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INTELLECTUAL PROPERTY AND THE COSTS OF COMMERCIAL EXCHANGE: A REVIEW ESSAY

Robert P. Merges*

THE COMMERCIAL LAW OF INTELLECTUAL PROPERTY. By Peter A. Alces and Harold F. See. Boston: Little, Brown & Co. 1994. Pp. xxxii, 736. \$145.

I. Introduction

Peter A. Alces¹ and Harold F. See² state in their highly useful book that

As the relative proportion of traditional goods involved in commercial transactions declines and the relative proportion of intellectual property in such transactions increases, the important question is whether Commercial Code principles designed with contemporary commercial practices in mind and promulgated essentially uniformly across the entire nation provide the better rules to foster economic and technological growth, or whether, on the other hand, the common law rules of contract forged in the early days of the industrial revolution, from which the commercial law sprang and diverged, provide the better guidance. [pp. 346-47]

Although they tip their hand a bit in framing the question — they clearly favor the extension of UCC rules and principles to cover "contemporary commercial practices" — Alces and See have no doubt hit on an important set of issues. They have identified a new ingredient increasingly spicing the meat-and-potatoes practice of the transaction-oriented business lawyer: intellectual property.

At the simplest level, their volume contains a compendium of, and commentary on, a wide range of commercial bargains in which intellectual property plays a role. By its own terms, their book is a straightforward effort to collect these cases from the corners of the commercial law reports and to impose some order on them. To do this, the authors make clear, they must describe and define some concepts that are familiar to intellectual property lawyers but not to commercial lawyers, and vice versa. Thus, for the practitioner, the book represents an effort to bridge the gap between two heretofore

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isolated fields. Although it is a smidgeon better at bringing commercial law to the intellectual property specialist than the other way around, overall it is a highly competent exemplar of the legal bridgebuilder's art.

Nevertheless, the bridge is an early model — a prototype, almost. Although there is a crying need for a book that brings out and ties together the multifaceted legal issues arising from intellectual property transactions, this book falls somewhat short of the deluxe, Golden-Gate-spanning variety the subject seems to call for. Nevertheless, it establishes some solid footings on which future scholars might build a more elaborate structure.

A. The Plan of Attack

In Part II, I try to explain why intellectual property is cropping up in more and more commercial transactions. I emphasize the role that intellectual property plays in some newly emerging organizational arrangements in economic production — in particular, the greater use of nonemployee consultants and contract-based "quasi firms" such as joint ventures. These increasingly common organizational forms, which appear regularly in the cases that Alces and See survey, have become more viable now that Congress and the courts have joined together to create stronger intellectual property rights.

After this account of the origins of the growing intellectual property component in commercial transactions, I turn in Part III to some details of those transactions, as analyzed by Alces and See. I first briefly describe the UCC-based approach the authors have taken to their subject matter, and I argue that the authors have included too many commercial transactions with only a nominal intellectual property component. I also describe the high points of the book and stop, now and again, to record a doctrinal quibble. The substantive conclusion of this Part is that the authors would have better served their intended audience by dissecting more thoroughly a smaller number of cases that expose basic incompatibilities between policies central to the UCC and accepted intellectual property doctrine.

In Part IV, I discuss why the book only partly bridges the existing gap in the intellectual property literature — why, as I like to put it, we need a contract law of intellectual property, and not just a commercial law. Here I argue for an integrated approach to the entire body of rules and doctrines that Congress and the courts have created to police intellectual property transactions. In the course of this discussion, I attempt to show why legislatures, courts, and scholars must consider the policing doctrines traditionally thought of as "internal" to the federal intellectual property regimes — especially the twin doctrines of copyright and patent "misuse,"

and such other issues as federal preemption of state law affecting intellectual property — together with U.C.C. issues if they are to construct a coherent body of transactional rules. I present a lengthy discussion of the "shrinkwrap" or "tear open" software license to illustrate the need for such an integrated treatment.

In Part V, I argue that the forces behind the growing commerce in intellectual property rights, which I review in Part II, will likely intensify, making it all the more necessary to complete what Alces and See have begun in this volume — the process of constructing a truly integrated contract law governing intellectual property-based transactions. I close by noting that books like this do more than describe this trend; they add to it by disseminating transactional "know-how" that enables lawyers and others to build more complex transactions on the foundation of intellectual property rights.

II. INTELLECTUAL PROPERTY RIGHTS AND THE ORGANIZATION OF PRODUCTION

Consider the quote from Alces and See in the introduction to this review. The authors observe that the relative importance of traditional goods involved in commercial transactions is declining while the relative proportion of intellectual property in such transactions is increasing. In this Part, I focus on what the authors see as the motivation for this development, and I discuss its implications and ramifications.

Let me state at the outset that, in the spirit of the authors' undertaking, I will take as a given that they are correct in asserting a higher intellectual property content in the practice of commercial lawyers. Anecdotal evidence for this abounds; it is certainly also relevant that two experienced commercial lawyers have bothered to write a practitioner-oriented book on the subject. I will assume their market research was accurate. The interesting question is: What lies at the heart of this trend? Just why has intellectual property become the subject of an increasing volume of transactions?

There are essentially three interrelated reasons for the growth in intellectual property commercial transactions. First, there is more intellectual property to include in transactions than there used to be, and it is worth more because it is more readily enforced by the courts. Congress, and to a lesser extent the state legislatures, are creating more intellectual property each year; where the United States leads in this area, other countries tend to follow.³ Second,

^{3.} Perhaps there is an interesting "race to the top," or to the bottom, phenomenon going on here. On the leadership of the United States in intellectual property protection, see Stephen A. Bent et al., Intellectual Property Rights in Biotechnology Worldwide (1987) (discussing U.S. leadership in biotechnology); Robert P. Merges, A Comparative Look at Property Rights and the Software Industry, in The International Computer Software Industry (forthcoming 1995) (discussing U.S. leadership in software).

the growth in intellectual property has increased businesspeople's awareness of the intellectual property aspects of traditional transactions. Consequently, there is often now an intellectual property dimension to transactions that were conducted in the past without mention of these rights. Third, and most interesting to me, intellectual property rights make more feasible various organizational structures that firms and individuals are increasingly using to produce goods and services. Since these organizations are at least partially based on contracts, they provide a growing source of commercial transactions that necessarily include an intellectual property component.

Intellectual property rights appear to enhance and, in some cases, to enable these contract-based organizations — which run the gamut from consulting arrangements to "out-sourcing" agreements in which firms purchase components formerly manufactured by themselves. In general, intellectual property rights make such transactions less risky, and hence feasible in more instances, because they make it easier for the licensor — often the supplier of a productive input — to police the activities of the licensee. The strong policy favoring injunctions is one example of how licensors can use intellectual property rights to police licensee activities;4 another example is courts' strict adherence to the field-of-use limitations that many licensing agreements contain.5 In these and other ways, intellectual property rights give the input supplier greater control over the activities of the licensee, which makes the external production of inputs and the concomitant transfer by contract more feasible. To put it another way, intellectual property rights reduce

^{4.} On the strong policy favoring injunctions, see Robert P. Merges, *Of Property Rules, Coase, and Intellectual Property*, 94 COLUM. L. REV. 2655 (1994); see also Burberrys (Wholesale) Ltd. v. After Six Inc., 471 N.Y.S.2d 235 (Sup. Ct. 1984) (illustrating how a licensor can craft licensing agreements that provide for injunctions).

^{5.} See, e.g., General Talking Pictures Corp. v. Western Elec. Co., 305 U.S. 124 (1938). See generally Stephen J. Davidson, Selected Legal and Practical Considerations Concerning 'Scope of Use' Provisions, Computer Law., Oct. 1993, at 1. Davidson argues that

such restrictions [i.e., tight field-of-use limitations] (or the lack of express authorization for a particular use) may be used by the licensor in an effort to extract excessive license or renewal fees after the licensee has become reliant on the software in its business. Claims of default and termination based on such restrictions or lack of express authorization, or based on ambiguity over what uses are permitted, can threaten the licensee's very ability to continue in business. The courts are all over the place on these issues, and the opinions in those cases that have been decided in the past few years suggest that the decisions were based more on the courts' gut level sense of justice than any uniform rules of law.

The ability of software licensors to terminate or threaten termination of their licenses or support agreements based upon alleged default by unauthorized use is a very real threat to licensees who are reliant upon the software for continuation of their day-to-day business operations.

the licensee's opportunistic possibilities⁶ and thereby lower transaction costs.

While it is important not to overstate the significance of intellectual property rights in the emergence of these new organizational forms, it is also important to point out some likely causal links, all of which turn on the potential for tighter contractual control, at lower cost, that comes with property rights. The most obvious illustration of how property rights confer tight control is the example alluded to above, the availability of quick injunctions in the event of breach. Since injunctions are much more easily obtained in intellectual property infringement cases than in run-of-the-mill commercial contract disputes, the inclusion of intellectual property in a commercial arrangement gives the owner of that property right much more leverage with which to police licensee behavior. It follows that, at the margin at least, the availability of intellectual property will make a supplier more likely to rely on contract, as opposed to integration or some other transactional form. In this way property rights, including intellectual property rights, contribute to the growth of contract-based exchange.

Note in this connection that it is difficult to argue that contract terms can substitute fully for the enhanced control conferred by the strong injunction policy of intellectual property law. It is well established, for example, that courts do not necessarily enforce contractual provisions stipulating to specific performance or other injunctive remedies.⁸ In addition, even if an enforceable contractual provision to this effect were assumed, such a clause would be expensive to draft and negotiate,⁹ and someone would have to establish its enforceability. As I have argued elsewhere, these are precisely the sorts of costs that "off the rack" intellectual property rights serve to lower or eliminate.¹⁰

^{6.} Of course, intellectual property rights also increase the bargaining leverage of the licensor, which is one reason the legal system must carefully consider the extension of these rights into new product markets. See Robert P. Merges, Intellectual Property Rights and Bargaining Breakdown: The Case of Improvement Inventions and Blocking Patents, 62 Tenn. L. Rev. 75 (1994).

^{7.} On injunctions in intellectual property cases, see Merges, supra note 4. On the availability of injunctions in commercial transaction cases, see Scott E. Masten, A Legal Basis for the Firm, in The Nature of the Firm 195, 205 (Oliver E. Williamson & Sidney G. Winter eds., 1993) ("[S]pecific performance is infrequently applied in commercial settings....").

^{8.} See Alan Schwartz, The Myth That Promisees Prefer Supracompensatory Remedies: An Analysis of Contracting for Damage Measures, 100 YALE L.J. 369 (1990).

^{9.} See Masten, supra note 7, at 207 (pointing out the advantages of relying on standard common law principles in the area of employment law, as opposed to replicating them in services contracts, which "would... require reviewing and repeating the entire case law in each contract, obviously forfeiting a substantial economy").

^{10.} See Merges, supra note 4, at 2664-73.

