Economics of Research Exemption

Sadao Nagaoka*  Reiko Aoki†

March 2006

Abstract

We provide an economic analysis of two types of research exemptions: (1) experimentation and research on the patented subject matter, and (2) academic (or non-commercial) research with the patented invention. We find that exemption for research on improving or inventing-around the subject matter makes good economic sense in the context of perpetual R&D competition, although it may not in the context of pioneer-follower innovation framework. The best approach might be to provide broad research exemption on the research on subject matter (more generally exemption for research using the knowledge disclosed in the invention that is useful for improving its subject matter), while stronger protection is provided for pioneer invention in terms of the breadth of claims. Exemption for experimentation on the subject matter for the purpose of verification of inventions also is sensible. On the other hand, we find that research exemption is a blunt tool for promoting academic research, with a negative effect on the development of research tool. In addition, it is not clear whether research exemption is necessary for efficient and coordinated price discrimination in favor of academic researches.

JEL Classification: O34 O31

Key Words: research exemption, research tools, patents, sequential innovation