

1992

Strategic Alliances for Innovation in the Global Market of the 1990s: A Comparative Study of the Relationship between Innovation and the Patent/Antitrust Mechanisms of the United States and the European Economic Community

Maria Sendra

Recommended Citation

Maria Sendra, *Strategic Alliances for Innovation in the Global Market of the 1990s: A Comparative Study of the Relationship between Innovation and the Patent/Antitrust Mechanisms of the United States and the European Economic Community*, 9 INT'L TAX & BUS. LAW. 382 (1992).

Available at: <http://scholarship.law.berkeley.edu/bjil/vol9/iss2/2>

This Article is brought to you for free and open access by the Law Journals and Related Materials at Berkeley Law Scholarship Repository. It has been accepted for inclusion in Berkeley Journal of International Law by an authorized administrator of Berkeley Law Scholarship Repository. For more information, please contact jcera@law.berkeley.edu.

Strategic Alliances for Innovation in the Global Market of the 1990s: A Comparative Study of the Relationship Between Innovation and the Patent/Antitrust Mechanisms of the United States and the European Economic Community

by
María Sendra†

U.S. antitrust and patent law have traditionally disapproved of cooperative strategies between firms within the same industry. Courts focused on individual firm strategies instead of the larger social effects. This view has slowly begun to change. The European Economic Community, however, already explicitly considers the social effects of the innovation when scrutinizing it under antitrust and patent law. The author demonstrates that the United States should reject traditional notions of private cooperation and adopt a more European view. The minor disadvantage of increased uncertainty is outweighed by several significant advantages. Such a shift would provide additional flexibility to assimilate future experiences into the law. Further, this approach would allow the balance of power between the licensor and licensee to become a more explicit concern. Finally, the resulting technological advances would strengthen the global competitiveness of the United States. This becomes particularly important given the strong European and Japanese competition presently facing the United States.

I. INTRODUCTION	383
II. STRATEGIC ALLIANCES AND COMPETITION POLICY	385
A. <i>A General History of U.S. Efforts Toward Cooperative Innovation under the Antitrust Laws</i>	385

† Associate, Morrison & Foerster, Los Angeles, California. J.D. Boalt Hall School of Law, University of California at Berkeley, 1991; M.A. University of Indiana, 1988; B.A. Yale University, 1983. The author wishes to dedicate this article to her parents, Amaro and Argentina Sendra.

B.	<i>A General Comparative History of the EEC's Efforts Toward Synthesizing Competition, Cooperation, and Innovation</i>	388
III.	STRATEGIC TECHNOLOGY LICENSING MEASURES UNDER THE PATENT SYSTEM AND THEIR IMPACT ON INNOVATION	393
A.	<i>Technology Licensing in the United States</i>	393
B.	<i>Technology Licensing in the EEC as Compared to the United States</i>	399
IV.	CONCLUSION	406

I.

INTRODUCTION

High-tech innovation in the 1990s requires large scale cooperation. It has become increasingly rare for any single company to possess all the resources necessary to deal with the complexity and expense of modern technological development.¹ In order to compete successfully, a company must possess not only the knowledge, expertise, and financial resources to research and develop sophisticated new products, but also the ability to successfully commercialize its discoveries in the current global market.²

Today, technological innovations are dispersed worldwide more readily and rapidly than ever before.³ Further, the capacity and competition for innovation have significantly extended beyond any single nation's borders. The resources required to innovate in such a market are almost always greater than a single firm's capacities.

This scenario contrasts sharply with the period between 1945-1970, when the United States was the world leader in technology. This dominant position was characterized by autonomy and an absence of coordination.⁴ In fact, until recently, the prevailing United States' view has been that "no cooperation should be permitted . . . it is best that we keep companies apart from one another."⁵

Given traditional American attitudes toward cooperation and the resource demands of modern high-tech innovation, it is not surprising that the United States no longer has an assured position of technological preeminence over European and Japanese competitors in several new and important technological fields.⁶ Critics point to traditional strategies, such as internal administrative coordination—as opposed to contractual cooperation between

1. Sara G. Zwart, *Innovate, Integrate, and Cooperate: Antitrust Changes and Challenges in the United States and the European Economic Community*, 1989 UTAH L. REV. 63, 72.
2. Robert B. Reich, *The Quiet Path to Technological Preeminence*, 261 SCI. AM. 41, 42 (1989).
3. See Thomas M. Jorde & David J. Teece, *Innovation, Cooperation and Antitrust: Balancing Competition and Cooperation*, 4 H.T.L.J. 1, 33 (1989).
4. *Id.* at 34.
5. *Id.*, citing WILLIAM OUCHI, *THEORY Z* (1984).
6. David H. Marks, *Patent Licensing and Antitrust in the United States and the European Economic Community*, 35 AM. U. L. REV. 963, 964 (1986).

firms—as contributing to the United States' inability to compete globally.⁷ Specifically, the criticism focuses on U.S. antitrust laws.

Interpretation appears to be the problem. The traditional reading of these laws does not account for “the side benefits that any challenged behavior may have for the economy as a whole, or for some particular area of technological development.”⁸

The extreme emphasis on competition in analyzing marketplace behavior has resulted in underemphasizing innovation and the major role it plays in the performance of the American economy.⁹ A more fruitful analysis would consider the potential for cooperative strategies in addition to maintaining competition.¹⁰ This conflicting reality must be accepted and understood if the United States is to design and tailor institutional structures and policies to encourage technological development.

This article argues that high-tech innovation will not be facilitated under the traditional interpretation of our statutes. The cooperation/competition interplay inherent in sophisticated, fast-moving technological development, and the current larger international context in which it functions, render the requirements of innovation incapable of being compartmentalized within the present patent and antitrust legal regimes. Rather, legal mechanisms must be interpreted dynamically as we reprioritize our goals in terms of the larger global arena of innovation and its commercialization.

Analyzing the larger global picture includes, in part, studying institutional structures and policies in other sectors of the market and their impact on innovation. Specifically, because of the American tendency to focus on individual competition strategies as opposed to larger social effects, this article proposes that a comparative look at the strategic alliance mechanisms recently developed by the European Economic Community (the “European Community” or the “EEC”)¹¹ is both timely and appropriate.

Comparing EEC technological alliance mechanisms with those of the United States is particularly interesting because of each entity's distinct position in the technological market. The United States is coming out of a long era of technological preeminence, and traditionally time-honored competition strategies are in need of reevaluation. The EEC, conversely, is just beginning to integrate as a world power. Its experience in terms of a unified community is limited, and its perspective defined by a contemporary market.

7. Jorde & Teece, *supra* note 3, at 34.

8. Gabriele Dara, *Antitrust Law in the European Community and the United States: A Comparative Analysis*, 47 *LA. L. REV.* 761, 764 (1987); see also ROBERT BORK, *THE ANTI-TRUST PARADOX: A POLICY AT WAR WITH ITSELF* 54 (1978) (“Fragmentation for its own sake confers no clear gain, and it makes economic processes more costly”).

9. Jorde & Teece, *supra* note 3, at 83.

10. *Id.*

11. Treaty of Rome, Mar. 25, 1957, 298 U.N.T.S. 11. TREATY ESTABLISHING THE EUROPEAN ECONOMIC COMMUNITY [EEC TREATY].

Further, a study of the EEC's strategies offers insights on incorporating innovation in patent and competition policies. In fact, the proclaimed task of the European Community through the Treaty of Rome is to restructure, balance and incorporate patent law, competition policy, and strategic alliances in hopes of socially and economically integrating the member states through greater technological interdependence.¹² This situation reflects a microcosm in the larger international technological context, making this study both timely and valuable.