A. Intellectual Property Rights and the "Propertization of Labor": The Parable of the Fish

Portions of the Alces and See volume are consistent with the notion that stronger rights are linked to diverse organizational forms. For instance, some of the cases they discuss help illustrate how the growth of an intellectual property component in commercial transactions has enabled new organizational forms. For example, in *Real Estate Data, Inc. v. Sidwell Co.*, ¹¹ an independent mapmaker contracted with a firm to produce maps. A copyright ownership dispute resulted from the relationship, but the relationship itself shows how intellectual property rights have become important in structuring this kind of consulting agreement. Because the consultant can control by contract the use and dissemination of her work product, she has an incentive to enter into a consulting agreement rather than an outright employment agreement.

A consultant generally can only sell a given unit of labor once, and she can sell it only to a single firm. Intellectual property, however, in effect "propertizes" her labor, making it possible to sell the same unit of output multiple times to multiple firms. Of course, for this to work, the consultant must produce something that intellectual property law protects, and she must retain ownership of her work product, typically by contract. Assuming ownership of a protected work, however, intellectual property rights allow her to transform her efforts from a onetime service into a multiple-use commodity. This conversion of services into an asset that the producer can trade many times of course enhances the potential economic returns from such work.

The old parable of the fish captures how reusable techniques and information can pose a public goods problem and how intellectual property law solves that problem. In the parable, a fisherman is instructing a neophyte in the essence of his trade. "Catch fish for people," he says, "and you will make a fine living. But teach someone to fish, and you will starve." Intellectual property introduces a third possibility: teach multiple people to fish, but prohibit them from retransferring the fishing techniques, and even limit the uses of the techniques, via contract. Under this scenario, the fisherman

^{11.} P. 373 (discussing Real Estate Data, Inc. v. Sidwell Co., 809 F.2d 366 (7th Cir. 1987)).

^{12.} Commentators at least since Locke have asserted that everyone owns his or her labor; in Locke's case, this was an outgrowth of his starting point that everyone owns his or her own body. John Locke, Two Treatises of Government 328-29 (Peter Laslett ed., 1960) (1690). But when these commentators refer to a property right in one's labor, they are talking about the right to bargain for a wage before engaging in work — in essence, the right not to be a slave. By contrast, I am referring to the conversion of labor into a tradeable asset or property right. "Assetization" might be a more appropriate term for what I have in mind; but since this sounds even worse than "propertization," I will stick with the latter. On a related phenomenon, see Tamar Frankel, Securitization: Structured Financing, Financial Assets Pools, and Asset-Backed Securities (1991).

supplies a product, but that product is fishing techniques instead of fish. By limiting the licensees' ability to retransfer the techniques, the fisherman eliminates the downside of transferring techniques instead of goods. In addition, when a buyer is better positioned to invest in boats and fish processing equipment, the sale of techniques will increase efficiency all around. Instead of forcing the fishing expert to invest in these assets to ensure a return on his or her know-how, the expert can sever that know-how and sell it to those who already possess these assets.¹³ In a world in which fishing techniques are subject to a property right, firms that buy their own fishing fleets and hire fishing consultants may turn out to be more profitable than those that stick to the old production arrangement.¹⁴ In this respect, intellectual property rights can be seen as a mechanism for lowering the costs of a certain type of exchange and thereby facilitating a finer division of "intellectual labor."

One can view the property right in fishing techniques as a substitute for fishing services. The property right in the techniques allows the owner of the right to transfer the techniques themselves — as opposed to fish or fishing services. In some sense the essence of the transaction has not really changed: the fisherman is still selling an input into the firm's production process. But the property right in techniques, together with whatever business strategy the owner of the right employs to exploit it, enhances the profit potential of a business based on the licensing of techniques, which in turn makes it more likely that the relevant industry structure will include at least some firms that specialize in the sale of techniques. If so, the property right in fishing techniques and the firms that come to specialize in the sale of such techniques contribute to the enhanced production potential of the industry. This little story thus reveals that the property right — or rather, the transaction it enables — may actually create value in some cases.

^{13.} When the law poorly specifies property rights, however, experts should invest in their own assets. See David J. Teece, Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing and Public Policy, 15 Res. Poly. 285, 294 (1986) (observing that firms often invest in cospecific assets as a way of capturing returns from research and development expenses). One way of characterizing the point made in the text is to say that when the R&D performer is not in the best position to produce these cospecific assets, strengthening intellectual property rights can increase efficiency by making it possible to disaggregate production of R&D from production of these cospecific assets. See infra notes 14-16 and accompanying text.

^{14.} The economist George Stigler is associated with the view that economic growth inevitably brings with it an increase in firm specialization, even with regards to research and development. This suggests the inevitability of specialized production of fishing techniques. See Oliver E. Williamson, Markets and Herarchies: Analysis and Antitrust Implications 197-205 (1975) (discussing Stigler's views on the organization of research activities, especially the tendency to specialize). Note that business historian Alfred Chandler has argued that firm specialization and economic growth are codetermined, and thus to some extent specialization causes growth. See Alfred D. Chandler, Jr., The Visible Hand 15-36 (1977).

In addition, once intellectual property rights are introduced into a transactional setting, they open up the possibility for another type of exchange altogether. In some cases, the property right is actually the motivating force behind the transaction. Just as the property right in fishing techniques creates a market for those techniques qua techniques, intellectual property rights create the possibility for certain transactions that would not otherwise be feasible. These transactions, in the aggregate, comprise new markets. In this sense, the introduction of intellectual property rights — in some cases at least — offers the potential to affect the organization of production in industries that commonly employ techniques, know-how, and the like. Ideally, these rights can even make existing commerce more efficient by increasing the viability of firms that specialize in the creation of techniques.

Of course, simply creating property rights does not guarantee such benign effects. If other factors — especially the transaction costs of integrating intangible inputs such as techniques into the production process¹⁵ — militate against the success of such specialized firms, property rights alone will not make them viable. Furthermore, if property rights create more transaction costs than they eliminate, ¹⁶ they will soon become associated with extortion and rent-seeking, rather than with enhanced production possibilities. But property rights do make feasible some experiments in specialization, as well as other organizational innovations. As the cases in the Alces and See volume suggest, some of these experiments work. As long as this continues to happen, and as long as intellectual property rights are part of the experimental mix, firms will continue to generate new types of intellectual property-related transactions and the organizational forms that grow out of them.

^{15.} See WILLIAMSON, supra note 14, at 176-207 (chapter entitled "Market Structure in Relation to Technical and Organizational Innovation"). Williamson argues:

At least occasionally, vertical integration backward into research is the most attractive way to overcome the dilemma posed when high-risk programs are to be performed: the sponsoring firm (agency) assumes the risk itself and assigns the task to an internal research group. It essentially writes a cost-plus contract for *internal* development. That this does not have the debilitating incentive consequences that often result when similar contracts are given to outside developers is attributable to differences in the incentive and compliance machinery: managers are employees, rather than "inside contractors" ... and thus are unable to appropriate individual profit streams; also the internal compliance machinery to which the firm (agency) has access is vastly superior to and more delicately conceived than the policing machinery that prevails between organizations. Internal organization thus arises in part because of its superior properties in moral hazard respects.

Id. at 203-04.

^{16.} On this, see Merges, supra note 4.

B. Quasi-Integration, Dis-Integration, and Reintegration

The fishing technique example also illustrates the possibility of other forms of economic production. One of these has come to be called "quasi-integration." This label signifies production that is midway between complete integration and total dis-integration. The classic case of complete integration is the manufacturer of automobiles that owns the supply of all of its inputs: everything from iron mines to rubber plantations to a work force entirely composed of full-time employees. The Ford Company of the Model T era comes to mind.¹⁷ The traditional rationale for this extensive integration is that managerial control over the entire production process is more efficient than the alternative of acquiring each input via a market transaction.

An example of complete dis-integration is harder to imagine, but consider the production of birthday cakes in a town in which there are only small specialty stores and there is no bakery. In such a town one who wishes to make a cake will have to get eggs and milk and butter from the dairy store, wheat and sugar from the grocer, candles from the hardware store, and perhaps other ingredients from other specialty stores. Then the baker of the cakes will sell them in a market transaction to those retail stores that wish to resell them. This is what is meant by dis-integrated production: each input into the final product, as well as the final product itself, must be purchased through an arm's-length market transaction.

Now consider an example of quasi-integration. Imagine a "firm" in the software industry that is composed strictly of independent consultants, none of whom are employees, working on leased computers and hired by clients on a contract basis, to produce specified types of computer programs for a specified fee. This firm assembles its components strictly by contract, on a limited-purpose, limited-time basis. In some sense, the firm is nothing but a collection of contracts organized around a specific task. Note that despite the contracted-in nature of the inputs, the ongoing nature of the task requires some management of the firm. This management is what differentiates this quasi-integration form from the case of dis-integration discussed earlier. In truly dis-integrated production, the transactions are discrete "spot market" contracts; in quasi-integrated production, the consultants assemble the inputs by contract, but they combine the inputs into an ongoing production process. The consultants perform the contracts over a period of time, rather than instantaneously in a spot-market transfer. In the lexicon of

^{17.} See Alfred D. Chandler, Jr., Scale and Scope: The Dynamics of Industrial Capitalism 208 (1990).

contracting, quasi-integration involves relational, rather than one-shot, or discrete, contracts.

With this as background, we return to the story of the fishing consultant. One can easily imagine a two-pronged agreement between the fishing consultant and the firm. The consultant agrees to: (i) teach members of the firm how to fish; and (ii) transfer her property right in fishing techniques to the firm. In exchange, imagine that the fishing consultant receives a portion of her compensation in the form of equity issued by the other party. This is an example of quasi-integration. It is certainly not an example of integration: the fishing consultant contracts with the firm rather than becoming an employee. It is not really an example of dis-integration, either, however; though the input supplied by the consultant is transferred via contract, the consultant helps implement the technique and disseminate it throughout the firm over time, and the equity compensation gives the consultant an ongoing interest in the activities of the firm.

