Per-Unit Royalty vs Fixed Fee:The Case of Weak Patents

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Abstract:

This paper explores a firm's choice between charging a per-unit royalty or a fixed fee when licensing an innovation covered by a weak patent, i.e. a patent that is likely to be invalidated by a court if challenged. We show in a general model where the type of competition between firms is not specified that the patent holder prefers to use a per-unit royalty scheme if the "strategic" effect of an identical increase in the potential licensees' unit costs on their equilibrium profits is positive. To show the mildness of the latter condition, we establish that it holds in a Cournot (resp. Bertrand) oligopoly with homegenous (resp. heterogenous) products under weak assumptions on the demands faced by firms. As a byproduct of our analysis, we contribute to the oligopoly literature by offering some new insights of independent interest regarding the effects of cost variations on Cournot and Bertrand equilibria.

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