This study will begin by briefly summarizing the general history of competition policy and patent law in the United States and the EEC in terms of the requirements of innovation. The core of the article will then evaluate the potential for economic development in both systems, considering the current trends encouraging technological progress and innovation. Emphasis will be placed on possible strategic technology licensing measures specifically established for the global market of the 1990s.

II.

STRATEGIC ALLIANCES AND COMPETITION POLICY

A. *General History of U.S. Efforts Toward Cooperative Innovation under the Antitrust Laws*

By 1975, a U.S. government study had already indicated that fear of antitrust violations seriously strained cooperation between companies even in the area of pure research.¹³ A Carter Administration study indicated a need to clarify policy concerning the formation of joint ventures in order to encourage greater cooperation.¹⁴

In the late 1970s, courts responded to these observations by finding anti-trust violations far less frequently. Practices previously declared illegal per se—such as price or output fixing, market sharing, group boycotting or tying—were condemned more reluctantly if their negative impact on the economy was not obvious.¹⁵ Illegal per se practices were limited to those which tended to decrease output rather than increase efficiencies.¹⁶

In some courts, the “per se rule” itself has been transformed into the more analytical and less restrictive rule of “facial unreasonableness.”¹⁷ This

12. GERALD SOBEL ET AL., TECHNOLOGY LICENSING 1989, 298-99 (1988).

13. See Zwart, *supra* note 1, at 88. See generally INDUSTRIAL RESEARCH INST. FOR THE COMMERCE TECHNOLOGICAL ADVISORY BOARD, INSTITUTIONAL AND LEGAL CONSTRAINTS TO COOPERATIVE ENERGY RESEARCH AND DEVELOPMENT (1975).

14. *Id.* at 88. See generally HOUSE COMM. ON SCIENCE AND TECHNOLOGY, SUBCOMM. ON SCIENCE, RESEARCH AND TECHNOLOGY, 96TH CONG., 2D SESS., ANALYSIS OF PRESIDENT CARTER'S INITIATIVES IN INDUSTRIAL INNOVATION AND ECONOMIC REVITALIZATION (Comm. Print 1980).

15. See Zwart, *supra* note 1, at 76.

16. *Id.* at 77.

17. See Dara, *supra* note 8, at 788; see also *Continental T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 50 (1977).

rule combines characteristics of both the per se rule and the rule of reason. This analysis replaces notions of per se illegality with the recognition that even anti-competitive practices may have favorable aspects and should be analyzed in an economic context on a case by case basis.¹⁸

This move toward a rule of reason analysis represents a greater reluctance to impose antitrust damages, because placing a case in the per se category leads to far more plaintiff successes.¹⁹ Rule of reason cases, on the other hand, favor defendants.²⁰ Overall, this reticence toward imposing sanctions encourages competition and is indicative of a new attitude toward cooperative, economically beneficial conduct.²¹

At the same time that per se analysis underwent modifications, so did rule of reason analysis. In deciding whether certain conduct violated the Sherman Act²² under a rule of reason analysis, courts traditionally consider the conduct's economic effects, the power of all parties involved within their relevant markets, and the motive behind the conduct.²³ Courts have streamlined this analysis, now focusing simply on whether the apparent purpose of an agreement was to reduce competition, and whether it actually did so.²⁴

Under this streamlined analysis, whether the defendant has sufficient market power to accomplish an anti-competitive result is the single most significant factor.²⁵ If the court finds that market power exists and that the conduct of the defendant resembles a per se practice, it may condemn the conduct without looking at the market effect.²⁶ More in-depth analysis will be triggered only when the defendant lacks market power and the conduct is not traditionally per se illegal.²⁷

Another recent trend in U.S. antitrust policy is the Supreme Court's willingness to not only focus upon the impact of the agreement on competition in general,²⁸ but also to consider how competitive agreements affect consumers.²⁹ Here, courts concentrate on the intended goal of the antitrust laws

18. *Id.*

19. Zwart, *supra* note 1, at 76.

20. *Id.* at 76.

21. See Dara, *supra* note 8, at 788.

22. 15 U.S.C. § 1 (1988).

23. Marks, *supra* note 6, at 969.

24. See Zwart, *supra* note 1, at 77; see also *National Collegiate Athletic Ass'n v. Bd. of Regents Univ. of Okla.*, 468 U.S. 85, 103 (1984); *Broadcast Music, Inc. v. CBS*, 441 U.S. 1, 8 (1979) (applying the rule of reason to an arrangement among copyright holders to market blanket performance licenses, even though "the blanket license involved 'price fixing' in the literal sense").

25. Zwart, *supra* note 1, at 77.

26. *Id.*; see also *National Collegiate Athletic Ass'n*, 468 U.S. at 109-10 and *FTC v. Indiana Fed'n of Dentists*, 476 U.S. 447, 460-61 (1986).

27. See Zwart, *supra* note 1, at 77.

28. See Dara, *supra* note 8, at 787.

29. *Id.* at 786; see also, e.g., *National Collegiate Athletic Ass'n*, 468 U.S. at 99 (holding that a horizontal price agreement constituted an illegal restraint of trade that, among other anti-competitive effects, resulted in limiting consumer choice).

of protecting and advancing the consumer's welfare.³⁰ There no longer appears to be the implicit assumption that simply fostering competition will automatically benefit consumers. Instead, the attitude appears to be that competition will be protected as long as it actually benefits the consumer.³¹

A final movement indicative of this changing perception of the antitrust laws and their potential effects is the National Cooperative Research Act of 1984 (the "NCRA").³² Congress passed the NCRA in order to "promote research and development . . . encourage innovation . . . and stimulate trade" by softening standard antitrust threats to some joint ventures.³³

Under the NCRA, joint research and development ventures registered with the government are exempted from per se illegal analysis.³⁴ Instead, any claim resulting from the conduct of these joint ventures is judged by a rule of reason.³⁵ Furthermore, even if convicted of antitrust violations, defendants become responsible for only actual rather than treble damages.³⁶ Moreover, if the joint venturer defendant prevails, attorney's fees may be recovered if the claim is "frivolous, unreasonable, without foundation or in bad faith."³⁷

The NCRA, however, only represents an intermediary step toward modifying antitrust policy for the sake of encouraging and reaping the economic benefits of cooperative innovation. For example, it covers all activities considered essential to bringing an idea "close to" technological commercial application, such as exchanging research data, setting up facilities and applying for patents.³⁸ The NCRA, however, specifically excludes production, marketing, and even joint research focused on preparing the product for the marketplace.³⁹ Thus, the Act does not fully support innovation. Instead, innovation is broken down into its technological and commercialization components, and only the former is addressed.

This approach engenders uncertainties that inhibit innovative practices. What "close to" commercial application means and how far product development may proceed before it is no longer covered by the Act remain unclear. What type of research and development costs, sales, and profitability information is "reasonably necessary to accomplish the objectives of the joint venture" as opposed to illegal collusive behavior also remains uncertain.⁴⁰

30. Dara, *supra* note 8, at 786, citing *Universal Life Ins. Co. v. Unimac*, 699 F.2d 846, 852 (7th Cir. 1983).

31. *Id.* at 787; see also *Universal Life Ins. Co.*, 699 F.2d at 852.

32. 15 U.S.C. § 4301 (1988).

33. See Zwart, *supra* note 1, at 89-90; see also S. CONF. REP. NO. 1841, H.R. CONF. REP. NO. 1044, 98th Cong. 2d Sess. 4 (1984) reprinted in 1984 U.S. CODE CONG. & ADMIN. NEWS 3105 [hereinafter CONFERENCE REPORT].

34. Zwart, *supra* note 1, at 90.

35. *Id.* at 89.

36. *Id.* at 90; see CONFERENCE REPORT, *supra* note 33, at 2.

37. Zwart, *supra* note 1, at 91 citing 15 U.S.C. § 4304 (Supp. III 1985).

38. *Id.* at 90.

