Fee Versus Royalties in General Cost functions

Hiroaki Ino∗

School of Economics, Kwansei Gakuin University

Abstract

Which is better off for the patentee to license its technology by fixed fee or unit royalties? Kamien and Tauman (“Fees versus royalties and the private value of patent,” Quarterly Journal of Economics, Vol. 101, pp. 471-491, 1986.) shows that the fixed fee scheme brings greater private value of the patent in the linear model. We extend their analysis into the general model. Then, the simple fact that the model allows a increasing marginal cost supports the unit royalties scheme. More concretely, the unit royalties scheme is superior to the fixed fee scheme when the number of firms is large.

JEL classification numbers: D45, L13
Key words: licensing, Cournot competition, convex cost, limit result

∗Address: 1-155 Uegahara Ichiban-cho, Nishinomiya, Hyogo 662-8501, Japan. E-mail: hiroakiino@04.alumni.u-tokyo.ac.jp.