Creating an organised IP rights market in Europe

With trade in IP rights attracting heightened attention and financial markets becoming increasingly important, the concept of an organised IP rights market is gaining traction. From a geo-strategic point of view, Europe must consider the role that it hopes to play in this global phenomenon

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In the knowledge economy, IP rights have become a valuable commodity and are gaining in importance as a strategic competitive advantage. Access to IP rights is crucial for both manufacturers and other companies that wish to develop or expand their product range.

This raises the issue of the optimal allocation of IP rights. Today, companies and research organisations already trade and license patents. The sale or licensing of patents to third parties increases innovation and technology transfer, generates economic value and provides access to capital. However, the market lacks transparency, and uncertainty as to the quality and value of patents and technology drives up transaction costs. Trading IP rights in a more formal way could facilitate a more efficient allocation process through improved transparency and more accurate pricing mechanisms, thereby affording the greater transactional certainty that the market needs.

In order to move towards a more efficient, organised rights market, and in the interests of fostering trade and engaging with investors, three questions must be answered:

- How might such a market be designed?
- Which financial products have tradable potential?
- What challenges will arise for market participants, policy makers and the legal environment?

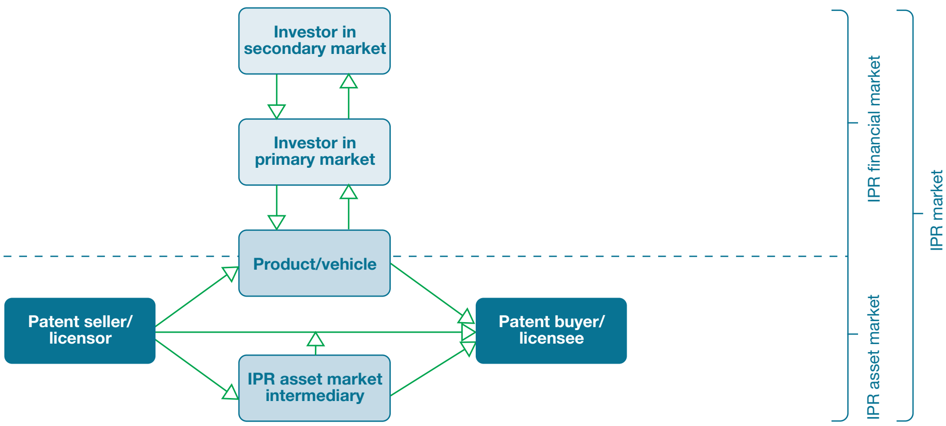
This article aims to answer these questions. In order to ensure that the results it yields are useful and representative, it investigates the concept of an organised market by focusing on a major type of IP right: patents.

Reasons for engaging in IP rights market

An IP rights market requires a certain number of transactions in order to be viable. Therefore, potential participants - and their reasons for engaging in IP rights transactions - must first be identified. The top 1,000 European Patent Office (EPO) applicants were surveyed in order to obtain a representative overview of potential participants. This revealed that 84% of applicants are active in technology-intensive industrial sectors, such as chemistry, electrical engineering and mechanical engineering. The sample is comprised mainly of companies with more than 500 employees.

One significant problem is that most companies still "show low to mediocre levels of familiarity" with patent transactions. However, those that already engage in IP rights transactions are planning to intensify these activities. Especially for the top applicants at the EPO, the European market is the preferred forum for IP rights transactions, although the Asian market is also seen as increasingly important.

Graphic representation of an organised patent rights market



Corporations, research organisations and small and medium-sized enterprises are the chief suppliers of patents. They are aware of the highly skewed value distribution of their patents; whereas some are declared to be worth hundreds of millions of dollars from their owner's perspective, others are practically worthless. Analysing the information on monetary value shows that one-third of patents are valued at less than €30,000.

The supply side of patent transactions is driven by the twin objectives of increasing revenue and transferring technology. In order to retain the right to capitalise on the future development of their technology while simultaneously generating profits beyond the product market, most companies prefer to license their IP rights, rather than transferring ownership. Patent suppliers largely rely on personal networks or patent attorneys to facilitate transactions; intermediaries or market agents such as patent funds, patent pools and trading platforms are less influential and are still regarded with scepticism.