39. *Id.* at 89; see also CONFERENCE REPORT, *supra* note 33, at 2.

40. See Zwart, *supra* note 1, at 108.

Consequently, any swift movement toward commercialization and innovation is impeded.⁴¹

Thus far, U.S. competition policy has acknowledged the need for greater flexibility and cooperation to compete in the global market. However, outdated concerns still impede full adaptation to the technology market. U.S. policy must decide whether prevention of collusion, and thus any sharing of post-development marketing data, should be the ultimate goal, or whether emphasis should be shifted in favor of encouraging all aspects of innovation. The fact that successfully restraining competition through collusion in the current complex and fast-paced technological market is highly unlikely leans heavily in favor of the latter.⁴² In short, U.S. antitrust policy must fully embrace innovation as a primary goal in order for any allowable cooperative efforts to maximize the economic benefits of technological development.

B. A General Comparative History of the EEC's Efforts Toward Synthesizing Competition, Cooperation, and Innovation.

The EEC bases its competition policy on Articles 85 and 86 of the Treaty of Rome.⁴³ Article 85(1) prohibits agreements with the object or effect of prevention, distortion, or restriction of competition within the EEC that actually or potentially affect trade between member states.⁴⁴ Prohibited practices include not only price fixing and market sharing but also any practice which controls and limits technological advancement.⁴⁵ Article 86, similar to section 2 of the Sherman Act, prohibits monopolistic abuses of a dominant market position.⁴⁶

The Sherman Act, however, differs from the Treaty of Rome in that it prohibits attempts to create and maintain monopolies. The Treaty of Rome is only concerned with the abusive exploitation of a monopoly position.⁴⁷ The EEC's position on monopolization, unlike that of the United States, leaves room to evaluate priorities and desired goals before condemning seemingly anti-competitive behavior. For example, anti-competitive behavior may be tolerated if it achieves the Treaty of Rome aims of "the creation of an integrated common market combined with economic development."⁴⁸ Currently, section 2 of the Sherman Act illustrates the tendency of the United States to compartmentalize and consider a certain category of restraints on competition *necessarily* harmful.⁴⁹

41. See Jorde & Teece, *supra* note 3, at 18-19.

42. See Zwart, *supra* note 1, at 83.

43. See Treaty of Rome, *supra* note 11, arts. 85 and 86.

44. See SOBEL, *supra* note 12, at 298.

45. *Id.*

46. *Id.* at 306.

47. See Dara, *supra* note 8, at 790.

48. *Id.*

49. *Id.*

In contrast, the Treaty of Rome sections function more interdependently, creating a mechanism for weighing pro-development and pro-competitive effects against anti-competitive effects. Any practice which violates 85(1) is void under 85(2).⁵⁰ However, parties can avoid an 85(2) ban by petitioning for an exemption under 85(3).⁵¹ To qualify for an exemption, applicants must show that: (1) the agreement contributes to economic or technological progress in the research, production, or distribution of goods; (2) consumers receive a fair share of the benefits of such progress; (3) the restrictions are essential to attaining the results; and (4) the agreement does not threaten competition in a substantial part of the common market.⁵² Restrictive agreements may be sanctioned if pro-competitive features outweigh any anti-competitive aspects.⁵³

The individual exemption process also exemplifies the EEC's greater flexibility in adapting apparently anti-competitive practices to the desired market structure. An exemption may be granted after the Commission reviews a contract and requests that specific changes be made.⁵⁴ This procedure serves as a prophylactic device against possible antitrust violations. In contrast, the United States has no individual exemption process, forcing potential innovators to proceed despite the possibility of an impending antitrust violation.⁵⁵

Exemptions are also granted more directly under a block exemption system that was created to ease the Commission's caseload burden.⁵⁶ This block exemption system is intended to create greater certainty by reconciling competition policy with the needs of innovation.⁵⁷ Block exemptions also serve as legislative guidelines for drafting agreements that will comply with relevant antitrust statutes.⁵⁸ They consist of a black list, a white list, and a grey list.⁵⁹ If practices fall under the block exemption category, notification and Commission approval is unnecessary.

The black list contains joint venture agreement provisions—such as restrictions on independent unrelated research—which companies cannot agree to if they are to fall under the joint venture blocking exemption.⁶⁰ The white list consists of conditions parties must adopt in order to be eligible for an exemption. For example, in a joint research and development venture, results

50. *Id.* at 771.

51. *Id.*

52. *Id.*

53. *Id.* at 771-72.

54. See Zwart, *supra* note 1, at 85-86.

55. *Id.* at 84.

56. *Id.* at 85-86.

57. *Id.* at 86.

58. *Id.*

59. *Id.*

60. *Id.*; see also Commission Regulation No. 118/85, art. 6, on the Application of Article 85(3) of the Treaty To Categories of Research and Development Agreements, 1984 O.J. (L 53) 5 [hereinafter Regulation 118/85].

should be available to all parties involved.⁶¹ Finally, the grey list specifies provisions which, although tending to restrict competition, still contribute to technological development. These practices are still permissible so long as they are within the limits set by the black list.⁶² For example, in important new technology or high-risk joint ventures, a provision prohibiting parties from carrying out the same research independently may be exempted to support the particular innovation.⁶³

The EEC, like the United States, is attempting to relax antitrust enforcement to favor joint research and development projects. However, the EEC clearly leads in the area by providing companies and joint ventures with a "safe harbor." Rather than being subject to Commission approval, joint ventures which involve a high investment risk or that produce important new technology can bypass 85(1) completely, and be directly exempted under the 85(3) block exemption (if they do not extend beyond the limits set by the black list).⁶⁴ In contrast, under the U.S. National Cooperative Research Act, joint ventures are still subject to rule of reason analysis and the accompanying threat of damages.⁶⁵

As with individual exemptions, the blocking exemption analysis results in a notification requirement. For example, when too many or too few competitors are involved, resulting in reduced research competition or abused market power, EEC procedures act in a preventative manner. Prior to commencement of a joint venture, the Commission informs the parties of their status.⁶⁶ The U.S. procedures, again, act only in hindsight, factoring market share into the "reasonableness" test only after an antitrust violation is alleged.⁶⁷

Another distinction between the attempts of the EEC and the United States to encourage innovation is that the NCRA does not cover the manufacturing aspect of research and development programs. In contrast, the EEC grants the benefit of block exemptions to ventures that also manufacture products.⁶⁸ Article 1 of the block exemption goes so far as to permit the joint exploitation of research results. The plan mitigates the effects of potential collusion by imposing a five year limit on such joint exploitation.⁶⁹

The EEC does not dismiss the potential for anti-competitive effects, however. Competition policy is always a relevant concern, but only in relation to the larger goal of social and economic integration through innovation.⁷⁰ Therefore, the Commission is willing to factor in actual cultural business

61. See Zwart, *supra* note 1, at 92; see also Regulation 118/85, *supra* note 60, art. 2(a).

62. See Zwart, *supra* note 1, at 94.

63. *Id.* at 102; see also Regulation 118/85, *supra* note 60, arts. 4(a)-(b).

64. *Id.* at 102; see also Nungesser v. Comm'n (Maize Seed), 1982 E.C.R. 2015, 2073.

65. See Zwart, *supra* note 1, at 103, citing CONFERENCE REPORT, *supra* note 33, at 17.

66. See Zwart, *supra* note 1, at 106.

67. *Id.*

68. *Id.* at 104.

69. *Id.* at 104-05.