We can see in examining these various contracts that intellectual property rights can enhance market transfers not only by propertizing labor, as described earlier, but also by facilitating quasi-integration. In the fishing example, this took the form of joining the property right with a service component. To the extent that the intellectual property right makes the transaction more feasible, it contributes to the desirability of the quasi-integrated organizational form. This is precisely the connection that I argue lies behind many of the transactions that Alces and See catalogue in their book.¹⁸

^{18.} Among the organizational forms represented in the cases Alces and See discuss are: (1) outsourcing of manufacturing, e.g., pp. 377-79 (discussing Step-Saver Data Sys., Inc. v. Wyse Technology, 939 F.2d 91, 93 (3d Cir. 1991) (stating that plaintiff was a value-added retailer or VAR)); p. 438 (discussing Burkert v. Petrol Plus of Naugatuck, Inc., 579 A.2d 26, 29 (Conn. 1990) (providing an excellent illustration of outsourcing because the trademark owner in the case, General Motors, did not even know the formula for making its trademarked transmission fluid; the formula was a trade secret of one of the outside manufacturers)); pp. 487-90 (discussing Platt & Munk Co. v. Republic Graphics, 315 F.2d 847 (2d Cir. 1963)); pp. 559-60 (discussing Harper & Assocs. v. Printers, Inc., 730 P.2d 733 (Wash. Ct. App. 1986) (involving a printing contract for copyrighted poster)); p. 599 (discussing Log Plastics Prods., Inc. v. Robert Linkletter Assocs., No. 87-C3482, 1988 U.S. Dist. LEXIS 971 (S.D.N.Y. Jan. 29, 1988) (finding outsourcing manufacturing when a licensor licensed patent and proprietary know-how to a manufacturer); pp. 605-06 (discussing Burberrys (Wholesale) Ltd. v. After Six Inc., 471 N.Y.S.2d 235 (Sup. Ct. 1984)); (2) franchising, e.g., p. 366 (discussing Boat & Motor Mart v. Sea Ray Boats, Inc., 825 F.2d 1285 (9th Cir. 1987) (franchise termination)); pp. 534-35 (discussing Amoco Oil Co. v. D.Z. Enterprises, Inc., 607 F. Supp. 595 (E.D.N.Y. 1985) (involving cure of trademark infringement by a franchisee)); (3) consulting contracts, e.g., pp. 539-42 (discussing H.M. Stickle Co. v. Heublein, Inc., 716 F.2d 1550 (Fed. Cir. 1983) (involving an outsourcing manufacturer whose source hired design consultants)); (4) "image licensing," in other words, publicity and promotion, e.g., pp. 543-44 (discussing Moxie Indus., Inc. v. Hayden, 677 F. Supp. 187 (S.D.N.Y. 1988), modified, 1988 U.S. Dist. LEXIS 1174 (S.D.N.Y. Feb. 9, 1988)); (5) publishing and distribution arrangements, e.g., pp. 351-52 (discussing Platinum Record Co. v. Lucasfilm, Ltd., 566 F. Supp. 226 (D.N.J. 1983) (involving a music license for use in a movie)); pp. 546-47 (discussing Dodd, Mead & Co., Inc. v. Lilienthal, 514 F. Supp. 105 (S.D.N.Y. 1981) (involving a book-publishing con-

Quasi-integration takes advantage of the propertization of labor referred to earlier. For the sake of completeness, however, it seems appropriate to consider briefly how intellectual property rights can also facilitate complete dis-integration. Take as an example the organization of production in the music industry.¹⁹ A firm that sells musical recordings need not employ the musicians or the composer, and indeed the artist herself can arrange for the actual production of the music as she sees fit. Artists license their rights to the resulting musical compositions and recordings, and they usually transfer the license and the master tapes to the sales firm. Because a large record label will have entered into such transactions with hundreds of musicians, almost none of whom are employees, the production of music is what I would describe as dis-integrated production.

Indeed, the dis-integrated nature of music production requires the integration of a large number of musical properties in order to assemble a formidable music portfolio.²⁰ Although to some extent the same logic that leads firms in other industries to integrate vertically is present here, this approach rarely involves actually hiring creators as employees. There seems to be broad agreement that the nature of creative work is incompatible with employee status. What the firm integrates, then, is property rights, rather than the actual services of the creators. These transactions would be much more expensive without some way of easily dividing up the output stream of a creator into discrete assets — in other words, without formal intellectual property rights.

In an alternative organizational form, holders of intellectual property rights covering certain works license those rights to a central institution, which then typically issues blanket licenses.²¹ The

tract)); pp. 554-56 (discussing Record Club of Am., Inc. v. United Artists Records, Inc., 643 F. Supp. 925 (S.D.N.Y. 1986) (involving record distribution)); pp. 603-05 (discussing Freund v. Washington Square Press, Inc., 343 N.Y.S.2d 401 (App. Div. 1973), modified, 314 N.E.2d 419 (N.Y. 1974) (involving a book-publishing contract)); and (6) joint ventures, e.g., pp. 622-25 (discussing Behr Venture Partners, Ltd. — 1983 v. Bedord Computer Corp. (In re Bedford Computer Corp.), 62 B.R. 555 (Bankr. D.N.H. 1986) (involving a joint venture in the computer software industry)).

^{19.} Alces and See cite several music industry cases in which the division of productive labor is an important factor. See, e.g., pp. 479-80 (discussing Kamikaze Music Corp. v. Robbins Music Corp., 534 F. Supp. 57 (S.D.N.Y. 1981) (involving a music publishing contract case)); pp. 554-56 (discussing Record Club of Am., Inc. v. United Artists Records, Inc., 643 F. Supp. 925 (S.D.N.Y. 1986) (involving a record distribution agreement)). I spell out my views on the organization of production in the music industry and the role of intellectual property rights and collective rights organizations in more detail in Robert P. Merges, Contracting into Liability Rules: Institutions Supporting Transactions in Intellectual Property Rights (Oct.-Nov. 1994) (working paper, on file with author).

^{20.} For example, Warner/Chappell, a large music publishing company, is said to hold over 700,000 copyrights to musical compositions. David Sinacore-Guinn, Collective Administration of Copyrights and Neighboring Rights: International Practices, Procedures, and Organizations 198 (1993).

^{21.} Such central institutions are among a handful of distinctive organizations in the intellectual property-intensive industries. See Merges, supra note 19.

right holders remain independent, however. The best example of this phenomenon comes in the market for music performance rights, in which the American Society of Authors, Composers and Publishers and rival organizations play this integrating role. The key here is that these institutions serve to integrate a large pool of properties while allowing musicians to remain independent from the firms that package and disseminate music on a large scale.

C. A Case Study in Quasi-Integration: Joint Ventures

Joint ventures among two or more firms are increasingly popular.²² They appear to be at the heart of some of the cases that Alces and See discuss.²³ Joint ventures proliferate as firms recognize their advantages. Joint ventures (i) compensate for in-house weaknesses or technological gaps; (ii) fill out product lines and portfolios; (iii) position the firm to enter lucrative new markets; and, most important, (iv) reduce the costs, risks, and time required to develop new products and process technologies.²⁴ Indeed, David Teece has written that contractual governance structures such as joint ventures may come to displace the "managerial capitalism" of the large, integrated firm that Alfred Chandler argues lies at the heart of economic growth in the twentieth century. Teece says:

[Today's] challenges are somewhat different, and the organizational forms suited to each may vary to some degree, and may also differ from those that were effective in the [era studied by Chandler, i.e., the late nineteenth century to the mid-twentieth]...

... Perhaps it is because classical economies of scale and the unit price advantages can be accessed contractually in today's markets. Flexible specialization and contracting may today yield greater advantages than economies of scale and scope generated internally.²⁵

^{22.} See Kathryn Rudie Harrigan, Managing for Joint Venture Success (1986); Jeremy Main, The Winning Organization, Fortune, Sept. 26, 1988, at 50, 52 ("Kathryn Harrigan, a Columbia University business professor, says the number of such ventures [joint ventures, partnerships, or other agreements] began to pick up in the early Eighties, from a growth rate of some 6% a year to around 22%. She looks for much faster growth in the next few years."); John P. Karalis, International Joint Ventures § 1.1 (1992).

^{23.} See, e.g., pp. 622-24 (discussing Behr Venture Partners, Ltd. — 1983 v. Bedford Computer Corp.), (In re Bedford Computer Corp.), 62 B.R. 555 (Bankr. D.N.H. 1986)).

^{24.} COMMITTEE ON JAPAN, NATIONAL RESEARCH COUNCIL, U.S.-JAPAN STRATEGIC ALLIANCES IN THE SEMICONDUCTOR INDUSTRY: TECHNOLOGY TRANSFER, COMPETITION, AND PUBLIC POLICY 17 (1992); see also Morton I. Kamien et al., Research Joint Ventures and R&D Cartels, 82 Am. Econ. Rev. 1293 (1992) (describing a formal model of research joint ventures).

^{25.} David J. Teece, The Dynamics of Industrial Capitalism: Perspectives on Alfred Chandler's Scale and Scope, 31 J. Econ. Ltt. 199, 216-18 (1993) (citation omitted).

Whatever the motivations behind the growth in joint ventures, and despite their potential problems,²⁶ I am interested in the role of intellectual property rights in facilitating their formation. As explained earlier, I — along with Alces and See²⁷ — believe the same factors are at work in the growth of a wide range of increasingly common organizational forms,²⁸ and that many of the cases discussed in the Alces and See volume grow out of transactions connected to these organizations.

The literature directed at joint venture organizers features helpful pointers about the use of intellectual property. To begin with, it emphasizes the importance of contractual restrictions on the venture's use of technology licensed in from the partners. For example, one book aimed at managers states that

[Joint venturers] can use exclusive licensing provisions, right-of-first refusal provisions, noncompetition agreements, and other contractual provisions to protect knowledge from disseminating to unauthorized third parties. . . .

... [T]echnology licenses that are based on control of patents often provide that certain information cannot be passed on or used in another application (or for another purpose) without the owner's explicit permission.²⁹

I would argue that intellectual property rights are more than just another issue the joint venture agreement must deal with. Seen more broadly, these rights facilitate the very formation of the venture itself, because they codify discrete quanta of technology that the partners license into the venture, making it easier to keep track of which partner contributed the technology.

Likewise, intellectual property rights help the partners manage the output of the venture. First, these rights represent real assets

^{26.} See, e.g., Jennifer F. Reinganum, The Timing of Innovation: Research, Development, and Diffusion, in 1 Handbook of Industrial Organization 849, 851 (Richard Schmalensee & Robert D. Willig eds., 1989) (summarizing models of research joint ventures, and concluding that a "robust" finding is that "firms who are not members of the research joint venture are left worse off as a result of innovation").

^{27. &}quot;Whatever the label, there is in its ascendancy a kind of property called 'intellectual property.' It lies at the heart of the 'computer revolution,' the 'franchising boom,' the 'communication explosion,' and virtually every other major advance in late twentieth-century America that is of economic significance." P. 6.

^{28.} See supra sections II.A-B. For more on the growing diversity of organizational forms in U.S. industries, see Michael L. Gerlach & James R. Lincoln, The Organization of Business Networks in the United States and Japan, in Networks and Organizations 491, 495-96 (Nitin Nohria & Robert G. Eccles eds., 1992):

[[]N]etwork forms appear to be proliferating as corporate downsizing and streamlining, often in response to competitive challenges from Japan and Europe, have encouraged joint ventures, subcontracting, industry consortia such as Sematech, and other cooperative arrangements among firms. Finally, new manufacturing technologies and production systems have led to stronger bonds and closer working relationships between manufacturers and subcontractors.

Id.

