

Software patent and its impact on software innovation in Japan

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Abstract

In Japan, patent system on software has been reformed and now software becomes to be a patentable subject matter. In this paper, this pro-patent shift on software is surveyed and its impact on software innovation is analyzed.

We use the datasets linking IIP patent database (individual patent datasets by using JPO's publication data) and firm level data from the Survey on Selected Services (software part) (METI) and Basic Survey of Business Activity and Structure (METI).

Before 1990's, inventions related to software cannot be patented by themselves, but they should be applied by combining with hardware related inventions. Therefore, integrated electronics firms used to major software patent applicants. However, during the period of late 1990's and early 2000's, when software patent reforms were introduced, innovative activities (measuring patent applications) by independent software development firms were activated.

In this paper, the relationship between software patent system reform and firm's innovative activities. A modest association of system change with patent application activities is found, but its relationship with R&D investment turns out to be marginal. However, we can find some evidence that patent can be used as a competitive tool for independent software house, when they deal with their software users in developing custom made software products.

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