70. *Id.*

practices before concluding that collusion is a relevant concern.⁷¹ In this case, the EEC is more concerned with promoting integration than with preventing collusion because of the tendency of many European companies to function independently in marketing their products.⁷²

Where fears of potential collusion or anti-competitive restraints are particularly high, the EEC's scrutiny of the affected market continues to tailor itself more specifically to the requirements and goals of a joint venture.⁷³ For example, in the EEC, scrutiny of the potentially affected product market is specifically limited to "products capable of being improved or replaced" by the research and development results of the particular venture.⁷⁴ In the United States, however, the product market encompasses the "knowledge" resulting from the research efforts.⁷⁵ It is doubtful that joint ventures in applied and developmental research are seeking to produce knowledge rather than a new product.⁷⁶ Further, the more basic the research and the newer the technology, the more difficult the determination of what "knowledge" means.⁷⁷

The geographical market definitions from which United States and EEC competition policies are culled also reveal this type of contrast. EEC scrutiny of competitive product development is limited to the EEC.⁷⁸ In the United States, antitrust scrutinies may be based on the world market.⁷⁹ Exactly how all competitors will be identified worldwide remains unclear.⁸⁰

In general, U.S. competition policy is becoming more grounded in an analysis that factors in and balances anti-competitive and pro-competitive factors to encourage innovation. The system remains unable, however, to completely bypass certain ingrained notions of collusiveness, competition or monopoly for the sake of any ultimate goal. Under EEC law, however, a clear possibility of an Article 85(3) exemption exists for economic reasons which go beyond a simple net positive effect on competition⁸¹ in order to encourage technological and economic progress through innovation.⁸²

Further, although per se illegality is slowly being replaced by a balancing approach in the United States, per se illegality remains valid.⁸³ This indicates the generally greater flexibility of the EEC system. Some critics argue that

71. *Id.* at 105.

72. *Id.*

73. *Id.*

74. *Id.*

75. *Id.* at 106.

76. *Id.* at 107.

77. *Id.*

78. *Id.* at 105-07.

79. *Id.* at 106-07.

80. *Id.* at 107.

81. See Dara, *supra* note 8, at 789.

82. See SOBEL, *supra* note 12, at 298.

83. See Dara, *supra* note 8, at 790.

this alone indicates the need in the United States for revised legislation to enable American courts to better deal with a mature economy.⁸⁴

In light of the EEC's efforts, assuring U.S. technological competitiveness might entail specifically recognizing the requirements for technological development in the language of U.S. antitrust statutes. For example, as is done under the EEC exemption categories, certain agreements that restrain competition should be allowed because they contribute to economic or technological progress.⁸⁵

U.S. antitrust policy could further adapt to the needs of innovation by considering larger sociological issues when analyzing the practical effect of certain factors, such as market share or concerns over collusion. For example, the EEC is more willing to risk collusion in joint exploitation, because a strong tradition of independent distribution by member states severely limits the probability of monopolistic control.⁸⁶ Another indication of EEC flexibility is the willingness to allow joint production of any size, treating the exploitation of the product as a natural extension of the research.⁸⁷

Regarding collusion concerns, the United States should take into account the fast-paced nature of commercializing innovation in the global market before setting restraints against joint production ventures. Such a market makes the risk of collusion unrealistic. Most importantly, however, commercialization is just as essential to successfully competing as is the successful development of technical knowledge.

As it stands, the NCRA and current antitrust enforcement trends in the United States represent the beginnings of a changing perception of the role of antitrust laws. However, the United States still has not created a mechanism that recognizes that a competition policy must not only restrain anti-competitive practices but must also create or even adapt such practices to stimulate production and foster innovation.

The European Community's approach is, on the other hand, structured to respond more effectively to the current market for innovation. The exemption category is designed to "be sufficiently liberal to encourage cooperation, sufficiently specific to provide certainty, and sufficiently narrow to prevent abuse" to ensure technological progress.⁸⁸

84. *Id.*

85. *Id.*

86. See Zwart, *supra* note 1, at 105.

87. *Id.* at 104-05.

88. *Id.* at 108.

III.
STRATEGIC TECHNOLOGY LICENSING MEASURES UNDER THE
PATENT SYSTEM AND THEIR IMPACT ON
INNOVATION

A. *Technology Licensing in the United States*

Patent licensing is recognized as one of the areas of greatest tension between the patent and antitrust laws.⁸⁹ A patentee may refuse to license or exploit his patent in any way without fear of being charged with antitrust violations. Once the patentee decides to exploit and license his patent, however, he comes immediately under the antitrust laws.

Under current laws, this tension between the two regimes may manifest itself in extreme form. For example, the American Bar Association in its 1988 Report on the Draft International Guidelines, noted that "denial of access to a patented invention is permissible *even if the invention is an essential input.*"⁹⁰ In the patent licensing arena, however, according to a recent decision, if a patented product is considered almost essential to competing in the relevant market (simply because of its uniqueness or because of high demand), the courts may find sufficient economic power in the patent to create a threat of leveraging.⁹¹ This threat of leveraging might influence a court to strike any restraints on the licensing of such products⁹²—which, ironically, under patent law, did not have to be licensed in the first place.⁹³

Recently, however, in less extreme circumstances, the general trend in case law has been toward less stringent standards for patent licenses than the standards of the early 1970s, when America was secure in its technological supremacy.⁹⁴ The current movement is to favor patentee-licensors accused of antitrust violations in connection with patent licensing agreements.⁹⁵

Recently, the Department of Justice's (the "DOJ" or the "Department") views have also changed substantially. 1977 DOJ guidelines reflect a hostile attitude towards many restrictions typically found in intellectual property licenses.⁹⁶ The older view was that intellectual property rights created monopolies which conflicted with the basic goals of the antitrust laws.⁹⁷

89. See Marks, *supra* note 6, at 966.

90. Bar Association, *Report to the House of Delegates [On Draft Antitrust Guidelines for International Operations]*, 57 ANTITRUST L.J., 651, 675 (1988) [hereinafter American Bar Association Section of Antitrust] (emphasis added).

91. *Digidyne v. Data Gen. Corp.*, 734 F.2d 1336, 1340 (9th Cir. 1984), *cert denied*, 473 U.S. 908 (1985).

92. See *id.* at 1340.

93. Marks, *supra* note 6, at 966-67.

94. *Id.* at 967; see also *U.S. v. Westinghouse Elec. Corp.*, 648 F.2d 642, 648 (9th Cir. 1981). See generally *U.S. v. Studiengesellschaft*, 670 F.2d 1122 (D.C. Cir. 1981); *SCM Corp. v. Xerox*, 645 F.2d 1195 (2d Cir. 1981), *cert. denied*, 455 U.S. 1016 (1982).

95. See Marks, *supra* note 6, at 967.

96. See generally Deborah A. Garza, *The New International Antitrust Guide*, 57 ANTITRUST L.J. 133, 138 (1988).

97. *Id.*

The Department's current position, however, is that the "owner of intellectual property is entitled to enjoy whatever market power the property confers."⁹⁸ It is believed that "respecting the rights of an intellectual property owner to enjoy the full value of the property . . . provides an incentive for the innovative effort . . . the results of [which] expand society's knowledge and wealth and increase productive efficiency."⁹⁹

Nonetheless, a patentee today cannot ignore the possibility of a private claim alleging patent misuse and antitrust violations. Such a claim could result in antitrust treble damages, or in a charge of misuse that would prohibit the patent from being exploited and render the patent valueless until the required changes were made. The current standard for analyzing anti-competitive effect is difficult to define. While some patent licensing provisions are classified as per se illegal, most provisions are analyzed according to a rule of reason. The confusion remains such that the courts and the current Department of Justice apply separate methods of analysis to intellectual property rights.

For example, both the Department of Justice and the courts apply rule of reason analysis to all non-price restraints between manufacturers and distributors.¹⁰⁰ Furthermore, both have expanded the use of this analysis to any conduct related to some more efficient economic integration of operations—including technology licensing—when arrangements are not made solely to coordinate price and/or output.¹⁰¹ The Department of Justice, however, has gone further still in its approach to rule of reason analysis, and interesting ideological differences between the courts and the Department have emerged.