The survey of the top EPO applicants reveals that IP rights transactions are characterised by high levels of uncertainty and high transaction costs. The main obstacles include calculating a patent's economic value, identifying potential transactional parties and evaluating the novelty of a particular technology. When asked about the most desirable attributes of an organised IP rights market, survey respondents cited an international dimension, price transparency, sufficient supply and demand, stable asset quality and the availability of information on products and market participants.

Market model

Most stakeholders describe the existing patent market as a "black box". Creating a sufficiently large, organised market structure would ensure transparency, depth and liquidity. Together with adequate governance rules, the development of such a structure would keep transaction costs

Article background

The findings of this article are based on the study "Creating a Financial Market for IPR in Europe", which was undertaken on behalf of the European Commission by the Institute of Technology Management at the University of St Gallen in Switzerland and the Fraunhofer Centre for Middle and Eastern Europe in Germany. The study was conducted in 2011 and has recently been published by the commission. In order to gain additional insights into practitioners' viewpoints, we surveyed the top 1,000 patent applicants at the European Patent Office and carried out interviews with over 80 experts from the fields of IP rights, technology transfer, the patent and technology markets, patent infringement, patent aggregation and banking. The study can be downloaded from the website of the European Commission's Directorate General of Enterprise and Industry at:

http://ec.europa.eu/enterprise/policies/innovation/policy/intellectual-property/index_en.htm

The emergence of IP-based financial products

Vehicle		Examples	Main funding market level	Technology suitability (early-stage or mature)
Private	Equity-based	Patent funds (eg, Patent Select I & II and Patent Invest 1, Germany)	Financial market	Both
	Debt-based	Patent securitisation (eg, Yale University, United States)	Financial market	Mature
Public-private		Public funds (eg, LSIP, Japan and Intellectual Property Bank, Taiwan)	Financial market	Both (especially early-stage)
Commoditisation		IPXI's Unit Licence Rights	Financial and asset market	Both

reasonably low and asset pricing efficient.

An organised IP rights market can be seen as a tool that would create economic value by allocating knowledge in a way that maximises wealth. What drives this process is the motivation to make knowledge broadly accessible to other economic participants in exchange for financial benefit. At present, a lack of market transparency prevents rights holders from taking advantage of opportunities to monetise their knowledge. Trading IP rights on a European market that attracted global players would increase participants' visibility and competitiveness; it would offer enhanced sales potential to a large pool of potential acquirers and access to rights from a broad range of providers. Facilitating the sale of IP rights would increase the efficiency and commercial orientation of research efforts throughout Europe. This would boost growth in innovation-intensive sectors of the economy, to the benefit of society as a whole.

An organised IP rights market must differentiate between the asset market (where IP rights are traded) and the financial market (where investors can invest in IP rights). These two markets are the model's basic components. This structure follows classic financial market concepts; at its core, it proposes an organised asset market that is connected to the financial market by financial products or special vehicles.

Asset market

The European asset market for patents is characterised by a relatively low level of homogeneity. This is a function of certain characteristics of patents, such as their dependence on context and the additional tacit knowledge required for their successful application. Every patent is unique and non-interchangeable. Moreover, the asset market lacks a generally accepted valuation method and is highly fragmented.

