

## Abstracts

### DOI Noriyuki, Standard Organizations and Competition Policy

In high-tech industries most of standards, of which the type is called “consensus standard”, are created through cooperative or consensus organizations. The standards have many effects such as improved flow of information, reduced transaction costs, achieved economies of scales, and interoperability. However, the standards and their standard setting organizations may raise antitrust concerns such as collusion and exclusion. Among the concerns are price cartels, refusals to access, patent hold-ups, oligopsonistic power, and the *ex ante* disclosure and contents of licensing terms. Those possible anticompetitive issues are examined through surveying the prior studies and their relevant cases. Also, these issues are likely to be related to the structure, behavior and performance of standard-setting organizations. The organizations are examined as well. The paper suggests some important economic problems which are necessary to be theoretically and empirically analyzed in future.

### HAYASHI Shuya, Refusal to License and Competition Law

The European Court of First Instance ruled in 2007 (Case T-201/04) that the Commission’s 2004 Decision (Commission Decision of 21/04/2004, Case no COMP/C-3/37.792) against *Microsoft* under Article 82 of the EC Treaty should be upheld on all substantive grounds of appeal (namely, the disclosure of interoperability information and the bundling of the Windows Media Player with the Windows PC operating system), and that the record fine of 497 Million Euros imposed on Microsoft should also stand.

*“Dominant companies have a special responsibility to ensure that the way they do business doesn’t prevent competition on the merits and does not harm consumers and innovation”* said the former European Competition Commissioner Mario Monti. *“Today’s decision (i.e., CFI decision on September 17 of 2007 – note by the author) restores the conditions for fair competition in the markets concerned and establishes clear principles for the future conduct of a company with such a strong dominant position,”* he added.

Why do dominant companies have the “*special responsibility*”? What is “*fair competition*” in a rapidly changing IT industry? Focusing on the *Microsoft Case* in

EU, this article undertakes a comparative study on *anticompetitive exclusion* among the United States, Japan, and EU competition law. And then, this article is trying to tackle these difficult questions above mentioned.

**MATSUSHIMA Noriaki, MATSUMURA Toshihiro, Patent licensing and R&D competition with endogenous location choice**

Using a standard linear city model with two firms, we consider how licensing activities affect the locations of the firms (i.e., the degree of product differentiation) and the incentive for R&D investment. In contrast to recent studies showing that R&D investment results in a large cost differential between firms, thereby leading to firm agglomeration, we find that licensing activities following R&D investment always lead to the maximum differentiation between firms and the mitigation of price competition. We also show that licensing activities induce the socially optimal effort level of R&D activity.

**NAKANISHI Yasuo, YAMADA Setsuo, The Patent Obsolescence Rate, Value and Quality in Japanese Manufacturing Firms**

This article assesses the rate of obsolescence of patents with measurements of the rate in Japan. Furthermore we investigate the effect of quality of patents on the value of patents. Our study departs from Parkes and Schankerman (1984) and Schankerman (1998) because of its application of the ordered probit model as well as considering the quality of patents.

The estimated value of the rate of obsolescence in Chemicals is apparently large. Values of obsolescence rate in each industry except Chemicals are located above 24%. The obsolescence rate obtained by our estimates is apparently higher than in previous studies. The estimated value of the patent in both Chemicals and Drugs are large. The effect of quality of patents on the value of patents in both Chemicals is much strong.

**OHKAWA Takao, SHINKAI Tetsuya, OKAMURA Makoto, Technology Choice and Cross-Licensing under Complementary Technologies**

Our paper aims at investigating technology choice without cross-licensing and possibility of cross-licensing agreement by constructing the duopolistic model where complementary cost-reducing technologies (technologies A and B) can be developed.

Our model is regarded as an amalgam of Mills and Smith (1996)'s model and González-Maestre (2008)'s one.

Our main results are as follows: (1) If the degree of complementarities between two technologies is strong, then both firms do not develop technologies A or B solely; otherwise, then they may do so. Note that in the case where the degree is quite weak and the level of development cost is medium, they develop one of two technologies solely. (2) An increase in the degree of complementarities tends to deteriorate the cross-licensing agreement. Especially, two firms disagree cross-licensing when the degree is strong and development cost is not low.

#### **KINOKUNI Hiroshi, SHINKAI Tetsuya, Technology Choice in a Differentiated Duopoly with Complementary Technology**

This paper considers duopolists which engage in cost-reducing innovation and product differentiated Cournot competition. Cost-reducing innovation uses two types of technologies; the firm specific technology and the complementary technology. We examine the efficiency of firms' choices of technology types when firms cooperate with respect to the complementary technology. The main findings are as follows. In the industry with the higher (lower) technological complementarity, firms overinvest (underinvest) in the firm specific technology and underinvest (overinvest) in the complementary technology. In the industry with the higher technological complementarity, firms tend to gain more profits when the degree of product differentiation is high. The opposite may occur when the degree of product differentiation is low.

#### **TANAKA Satoru, HAYASHI Shuya, A Reconsideration of a Japan's Patent Pool Case on "Pachinko Machines"**

This paper is a "Law and Economics" approach to the Japanese patent pool case on "Pachinko" machines (Japanese entertainment machine) which is the leading case of monopolization by means of the patent pool. In there, we consider the competitive effects of the patent pool by tracing the various facts around this pool. After examining the historical backgrounds of this patent pool, we analyze the characteristics of the patents collected in the pool through the network analysis of the patent citation network. As a result, it is shown that the patents collected in the

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patent pool are essential to manufacture the "Pachinko" machines, and that the refusal of the license of this kind of the patents is effective to the entry deterrence. Based on this analysis, we consider the implications of the decision to this case by JFTC.