As previously noted, the more streamlined analysis currently performed by the courts focuses on whether the apparent purpose and actual effect of an agreement is to reduce competition. A significant factor as to whether such an effect is possible is the market power of the patentee. If there is no market power, the court may still apply a more in depth analysis. The Department of Justice test for unreasonableness, on the other hand, requires market power.

If preliminary economic analysis suggests that the conduct is not likely to result in the exercise of market power, the Department scrutiny ends regardless of the nature of pro-competitive benefits or less restrictive alternatives.¹⁰² This position contrasts sharply with the Court's decisions in *National Collegiate Athletic Ass'n v. Board of Regents of University of Oklahoma* and *FTC v. Indiana Federation of Dentists*, which do not require

98. 53 Fed. Reg. 21593 (1988)

99. *Id.*

100. Garza, *supra* note 96, at 136.

101. Barry E. Hawk, *The Proposed Revisions to the Justice Department's Antitrust Guidelines for International Operations and Recent Developments in EEC Competition Law*, 57 ANTITRUST L.J. 299, 305 (1988).

102. *Id.* at 304-05.

market power in order to condemn a restraint as anti-competitive under certain circumstances.¹⁰³

The inconsistent views between the courts and Department regarding how to limit the concept of market power in the intellectual property arena adds further complications. The Department's limits were set in the 1988 International Antitrust Guidelines with the following challenge: "Intellectual property—even a patent—does not . . . necessarily confer an economic monopoly or even market power on its owner. A patent is merely a legally cognizable property right . . . an incentive for . . . innovative effort."¹⁰⁴ The guidelines fail to note that case law does not recognize this limitation on the market power concept.¹⁰⁵

In fact, the case law defining the relevant market for new technology remains very inconsistent. The U.S. Supreme Court has defined the relevant market as that which includes "commodities reasonably interchangeable by consumers for the same purposes."¹⁰⁶ However, later antitrust case law involving intellectual property rights limits the scope of the relevant market to that of the protected right, the patent.¹⁰⁷ The Department's market definition directly conflicts with the latter view in specifying that a patent or any other intellectual property cannot be assumed to delimit the relevant market.¹⁰⁸

Significantly, a recent legislative proposal passed by the Senate and pending in the House would support the Department's view. The Intellectual Property Antitrust Protection Act of 1989 recommends clarifying the application of antitrust laws to intellectual property by prohibiting courts from presuming the market power necessary for antitrust liability solely from the existence of a patent or copyright.¹⁰⁹

Regardless of how stringently the courts limit the relevant market in a patent misuse case, if any competing technology exists, the case might possibly fall as a matter of antitrust principles. These principles would concentrate on the issue of entry barriers. However, the scenario may not be so predictable where innovation is concerned.

The 1988 International Antitrust Guidelines attempt to clarify this area by suggesting that the analysis of technical markets focus "on the relevant efficiency of the available technologies and the time it would like[ly] take for

103. *Id.* at 304; see also *National Collegiate Athletic Ass'n*, 468 U.S. at 98-99 and *Indiana Fed'n of Dentists*, 476 U.S. at 460-61.

104. 53 Fed. Reg. 21593 (1988).

105. American Bar Association Section of Antitrust Law, *supra* note 90, at 675.

106. See *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 395 (1956); see also *Walker Process Equip. Inc. v. Food Machinery & Chem. Corp.*, 382 U.S. 172, 177 (1965).

107. *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 24 n.39 (1984) *citing* *United States v. Jerrold Elec. Corp.*, 187 F.Supp. 545 (E.D. Pa. 1960).

108. 53 Fed. Reg. 21594 (1988).

109. INTELLECTUAL PROPERTY ANTITRUST REFORM ACT OF 1989: A REPORT ON S.270, S. REP. NO. 8, 101st Cong., 1st Sess. 1 (1989).

comparably efficient alternative technologies to be brought to the market.”¹¹⁰ The analysis would further attempt to “qualitatively assess the likely future strength of such technologies in the market as well as whether alternative technology would likely be brought to the market sufficiently promptly so as to undercut any attempted exercise of market power.”¹¹¹

However, the American Bar Association correctly points out that these guidelines are inadequate.¹¹² It is unrealistic to expect the “Department, businesses or their advisers [to practically assess] the future availability of alternative technologies. Even if predictions could be made, it is highly unlikely that they will be sufficiently accurate to form a basis for antitrust enforcement decisions and corresponding business decisions.”¹¹³

The courts, however, are even more vague when evaluating a patentee’s market power in the context of innovation. In fact, in *Digidyne v. Data General Corp.*, the court used the technological “uniqueness” of a software product (tied to an unpatented processing unit), in combination with its copyright power, to create a presumption of economic power sufficient to condemn the tying arrangement. The court was justifiably concerned that competitors would be denied access to the tied processor market because of its tie to a software package in high demand.¹¹⁴ However, the decision does not comport with current legislative and Department of Justice suggestions that a patentee’s statutorily granted power not be used to condemn the use of the patent.

In *Digidyne*, the court actually went beyond the concept of market power and created a broader category for condemnation, that of “economic power.”¹¹⁵ The court attributed such a high degree of economic power to the product that it did not inquire into the relevant market and market share at all before condemning the tying practice as illegal per se.¹¹⁶ As discussed above, this reasoning, taken to its extreme, could define a patented product to be so highly unique and in demand that it would be considered essential. This would strip the patentee of licensing control. As noted by the ABA, this result is completely antithetical to the notion of a patent as an individual property right which, even if the invention is an essential input, the patentee remains free not to exercise.¹¹⁷

110. 53 Fed. Reg. 21611 (1988).

111. *Id.*

112. American Bar Association Section on Antitrust, *supra* note 90, at 678.

113. *Id.*

114. 734 F.2d at 1343.

115. *Id.* at 1347.

116. *Id.*

117. American Bar Association Section on Antitrust, *supra* note 90, at 675.

Ultimately, the court's position on patent power in *Digidyne* was due to its concern over the use of such power by patentees as leverage over the licensee in negotiating an agreement.¹¹⁸ The core of the argument, however, focused on creating a super category of per se illegality.¹¹⁹ The possession of a unique patent (uniqueness, ironically, being one of the qualities which defines what is patentable in the first place) is enough to disregard market power analysis in favor of per se illegal economic power.¹²⁰

What is significant about this scenario is that the court emphasizes various abstract hierarchical levels of "power" (economic power compared to market power) rather than attempting to define how innovative products might be evaluated under particularly tailored market definitions. The court is distracted by what really seems to be a contract issue—the bargaining power of all parties concerned and the implied negotiations for the licensing arrangement.

This analysis of more unclear restrictive categories of patent power creates further confusion with regard to the relationship between intellectual property rights, cooperation, pro-competitive concerns and innovation. This decision further hinders integrating these aspects of the technology market. Thus, several layers of confusion in the U.S. technology licensing area affect innovation. First, three different levels of interpretation exist: the courts, the Department of Justice, and the legislature.

Second, in this area, the Department of Justice claims to provide guidance consistent with trends in the courts.¹²¹ Nevertheless, as we have seen, the views of the Department and the courts frequently conflict. Furthermore, the DOJ guidelines are not binding¹²² and parties must still separately evaluate the risk of private litigation as well as the risk of enforcement and prosecution under state and federal antitrust laws.¹²³

Finally, antitrust statutory law is quite limited. It fills less than two pages, and sections dealing with patent licensing are vague.¹²⁴ Therefore, much patent and antitrust law is found in case law developed in an unstructured manner from one factual situation to another.¹²⁵ This history, of course, explains much of the inconsistency and confusion in case law in this area. The common law interpretation, therefore, remains as unclear and inconsistent as the Department of Justice approach.