^{29.} HARRIGAN, supra note 22, at 148.

that the partners can allocate if they wind up the venture. This undoubtedly saves a good deal of time and energy because the parties need not, at the time of dissolution, specify in detail all the research results produced by the venture during its life. Second, these rights organize relations between the venture and its "parents" by providing a discrete asset that the venture can license or assign. Again, this saves the costs of specifying exactly what technology the venture has created and exactly what rights the venture will have. The venture's intellectual property rights cover the technology, and those rights define the limits of the venture's rights with respect to its technology. The venture would have to specify all of this at length by contract in the absence of these rights.

In light of this it is not surprising that the empirical data, though sketchy, suggest that intellectual property rights play a significant role in many joint ventures. I have been unable to locate rigorous empirical data on the prevalence of such rights in joint ventures.³⁰ Nonetheless, it is clear from the legal practitioner literature,³¹ the available quasi-armchair data,³² and reports of litigated cases,³³ that

^{30.} I have, however, searched the NEXIS database for all periodical articles on joint ventures involving research and technology between 1977 and 1993. I found that 269 explicitly mentioned patents, and 1058 did not. Although it is by no means clear that the 1058 did not involve patents in some form or another, the large number of articles that specifically refer to patents is at least some indication that this form of intellectual property right plays a significant role in joint ventures.

See, e.g., Karalis, supra note 22, § 2.25, at 64, 67-68:

If a joint venture engages primarily in research and development, its output will be primarily technology. This technology may include patentable inventions, copyrightable works or trade secrets. In addition to creating its own technology, the joint venture may improve upon technology transferred to it by one or more of its shareholders. It may also acquire, and improve upon, technology created by others.

Rights in this technology are acquired by license agreement. . . .

Id. (footnotes omitted); see also John P. Sinnott, Selection Strategy for Foreign Patent Application Filing, in Global Intellectual Property Series 1992: Practical Strategies — Patent (Practicing Law Institute 1992). Sinnott adds some interesting points:

The character of the patent portfolio, moreover, should reflect the foreign business format that is likely to be chosen. Illustratively, the number and character of the patents in a license portfolio could be significantly different from the patents in a joint venture portfolio. A joint venture portfolio probably would be much more extensive and be weighted more toward process patent rights than the patents required for a less complicated product patent license program. Certainly, the United States concern that wants to enter, let us say, a joint venture in some country will be in a superior bargaining position if a large and relevant portfolio of patents can be presented to the prospective foreign business associate and to the host government's financial authorities who so frequently have the power to authorize royalty payments.

Id. at 29-30.

^{32.} See supra note 31; see also Mark Casson, The Firm and the Market: Studies on Multinational Enterprise and the Scope of the Firm 137-41 (1987) (describing the example of Pilkington's patented glass technology, which has been diffused internationally by means of joint ventures).

^{33.} In a recent search I found more than ten cases involving joint ventures and intellectual property since 1980. See, e.g., Hockerson-Halberstadt, Inc. v. Nike, Inc., 779 F. Supp. 49 (E.D. La. 1991) (refusing to dismiss suit, despite defendant's argument that plaintiff had not formed its joint venture when defendant's acts of infringement occurred, because the inven-

intellectual property is important in many joint ventures, especially those with a research and development component.

D. Further Refinements: The "Pure" Market for Rights

I will return briefly to the fishing example to illustrate an additional class of intellectual property transactions that Alces and See do not treat explicitly but that are nonetheless important both practically and theoretically. Imagine that the fishing techniques pioneered by the consultant in our story have long since passed into wide circulation. If the fisherman retains a property right in the techniques, others who wish to use them must still acquire the fisherman's permission. The difference between this and the transactions discussed earlier is that it is purely a transaction in legal rights.³⁴ As before, the fisherman is selling fishing techniques, not fish. Because the buyers know the techniques, however, they do not need the fisherman to teach them how to use those techniques. The real purpose of the transaction, then, is to remove the threat of a lawsuit. The fisherman, in other words, is waiving his right to sue for infringement of his property right — for a price, of course.

One reason to pay attention to the market for clearances and permissions is that this market is in some sense entirely a creature of legal rights. Unlike the fisherman's consulting agreement discussed earlier, the only thing that changes hands in the market for fishing technique permissions is a legal immunity from infringement litigation. Thus it is clear that when a licensee enters into such a transaction, she is in effect buying what might be termed "an invisible input" for her production process. The only effect of the license is to remove the risk of a lawsuit.³⁵

tors who assigned all their intellectual property to the joint venture specified that it was to have the right to sue for past infringements).

^{34.} Although Alces and See do hint at the appropriateness of these transactions, they do not analyze them as a distinct class:

Answers to questions like "How do we hire a researcher to develop a product and keep for ourselves the patent on that product?" are of little help when the question is "How can we most fully exploit the concept of a children's cartoon character?" Both are fundamentally business questions. Both require legal answers. But the second question implicates commercial transactions in a way that the first does not.

P. 7.

^{35.} Thus what I call the market for "pure" legal rights is distinct from the market for information that others have described. See, e.g., Raymond T. Nimmer & Patricia Ann Krauthaus, Information as a Commodity: New Imperatives of Commercial Law, L. & Contemp. Probs., Summer 1992, at 103. Although Professor Nimmer, who has almost single-handedly pushed "intangible contracts" on to the U.C.C. policy agenda, appears at times to understand the difference between information contracts — those covering data, compilations, and the like — and "pure" intellectual property transactions, at other times he blurs the distinction:

Software and other intangibles contracts fit a standard of importance gauged by economic significance under any measure. The information industry accounts for over two percent of the gross national product of this country and affects a broad spectrum of commercial and individual interests. Ongoing developments in information technology

In theory, it makes no difference that the licensee was already familiar with the fisherman's technique. In many cases legal protection of the technique does not, after all, turn on whether someone learned of it directly from its creator. Instead, the inquiry centers around whether the technique used by the prospective licensee is in fact the same as, or legally similar to, that of the rightholder or licensor. As recent scholarship has made clear, the theory behind intellectual property rights demands compensation when the creator of a work bestows a substantial benefit on a subsequent user.36 Determining the substantiality of the benefit is of course a major focus of intellectual property doctrine. The temporal limitations on copyrights and patents provide a way to cut off the compensation for beneficial effects bestowed on later users. The requirements of content similarity have the same effect — for example, "substantial similarity" in copyright law and the "doctrine of equivalents" in patent law — ensure that the benefit bestowed is not so attenuated, or so transformed in the user's context, that it is unfair to require compensation.

Two examples make this discussion more concrete. First, consider a copyrighted song that has passed into the general consciousness — for example, "Happy Birthday." No one needs to deal with the composer of the song, or his estate or representatives, to learn

promise to continue the exponential growth of that field. *Technology (intangibles) contracts* underlie virtually all modern areas of commerce driving our present economy. Virtually every company uses one or more software products. *The copyright and related industries* are burgeoning and depend substantially on intangibles-based transactions.

Raymond T. Nimmer, Intangibles Contracts: Thoughts of Hubs, Spokes, and Reinvigorating Article 2, 35 Wm. & Mary L. Rev. 1337, 1369 (1994) (emphasis added) (footnote omitted). Nimmer in this passage blurs the distinction between two types of nonphysical inputs I described — information, which makes a discernable physical difference in the product, and "invisible" inputs based on legal rights, which only make legal difference in the product. For example, a real estate agent who subscribes to a computerized listing service has entered into an information transaction; the additional exposure the real estate agent gains for her listed properties is a physical addition to the services she offers prospective buyers. Contrast this with a pure permission or clearance transaction, for instance, when an artist pays royalties to the Walt Disney Company for permission to include pictures of Disney characters in a children's book. Because the artist presumably knows the characters well, she does not need any guidance from Disney on how to draw them. The clearance transaction, then, only makes a legal difference to the buyer of the book.

Both nonphysical inputs add to the value of the final product, but they do so in different ways. In the case of information, collecting it and disseminating it in usable form is a valuable economic activity, which often makes the information the subject of a transaction. In the case of the pure legal right, the law creates the value of the asset, in the sense that without a legal rule no user would enter into a "pure" intellectual property license as I have defined it. In other words, gathering information creates value, and a transaction follows; "pure" intellectual property, by contrast, owes its value to the fact of legal enforceability, and transactions follow from this.

36. See Wendy J. Gordon, Toward a Jurisprudence of Benefits: The Norms of Copyright and the Problem of Private Censorship, 57 U. Chi. L. Rev. 1009, 1038-39, 1043-44 (1990) (reviewing Paul Goldstein, Copyright: Principles, Law and Practice (1989)). I have explained the central problems that this analysis presents from a transactional perspective, with reference to the Coase theorem, in Merges, supra note 4, at 2656-64.

it. A transaction is only necessary to buy that invisible input — the copyright license — that authorizes one to use the song.

Next, consider a patent on a basic technology that is well known in the scientific and engineering community — for example, basic laser technology. Assume further that the patentee of this basic patent, as is common, filed a patent application amid a flurry of pioneering activity by several teams of researchers, and that the ensuing priority tangle took several decades to straighten out. By the time the patentee has won the various priority contests and received the basic patent, most researchers with any use for lasers know how they work and use them regularly. Of course, because of this, the technology has diffused widely among commercial applications as well, and anyone can find it in many products available on the market. Under such a scenario, when the patentee, having finally won the patent, opens licensing negotiations with all those who use lasers, the resulting transactions will fit my description of the purchase of invisible inputs. No buyers will need the patentee to instruct them on how to make or use lasers. The patentee simply will be collecting royalties for activities people have been carrying on for some time. Many of the activities will bear only slight resemblance to the pioneering efforts of the patentee, the technology having advanced significantly during the period when the patentee was involved in the priority contests.

The examples illustrate an endpoint on the spectrum of transactions based on intellectual property. This endpoint concerns what I term "pure" rights transactions — deals in which the only purpose is the exchange of legal rights. Because these transactions involve only legal permissions or clearances, and because such rights are of course not apparent on the face of the final product — for example, the song sung in a restaurant or an advanced laser incorporated into a consumer electronics product — I call them invisible inputs.

The characteristics of markets for "invisible inputs" put them outside the boundaries that Alces and See set for themselves in their book. Their book deals with transactions in goods that are covered by some form of intellectual property right. In these standard commercial transactions, intellectual property is linked with an underlying asset — for example, maps or raincoats.³⁷ Even in the earlier example of the fishing consultant, the property right in fishing techniques was transferred together with know-how or expertise in the consulting arrangement. What ties these examples together is the presence of an additional asset with which the intellectual property is bundled for transfer: standard goods, in the cases Alces and See discuss; and know-how or information, in the

^{37.} The reference is to the Real Estate Data and Burberrys cases cited supra notes 4, 11, 18.

fishing example. These transactions are fundamentally different from the exchange of "pure" rights, as can be seen from the birthday song and laser examples.

