

Innovation and licensing in models of product differentiation

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Abstract

In this paper we consider licensing of innovations in markets with differentiated products. We analyze models where firms compete in prices and are offered by an outsider innovator an innovation that increases the quality of their product. We examine the licensing policies of auction, fixed fee, linear royalty and their combination; the optimal number of licensees, the effect of the licensing policies on the market structure and welfare etc. We then examine the outcome of a cooperative licensing procedure between the innovator and the potential licensees where the payoff of each player is their Shapley value of an appropriately defined cooperative game.

Keywords: Licensing policies, differentiated markets, quality-improving innovation.

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