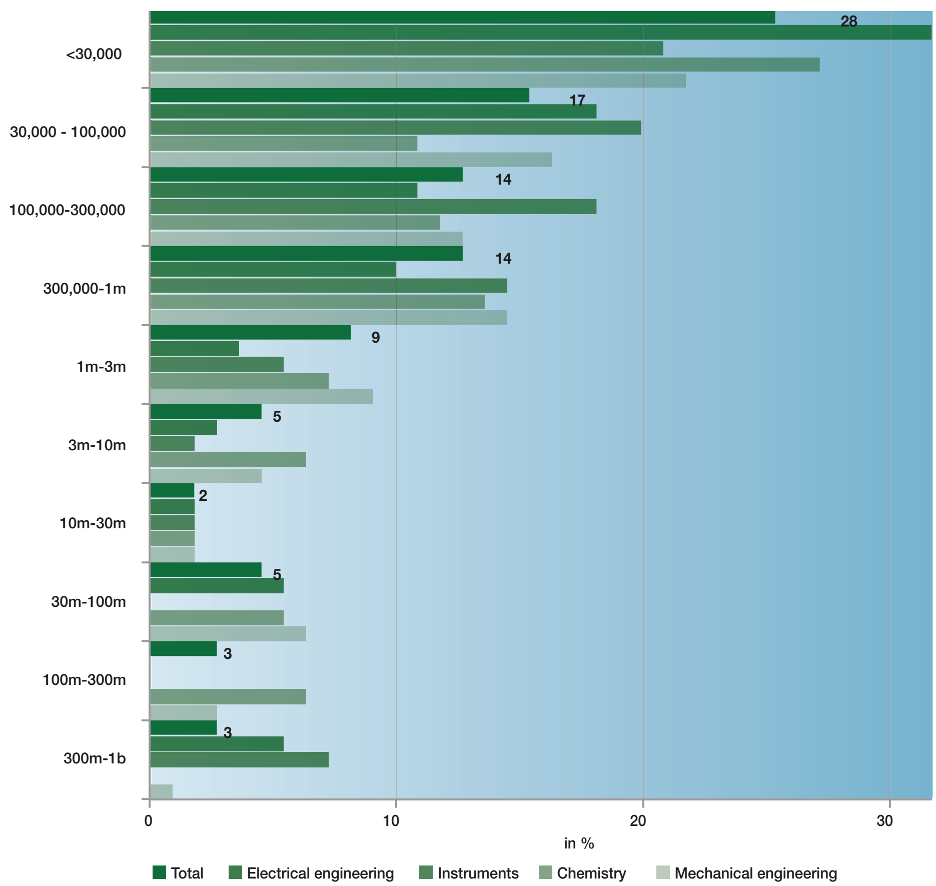
The organised market aims to address these inefficiencies and lay the foundations for the broad, financially driven capitalisation of innovation. In many cases, knowledge is tacit because it is bound to particular people or organisations. Extracting that knowledge can be costly. In fact, profitability is fundamentally connected to the extraction of this tacit element. An organised market would provide a financial incentive to make such knowledge explicit. Following the general principle of efficient allocation within markets, knowledge would likely be distributed to those participants that can derive the greatest economic benefit from it, since they would probably be willing to pay the highest price.

When patent vendors or licensors transfer their IP rights to patent acquirers or licensees for financial consideration, they do so either directly or indirectly. In the latter case, vendors and acquirers utilise the specialist know-how of intermediaries. The value of these intermediaries lies in identifying transactional partners and providing services such as portfolio management and valuation know-how.

Financial market

The financial side of the IP rights market directly connects capital to innovation, thus promoting research activity and incentivising companies and research institutions to develop inventions. This

Value structure of patent portfolio



effect could narrow the funding gap between the research stage and the development of prototypes.

In the financial market, vehicles are used to create financial products based on IP rights. The primary market is created when such vehicles issue shares, bonds or hybrids. A secondary market is established as soon as these financial products can be traded between investors. Again, the proposed structure is derived from classic financial markets.

Thus, the market provides for liquidity and homogeneity of assets and resolves the issue of uncertain valuation. It provides easy-to-understand products, cash-flow predictability and an organised structure (preferably based on an electronic platform), enabling financial products based on IP rights to be traded on a large scale.

