portfolio, attempt to license them

through targeted letter-writing campaigns and then file patent infringement suits against those letter recipients who refuse to enter into non-exclusive licences. Those that practise this business model are often called (rightly or wrongly) patent trolls.

In some cases, the PLECs have purchased the patents they are asserting and, in other cases, the PLEC entity is actually founded by the inventor(s) of the asserted patent portfolio (although in the latter case, such entities are not technically intermediaries). PLECs therefore generate revenue both from licence fees and from the annual US\$3.4 billion IP awards and settlements market.

Prime examples of PLECs include Acacia Research, Fergason Patent Properties, Lemelson Foundation, LPL Financial, NTP, Patriot Scientific, RAKL, TLC and TPL Group.

Institutional IP aggregators/acquisition funds

These are entities, such as Coller IP Capital and Intellectual Ventures, that operate in a sort of private equity fashion. That is, they typically operate as general partners of a limited partnership and raise money either from large technology companies or from the capital markets (institutional investors and sometimes high-net-worth individuals).

The investors are promised above-average ROI from selective, targeted or large-scale patent purchases with the goal of instituting licensing programmes and/or employing various arbitrage strategies.

IP/technology development companies

These are entities that engage in R&D activities and produce IP (including both patents and know-how) much like traditional operating companies. However, the developed technology is not used to manufacture products in the form of physical goods. Rather, the IP associated with the technology is licensed by these entities to one or more operating companies so that the operating company may bring products and services employing the technology and IP to the marketplace.

Often the IP creator provides consulting services to the licensee to integrate the technology into the licensee's products or processes. Thus, these firms are not true intermediaries between patent owner and patent licensee. They are intermediaries, however, in the sense that they form a link between the creator of the patented technology and those who commercially deploy it in the form of products and services. In some instances, however, these



companies choose to produce and sell products embodying the IP they develop themselves, as well as licensing others.

Players in this field include AmberWave, InterDigital, MOSAID, Qualcomm, Rambus, Tessera, Walker Digital and Wi-LAN.

Licensing agents

These entities (eg, Fairfield Resources, Fluid Innovation General Patent, ipCapital Group, IPValue and ThinkFire) function as intermediaries by attempting to assist IP owners in finding licensees. Entities that function under this business model often call themselves IP advisory, IP consulting, IP management or technology transfer firms.

While the amount, quality and depth of services vary, to some degree in shape or form these firms all earn retainer and/or success fees by assisting patent owners to find licensees. Accordingly, these entities may function more like traditional consultants where the patent owner stays very involved in the licensing process, or they may function more like IT companies where the patent owner essentially outsources patent monetisation and is not involved in day-to-day licensing operations, but still collects a majority of any licensing revenue.

The various licensing agents also differ as to whether they engage in carrot licensing or stick licensing activities. In the latter case, these entities tend to engage in activities that start to closely resemble the PLEC business model.

From left

Dr Alexander Poltorak

Chairman & CEO, General Patent Corporation

John Cronin

Founder and Chairman, ipCapital Group

Litigation finance/investment firms

These entities are a cross between IP acquisition funds and PLECs. Like IP acquisition funds, they operate as general partners of a limited partnership and raise money from large institutional investors and high-net-worth individuals. Like PLECs, however, their stated goal is to acquire a financial interest in patent portfolios for assertion. The assertions typically take the form of targeted letter-writing campaigns, followed by patent infringement suits against those letter recipients who refuse to enter into non-exclusive licenses.

Variances in the model (and from a PLEC) include the level and nature of ownership or participation (eg, equity v debt) that the firm takes in the patent portfolios being asserted or in the patent-owning entity itself (typically an LLC formed for the purpose of assertion).

Altitude Capital, IP Finance, Rembrandt IP Management, NW Patent Funding and Oasis Legal Finance are all prime examples of litigation finance/investment firms.