Despite this fundamental difference, I believe a book like Alces and See's ought to consider the full realm of intellectual property transactions, including those involving "pure" rights, unbundled from any goods. Not only are the conceptual issues closely related, 38 but from a practitioner's standpoint, there may be occasions when one must choose among a variety of intellectual property-related transactions. For example, if a patent license is at issue, one may consider a naked license, or a license with know-how, or a license coupled with an outsourcing or subcontracting component. It would be useful in such circumstances to have a single volume on the shelf to give guidance for each alternative and, ideally, to help choose the appropriate one. I would lobby Alces and See to make the second edition of their book just such a volume.

E. Policy Implications: Changing Property Rights to Affect Industry Structure

I have argued so far that the transactions that Alces and See document reveal some interesting patterns in the use of intellectual property rights to structure commercial production. Before moving on to consider some of these transactions — and their doctrinal nuances — in more depth, I want to quickly touch on a policy matter implicated by these observations. If, as I have argued, intellec-

^{38.} I have tried to show in this section, and earlier in this review, that intellectual property rights have unique attributes that can best be understood in a transactional setting. From a theoretical point of view, it is interesting that the traditional economic models assume that actors exchange intellectual property rights only in pure, in other words, unbundled, form. The paradox is that, because of the difficulty of tracing the source of an idea, valuing it, and determining a cutoff point beyond which an agreement will not require compensation for a benefit, the pure market is the most troublesome one. This may well explain why licensors so often join intellectual property rights to some tangible product, or at least to knowhow or other transferrable assets of the licensor. These additional components may make it easier to value the package of benefits that the licensor is indeed bestowing. In some cases one might best describe this bundling as a kicker or sweetener — an additional, though minor, element of value in a multicomponent transaction. One corollary is that manufacturers sometimes consider licensors whose primary business is the issuance of pure or naked licenses as marginal contributors to the advancement of an industry, and sometimes even as mere extortionists. Cf. Edmund L. Andrews, Inventor Wins Hot Wheels Case, N.Y. TIMES, Nov. 11, 1989, at 35 (describing lawsuit by prolific inventor Jerome Lemelson, who is widely known for asserting broad but vague patents against entire industries). Economic theorists for the most part have yet to catch on to this. But see Teece, supra note 13. On "bundling," see Harold Demsetz, Information and Efficiency: Another Viewpoint, 12 J.L. & Econ. 1, 31, 41-43 (1969) (describing vertical integration and bundling of hard-to-police commodities with others that are not as "methods which will arise in the market and which will lower the required police cost"). On property rights theory in general, see YORAM BARZEL, ECO-NOMIC ANALYSIS OF PROPERTY RIGHTS (1989). The "conceptual relationship" depends on the idea that property rights can be enhanced by bundling them with other goods in a single transaction. This is the essence of the article written by Teece, supra note 13.

tual property rights are finding their way into more transactions, and if they are helping to further the spread of certain contract-based organizational forms for the ordering of production, the tantalizing possibility exists that policymakers might actually influence the profitability of these forms, and thereby indirectly influence industry structure in some cases.

Although this review is not the place for a full-blown exploration of these matters, a short discussion of a recent policy change in the Japanese intellectual property landscape may hint at some of the interesting issues. The Japanese software industry is an anomaly. In the United States especially, but also in Europe, the sale of prepackaged software — software available as a standardized, retail product, such as spreadsheets or word processing programs — far outstrips the sale of custom-programmed software.³⁹ The prepackaged segment of the world market has grown faster than custom programming services, and it is expected to continue to do so.⁴⁰ Consequently, Japanese officials have tried in recent years to stimulate the prepackaged segment, or at least to push the custom-programmed segment to evolve in this direction.⁴¹

Many Japanese software firms had their origins as divisions of large companies, and many others originated within the supportive but semiclosed environment of the *keiretsu* structure.⁴² In this environment, formal, statutory intellectual property rights are less important because most transactions are essentially contractual. Sellers of software rely on contractual safeguards — and to some extent, implicit understandings with fellow *keiretsu* members — rather than statutory protection. The lack of copyright protection both results from the prevalence of this structure and contributes to its maintenance.

If recent statements are any indication, Japanese policymakers may be attempting to change this structure. Their goal is to encourage the emergence of freestanding software firms, in part through strengthened intellectual property rights.⁴³ Japan adopted

^{39.} See Merges, supra note 3, at 3-4.

^{40.} Id. at 4.

^{41.} Id. at 20.

^{42.} For a description of Japanese keiretsu, see Ronald J. Gilson & Mark J. Roe, Understanding the Japanese Keiretsu: Overlaps Between Corporate Governance and Industrial Organization, 102 YALE L.J. 871, 882-95 (1993).

^{43.} See Japanese Panel to Draft Guidelines for Software Protection, 5 J. PROPRIETARY Rts. 44 (1993):

[[]A] subcommittee of the Industrial Structure Council, advisory panel to the Minister of International Trade and Industry, determined to draft guidelines to urge changes to the practices of software businesses in an effort to better protect software copyrights and to encourage new domestic software development. . . . Under prevailing Japanese practices, software is often treated as a service accompanying computer hardware and there is considerable concern that if software is continued to be treated lightly, the software industry will not become viable as an industry independent from the hardware industry.

copyright protection for software in 1985.⁴⁴ In addition, a government-industry committee run by the Ministry of International Trade and Industry (MITI) has recommended a series of changes in standard contracting practices between custom software firms and their clients, including explicit acknowledgment of the software firm's right to reuse the software code it writes as part of a project for a single client. These steps, designed to strengthen property rights over software, may be working; Japan has seen the founding of a significant number of independent software firms in the past ten years.⁴⁵

To the extent they associate freestanding software firms with smaller, more specialized organizations, Japanese policymakers seem to believe that the availability of enforceable intellectual property rights opens up a wider range of *choice* regarding the organizational form in which to house software production assets. Obviously, creating or strengthening such rights will not obviate all the advantages of internalized software production in all circumstances. Formal, statutory intellectual property rights do not always add enough of an appropriability premium, compared to the alternative appropriability mechanisms, to justify complete externalization of the software function in every case. Stronger property rights simply make it more feasible in the marginal case to establish a small, freestanding software firm.

This leads to a more general observation. As governments have strengthened intellectual property rights in recent years, a concomitant growth in organizational diversity has occurred. I suggest that this is not a coincidence. The availability of stronger protection bears significantly on the choice of organizational form. In line with Douglass North, however, I hasten to stress that stronger protection does not follow inevitably from prevailing economic conditions. Specification of intellectual property rights is a matter of policy choice, not a spontaneously generated reaction to new market conditions. Although Harold Demsetz is undoubtedly correct that in the absence of economic conditions that make increased specification worthwhile no one would bother, 47 it does not necessarily follow that the *presence* of such conditions makes the new specification of rights automatic. In truth, we will seldom know

Id. at 44 (emphasis added).

^{44.} See Yoshikazu Takaishi, The Perspectives from Japan on Software Protection, 1 Software Law Journal 187, 188-207 (1986) (analyzing legal protection of computer software under pre- and post-1985 Japanese copyright law).

^{45.} Merges, supra note 3, at 22.

^{46.} See Douglass C. North, Institutions, Institutional Change, and Economic Performance 121-22 (1990).

^{47.} HAROLD DEMSETZ, The Exchange and Enforcement of Property Rights, in OWNERSHIP, CONTROL AND THE FIRM 31 (1988); see also BARZEL, supra note 38.

precisely when the conditions necessary to support a new configuration of rights have actually coalesced. But what we do know is that, once the legal and political spheres reconfigure the property rights regime, this will set in motion a series of second-order responses. Some, as North predicts and the Japanese software example tends to show, are exactly those changes that interest groups pushing for the new property rights regime had contemplated. The upshot is that tweaking the intellectual property rights regime in an industry encourages an industry structure with more organizational diversity, including more small, entrepreneurial software firms. One attribute of these small firms is that they engage in a greater number of arm's-length transactions, compared to vertically integrated software producing divisions of large companies. Consequently, we can say that stronger property rights lead indirectly to a higher volume of transactions involving those rights. As I have described it, a stronger intellectual property right lowers the costs of exchanging the asset covered by the right, making such exchanges more feasible and thus encouraging the emergence of firms that specialize in producing the asset.⁴⁸ Furthermore, what is true for the software industry ought also to be true for other industries. Thus the higher transactional volume we observe in a number of intellectual property-intensive industries - for example, biotechnology - may well follow from the strengthening of rights in those industries.

To return to the point of all this armchair theorizing, I would argue that the growing volume of cases at the confluence of intellectual property and commercial transactions stems at least in part from the trend in recent years toward stronger rights for intellectual creations. If this is so, it is a useful bit of information. It has the potential to do more than partially explain the origin of the cases Alces and See discuss, itself a worthwhile goal. The important effects of stronger intellectual property rights suggest that any discussion of the doctrine governing intellectual property transactions should be conducted with a view to this changing transactional setting. As but one example of why, note that the value of intellectual property in the hands of a firm that must exchange it via arm's-length transfer depends critically on contract law. To such a firm,

^{48.} Of course, this holds true only if the gains from specialization are outweighed by the increased transaction costs of more arm's-length exchange. Note of course that transaction costs are present even in vertically integrated production; only if they are much higher, compared to the gains from specialization, will that specialization appear too costly. See HAROLD DEMSETZ, The Theory of the Firm Revisited, in OWNERSHIP, CONTROL AND THE FIRM, supra note 47, at 144 (discussing the presence of transaction costs inside firms). These are detailed empirical questions, to be answered in the context of each particular industry of interest. My main goal is to simply spell out a theoretical relationship between the structure of property rights and the volume of arm's-length contracting, again as a way of accounting for the increased volume of the intellectual-property-related transactions at the root of the cases in the Alces and See volume.

the law of contract supplements and cooperates with the law governing the property right. A rule restricting certain transfers, or prohibiting certain conditions or requirements in a contract, subtracts from the total value of the property right just as much as a limitation on the right itself.⁴⁹ In a word, in a more highly transaction-intensive environment, transactional rules take on central importance. With this in mind, we turn to a discussion of Alces and See's treatment of just these transactional rules.

III. COMMERCIAL CODE ISSUES FOR INTELLECTUAL PROPERTY TRANSACTIONS

Having now surveyed this background, the rest of this review essay proceeds to a consideration of Alces and See's main subject matter on its own terms. First, I analyze Alces and See's book in depth, describing and critiquing its approach. Then, I examine the intersection of commercial law and intellectual property from a more theoretical perspective.

A. The Commercial Law of Intellectual Property

Alces and See take a straightforward approach to the discussion of the bread-and-butter issues, those at the intersection of the UCC and intellectual property law. After some introductory chapters outlining the basics of the major intellectual property rights (chs. 2-7), the authors interweave chapters on basic UCC concepts (chs. 8, 10, 12, 14, 16, 18) with parallel chapters describing how courts have applied these concepts to cases involving intellectual property (chs. 9, 11, 13, 15, 17, 19). This structure has the obvious advantage of familiarity, at least to the commercial law portion of the audience; the Code itself provides the organization, and the authors array the cases accordingly.