Developing a system that works to incorporate the single goal of innovation within the sometimes seemingly conflicting mechanisms of patent and antitrust is difficult within this fragmented historical development, especially

118. 734 F.2d at 1347.

119. *Id.* at 1341.

120. *Id.*

121. 53 Fed. Reg. 21585 (1988).

122. *Id.* at 21583.

123. *Id.*

124. See Marks, *supra* note 6, at 967; see also 15 U.S.C. §§ 1, 2, 14, 18 (1982).

125. See Marks, *supra* note 6, at 967.

in the area of technology licensing. The current case law trend favoring patentee-licensors in antitrust situations demonstrates an effort to encourage innovation. Again, however, the court's creation of a super category of per se illegality with regard to leveraging harks back to the extreme version of antitrust analysis. Basic antitrust concerns with patent monopoly power, for example, override all others, including encouraging innovation and allowing for strategic product licensing mechanisms and negotiations.

Ironically, the concern over leveraging seems misplaced. The basis for the concern is protecting (1) the licensee in a potentially less powerful bargaining position and (2) smaller potential entrants in the tied product market.¹²⁶ Yet smaller firms have been shown to be more efficient in developing technological innovation.¹²⁷ It is these smaller companies that would particularly benefit from laws that increase their ability to license their patents in order to manufacture, commercialize and distribute their product.¹²⁸

From this perspective, as a matter of policy, it is unclear whom the court should favor in a negotiation setting where the licensor with the unique, greatly demanded product is the small firm innovator trying to break into the market. One point is clear. If this broad notion of economic power continues to be associated with certain patents, the licensor will always be at a distinct disadvantage,¹²⁹ regardless of the bargaining power differential between the parties¹³⁰—and regardless of the fact that innovation is carried out more efficiently by small firms.¹³¹

The DOJ does recognize the benefits of technology licensing to the consumer.¹³² The DOJ acknowledges that certain restraints may encourage the efficient development and use of technology, maximizing the returns to consumers as quickly as possible.¹³³ Due to the general pro-competitive nature of technology licensing,¹³⁴ the Department, unlike the courts, is committed to analyzing the competitive effects of licenses and their restriction under a rule of reason “unless the underlying transfer of technology is a sham.”¹³⁵

While the Department's approach favors innovation by applying a more lenient analysis focusing on the entire agreement rather than on particular restraints, the impact is limited.¹³⁶ The Department has yet to come up with an adequate market definition for new technology in order to evaluate competitive effects. Furthermore, the Department of Justice's approach remains

126. *Digidyne*, 734 F.2d at 1340.

127. PAUL S. HOFF, *INVENTIONS IN THE MARKETPLACE: PATENT LICENSING AND THE US ANTITRUST LAWS* 14 (1986).

128. *Id.*

129. See Marks, *supra* note 6, at 989 n.12.

130. *Digidyne*, 734 F.2d at 1340.

131. See HOFF, *supra* note 127, at 14.

132. 53 Fed. Reg. 21592 (1988).

133. *Id.* at 21593.

134. *Id.*

135. *Id.*

136. American Bar Association Section on Antitrust, *supra* note 90, at 676

only an internal test, not the law. Both these factors indicate that thus far, as under the National Cooperative Research Act, U.S. attempts to incorporate the requirements of innovation in the intellectual property regime are only serving to bring in a new perspective rather than a change in approach.¹³⁷

B. Technology Licensing in the EEC as Compared to the United States

In the EEC, patent licensing practices are reviewed under regulation 2349/84.¹³⁸ As with joint ventures, licensing provisions are evaluated in relation to Articles 85 and 86 of the Treaty of Rome under three separate categories—the black, white and grey lists of 85(3).

Article 1 is sometimes referred to as the grey category.¹³⁹ This section lists territorial licensing provisions that are exempted under Article 3 from being prohibited under 85(1) as anti-competitive restraints. This list includes, for example, certain types of exclusive licenses and modified or non-absolute territorial restrictions.¹⁴⁰

Article 2, referred to as the white list, notes provisions that generally do not restrict competition and, therefore, are not even subject to modification.¹⁴¹ These provisions are specifically listed for the sake of providing certainty.¹⁴²

Article 3, the black list, categorizes license provisions that are denied the benefits of block exemption.¹⁴³ Provisions falling within this category include no-challenge clauses, maximum quantity limitations, price restrictions, and non-reciprocal grant-backs.¹⁴⁴ This section does not actually serve as a per se anti-competitive category. Instead, it defines the limits of provisions which may be exempted under the grey list.¹⁴⁵

The preamble to Article 85(3) of the Treaty pertaining to certain categories of patent licensing agreements establishes the philosophy integrating the various categories that comprise the blocking exemption. The focus of the EEC's licensing mechanism is not on competition or power when defining patent, but rather on how the law functions in relation to the objective and requirements of innovation.¹⁴⁶ First, the mechanism defines patent licensing as "agreements. . . to exploit the patented invention by one or more of the

137. See Zwart, *supra* note 1, at 106.

138. Commission Regulation No. 2349/84, 1984 O.J. (L219) 15 [hereinafter Regulation 2349/84].

139. See SOBEL, *supra* note 12, at 305.

140. See Barry E. Hawk, *Patents Under EEC Competition Law*, 53 ANTITRUST L.J. 737, 756 (1986)

141. See Marks, *supra* note 6, at 973, citing Regulation 2349/84, *supra* note 138.

142. See SOBEL, *supra* note 12, at 306.

143. See Marks, *supra* note 6, at 973.

144. See Hawk, *supra* note 140, at 757.

145. See SOBEL, *supra* note 12, at 306.

146. See Regulation 2349/84, *supra* 141, at 15.

means of exploitation *afforded by patent law*, in particular manufacture, use or putting on the market.”¹⁴⁷

Second, the treaty defines the category of patent licensing agreements to be exempted “in light of the experience acquired so far”¹⁴⁸ with regard to which agreements “are capable of falling within the scope of Article 85(1), but which can normally be regarded as satisfying the conditions laid down in Article 85(3).”¹⁴⁹ To fall under the exemption category of 85(3) the agreements must be “concerned with the introduction of new technology.”¹⁵⁰

This mechanism leaves room to redefine patent law according to acquired experience. This working knowledge must be specifically derived by systematically interpreting competition policy, 85(1), considering in part certain categories of patent power, 85(3), evaluated according to their ability to contribute to technological progress.¹⁵¹

As the Court of Justice of the European Community (the “Court of Justice”) is the ultimate interpreter of Articles 85 and 86,¹⁵² any analysis of the EEC’s system must consider that Court’s opinions.¹⁵³ The Commission’s blocking decisions must be read in light of the Court’s historical decisions.¹⁵⁴ Specifically, an understanding of how and why the blocking exemption was chosen to balance the needs of economic integration requires studying the history behind the *Maize Seed* decision.¹⁵⁵

The *Maize Seed* judgment represents the first court decision to address the validity of patent license restrictions in light of competition policy.¹⁵⁶ In *Maize Seed*, the Commission denied an exclusive license agreement which prevented a licensor from producing or selling the product or from granting further production or sale licenses.¹⁵⁷ The Commission held that such a restraint violated Article 85(1).¹⁵⁸ The Court of Justice overturned this decision.¹⁵⁹

First, the Court distinguished open exclusive licenses from closed exclusive licenses.¹⁶⁰ A closed license provides exclusive and absolute territorial protection by obligating the licensor to eliminate all third party competition with respect to the product and territory in question.¹⁶¹ Eliminated third

147. *Id.* at 16 (emphasis added).

148. *Id.*

149. *Id.*

150. *Id.*

151. *Id.*

152. *Id.*

153. The European Court of Justice determines all appeals from decisions of the European Commission. The Commission represents the centralized policy-making institution of the EEC.

