

NPEs And Patent Aggregators— New, Complementary Business Models For Modern IP Markets

By Daniel Papst

The ever-growing importance of innovation for economic growth has changed the role of Intellectual Property (IP) rights, especially patents, in business. They are no longer seen as merely a means of protecting an innovation, but also as marketable assets that can be acquired, held, licensed and sold strategically—either to attack competing businesses within a market, or to defend one’s own business from such attacks.

This “new view” on IP has created a flourishing, new marketplace for IP rights, and has led to the rise of new, highly specialized companies that seek to create and extract value from this market by either “offensive” or “defensive” patent aggregators. They specialize in the strategic buying, licensing and selling of patents rather than doing research or manufacturing anything—and they are thriving. The success of these entities has, in fact, changed the whole structure of the IP economy, which in turn has raised many concerns within the wider industry. Do these firms contribute to an economy that furthers research and innovation, or do they hinder it? What is it exactly that these companies contribute to the IP-economy? And what are the implications for other firms’ IP and patent rights business?

This paper tries to explore these questions by a) giving a short introduction to the idea of “offensive” and “defensive” IP aggregation strategies, and by b) reviewing some specialized companies that are using business models derived from these strategies. The article looks at what value these firms create, respectively, and how that value is created, and then interprets the findings. The business models and firms reviewed are: offensive patent aggregation (“OPA”) and the non-practicing entity (“NPE”) as well as defensive patent aggregation (“DPA”), patent pools and patent aggregators.

OPA and the NPE business model

The first strategy, OPA, comprises the acquisition of patents for the sake of licensing them. Patent owners that pursue this strategy usually seek to extract value from their IP assets by licensing or, if necessary, enforcement through litigation. OPA might be used

by “practising” businesses—*e.g.* manufacturers—or research entities, universities, or even single inventors, who use OPA as one of several strategies within their IP asset management, to license patents before an infringement occurs. It is also widely used by so called “non-practicing entities” or “NPEs.”

An OPA NPE could be defined to be a patent owner which neither carries out research nor files for patents, nor uses patented innovations to manufacture respective products. Instead, it seeks to generate revenue mainly or even exclusively by licensing or selling patented inventions to “practicing” businesses such as manufacturers that, at the time when licensing royalties are claimed, already uses the NPE’s patent. One could argue that the user of the covered technology is therefore in need to take a license (“stick licensing”). NPEs might be founded as start-ups (such as the U.S. based, high-profile NPE, “Intellectual Ventures”), or as spin-offs of huge manufacturers, research firms or even universities which seek establishments capable of implementing an OPA strategy. Or, sometimes, manufacturing or research companies that face bankruptcy or go out of business might become NPEs in order to extract value from IP and patents which they may not use anymore (such as “Papst Licensing,” see Box 1).

The NPE business model may seem to be easy to implement. But in order to be successful, NPEs need to be able to answer complex questions, such as:

- Is a given patent or a family of patents valid, and is its or their quality good enough for an enforcement-based licensing approach?
- Is the respective patent used in the market place (infringed), and who are the companies using it?
- Where and what do these infringers produce and sell?

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Box 1: Papst Licensing—A Widely Imitated Manufacturer Turned Into An NPE

Papst Licensing is an example for a manufacturer-turned-NPE. The firm has roots as a leader in electric drive technology for tape recorders and players and other data storage media such as hard disk drives, as well as electronic cooling applications (under the name of “Papst Motoren”). In the 1980s, predominantly Asian companies infringed its patents on a massive scale, while undercutting the prices of its products. As a medium-sized company, Papst Motoren was unable to proceed effectively against the infringements of its patents in Asia and the U.S., and found itself in serious economic difficulties. In 1992 the company’s lenders forced the sale of Papst Motoren without bothering to value its intellectual property portfolio, which included more than 600 patents and patent applications. Georg Papst turned necessity into a virtue by making a high-risk investment in buying back the respective patent portfolios and founding the NPE “Papst Licensing.” Its mission was to conclude licenses with the infringers of Papst Motoren’s patents, located mostly in Japan, Korea and Taiwan. The business model proved successful and more than 160 licensing agreements were concluded with many well-known companies in the IT and electrical engineering industry. All present hard disk drive manufacturers are licensed by Papst Licensing, as well as most DC brushless fan manufacturers. Inspired by this success, Georg Papst’s sons, Constantin and Daniel, followed him into the business. Today, Papst Licensing offers practical support to third parties facing infringements of quality patents. The aim is to secure licenses from infringers. Operating independently of banks and investors, Papst Licensing is today a third generation business committed to licensing and advancing innovation through negotiations in search of an amicable resolution. Where no such solution can be found, Papst Licensing is experienced in enforcing its rights in court, especially in the U.S., the Netherlands, Switzerland, Finland and Germany.