Nevertheless, partly as a consequence of this approach, the authors' efforts to synthesize commercial and intellectual property law fall short in a number of respects. First, and least important, they oversimplify some intellectual property issues, mostly in an attempt to be brief. Second, they cover too many cases with only a nominal intellectual property component and fail to grapple with the interaction of intellectual property and commercial law at a sufficiently deep level where intellectual property law does in fact challenge

^{49.} Louis Kaplow provided the first in-depth explanation of how permissible licensing practices combined with intellectual property rights (in his article, patents) define the total package of rewards available to creators. Although Kaplow was concerned primarily with which terms should be permitted in bilateral license agreements under the antitrust laws, his paper suggested that the overall economic impact of intellectual property rights can be understood only when they are seen in their transactional context. See Louis Kaplow, The Patent-Antitrust Intersection: A Reappraisal, 97 Harv. L. Rev. 1813 (1984).

fundamental UCC principles. Third, they simply neglect to cover some issues at the intersection of the two fields that are extremely important, especially to practitioners.

As an intellectual property scholar, I found a number of issues to quibble with in the introductory chapters. For example, the authors try to summarize a complex area, the "first to invent" rule in patent law, by stating that "the invention generally will go to the first to conceive it" (p. 21). This is so oversimplified as to be quite misleading because they assume: (i) that the inventive activity occurred in the United States;⁵⁰ (ii) that the first conceiver also reduces to practice first, or at least is diligent in reducing to practice under the conditions that the patent code spells out;⁵¹ and (iii) that the first conceiver can meet the relevant evidentiary burden.⁵² If these criticisms sound picky, that is the point; generalizing in this area is so difficult as to be almost fruitless, and the best summary one can attempt is "this is complicated; see the cases."

Another example of an oversimplification is the authors' handling of the thorny issue of "combination patents" — patents claiming inventions comprised of new combinations of preexisting elements (pp. 46-48). After concluding that Supreme Court precedent has created a higher standard of patentability in these cases, the authors appropriately turn to the post-1982 Federal Circuit case law. They note that the Federal Circuit has in effect ignored the earlier Supreme Court opinions and now treats combination patents in the same way as other patents. My complaint is not that the authors have given the Federal Circuit coequal status on this issue, though I do believe that is a simmering issue that only the Supreme Court can bring to a boil. I simply would have liked to see a more frank statement that the older Supreme Court cases, whatever they say, are no longer the operative law in this area. The authors leave the mistaken impression that patent practitioners live in the shadow of doubt regarding the standard for combination patents; the truth is that the bar considers this a dead issue.

Despite minor quibbles such as these, however, I found that Alces and See's presentation was concise and clear. Especially once the authors turn to the heart of their project, commercial law cases with an intellectual property twist, their treatment of detailed UCC issues is surefooted and comprehensible. Commercial lawyers will certainly have no trouble following the authors through the Code cases.

^{50.} See 35 U.S.C. § 104 (Supp. V 1993) (stating that inventors may introduce only U.S. inventive activity to prove conception and reduction to practice dates; inventors with foreign inventive activity must rely on their filing date).

^{51.} See 35 U.S.C. § 102(g) (1988).

^{52.} See generally Robert Patrick Merges, Patent Law and Policy 161-377 (1992).

Readers may wonder at times, however, where the "intellectual property" in the book's title actually appears in the text. Many of the cases in the specific intellectual property chapters have a minimal — in some cases, almost nominal — intellectual property component.⁵³ More to the point, I often found that this component did not seem to affect the reasoning of the cases. In many of the cases said to illustrate application of a basic Code concept to the intellectual property context, I found the Code concept clearly enough but no evidence that the presence of the intellectual property issue changed anything about the case. Many of the cases are simply plain vanilla Code cases that only tangentially involve an intellectual property right.⁵⁴ This is not what one thinks of when the Preface to the book claims that the book will "effect a rapprochement of commercial law and intellectual property principles" (p. xxix).

Often the cases I am describing here involve franchise disputes, and obviously a trademark license is often an important component of a franchise agreement. The common trademark identifies the licensee-franchisee as a representative of the franchisor-licensor; in some sense, the institution of the franchise is impossible without the intellectual property right known as trademark.⁵⁵ Nonetheless — despite what the authors sometimes seem to think — simply because a trademark is present in the contractual relationship does not mean that every franchise dispute centers on an intellectual property issue.⁵⁶ There are a host of cases involving a myriad of

^{53.} See, e.g., pp. 559-60 (discussing Harper & Assocs. v. Printers, Inc., 730 P.2d 733 (Wash. Ct. App. 1986) (involving an impracticability defense in a contract for printing services; the "copyrighted" nature of artwork to be reproduced does not figure in case)); p. 602 (discussing Maykuth v. Adolph Coors Co., 690 F.2d 689 (9th Cir. 1982) (holding that resale of beer without wrongful rejection raises a § 2-706 issue; the trademarked status of the beer was irrelevant to the determination of the case)); p. 358 (discussing Thermal Sys., Inc. v. Sigafoose, 533 So. 2d 567 (Ala. 1988) (involving a distributor dispute over a patented thermal heat exchanger, with the patent seemingly irrelevant)); pp. 362, 364 (discussing Franz Chem. Corp. v. Philadelphia Quartz Co., 594 F.2d 146 (5th Cir. 1979) (involving the sale of a patented corrosion resistance product for repackaging and resale by a buyer and licensee; a seemingly straightforward unconscionability case in which patented nature of product does not figure)).

^{54.} See, e.g., p. 364 (discussing Franz, 594 F.2d at 149).

^{55.} It also is one component in the relationship that adds to the mutual opportunism inherent in the relationship, as the law and economics literature has made clear. See James A. Brickley & Frederick H. Dark, The Choice of Organizational Form: The Case of Franchising, 18 J. Fin. Econ. 401, 403-07 (1987); Gillian K. Hadfield, Problematic Relations: Franchising and the Law of Incomplete Contracts, 42 Stan. L. Rev. 927 (1990).

^{56.} See, e.g., p. 362 (discussing Zapatha v. Dairy Mart, Inc., 408 N.E.2d 1370 (Mass. 1980) (involving primarily the unconscionability of a franchise termination; the trademark license is tangential at best)); p. 366 (discussing Boat & Motor Mart v. Sea Ray Boats, Inc., 825 F.2d 1285 (9th Cir. 1987) (involving unconscionability in franchise termination setting; the trademark license is not relevant)); pp. 433-34 (discussing Ponderosa Sys., Inc. v. Brandt, 767 F.2d 668 (10th Cir. 1985) (involving an implied warranty of merchantability in a franchise case; no discernible intellectual property issue exists)); pp. 535-37 (discussing Lippo v. Mobil Oil Corp., 776 F.2d 706 (7th Cir. 1985)) (involving cure in a franchise termination case; no intellectual property issues involved); pp. 538-39 (discussing Hellndall Distribs., Inc. v. S.B.

UCC issues in which franchise contracts are the source of the problem; yet rarely in these cases does the presence of a trademark license make much of a difference at all.

The cases the authors include in the book frequently undercut the implicit notion that there is anything distinctive in the UCC cases with an intellectual property component. This is a shame for two reasons. First, there are some cases in which intellectual property is directly involved and calls for some very subtle and nuanced analysis in the context of a UCC discussion. Because they cover so many cases, the authors give these cases short shrift. These diamonds, however, are worthy of a better setting. They demonstrate what the authors are after — the distinctive twist introduced into UCC doctrine by the presence of intellectual property issues.⁵⁷ Second, partly because many of the intellectual property issues are so tangential, the author's incorporation of them into Code exegesis suggests a seamless integration that closer analysis belies. Thus, the bridge they build between the two disciplines ends up having the quality of an optical illusion; it makes both sides appear closer than they are. In reality, as the discussion below illustrates, the authors have identified a legal interface that is fraught with some very difficult questions. It will not do, either as a service for practitioners or as a pioneering book in a new cross-disciplinary area, to suppress the difficult tensions this interface creates.

This is not to say that the authors only consider cases in which intellectual property issues are tangential. They do indeed grapple with some cases that involve deep tensions. A good example is Burberrys (Wholesale) Ltd. v. After Six Inc., 58 which held that the Code's resale provisions were not available to an aggrieved seller after the buyer cancelled a trademark license. In Burberrys the seller, After Six, had agreed to manufacture thirty thousand raincoats for sale to Burberrys. After Six styled the raincoats to the buyer's proprietary specifications, and the raincoats included the buyer's famous trademark. As the court states,

Thomas, Inc., 559 F. Supp. 573 (E.D. Penn. 1983) (involving an acceptance issue under a franchise contract; intellectual property does not figure in decisions), affd., 755 F.2d 920 (3d Cir. 1985)). To the same effect are numerous cases on distributorship agreements. See, e.g., pp. 380-81 (discussing Cassidy Podell Lynch, Inc. v. SnyderGeneral Corp., 944 F.2d 1131 (3d Cir. 1991) (involving a distributorship agreement under which the seller allowed the distributor to display seller's logo; the trademark in the logo was not relevant to the course-of-performance issue)). These may be interesting cases, and they certainly show how intellectual property may enter into the structuring of a business relationship. I am simply pointing out that one cannot describe the issues in these cases as emerging out of the UCC-intellectual property interface. By all appearances they involve straight UCC issues.

^{57.} I discuss some of the cases below. See infra notes 58-69 and accompanying text.

^{58.} Pp. 605-06 (discussing Burberrys (Wholesale) Ltd. v. After Six Inc., 471 N.Y.S.2d 235 (Sup. Ct. 1984)).

A dispute arose between the parties and no further cutting orders were given....[P]laintiffs allege that [After Six] has manufactured or intends to manufacture the remaining Burberry raincoats and sell them to retailers. It alleged that [seller] has already attempted to sell the coats in question or threatens to do so. Defendant [seller] does not deny this. Plaintiffs have advised defendant . . . that it is not to manufacture or sell the remaining raincoats and has cancelled any license to do so, if one exists.⁵⁹

In a rather cursory opinion, the court held as follows:

UCC 2-703 provides that "where the buyer wrongfully rejects or revokes acceptance of goods . . . the aggrieved seller may (d) resell and recover damage as hereafter provided (§ 2-706)." UCC 2-706 states "where the resale is made in good faith and in a commercially reasonable manner, the seller may recover the difference between the resale price and the contract price " While the Court has found no case directly in point, under the circumstances in this case, a sale by the defendant could not be considered to be made in good faith and to be commercially reasonable. § 2-706 does not purport to grant a trademark license and a sale under the sanction of that section would be doing exactly that. This is particularly true where the defendant shows no prejudice. The plaintiff is solvent and can respond in money damages to any claim made by defendant in a future litigation. Moreover, as the claim is a trademark infringement the defendant cannot be penalized for failure to mitigate its claim. It may resort to its other remedies under the Uniform Commercial Code if it is so advised.60

Alces and See present this case as a simple one, in which UCC remedies must give way to intellectual property law:

The court noted that continued use of a trademark after expiration of the license constitutes infringement, and that this was true regardless of the quality of the products offered by the former licensee. . . .