154. Hawk, *supra* note 140, at 749.

155. Nungesser, 1982 E.C.R. at 2015.

156. Hawk, *supra* note 140, at 749.

157. 1982 E.C.R. at 2019-20, 2030-31.

158. *Id.* at 2030-31.

159. *Id.*

160. *Id.* at 2065-68.

161. *Id.* at 2068.

parties include parallel importers or licensees for other territories.¹⁶² In an open exclusive license, the owner is only obligated to not grant other licenses and to not compete with the licensed product in the specified territory. Parallel importers and other licensees remain free to sell in the territory.¹⁶³

As the latter does not grant the licensee absolute territorial protection against third parties¹⁶⁴ such as parallel importers and licensees for other territories, the Court held that certain open exclusive licenses did not violate the treaty's essential goal of market integration and the free movement of goods.¹⁶⁵ Thus, certain open licenses might not be incompatible with Article 85(1) of the Treaty. Instead, the Court recognized that such licenses provided "a further incentive to innovative efforts."¹⁶⁶ The denial of all exclusive licenses, including those where, as in this case, the intention was to protect breeders' rights for a limited period during agricultural innovation, might hamper the spread of knowledge and technology in the European Community.¹⁶⁷ Thus, in determining whether or not to apply Article 85(1), the Court emphasized the specific nature of the product concerned, the risks involved in cultivating and marketing the particular product, and the significance of the new technology.¹⁶⁸

Essentially, the *Maize* Court's refusal to apply a per se test to restrictions on conduct likely to have an important impact on the market represents the significance of the case.¹⁶⁹ The Court aligned itself with the European Parliament's belief that parallel importing and "the overall competitive effects of distribution agreements need to be examined in *greater* detail from an *economic* rather than *just [a] legalistic* point of view."¹⁷⁰ The Commission's codification of *Maize* in recital 11 of 85(3) further signifies its encouragement to all licensors, regardless of financial capacity, "to create a balanced network of licenses."¹⁷¹ The Commission adopted the Court's position by reiterating the distinction between open and closed licenses but, interestingly, did not adopt the Court's market analysis of certain open licenses under 85(1).¹⁷² Instead, the Commission went a step further and declared that all open licenses fell

162. *Id.*

163. *Id.*

164. *Id.*

165. *Id.* at 2069.

166. *Id.*

167. *Id.*

168. *Id.* at 2065-69.

169. See VALENTINE KORAH, PATENT LICENSING AND EEC COMPETITION RULES REGULATION, 2349/84 5 (1985); see also Nungesser, 1982 E.C.R. at 2130-31.

170. 1982 E.C.R. at 2130, quoting resolution by the European Parliament on December 17, 1981 (emphasis added).

171. Commission, Working Document No. IV/84, as quoted in, Hawk, *supra* note 140, at 765.

172. Regulation 2349/84, *supra* note 141, at 15.

outside of Article 85(1).¹⁷³ It then introduced a full market analysis directly under 85(3).¹⁷⁴

Under Article 85(3), open agreements "are not in themselves incompatible with Article 85(1) where they are concerned with the introduction and protection of a new technology in the licensed territory, in view of the scale of the research that has been undertaken and of the risk that is involved in manufacturing and marketing a product which is unfamiliar to users in the licensed territory at the time the agreement is made."¹⁷⁵ The Article only later clarifies that this exemption remains subject to subsequent decisions by the Court of Justice.¹⁷⁶

This history of the drafting and, ultimately, the structure of the blocking exemption is significant because it reveals a mechanism and priorities. By refusing to introduce market analysis under 85(1) and instead reserving this type of analysis for the exemption category of 85(3), the Commission creates a new set of specific priorities to override any vague general concerns over competition.¹⁷⁷ Basically, the emphasis is initially placed on achieving a specific competition policy and particular patent licensing objectives.¹⁷⁸

The highest priority goal is free movement of goods/market integration,¹⁷⁹ the initial distinction between open and closed exclusive licenses. The next goal is to promote innovation which might not otherwise occur, because of technological complexities, scale of research or financial risk. Rather than analyze open agreements in terms of potential competitive restraints they might impose, the Commission immediately exempts them under the patent licensing block. This analysis recognizes innovation as a goal rather than the promotion of competition as a means. The Commission recognizes that technological development may actually be necessary to achieve the larger objective of competition, social integration, and ultimately, financial and economic independence.¹⁸⁰

The Commission accepts the role of the Court in the process. The Commission notes that its analysis is "without prejudice to subsequent developments in the case law" and reserves the Court's right to review such agreements under Article 85(1).¹⁸¹ However, that review may be based on any acquired experience which might further affect the relationship between technology, competition, and cooperation.

173. *Id.*

174. *Id.*

175. *Id.*

176. *Id.*

177. *Id.*

178. *Id.*

179. *Nungesser*, 1982 E.C.R. at 2070.

180. *Jorde & Teece*, *supra* note 3, at 33 n.75 *citing* R. LANGLOIS, MICROELECTRONICS: AN INDUSTRY IN TRANSITION 116 (1987).

181. Regulation 2349/84, *supra* note 141, at 21.

The Commission's method of determining which priorities benefit from an exemption can be seen by the evolution of its standards according to set priorities and experience. Initially, the Commission, believing large firms required less protection than smaller firms, considered a turnover requirement in order to qualify for an exemption.¹⁸² However, after criticism from the business community suggesting that such discrimination would "restrict the flow of technology within certain parts of the Community," the turnover requirement was eliminated.¹⁸³

The Commission was persuaded that all licensors need protection from competition against their licensees and from the risk of investment. Without territorial restrictions which protect licensees from one another, the individual licensee would not be encouraged to make the investments necessary to successfully market new inventions. Further, licensors might be tempted to exploit their own product. The Court reads the territorial restriction as allowing the licensor "maximum freedom [to] adopt the licensing structure which will create and maintain the optimal incentive for each of the economic agents involved."¹⁸⁴

Thus, the history and structure of the blocking exemption are preserved by the hierarchy of priorities: social and economic integration, the free movement of goods, innovation and technological development, and, finally, potential competition analysis. As stated in the preamble, it is the law and experience behind patent and competition doctrines examined in light of desired goals that drives the mechanism forward, not any concept of competition or power implied from the notion of a patent.¹⁸⁵

Some have suggested that this licensor freedom has been curtailed by the recent *Windsurfing International v. Commission*¹⁸⁶ decision. In *Windsurfing*, the European Court of Justice found unlawful a provision prohibiting the licensee from changing the design of a windsurfing board without approval from the licensor.

The licensor claimed this provision really represented a territorial restriction that, as with open exclusive licenses, would allow him to create a successful patent licensing network. This facilitated quality control and contributed to rapid growth and expanded production by emphasizing a wide choice of models.¹⁸⁷ While the Court recognized that the licensor's goal of creating "sufficient product differentiation between its licensees' sailboards to

182. Commission, Working Document No. IV/84, as quoted in, Hawk, *supra* note 140, at 765.

183. *Id.*

184. *Id.*

185. Regulation 2349/84, *supra* note 141.

186. 1986 E.C.R. 611 (1986).

187. *Id.* at 639.

create the widest possible spectrum of market demand," it nevertheless declared the provision unlawful.¹⁸⁸ Some have suggested that this holding indicates a trend by the EEC toward favoring and protecting licensees.¹⁸⁹

However, the Court's decision in *Windsurfing* had less to do with re-vamping the law on territorial restrictions in favor of licensees than with maintaining the equilibrium between licensee and licensor in a way which would maintain the integrity of the goals of 85(3). First, the Court acknowledged that the purpose of the 85(3) exception for technological innovations was not only to promote technical progress but also to contribute to improving the production and distribution of goods.¹⁹⁰ Additionally, the Court of Justice, as well as the Commission, agreed that quality control and product differentiation such as those claimed by the licensor might well serve to meet this objective,¹⁹¹ except in cases where the production methods are not related to the particular nature of the technology or innovation being promoted.¹⁹²

Thus, the Court first defined the technology in question. *Windsurfing International* claimed the patent covered the sailboard. However, according to the patent decision of March 31, 1978, the object of the patent was the rig for the sailboard.¹⁹³ The aim of the invention was the rig's "novelty and advanced nature."¹⁹⁴ The innovation did not encompass component parts such as the board.¹⁹⁵ In this context, the licensor's provision granting control over the board did not aim to protect the specific promoted technology. Thus, the Court's primary concern was not with *who* should be protected, but with *what* was being supported under the 85(3) exemption.