- Where and to whom should the patent or the patents be licensed?
- Which kind of licensing agreement should be reached?

Once these questions are answered, NPEs need to be able to either negotiate licensing agreements with infringers—or litigate before court in order to reach a settlement. In case they are successful, NPEs also have to be able to ensure compliance with the licensing agreement, and to handle collection issues in cases in which licensees do not comply with the agreement or irregularities with payments occur.

In order to accomplish these tasks, NPEs need to build up and maintain know-how in global patent and market research and screening, licensing and corporate law, negotiation and litigation tactics, compliance and compliance enforcement, and fee collection.

IP Market Inefficiencies

In order to understand why NPEs have entered the market and what value they and their expertise

might—or might not—bring about, one has to review some IP-economy “basics.” Firstly: The separation of practicing a patent and practicing of the inherent patent rights, and the specialization on one of these two sides which are the very foundation of the IP market and economy.

Both these phenomena aren’t new. Ever since the assembly line of the early 1900s ushered in an era of specialization and turned businesses and workers into specialists, inventors no longer need to manufacture or sell something to make a significant contribution to economic growth. Thomas Edison, for example, was primarily a licensor of patents. He was in the “invention business,” very much in the same way as are

modern research firms and facilities. Edison realized that he was neither an entrepreneur nor an industrialist, so he focused on what he knew best—invent. He filed and owned over 1,000 patents, and many of them were licensed to companies to manufacture goods or deliver services. In fact, Edison owned a patent for a time clock, and the firm that licensed this patent later on became what today is known as IBM.

Edison’s idea of separating research, innovation and the filing of patents from manufacturing is at the very core of today’s IP economy, since it is this understanding of patent rights as tradable goods that creates IP markets in the first place.

These markets play a vital role for innovation and economic growth: A myriad of single inventors, small, inventive businesses, universities, research firms and research departments within large corporations file for patents based on their innovations although often they know beforehand that they will not, in fact, be able to bring their innovations to market

(either because they lack the resources, or they willingly choose not to for strategic reasons). But they innovate anyways—comforted in the knowledge that they can turn to the IP markets to find ways to extract value from their innovations, *e.g.* by selling or licensing them to manufacturers which buy patents or licenses in order to use them, or for protective or counter-assertion reasons.

However, there is a second topic that needs to be reviewed while reviewing the NPE business model: The IP-markets which inventors might turn to are not as efficient as they could be. Not every company that should buy or license a patent does so. Patent infringement and the unauthorized use of intellectual property are, in fact, on the rise. In most industries, the illegal use of a patented invention becomes common once the invention has established itself on the world's markets. While the infringers enjoy the benefits from the illegal use, the inventor is often left empty-handed—that is, if he or she does not (or cannot) actively assert his or her rights, which is very often the case.

Box 2: 250.000 Euro Just For Re-Instating A Patent

German entrepreneur Peter Jöst experienced how risky it can be to take a stand against infringers. He and his medium-sized manufacturing business had to go to the Bundesgerichtshof (the federal court of justice in Germany) in order to re-instate a patent which he then had held for several years. Jöst's business manufactures abrasive disks for industrial use, and had patented a highly-innovative grinding disk that lasts two- to three times longer than other disks on the market and provides exceptional dust extraction. Once the patent had been granted, more and more large, international corporations started to infringe upon it. Jöst went to court to sue them—with less than no success: The infringers counter-sued, claiming that his patent was invalid. Worse than that: They even convinced some of the judges and courts. Jöst had to litigate—and pay—his way through several instances up to the Bundesgerichtshof, which finally found his patent to be valid and his patent rights to be sound. According to publicly available information, this ordeal cost Jöst more than 250.000 Euro—and did not result in anything but the re-instating of his patent's validity.