Financial products

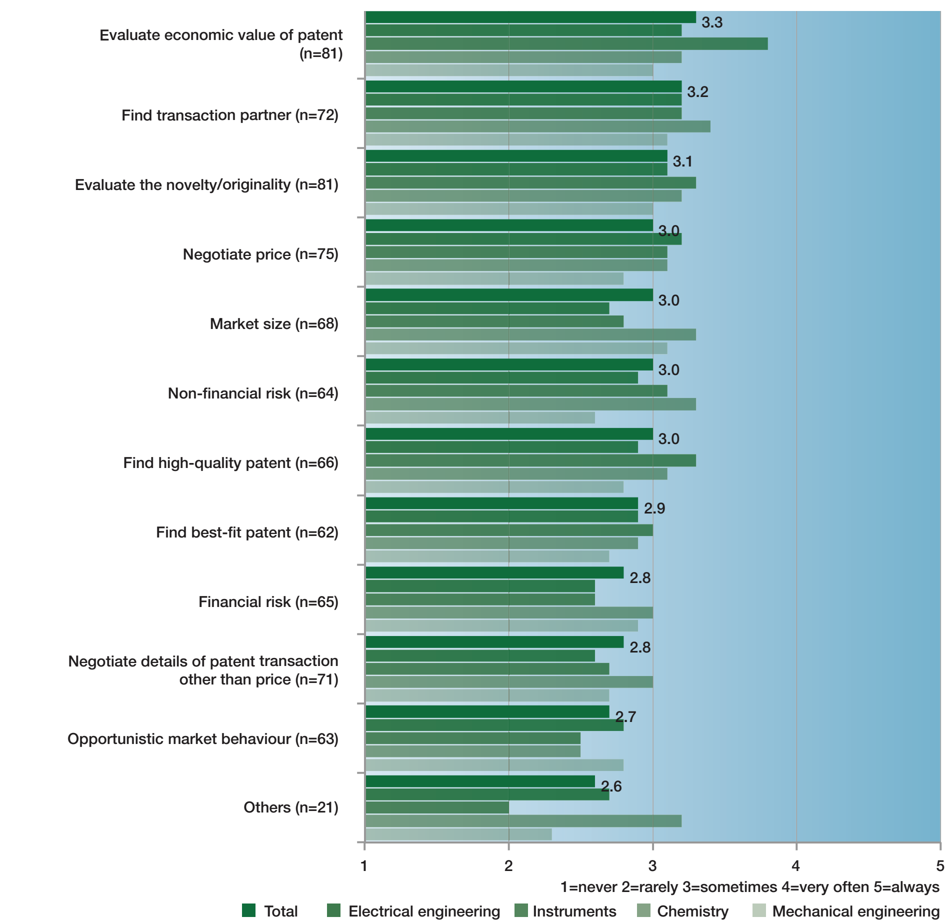
Financial products connect the financial and asset markets, and their characteristics strongly influence the trade in IP rights. They can be divided into private vehicles, public-private vehicles and commoditisation vehicles.

Private vehicles are financial instruments that are funded by private sector investors. Such vehicles are located at the crossroads of the financial and asset markets for IP rights, linking financially motivated investors to patents. Private vehicles can be divided into two types.

Equity instruments represent a residual interest in the issuer's net asset - for example, an ordinary share of a company's common stock or a claim on a fund's assets and returns. Investors can sell their shares to other investors on a secondary market. Equity-based vehicles may relate to early-stage or mature technologies, depending on the investors' risk/return profile.

Debt-based (or liability) instruments require the issuer to deliver a financial asset to the owner - examples include bonds and asset-backed securitisation vehicles. Debt-based vehicles tend to be more appropriate for technologies that already generate stable revenue, as this is a common characteristic of debt-based financial products in other

Barriers to patent transactions



asset classes. In contrast to an equity-based vehicle, investors in a debt-based vehicle do not own shares in it.

In both models, investors interact only with the vehicle itself. The vehicle buys, sells or licenses patents with the money provided by investors, in exchange for a return based on the cash flow generated by IP rights.

Public-private vehicles are financial instruments that are fully or partly funded by public money. They may be structured as financial products that can be traded on an IP rights financial market (as may private vehicles). Whereas private vehicles primarily serve the aims of investors, public-private vehicles may add further value by fostering early-stage commercialisation of technology or retaining freedom to operate for domestic companies in global markets.

Commoditisation vehicles are intended to facilitate the continuous trading of IP rights assets, such as licences. IPX International serves as an example of the continuous trading exchange model. Licensing contracts are traded like financial products: the purchase of one licensing contract effectively grants the holder the production of one unit. The commoditisation vehicle's main benefit is its potential to enhance liquidity in the organised IP rights market by transferring asset market transactions into the sphere of financial market transactions.