The Court further noted that even if this restriction on board design improved the production quality and marketing of the entire rig, it did not technically meet the priorities of 85(3).¹⁹⁶ Article 85(3) represents an exception to 85(1) to encourage new and potentially risky technologies that could not develop under present law. Thus, exclusive or restrictive arrangements are allowed only when meeting the technological progress objective without imposing restrictions "not indispensable to the attainment of [this objective]."¹⁹⁷

Thus, the technology supported must be initially defined. Second, while the production and distribution of the goods qualifies as an essential element of the technology, restraints with only this goal must also be necessary to

188. *Id.* at 656.

189. Norman E. Rosen, *EEC Antitrust Limitations on Technology Licensing*, 1 ANTITRUST L.J. 16 (1987).

190. 1986 E.C.R. at 638; see also Regulation 2349/84, *supra* note 141, at 26.

191. 1986 E.C.R. at 656.

192. *Id.* at 619; see also Regulation 2349/84 *supra* note 141, at 26.

193. 1986 E.C.R. at 619.

194. *Id.*

195. *Id.*

196. Regulation 2349/84, *supra* note 141, at 26.

197. *Id.*

maintain the integrity of the innovation promoted.¹⁹⁸ Ultimately, the result in *Windsurfing* maintains the 85(3) priorities so that it continues to promote a balanced network between the licensors and licensees in the promotion of technology.¹⁹⁹

Promoting technology and investment by maintaining a contractual balance of power between licensee and licensor²⁰⁰ may be best illustrated by the Commission's regulation of tying clauses. The crucial issue—and the main, but disguised, issue in the U.S. case, *Digidyne*—is the degree of protection needed to generate the optimal investment by licensor and licensee.²⁰¹

Both the United States and the EEC generally condemn the tying of unpatented products to the grant of a patent license.²⁰² However, in the EEC, as with package licensing, a licensor may obligate the licensee to use specified goods or services as part of the license when those “products or services are necessary for a technically satisfactory exploitation of the licensed invention.”²⁰³ The definition of “necessary” and the length of time the determination remains valid is unclear.²⁰⁴ Again, however, the structure of the actual analysis the Commission performs in these cases affords a reasonable interpretation.

First, the requirements for technical exploitation are significant factors in determining whether or not to prohibit tie-ins. These requirements are emphasized not only in the exception to the general prohibition on tying found in Article 3.9,²⁰⁵ but also in Article 2.1(1), the first item under the white list.²⁰⁶ This category encompasses clauses which may restrict competition between licensees, but do not infringe upon Article 85(1) when necessary to induce the required innovation investment.²⁰⁷

Thus, although tie-ins may generally be condemned as anti-competitive, once it is shown that such an arrangement is necessary to reach the goal of technical exploitation, the tie-in falls within an Article 2.1(1) analysis.²⁰⁸ However, although the EEC exempts tie-ins that promote technological progress, just as with open exclusive license agreements, the Commission draws the line strictly.²⁰⁹ General business decisions made with regard to methods of technical exploitation are not equated with the actual economic requirements of innovation.

198. *Id.*

199. 1986 E.C.R. at 656-57.

200. Commission Working Document, as quoted in *Hawk supra* note 140, at 765.

201. *KORAH, supra* note 169, at 48.

202. *Marks, supra* note 6, at 988-89.

203. *Id.*

204. *Id.*

205. *Marks, supra* note 6, at 989 n.170.

206. *Id.*

207. *KORAH, supra* note 169, at 47-48.

208. *Id.*

209. *Id.*

Valentine Korah, an authority on the EEC Treaty, suggests that, according to recent decisions, the Commission will probably exempt tying provisions only if there are no sufficiently reliable alternatives available.²¹⁰ Therefore, since the motivations are primarily financial rather than technical, Article 3(9) blacklists tying in order to meter the use of the invention.

On the other hand, a licensor may be permitted to limit the licensee's choice of supplier to ensure a technically satisfactory level of a particular product. This use of a tie-in is expected to result in greater consumer satisfaction and consequently greater output.²¹¹

However, as in *Windsurfing*, the needs of innovation are satisfied to generate optimal licensor and licensee investment. The licensor's freedom is maximized. If his product falls within a category of technological development sought to be encouraged (high risk ventures in *open* exclusive territorial restrictions, technical or business necessities for successful exploitation in the case of tie-ins), any provisions necessary for development may be exempted.²¹² The licensee is also protected. These exemptions are strictly tailored to satisfy technological, not financial, objectives of the licensor.²¹³

In addition, even when the exemption granted the licensor is strictly defined, the effects on the licensees may still be factored in.²¹⁴ The Commission's decision-making process when considering whether to limit the exemption privilege for open territorial restrictions to firms with a lower turnover rate demonstrates this strict tailoring of the exemptions to achieve the objective of innovation, while preventing excessive market power in any one party. Turnover requirements were eliminated only when the Commission recognized that licensees would benefit most if large licensors were encouraged to create successful licensing networks.

Thus, the Commission consistently checks the licensor's power against the licensee's position by strictly limiting the use of exemptions to those that fulfill the needs of technological progress and optimal commercialization. The ultimate emphasis is upon innovation in its entire spectrum—from technological development to its successful marketing by a balanced network of licensors and licensees.²¹⁵

IV. CONCLUSION

Being a successful innovator and competitor in the fast-paced global market of the 1990s may depend upon the ability to continually adapt to rapidly changing circumstances. As an integral part of a worldwide market,

210. KORAH, *supra* note 169, at 47-48.

211. *Id.* at 48.

212. *Id.*; see also Regulation 2349/84, *supra* note 141, at 16.

213. KORAH, *supra* note 169, at 48.

214. *Id.*

215. Commission Working Document, as quoted in Hawk, *supra* note 140, at 765.

the successful competitor may have to look to other international institutions and policies and share in other countries' experiences when dealing with innovation, patent, and competition regimes.

The EEC's method of synthesizing competition policy and intellectual property regimes to achieve the larger goals of social integration through economic and technological progress²¹⁶ can serve as a valuable model for all countries to integrate into the global innovation market. While all such complicated systems contain inherent uncertainty in practice, the general philosophy behind the current system is admirable. Structured specifically to maintain certain goals and priorities, the system remains open to integrate newly acquired experience. Finally, it addresses antitrust, innovation, and patent law concerns in an effort to maintain a balance of power between licensor and licensee.

In the United States, to adapt to the current market, we must determine what is really necessary—as opposed to necessarily harmful—in order to encourage technological development.²¹⁷ Old notions of competition, monopoly, and patent power will have to be redefined in terms of the current requirements of innovation. Larger social goals such as technological and economic progress will have to be clearly integrated into the language of our legal regimes.

Old fears of collusion will have to be evaluated in line with a more realistic vision of the fast-paced, strategic negotiating characteristic of the current high-technology market.²¹⁸ Finally, the fear of leveraging created by the economic powers of invention must also make way for the needs of successfully structured alliances that encourage maximum investment by all parties involved in the global competition.

216. See LANGLOIS, *supra* note 180.

217. See Dara, *supra* note 8, at 790.

218. See Jorde & Teece, *supra* note 3, at 83.