

## **The Influence of Strategic Patenting on Companies' Patent Portfolios**

**Knut Blind, Katrin Cremers, Elisabeth Mueller, Berlin University of Technology,**  
**Knut.Blind@TU-Berlin.de    Cremers@zew.de    mueller@zew.de**

The role of patents changed fundamentally in the 1990s. The number of patent applications increased notably faster than companies' R&D expenditures, even though companies attributed a decreased role to patents in protecting innovations. Patents gained a strategic importance that exceeded their traditional role of appropriating direct returns from R&D. Patenting has been motivated by the desire to block competitors in their research activities (blocking motive). In addition, patents have become important assets in R&D collaborations, to generate licensing revenues or to enter cross-licensing agreements (exchange motive). It has been assumed that, alongside the traditional protection motive, these additional strategic motives have an influence on the characteristics of companies' patent portfolios. However, no insights into this relationship have been available until now.

This paper analyses whether strategic motives for patenting influence the characteristics of companies' patent portfolios. As first characteristic we use the average number of citations that the patents in a portfolio receive. The number of citations can be interpreted as a value indicator. The more citations a patent receives from later patent applications the higher its value. The second characteristic is the share of patents in a portfolio that receive an opposition. Within nine months after the grant of a patent by the European Patent Office (EPO), any third party can file an opposition against it. In an opposition proceeding the validity of a patent is checked.

The investigation is based on survey data on patenting motives from more than 400 German companies that was combined with patent information from the EPO. There is evidence that the patenting strategies of companies help to explain the characteristics of their patent portfolios. First, companies that use patents in their traditional function of protecting innovations from imitation receive, on average, a higher number of citations for their patents than companies that emphasise the more strategic motives of blocking and exchange. Interpreting the number of citations as an indicator of value, we find that strategic motives lead to patents of lower value. This finding is of great importance to policy makers who are concerned that an increasing number of patents of low value may lead to patent thickets that could hinder innovation. Second, we find that the motive of offensive blocking but not of defensive blocking is related to a higher incidence of oppositions, whereas companies emphasising the exchange motive receive fewer oppositions to their patents. Companies which collaborate in R&D or cross-license patents on a regular basis may try to avoid patent conflicts or may prefer to resolve such conflicts informally.