

Patent data - Patenting strategies of firms

Patent information can help identify the market strategy of the patent owner, notably the countries for which protection is being sought and their order of importance. The history of the patent application is also provided by patent documents. It reveals the timeline of the invention, the application's passage through the patent office's workflow, and the applicant's strategies (designated states, patent equivalents and priority dates, etc).

Characteristics of patent data for patenting strategies of companies

All stages of the patenting procedure generate large amounts of information about the invention for which protection is sought. Information regarding the procedural stage of patent applications provides insight on the applicant's strategy:

- The list of countries in which the application is filed, or the international route it takes (PCT), is an indication of the applicant's market strategy (local, regional or worldwide). It is also indicative of the invention's value, as one would expect the expected revenue from the patented invention to exceed the prospective cost of patenting in the first place.
- The length of the patenting procedure (the time it takes for the patent office to reach a decision) is indicative both of the strategy of the applicant (who can seek a quick grant or aim to lengthen the procedure) and the efficiency of the patent office (ability to manage its workload). The fact that an application is granted or refused is indicative of its quality.

Types of policy questions that can be addressed by patent data

Policy questions

Applicant's business strategy

The decision to apply for patent protection in a country (or countries) depends first on the applicant's business strategy. In most cases, a patent application is filed at the national patent office of the inventor (applicant) in order to protect the invention in the domestic market and followed by foreign filings. However, it is not mandatory to file the first application at the applicant's national patent office. An applicant can file a patent application initially at any patent office in the world. In the United States, however, a foreign filing licence may be required before filing in a foreign country.

Applicant's market strategy

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Strategic behaviour of companies

The potential of patent citation measures for policy analysis is tremendous. Three applications of patent citations dominate the innovation literature: i) the measurement of knowledge flows or spillovers (e.g. Jaffe et al., 1993); ii) the measurement of patent quality (e.g. Harhoff et al., 2002); and iii) the strategic behaviour of companies (e.g. Podolny et al., 1996).

Ownership and research strategies

Globalisation of technological activities as illustrated in patents reflects a mix of research and ownership strategies. Patent data provide further insight into these matters when one looks at the combinations of types of ownership (or co-ownership) and types of invention (invention made only abroad or through co-invention). Five patterns of internationalisation can be identified in patent data:

- Purely domestic ownership of foreign inventions (country A owner and country B inventor). This type of strategy concerns patents for which the research has been entirely conducted in the foreign laboratory (subsidiary of a multinational corporation).
- Domestic ownership implying co-ownership with a single inventor (countries A and B owners but only country B inventor). This pattern may reflect co-ownership by the multinational and an affiliate abroad or a research joint venture between companies of two different countries.
- Domestic ownership with co-invention (countries A and B inventors but only country A owner). This pattern concerns patents by multinational firms engaged in twofold internationalisation strategies: exploiting their own knowledge assets and accessing foreign knowledge.
- Co-ownership jointly with co-invention (countries A and B inventors and owners). This strategy is a combination of the last two types (2 and 3). It may reflect the joint involvement of the headquarters and a foreign affiliate of a multinational firm, or research co-operation between companies in two different countries.
- Cross-border ownership or inventorship with distinct inventor and owner countries (A and B owners and C inventor). This complex and uncommon pattern requires case-by-case analysis. It may for instance reflect an international network of companies having assigned a third company the management of their patents (e.g. technology pools).

Contributor: OECD

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