IP brokers

Bramson & Pressman, Iceberg, Inflexion Point, iPotential, Ocean Tomo, PCT Capital, Pluritas, Semiconductor Insights and ThinkFire all function in essentially the same way as the licensing agent model discussed above. The key distinction, however, is that they seek to assist owners of IP (primarily patents) in finding buyers rather than licensees. Also, unlike licensing agents, they operate on both the sell-side and the buy-side. In the latter case they often assist technology companies in acquiring patents having strategic (ie, defensive) value *vis-à-vis* their competitors.

A typical engagement between an IP brokerage firm and an IP owner is, therefore, shorter than a licensing agent firm. This is because once the IP is sold, the IP broker takes a percentage of the sale as a success fee and the engagement is done – it is a one hit and done engagement. Thus, there is no opportunity for recurring revenue, unless the client later decides to sell additional IP. In contrast, buy-side brokerage engagements can continue indefinitely as the broker's client strengthens and extends its IP position over time.

Entities that function under this business model also often call themselves IP advisory, IP management, IP merchant banking or technology transfer firms. While the amount, quality and depth of services vary, when representing a seller, in some shape or form they all prepare a pitch package, identify

potential buyers and earn retainer and/or success fees by actually assisting IP owners in negotiating the terms and conditions of the sale agreement with buyers.

These entities may function more like traditional consultants where the IP owner stays very involved in the process; or they may function more like IT companies when the IP owner essentially outsources the monetisation of the IP and is not involved in the day-to-day sale efforts, but still collects a majority of the sale revenue (minus the broker's commission and, in some cases, the broker's expenses). In contrast, buy-side, brokerage engagements almost always involve a close working relationship between buyer and broker.

IP-based M&A advisory

These are entities that operate in a traditional investment banking model. They advise technology companies in their M&A activities and earn fees based on the value of the entire deal (or apportioned according to the value of the IP within the deal). Whether doing sell-side or buy-side engagements, these entities obviously focus on the IP assets within contemplated corporate transactions where IP is driving, or is a major component of, the transaction.

Services provided by such entities include IP due diligence, consultation on the integration of IP assets and operations as a result of M&A activity, and IP deal structuring, as well as general consultations related to contemplated investments, mergers, acquisitions, divestitures, joint ventures and other corporate transactions.

Second-generation IP investment banking involves not just maximising IP value in the context of a traditional corporate acquisition or divestiture, but actually sourcing the transaction based, at least in part, on IP considerations. Here the IP investment banker helps to identify potential corporate acquisition targets or acquirers with complementary IP assets.

Analytic Capital, Blueprint Ventures, Inflexion Point, PCT Capital and Pluritas are examples of firms offering such services.

IP auction houses

These are entities that are attempting to do for the patent marketplace what famed London auction houses Christie's and Sotheby's did for the antique and art marketplace. That is, entities such as IP Auctions GmbH and Ocean Tomo are auction houses that hold multi-lot, live auctions for patents with the intent of providing a marketplace for facilitating the exchange of such historically illiquid assets.



From left
Andrew Allemann
 President, Fluid Innovation
James Malackowski
 President and Chief Executive Officer,
 Ocean Tomo LLC

While there are various auction formats and structures (English, Dutch, etc), such auctions enable sellers to offer one or more patents according to a pre-determined set of terms and conditions and allows the auction house to charge listing fees, attendance fees, buyers' premiums and/or sellers' commissions. Also, other entities such as FreePatentAuction.com and IPAuctions.com aim to be the "eBay of patents" by offering online patent auctioning services.

Online IP/technology exchanges, clearing houses, bulletin boards and innovation portals

These entities function like the business-to-business websites that became the rage during the late 1990s dot-com boom. They offer web platforms and interfaces intended for patent and other IP assets. Essentially, this model can be thought of as online classifieds like Craig's List, but for IP.