The Issue of Enforcement

Asserting one's patent rights is a challenge. Given the nature of global manufacturing and worldwide trading, it is very hard for patent holders to even find out about cases of infringement, or to identify the infringer. Those businesses that find out anyways (*e.g.*, by chance), often lack the resources, time and know-how to enforce their rights locally, let alone internationally. If they nevertheless attempt to do so, there is a serious risk that they have to face well-capitalized, huge corporations in lengthy, expensive and draining disputes until they will have to resign and give up (See Box 2).

This can be very harmful for businesses—and for innovation. Studies have shown that many companies, small and medium-sized businesses above all, decide to do nothing against patent infringements they have learned about because they do not want to make the effort or take the risks. Needless to say, acting or better not acting this way is harmful to innovation: Infringements must be pursued to ensure that patent holders can successfully benefit from their patent rights and keep innovation at the cutting edge. If this is not accomplished—why bother to innovate? If businesses can readily infringe patents without penalty, IP markets become inefficient.

So, to summarize the short review of IP-economy “basics”: Inventors who do not want to use their patents themselves need markets where they can sell or license these patents. Such markets exist, but they are not overly efficient: Hindrances to patent rights enforcement make it easy to infringe on intellectual property at low or no cost.

Strengthening Demand Within IP Markets

So, do NPEs bring value to an IP-economy in the discussion outlined above? And, if so, what value is it?

The short answer to the first question is: Yes, they do. NPEs are an important part of the “demand” side of IP markets, they boost competition and lower IP prices, and they provide patent enforcement where needed.

As companies that have to buy patents in order to sustain their business, NPEs offer a viable “Exit” for innovators and manufactures that are looking for ways to extract value from patents by other means than “practicing” or using them in their products. As such, they boost competition within IP markets and, by doing that, put pressure on the prices for IP rights. Additionally, since they cannot afford to buy “bad” patents which are either very hard to license or cannot be licensed at all, NPEs are usually very selective about which patents they do or do not buy.

They therefore also serve as filters which sort out low-quality patents.

NPEs are not only buyers of patents, but can also be “enforcers.” Since “stick licensing” is one of their business tactics of choice, these NPEs have to be very good at researching patent infringements, at license negotiations, and at conducting litigation. Most of the enforcement oriented NPEs in the market today have a lot of expertise in all of these fields—and are using it constantly to screen whole “IP landscapes” for patent infringements. This eases, if not even solves, the issue of enforcement: NPEs “police” the IP-economy for reasons of self-interest, raising the cost of patent infringement. The rising prices incentivizes manufacturers to comply with IP laws, *i.e.* to buy patents or taking licenses—increasing the demand for patent rights even further.

All this is not to say that the enforcement NPE business model does not have its downsides: There are issues with NPE tactics, such as “holdup,” *i.e.* the suing of manufacturers with patents which apparently lack quality (*e.g.* obvious validity problems or no infringement). However it is to say that non-practicing entities can—and do—add value to the IP-economy in that they increase market efficiency which propels innovation.

DPA, Patent Pools and Patent Aggregators

The second strategy in the license market is defensive patent aggregation or DPA. Thereby a “patent pool” is created in order to keep patents which touch on a potentially important invention or technology out of the hands of competitors or NPEs.

DPA was and is—as is OPA—widely used by large corporations which often try to file, buy up and “pool” patents which are critical to their business. It is also the strategy which is at the core of the recent business model of “patent aggregators.”

Patent aggregators act as “third party patent pools.” They purchase patents and patent rights on behalf of their investors, *e.g.* inventors and manufacturers which pay a fixed annual fee, to mitigate both the risk and the cost of litigation on the innovations protected by these patents. In return for the fee they pay, investors get licenses of the patents in the pool.

Two ways of “pooling” or “aggregating” patents have established themselves on the market. The first one might be described as “catch and hold,” and it is so far used by RPX Corporation, the firm that is said to have invented the patent aggregator business model. RPX buys “dangerous” patent rights off the open market, *i.e.* patents that might, if enforced, pose a threat to RPX clients. The firm “removes” these patents and

spreads the costs of this removal across its investors (among them *e.g.* IBM, Cisco or Hewlett-Packard). RPX *modus operandi* is to buy patents and hold them within an “IP library,” to which every investor gets access. The decision which patents are to be bought for this library is made by the firm’s staff after extensive due diligence.