The court wisely recognized the distinction elsewhere emphasized by the authors of this work . . . between tangible goods on the one hand and intellectual property on the other. . . .

... The Uniform Commercial Code authorizes resale, but it does not, absent a clear implication in the agreement to the contrary, transfer or otherwise license any intellectual property rights. This nongrant of intellectual property rights excuses conduct that would otherwise be required in mitigation.⁶¹

I believe that cases like *Burberrys* represent the *raison d'etre* of a volume such as Alces and See's. Although the authors do a good job of describing and summarizing the case and putting it into its UCC perspective, there are other relevant cases that Alces and See

^{59.} Burberrys, 471 N.Y.S.2d at 236.

^{60.} Burberrys, 471 N.Y.S.2d at 237.

^{61.} Pp. 605-06. The authors do go on to state in a footnote that "[t]he proper treatment of goods and intellectual property interests would benefit from clarification in the statute." P. 606 n.36.

might have discussed, cases that find it a much closer question whether the unauthorized sale of previously authorized merchandise in the midst of a dispute implicates the core trademark policy of avoiding consumer confusion.⁶² In some of these, courts diverge from the *Burberrys* approach and deny the injunction.⁶³

More to the point, the case illustrates the real tensions that sometimes arise between the Code and intellectual property law. It pits the general rule in intellectual property law — that any sale of items covered by the licensed right becomes an infringement once the license is terminated — against the strong Code policy favoring flexible, electable remedies on the part of an aggrieved party. It would seem to invite a host of questions, including: Can a license agreement provide for termination in the event of a dispute, even when this would frustrate the Code's remedial objectives? Can a party to a license agreement terminate in anticipation of a dispute, thus cutting off various aspects of UCC analysis?

Once a trademark license is terminated under the *Burberrys* approach, the seller is in much the same position as many sellers in the pre-Code era; her only remedy is to prove that there was a breach and collect damages.⁶⁴ The intellectual property component of the transaction thus sweeps away the innovative remedies that the Code has made commonplace — such as the aggrieved seller's right to make a reasonable resale.⁶⁵ Is it a good idea for intellectual property to have this effect on the Code? Has it been thought through? How can one contract around this result? The authors leave us is in the dark on these and related questions — exactly the

^{62.} See, e.g., Bill Blass, Ltd. v. SAZ Corp., 751 F.2d 152 (3d Cir. 1984) (upholding the trial court's grant of injunction against sales after the license had expired, in light of an explicit contractual provision that limited the rights of the seller to liquidate inventory after expiration of the licensing agreement).

^{63.} Curiously, the authors do discuss such a case later in the book (pp. 492-94), Monte Carlo Shirt, Inc. v. Daewoo Intl. (Am.) Corp., 707 F.2d 1054 (9th Cir. 1983), which holds that there is no trademark infringement when a seller of rejected goods resells them without authorization of the trademark owner — a holding the authors criticize at length. While I agree with the authors that this holding perhaps goes too far in implying a trademark license, it is curious that they do not discuss *Monte Carlo Shirt* in more detail in the context of *Burberrys*.

^{64.} Thus such situations might well thwart the author's belief in the efficacy of the UCC as applied to intellectual property, with a licensor seizing on the intellectual property component of the transaction to negate Code-based rights and remedies. Alces and See state:

This book argues for the direct application of U.C.C. provisions to intellectual property issues.... The exposition and argument here maintains that many (and perhaps the overwhelming majority) of Uniform Commercial Code rules would not only function well in the intellectual property contexts but would accommodate and actually facilitate the improvement of both the commercial and intellectual property law.

^{65.} See James J. White & Robert S. Summers, Uniform Commercial Code § 7-6, at 302 (3d ed. 1988) ("2-706 is an important Code innovation."); Melvin Aron Eisenberg, The Responsive Model of Contract Law, 36 Stan. L. Rev. 1107, 1142-43 (1984) (discussing the rationale for §§ 2-706 and 2-708).

kinds of questions one would want answered in a deep analysis of the UCC-intellectual property interface.

My own understanding of the Burberrys case is that it calls for a subtle adjustment of intellectual property doctrine. To forestall the strategic use of the intellectual property component of the transaction, a court should look hard for a way to interpret the license to allow the aggrieved seller to resell the goods. In the alternative, courts should consider the UCC's remedial provisions when deciding whether to grant injunctions in these cases.66 When an aggrieved seller has invested significant sums in contract-specific assets, and when the option of immediate liquidation is superior to waiting and proving damages at trial, courts should deny injunctions - and create, in effect, a limited, implied trademark license. Either way, the goal is to allow the seller the benefit of the UCC's flexible menu of remedial options. Because immediate resale is an important remedy — essentially the only remedy that gives the aggrieved seller instant, liquidated recovery for at least part of the harm that a buyer's breach causes — courts must strive to preserve the remedy even when an intellectual property right is involved. This approach entails a sensitive consideration of both contract and intellectual property issues, far beyond the cursory treatment of these issues by the court in Burberrys. 67

The standard rule in intellectual property cases that any sale outside the protective umbrella of a license is an infringement must give way in this context to a recognition that the aggrieved reseller here is situated differently from the run-of-the-mill infringer. The aggrieved reseller's actions are rooted in a prior contractual relationship. The licensor had authorized her to perform acts that would otherwise amount to infringement and she relied on that authorization in completing the licensing contract. Thus, while the aggrieved reseller is no longer a presently authorized licensee, the

^{66.} Federal courts in some instances have looked to the substance of the contract claims in determining whether they have jurisdiction under the Copyright Act, 28 U.S.C. § 1338(a) (1988), to grant an injunction to protect an intellectual property right. See, e.g., Schoenberg v. Shapolsky Publishers, Inc., 971 F.2d 926 (2d Cir. 1992); Berger v. Simon & Schuster, 631 F. Supp. 915 (S.D.N.Y. 1986). See generally James M. McCarthy, Comment, Federal Subject Matter Jurisdiction: When Does a Case Involving the Breach of a Copyright Licensing Contract "Arise Under" the Copyright Act?, 19 U. DAYTON L. Rev. 165, 190-94 (1993) (proposing a three-part test to determine whether a claim arises under the Copyright Act). I propose extending this approach to take into account the remedial policies of the UCC in determining the details of the injunction, such as when it will take effect.

^{67.} For example, recall from the earlier quoted passage, supra notes 59-60 and accompanying text, that the court in the Burberrys case did not even decide whether the licensee had breached the agreement. It simply issued an injunction in the case, effectively waiting for trial to determine whether there was a material breach. The problem with this approach, as many of the jurisdictional cases make clear, is that without breach the license remains in force, and therefore no injunction should issue.

prior authorization and her reliance suggest that a court might find her constructively authorized.

In essence I am arguing that courts should not blithely interpret intellectual property rules so as to undermine important innovations of the UCC. One of the most important of these innovations was the clarification and expansion of what might be called a zone of cooperative damage control. The Code formalized what preexisting rules, such as the rule requiring mitigation, already required: that parties have an obligation to help a broken deal wind down in an orderly and efficient manner. In this spirit, the Code provides an obligation on the part of an aggrieved, remote buyer to resell rejected goods at the direction of the seller.⁶⁸ Likewise, the Code allows a seller to resell goods and apply the proceeds to her claims against the breaching buyer.⁶⁹ Courts should not allow the presence of an intellectual property component in a transaction to undercut these policies, at least not without giving the matter some thought.

In terms of the book at hand, this is precisely the type of case from which the authors could have made a real contribution. There are important and difficult issues here, but Alces and See sweep them away in a quick aside. If the interface between these branches of law is worthy of study — and I think it is — it deserves a more in-depth treatment.

As a further example of the book's shortcomings, consider some of the other practical issues that cases such as *Burberrys* raise. This is a state case, essentially involving a breach-of-contract claim. Yet, as mentioned earlier, it is also a trademark infringement case — a matter of federal law. It is therefore an example of a very common situation: a breach of a license agreement involving federal intellectual property rights. As legal claims go, this is an interesting two-headed beast: a state law contract, based on the exchange of federally granted intellectual property rights. It is perhaps not surprising that courts have had trouble coming to grips with such an animal. What is surprising, especially in a book aimed at commercial lawyers, is that the authors fail to mention the difficult jurisdictional issues — and concomitant litigation strategies — implicit in a case of this nature.

Courts essentially have to decide whether such a case is primarily a contract case, with an intellectual property right as its incidental subject matter; or primarily an intellectual property case, which just happened to arise in the context of a licensing agreement.⁷⁰

^{68.} U.C.C. § 2-603 (1993).

^{69.} U.C.C. § 2-706(1) (1993).

^{70.} Actions brought in copyright, patent, and trademark are brought under the express grant of jurisdiction to federal courts found in 28 U.S.C. § 1338(a), which states that "[t]he

This can be a tricky distinction indeed, as a variety of cases and commentary in the area attest. For example, in the leading case on copyright jurisdiction, *T.B. Harms Co. v. Eliscu*,⁷¹ Judge Friendly of the Second Circuit stated:

[A]n action "arises under" the Copyright Act if and only if the complaint is for a remedy expressly granted by the Act... or asserts a claim requiring construction of the Act... or, at the very least... presents a case where a distinctive policy of the Act requires that federal principles control the disposition of the claim.⁷²

This test has an analogue in the patent field,⁷³ in which similar jurisdictional principles — and squabbles — prevail.⁷⁴ A number of subsequent cases and commentators have tried to refine this and similar tests over the years.⁷⁵ The point here is not that one or an-

district courts shall have original jurisdiction of any civil action arising under any Act of Congress relating to patents, plant variety protection, copyrights and trade-marks. Such jurisdiction shall be exclusive of the courts of the states in patent, plant variety protection and copyright cases." 28 U.S.C. § 1338(a) (1988).