Within the model, there are variances such as whether listing fees are charged to patent owner/sellers in addition to, or versus, back-end fees for successful patent sale or licensing transactions. Additional variances include whether these sites are public and browsable for free, or whether they are private, member-only sites that require registration (and presumably a registration/membership fee). Some of these sites also offer forums, bounties, challenges and idea exchange platforms that aim to spur innovation and thus create new IP.

InnoCentive, NineSigma, Novience, Open-IP.org, The Dean's List, Tynax and Yet2.com are all prime examples of such entities.

IP-backed lending

These are companies such as IPEG Consultancy BV and Paradox Capital that provide financing for IP owners. They act

either directly or as intermediaries, usually in the form of loans (ie, debt financing), where the security for the loan is either wholly or partially IP assets (ie, IP collateralisation). Thus, these parties often function as intermediaries between borrowers and commercial lending institutions, such as banks. Unlike traditional bankers, who focus on accounts receivable and tangible assets, however, these IP-backed financiers take into account a borrower's or target company's (potential or actual) IP assets in structuring a financing transaction.

Variances in this model include entities which deploy their own capital (and thus resemble IP investment firms), or which maintain a network of technology or industry-specific investors to whom they refer IP owners (and thus resemble patent brokers).

Royalty stream securitisation firms

These are entities such as alseT IP and UCC Capital that counsel, assist and/or provide capital to patent owners performing IP securitisation financing transactions (which resemble the more common mortgage-backed securities). In such transactions, the patent owner sells the patents underlying the transaction to a bankruptcy-remote entity (BRE) and the BRE grants a licence to the patents back to the original patent owner. The BRE in turn issues notes (ie, IP-backed securities) to investors to raise cash to pay the original patent owner the agreed-upon purchase price. The notes are then backed by the expected future royalties to be earned from licensing the underlying patents (to the original patent owner and/or third parties). At the end of the transaction, the original patent owner has essentially raised funds much more cheaply than a loan backed by its traditional assets. Thus, the IP-backed notes will generally be higher-rated

commercial paper reflecting the quality of the patents and not necessarily the overall creditworthiness of the original patent owner.

Patent analytics software and services

These are entities that provide advanced patent search and analytics software tools. These tools allow patent owners, prospective buyers, attorneys, investors and other players in the IP marketplace to obtain various due diligence intelligence and data points about a single patent or patent portfolio.

The software tools and platforms provide varied outputs related to patent quality such as validity probabilities, maintenance fee-related life expectancies, various infringement-related metrics, prior art analysis, related patent analysis, citation-related metrics, etc. These entities earn revenue from pure software sales/licences, as well as consulting fees.

1790 Analytics, Intellectual Assets, IP Checkups, Next Steps Research, Patent Café, PatentRatings.com, TAEUS, The Patent Board and TOPCAP are all examples of players that implement these IP business models.

University technology transfer intermediaries

Texelate and UTEK are examples of such entities that function as IP development companies, IP acquisition funds, licensing agents and/or patent brokers, but focus on the niche university technology transfer (ie, licensing) market.

The choice to focus on the university market by such entities is not surprising, given that in the 2005 fiscal year, US universities and research institutes spent over US\$42 billion in R&D, received over 3,278 US patents and executed over 4,000 licenses.

Emerging business models

Having described the business models existing in this new era of IP for the masses, we now turn to the newest players.

IP transaction exchanges and trading platforms/IP transaction best practices development communities

In further attempts to make IP a more liquid asset class, plans have been announced to create traded exchanges (whether physical or online locations) similar to the NYSE and NASDAQ. Within these exchanges, yet-to-be-created IP-based financial instruments would be listed and traded much like stocks are today.

Another variant involves an online trading platform where IP buyers and sellers can

come together to execute transactions based on a set of agreed rules developed by a best practices steering committee composed of major corporate buyers and buyer-sellers.

Gathering 2.0 and the IP Exchange Chicago are examples of two such initiatives.

