

Patent–Secret Mix in Complex Product Firms

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Different protection mechanisms may be employed at the same time when an innovation is comprised of separately protectable components. If patents and trade secrets can be mixed in protecting single innovations, a strengthening in patent breadth may induce a lower level of patenting, as innovators are more prone to rely on secrecy. (*JEL* K00, L49, O34)

1. Introduction

According to Cohen, Nelson, and Walsh (2000), for certain purposes the key difference between a complex and a discrete technology is whether a new product or process is comprised of numerous separately patentable elements versus relatively few.¹

It is then well known that electronic products tend to encompass a large number of patentable elements—often hundreds—and, hence, may be characterized as complex. But product complexity is not a sector-specific feature: on the basis of an estimation of the number of patent applications per innovation, conducted on a survey of one thousand one hundred and sixty-five

We thank James Bessen, Nisvan Erkal, Massimiliano Granieri, Marco Ricolfi, Steven Shavell, an anonymous referee, and participants at the 2007 ISLE annual conference for useful comments and suggestions. The usual caveat applies.

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1. The distinction between complex and discrete, or simple, technologies was drawn by Levin *et al.*, 1987; Merges and Nelson, 1990; Kusunoki, Nonaka, and Nagata, 1998; and, Kash and Kingston, 2001.

American Law and Economics Review

doi:10.1093/aler/ahn007

Advance Access publication April 22, 2008

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