Challenges in establishing the market

Several challenges must be overcome before an organised IP rights market can be established. The market's governance structure must address these challenges on a European policy level. A European position is also needed on issues such as access and contributions, taxation and market location.

Access to IP rights is becoming an increasingly crucial factor in global competition. The United States, China, South Korea and other countries have already acknowledged this trend by creating public-private vehicles, aggregating patents and financing innovation. The implications of such intervention for international trade agreements have yet to be fully considered. Moreover, there is scope for policy discussion on the competitive effects that such vehicles may have on technology companies. The governance of the market may present solutions to these issues, but it must reflect a European perspective.

Access must also be considered from an internal standpoint. If IP rights are financed with public money, it is necessary to calculate the appropriate price for them – if indeed it is appropriate to set a price. For example, should public university research be made available to the general public or merely to an exclusive circle? Universities and small and medium-sized enterprises (SMEs) may find it difficult to participate in the market because of a lack of resources. SMEs are undoubtedly a valuable source of innovation and to exclude them would further weaken their competitive position. Universities might be driven to focus on the pursuit of commercially valuable innovations at the expense of basic research, with potentially damaging consequences for society. A balance between innovation and sustainable economic growth is imperative.

Taxation and location also raise problematic issues – for example, should the financial benefits of IP rights transactions be taxed as capital gains? At a national level, the collection of such revenue must be secured, but there are still no clear and commonly accepted accounting rules on the treatment of IP rights assets on company balance sheets. A similar challenge arises in respect of the physical location of the marketplace. As a wide circle of service providers is likely to emerge around the market, the host nation can expect additional benefits in terms of job creation and tax revenue.

IP rights vary in quality according to the legislation on which they are based, as granting and application procedures differ in scope and stringency. The granting process has an important signalling function, while scope determines usability on the product markets. These two factors further influence enforceability in the event of a legal dispute. Common rules and regulations to facilitate trading must therefore be developed, possibly on a global scale.

Additional uncertainty stems from the quantification and measurement of IP rights. Without commonly accepted valuation principles, the commercial success of a given technology is determined by factors such as customer preference, industry investment and disruptive innovation, making meaningful and objective predictions difficult. Most methods of measuring these developments are at least partly subjective; only established technologies show measurable cash flow and therefore allow for commonly accepted valuations.

Encouraging the wider use of the patent system

The primary advantages of an organised IP rights market are greater certainty in patent transactions and the mobilisation of capital for innovation on a larger scale. To this end, innovators must be made aware of this opportunity. Common valuation practices and increased transparency - in respect of both participants and prices - are crucial to ensure sufficient liquidity for financial operations. Achieving these aims will require a degree of political support. Moreover, since the effectiveness of financial products based on IP rights has previously been tested only in a dynamic environment, robust empirical evidence is needed to ensure that the models in question function efficiently.

A successful market will not only encourage participants to convert their ideas into exchangeable and exploitable assets, but also support the wider acceptance and use of the patent system by facilitating transparent transactions and clearer pricing of IP rights. In addition, the market can be expected to improve the circulation of, and access to, such rights. If implemented quickly enough, a European IP rights market could become a hub and reference point for international technology trading. *iam*

Action plan

In moving towards a more formal IP rights market in Europe, policy makers and market organisers should:

- Consider focusing on the asset market before establishing a financial market.
- Avoid market fragmentation and work towards unification of the European legal framework in order to ensure market liquidity.
- Ensure high patent quality.
- Weigh the advantages of licensing as opposed to transfer of ownership and consider the promotion of licensing.

Companies that supply or acquire IP rights should consider:

- The opportunities presented by additional transaction partners in trading vehicles or financial products.
- The role that they wish to play in the asset market structure that might develop from the emergence of commoditisation vehicles.
- The development of the IP rights market and its increasingly global scale, in order to consolidate or expand their competitive position.
- New financing options for innovation, created by the emergence of the organised market.
- An approach to the production process that integrates - rather than avoids - IP rights as input factors.

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