Defensive patent pools, funds and alliances

This category includes several different types of defensive entity. One was born in reaction to the established PLEC and institutional patent aggregator/IP acquisition fund business models described above. These entities, such as Constellation Capital, Open Invention Network and Pelorus Advisors, seek to acquire portfolios of patents selectively for defensive reasons. They often focus on one technology area or in one industry segment, and are inspired by a "let's take these patents off the street before the asserters get them" attitude.

This model results in multiple operating companies – which may have not previously cooperated, done business or even respected each other – joining financial and other resources to create an independent entity. The aim is to acquire potentially problematic patents and license them to anyone willing to share the financial cost of acquiring the patents and the management overhead of administering the pool.

One variant of this basic model, referred to as catch and release, involves a consortium of operating companies that buys patents which have been put on the market (eg, via auctions, brokers or direct sale), licenses them to the members and then sells the patents – preferably, though not necessarily – at a profit. In another variant, referred to as a library fund, a group of corporate investors pool capital to buy patents that may be of interest to certain large operating companies who are known to be aggressive in asserting patent claims against competitors. If one or more of the alliance members is threatened or sued by one of these companies, the affected member(s) can check out the patents to use in a counterattack.

Technology/IP spin-out financing

This emerging business model is best described as being organised as a traditional venture capital (VC) or private equity firm; but one that specialises in spinning out promising (non-core) IP which has become stranded within larger technology companies, or creating joint ventures between large technology companies to commercialise the technology and monetise the associated IP.

Thus, the revenue for this emerging business model is the same as a traditional VC or private equity firm – achieving a high ROI once a portfolio company is sold, goes through an IPO or sometimes evolves into an IP licensing company.

Altitude Capital, Analytic Capital, Blueprint Ventures, Inflexion Point, IgniteIP and New Venture Partners are all examples of companies implementing this business model.

Patent-based public stock indexes

This emerging business model is the evolution of the established patent rating software and services IP business model described above. That is, once the entities offering these software tools and platforms realised that nearly 80% of the value of a US publicly traded company now comes from intangible assets, and that they possessed tools to measure the quality of arguably the largest part of those intangible assets, then it became clear that another potential source of revenue would be the creation of formalised stock indexes based on their existing software tools and platforms.

Put in different terms, the patent rating software and services industry theorised that investing in stocks with valuable patents may allow investors to commit a meaningful and sustainable portion of their assets to IP and allow them to outperform other investment strategies. Thus, they sought out different algorithms to create baskets of stocks using the quality of a publicly traded company's patents as the primary selection factor.

Revenue from such an emerging business model includes the sale of equity research and the licensing of such indexes (eg, Ocean Tomo Indexes, Patent Board WSJ Scorecard) to ETF, mutual fund and other investable financial instrument issuers.

More to come

It is clear that the players, and their attitudes, that dominated the feudal period will no longer carry the day. The newly established and emerging IP business models (and the players exercising such models) are not going away. That is, neither US Supreme Court decisions such as *eBay* and *KSR*, nor any of the so-called anti-patent troll legislative proposals floating through Congress, will force intermediaries out of the market.

With as much as three-quarters of the value of publicly traded companies in America coming from intangible assets, and global IP licensing revenue now being measured in the hundreds of billions of



dollars, there is simply too much economic justification for such entities to exist. In fact, new players implementing the IP business models described herein are continually surfacing. And creative new IP business models will surely come into existence. Why? Quite simply, the business of IP (ie, the IP marketplace) itself is fertile ground for innovation! ■

From left
Nathan Myhrvold
 Founder and CEO, Intellectual Ventures
Richard J Faubert
 President and CEO of AmberWave
 Systems Corporation

Raymond Millien is the CEO of PCT Capital LLC, an IP advisory and asset management firm

Ron Laurie is co-founder and managing director of Inflexion Point Strategy, LLC, an intellectual property investment bank based in Silicon Valley

This paper reflects the authors' current views and should not be necessarily attributed to their former, current or future employers or their respective clients