

Sharper Machetes for the Patent Thicket: Objective Criteria for Antitrust Evaluations of Patent Pools

by Gavin Clarkson

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I. Introduction

While antitrust and intellectual property were viewed as in tension for most of the 20th century, with patent pooling often facing the brunt of antitrust enforcement, recent developments indicate that these two areas of law can be aligned so as to foster innovation rather than stifle it.¹ The 1995 Guidelines for the Licensing of Intellectual Property,² jointly issued by the U.S. Department of Justice and the Federal Trade Commission, formally established the possibility that collective ownership structures for intellectual assets, including patent pools, could be pro-competitive in certain circumstances. The 1995 Guidelines provide a clear and objective indication of what is an appropriate licensing structure for a patent pool.

¹ See generally Willard K. Tom and Joshua A. Newberg, "Antitrust and Intellectual Property: From Separate Spheres to Unified Field," *Antitrust Law Journal* 66 (1997).

² USDOJ and FTC, "Antitrust Guidelines for the Licensing of Intellectual Property," (1995). *Hereinafter* 1995 Guidelines.

Although there have been relatively few analyses of patent pooling,³ several scholars have pointed out, however, that unlike the evaluation of the economic aspects of contractual terms, the evaluation of the economic relationship between patents is quite problematic.⁴ Thus much of the economic evaluation of patent pool membership is quite subjective, which still leaves a high level of uncertainty for potential pool participants. Given the high cost of defending an antitrust enforcement action and the extremely harsh penalties for losing at trial,⁵ patent pool formation is likely to be less frequent than the optimal level needed for the maximization of innovative activity in a number of industries. Given that the 1995 Guidelines reduce uncertainty as to permissible contractual arrangements, what is needed is a similar reduction in uncertainty for patent pool membership criteria.

Before proposing such a criteria, however, it is necessary to define several concepts and review a bit of history. Thus, part II of this article begins with a definition of a patent pool and then proposes a taxonomy for the economic relationships between patents. Part III of this article

³ The modern treatments include George L. Bittlingmayer, "Property Rights, Progress, and the Aircraft Patent Agreement," *Journal of Law and Economics* 31 (1988).; Robert P. Merges, "Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations," *California Law Review* 84, no. 5 (1996).; Tom and Newberg, "Antitrust and Intellectual Property: From Separate Spheres to Unified Field.;" Steven C Carlson, "Patent Pools and the Antitrust Dilemma," *Yale Journal on Regulation* 16, no. 2 (1999).; Robert P. Merges, *Institutions for Intellectual Property Transactions: The Case of Patent Pools* (University of California at Berkeley, 1999).; Joshua A. Newberg, "Antitrust, Patent Pools, and the Management of Uncertainty," *Atlantic Law Journal* 3 (2000).; Carl Shapiro, "Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting," *Innovation Policy and the Economy* 1 (2000).; Jeanne Clark et al., *Patent Pools: A Solution to the Problem of Access in Biotechnology Patents?* (USPTO, 2000).; Richard J. Gilbert, *Patent Pools: 100 Years of Law and Economic Solitude* (2002), Josh Lerner, Marcin Strojwas, and Jean Tirole, *The Structure and Performance of Patent Pools: Empirical Evidence* (2002). Earlier analyses include Floyd L. Vaughan, "Patent Pools," in *Economics of Our Patent System* (New York, : The Macmillan Company, 1925).; Floyd L. Vaughan, *The United States Patent System; Legal and Economic Conflicts in American Patent History*, 1st ed. (Norman, : University of Oklahoma Press, 1956).; Gilbert Goller, "Competing, Complementary and Blocking Patents: Their Role in Determining Antitrust Violations in the Areas of Cross-Licensing, Patent Pooling and Package Licensing," *Journal of the Patent and Trademark Office Society* 50, no. 11 (1968).; and George L. Priest, "Cartels and Patent Licensing Arrangements," *Journal of Law and Economics* 20 (1977)..

⁴ See e.g. Newberg, *supra* note 3, at 5-6; Goller, *supra* note 3. Cf Ward Simon Bowman, *Patent and Antitrust Law; a Legal and Economic Appraisal* (Chicago, : University of Chicago Press, 1973), 202. ("[T]he relationship that patents bear to each other is not often en either/or matter. The relationship of patented processes or products can be competing, complementary, or blocking, or a little of each.")

⁵ Cite to nasty things that happen when one loses an antitrust case

briefly reviews the history of patent pools and antitrust enforcement through the various periods prior to the issuance of the 1995 Guidelines. Part IV of this article will focus on the 1995 Guidelines and the subsequent antitrust enforcement activities involving patent pools. In the vein of objective guidelines initiated in 1995, Part V of this article proposes a theoretical set of objective criteria for the evaluation of the actual patents contained in patent pools and suggests that such criteria might be incorporated into antitrust analysis so as to create a rebuttable presumption of validity for certain types of patent pools. With objectively determinable criteria for patent pool formation, those firms attempting to hack their way through the patent thicket can proceed in clearing blocking patent positions by forming collective ownership structures without worrying excessively about the uncertainties of antitrust enforcement litigation. Part VI concludes with some suggestions for further research, including empirical exploration of the application of the proposed criteria.

II. Patent Pools and Patent Relationships

As the rate of patenting has increased across several areas of inventive activity, it is inevitable that conflicting intellectual property rights (IPRs) have occasionally present obstacles. In the two-party case, often the result has been a cross-license. When more than two parties are involved, however, the transaction costs of cross licensing between all of the parties are prohibitive, and the danger of what economists refer to as a hold-up problem⁶ exists. As a result of these hurdles, over the last 100 years, firms have occasionally chosen an alternative structure, the patent pool.

⁶ If a party has cross-licensed with every other party except one, that last party can extract a premium relative to the other parties merely because of the sequencing of the cross-licensing negotiations