The second way is used by Allied Security Trust (“AST”), which, while working towards the same results as RPX, is using a tactic that might be described as “catch and release.” AST is a member-owned trust that has been set up by several corporations (Motorola among them). The trust’s members contribute to the expenses of the trust, and finance the acquisition of patents. The trust uses these funds to purchase patents which some or all of its members are interested in. The members behind a patent purchase are then licensed to the patent. AST does not hold on to patent rights for long, but sells or even donates them after a short period of time (usually after one year or less). The decision of which patents to buy, or when to sell them, is not made by trust staff, but by experts from the trust’s member firms. They decide whether or not they are interested in ante up funds for a purchase; the fund then collects the money from the interested members and bids for the patent.

A Countermeasure to OPA and NPEs

To understand the value of DPA and patent aggregators, one needs to take a closer look at the implications of OPA and the NPE business models: The emergence of NPEs has put manufacturers and service providers under pressure, and increased the risk and cost of having to face litigation. (It also has brought up the risk of holdups, which will not be discussed here).

NPEs are, as they do not offer the products or services the patents themselves cover, much less vulnerable to “counter attacks” by patent owners with whom they are seeking a license agreement. If a manufacturer which is a global leader in a certain technology field tries to enforce patents against a competing firm, this competing firm might be able to assert other patents against the manufacturer, forcing it to take licenses to patents. IBM was, *e.g.*, known for such a “sue me with one patent and you will be sued with ten of mine” strategy. But such a strategy would apparently not work against an NPE.

Furthermore, NPEs often do not have to meet SEC disclosure requirements in the way publicly traded corporations have to, which gives them an “information advantage” (corporations are often required

to reveal precise amounts for their revenues and profits, the geographic origins of these revenues, and sometimes even breaking out revenues by business and so forth).

The emergence of NPEs, which are specialists in the field of IP licensing, litigation and enforcement, has not only increased the efficiency in IP markets it has also created an asymmetry within these markets putting manufacturers at a certain disadvantage.

Re-Establishing Symmetry

So, what effects do DPAs have on the IP markets? And what value do they contribute?

First, firms like RPX or AST act as buyers, bringing in money from the “operating businesses” to the upstream license market to pay for intellectual property. They also reduce the number of patents on the market.

Second, they somewhat re-establish symmetry in the IP economy. Whereas NPEs are causing competitive patenting and—if they act like “trolls”—increase the risk of holdups, DPAs counterbalance these effects by serving as a countermeasure to them.

But the DPA business model does other things as well. One example: It allows non-patent-holding manufacturers access to the synthesized “pool.” In other words, a non-patent-holding company or a company with very few patents can obtain the operating freedom in a business field by purchasing a membership with a respective patent aggregator. More importantly, a firm entering a business field as a non-patent holding manufacturer can license a patent portfolio from an NPE, and then acquire operating freedom by joining a DPA. As a result, with the presence of NPEs and DPAs, a newcomer with no patents can easily replicate the structure and operation of a patent-holding producer through market transactions. In this sense, one of the greatest benefits DPAs bring to the patent market is

that they enhance competition in the downstream product market by providing operating freedom to non-patent holding companies.

In the past some defensive patent aggregators have argued that NPEs increase costs and risks for practicing entities. They defended the patent “practicing” companies by preempting the NPEs but it should not be missed that they discharge complementary functions in a dynamic license market.

Concluding Remarks

What is the role of the “new” IP strategies and business models within the IP economy? Reviewing the thesis and facts given above, it is clear that both OPA and DPA create demand within IP markets which seems safe to say, is a good thing for patent owners. Furthermore, while OPA strategies and NPE businesses create value by bringing competition and increased efficiency to IP markets, DPA and patent aggregators hedge these markets and the businesses within from the “downsides” and the risks of the former two (such as trolling and “patent hold ups”). This, it seems, is also positive.

An answer to the question of whether or not these new strategies and business models further innovation, can, however, not be drawn within the limits of this paper. One could say that increased demand for IP, *i.e.* patents, incentivizes patent filing and, before that, innovation. But that would be synonymous to ignoring the issues that might stem from this, *e.g.* the stacking-up of low-quality patents.

Businesses within the IP-economy should, nevertheless, get used to these new strategies, firms and services.

OPA, DPA, NPEs and patent aggregators are here to stay. Other businesses within the IP markets will have to figure out how to use them—and they should, too, since they do create value. ■