- 71. 339 F.2d 823 (2d Cir. 1964), cert. denied, 381 U.S. 915 (1965).
- 72. 339 F.2d at 828 (citations omitted).
- 73. See Luckett v. Delpark, Inc., 270 U.S. 496 (1926). In Luckett, the Court held that an action against a patent licensee who asked for royalties owed, an accounting, a declaration that the patent had reverted to the plaintiff, and an injunction against future alleged infringements did not arise under the patent laws, and, therefore, no federal subject matter jurisdiction existed. In the course of the opinion, the Court stated that when a complainant "makes his suit one for recovery of royalties under a contract of license or assignment, or for damages for a breach of its covenants . . . he does not give the federal district court jurisdiction." Luckett, 270 U.S. at 510. Courts have interpreted Luckett variably, some finding that it limits the bases of state court jurisdiction in patent-licensing cases, see, e.g., Eli Lilly & Co. v. Genentech, Inc., 17 U.S.P.Q.2d (BNA) 1531, 1534-35 (S.D. Ind. 1990) (holding that no state law cause of action exists for an alleged violation of a licensing agreement that involved exceeding the scope of the licensed use), and others distinguishing it in holding that a breach of contract action will lie, see, e.g., Shaw v. E.I. DuPont De Nemours & Co., 226 A.2d 903, 905 (Vt. 1966) (holding that the licensee had breached an implied covenant not to exceed the bounds of the license restriction, thus the licensor "could elect to waive the patent infringement and rely on the defendant's contractual undertaking in the license"). See generally Ted D. Lee & Ann Livingston, The Road Less Traveled: State Court Resolution of Patent, Trademark, or Copyright Disputes, 19 St. MARY'S L.J. 703, 738-745 (1988) (providing an extensive list of Texas state court cases involving intellectual property issues).
- 74. Federal courts have original jurisdiction in matters involving "patents, plant variety protection, copyrights, and trade-marks." 28 U.S.C. § 1338(a) (1988). Therefore, claims for copyright infringement are analogous to those for trademark infringement. See Bear Creek Prods., Inc. v. Saleh, 643 F. Supp. 489, 491 (S.D.N.Y. 1986) ("Analogous principles govern the exercise of federal jurisdiction in all three types of action."). See generally Foxrun Workshop, Ltd. v. Klone Mfg., Inc., 686 F. Supp. 86 (S.D.N.Y. 1988); Mary P. Twitchell, Characterizing Federal Claims: Preemption, Removal, and the Arising-Under Jurisdiction of the Federal Courts, 54 Geo. Wash. L. Rev. 812 (1986).
- 75. For examples of cases applying, extending, and commenting on *Harms*, see Schoenberg v. Shapolsky Publishers, Inc., 971 F.2d 926 (2d Cir. 1992); Arthur Young & Co. v. City of Richmond, 895 F.2d 967 (4th Cir. 1990) (rejecting the "essence" test of *Harms* and holding that federal subject-matter jurisdiction exists when the complaint asks for a remedy that is provided in the Copyright Act); Vestron, Inc. v. Home Box Office, Inc., 839 F.2d 1380 (9th Cir. 1988) (holding that the court had federal subject matter jurisdiction because the complaint sought a remedy expressly granted by federal copyright law); Daniel Wilson Prods., Inc. v. Time-Life Films, Inc., 736 F. Supp. 40 (S.D.N.Y. 1990) (rejecting the "essence" test and holding that the court had subject matter jurisdiction because the complaint alleged

other of these proposals is definitive; it is simply to point out that Alces and See omit this entire set of important, practical considerations from their book. It will not suffice to argue, as one might, that such a discussion is out of place in a book primarily aimed at the drafting stage of commercial agreements, because a number of the relevant cases turn on the presence, absence, or content of various provisions within the agreement itself.⁷⁶

Another example of the practical importance of issues at the interface between intellectual property and contract terms is the case of ARP Films, Inc. v. Marvel Entertainment Group, Inc.⁷⁷ In the agreement that led to the dispute in this case, Marvel licensed copyrights and trademarks in certain characters, such as Spiderman, to the plaintiff for inclusion in cartoon films. The parties fought over whether the field of use in the license agreement included videocassettes or simply televised cartoons. Defendant Marvel terminated the agreement under a provision in the licensing agreement permitting termination for material breach.⁷⁸ A jury found that the license did indeed cover the use of the characters in videocassettes, and hence that Marvel had improperly terminated.⁷⁹

copyright infringement and requested remedies provided by the Copyright Act); Foxrun Workshop, Ltd. v. Klone Mfg., Inc., 686 F. Supp. 86 (S.D.N.Y. 1988) (rejecting the "essence" test in determining whether the court had subject matter jurisdiction to hear a suit brought under the Lanham Act for trademark infringement); see also Jay S. Fleischman, Comment, Swimming the Murky Waters: The Second Circuit and Subject-Matter Jurisdiction in Copyright Infringement Cases, 42 Buff. L. Rev. 119, 143 (1994) ("If the action involves two parties bargaining to exchange something then it is a contract claim; if, however, it is for one party to recover something which has been stolen, then it is for copyright infringement."). In Foxrun Workshop, Judge Leval stated in dicta that the "essence" test was against public policy. 686 F. Supp. at 90. Judge Leval further stated that the "essence" test left jurisdiction open to question as the parties conducted discovery and refined the issues in a case. "Indeed this approach admits a possibility of dismissal at the time of, or even after trial, upon the court's conclusion that the action primarily sought enforcement of contract rights rather than statutory remedies." Foxrun Workshop, 686 F. Supp. at 90. The "pleadings" test, therefore, was superior because it allowed jurisdiction to be determined as a preliminary matter, creating a degree of predictability and uniformity. Foxrun Workshop, 686 F. Supp. at 90.

76. For example, some of the cases on jurisdiction take into account whether the alleged breach violates a condition or merely a covenant of the license agreement; only if a condition is breached, resulting in rescission, do the licensee's postbreach activities constitute infringement of the licensed intellectual property right.

77. 952 F.2d 643 (2d Cir. 1991).

78. The licensing agreement read:

Marvel shall have the right to terminate the license as provided by this agreement in the event of . . . ARP's . . . not substantially abiding by the terms and conditions of this agreement or failing to substantially abide by the terms and conditions of the license for distribution of the [films] and rights related thereto, which terms and conditions include prompt accounting for such distribution, but except for such termination of license, this agreement shall continue in full force and effect.

Marvel Entertainment, 952 F.2d at 646-47 (emphasis omitted).

79. Marvel Entertainment, 952 F.2d at 648. On appeal, the Second Circuit held that, "On the heels of Marvel's repudiation... ARP had two options: (1) it could have stopped performance and sued for total breach; or (2) it could have affirmed the contract by continuing to perform while suing in partial breach." Marvel Entertainment, 952 F.2d at 649. The holding is complicated by the fact that ARP later withheld royalties due under the terminated

Although Marvel never sought a preliminary injunction, the case is typical of licensing disputes in which intellectual property rights can play a major role. The lapse of time between the beginning of the dispute and the final resolution of the case — roughly ten years⁸⁰ — gives an indication of the strategic value of a preliminary injunction to the property right holder. The introduction of this issue into the normal dynamic of contract performance disputes creates the need for a nuanced handling of the UCC issues that arise. If commercial law doctrine is insensitive to the special problems that a transaction that involves intellectual property creates, that doctrine will increasingly come to unbalance the carefully structured relationship between contracting parties that the UCC strives so hard to maintain. Alces and See had a marvelous opportunity, which they unfortunately missed, to address these concerns.

B. When Property Rules and Contract Doctrine Meet

Cases such as *Burberrys* and *Marvel Entertainment* demonstrate that the strong property rule that accompanies intellectual property rights can sometimes cause problems in the context of normal contract remedies. In particular, the presence of an intellectual property right can give the rightholder-licensor a significant strategic advantage in a dispute between licensor and licensee. This advantage comes in the form of the strong presumption in favor of injunctions — in particular preliminary injunctions — which gives the licensor a serious trump card over the licensee.⁸¹

The threat of an injunction can effectively hold the licensee hostage; licensors clearly can use it to manipulate the licensee to win a contract modification or other concession because there may be a hearing on the preliminary injunction long before a court has reviewed the basis for the termination.⁸² Once the licensor removes

agreement while continuing to earn revenues from the films. This led to an additional holding that ARP had affirmed the original agreement after Marvel terminated and thus that ARP had breached the now-affirmed agreement by withholding royalties. Marvel Entertainment, 952 F.2d at 649. The jury awarded ARP \$1,220,000 "for Marvel's breach of contract by licensing others to distribute Marvel films on videocassette." Marvel Entertainment, 952 F.2d at 648. It also awarded Marvel \$137,000 "for various contractual breaches by plaintiffs." Marvel Entertainment, 952 F.2d at 648.

^{80.} Marvel Entertainment, 952 F.2d at 647.

^{81.} See Merges, supra note 4, at 2667-73.

^{82.} See C.R. Bard, Inc. v. Cordis Corp., 12 U.S.P.Q.2d (BNA) 1229 (D. Mass. 1989) (involving a plaintiff who sought a declaratory judgment that certain of its products did not infringe the defendant's patent that the plaintiff had licensed earlier, and an injunction to prevent the defendant from terminating the license during the patent trial; in denying the motion to grant the injunction, the court in effect refused to consider the details of the termination issue); cf. Neil M. Goodman, Note, Patent Licensee Standing and the Declaratory Judgment Act, 83 COLUM. L. Rev. 186, 187 (1983) ("This Note will argue that courts should generally require a patent licensee to terminate his license agreement as a prerequisite to bringing a declaratory action against a patentee.").

the protective umbrella of the licensing agreement, the licensee is a naked infringer. Unless a licensee convinces the court to consider the sometimes complicated facts behind a dispute leading to termination, there is a real threat that the court will fall back on the strong presumption in favor of preliminarily enjoining an infringer. The threat of total suspension of business that comes with a preliminary injunction may well pose a risk of significant losses for the licensee. In the many cases in which the licensee is a manufacturer, as in the *Burberrys* scenario, an immediate injunction will prevent the manufacturer from selling off its existing inventory. In the language of transaction cost economics, the manufacturing licensee in such a case will have made significant asset-specific investments, which the licensor can then use as leverage to extract concessions.⁸⁴

The law must respond to the inefficiencies that this dynamic can create. One response, suggested earlier, is to adjust the seller's remedies in cases in which the licensor breaches, wrongfully terminates, or perhaps even terminates for a minor breach.⁸⁵ Under these circumstances the manufacturing licensee should have a reasonable opportunity to liquidate any inventory on hand. If the licensor objects, for example on the grounds that the licensee is manufacturing products that fall below the licensor's quality standards, an alternative remedy would be to give the licensor a right of first refusal on any resale offer the licensee is able to generate.⁸⁶

^{83.} Cf. Schoenberg v. Shapolsky Publishers, Inc., 971 F.2d 926 (2d Cir. 1992).

^{84.} This dynamic runs under the suggestive rubric of a "holdup problem" in the law and economics literature. See Merges, supra note 6; see also Davidson, supra note 5, at 1.

^{85.} Also, courts could apply the UCC's requirement of good faith and fair dealing to preclude opportunistic terminations, as some seem to have already. See, e.g., Baker v. Ratzlaff, 564 P.2d 153 (Kan. Ct. App. 1977) (finding bad faith termination under "payment on delivery" clause because seller did not insist on payments at time of delivery). Although some commentators state that licensees would never agree to give licensors the right to terminate at will, others believe that some agreements contain such provisions. See Davidson, supra note 5, at 2 (noting that licensing agreements can provide that termination can be triggered by any breach "or even at will"). On "bad faith termination" in cases with an intellectual property component, see First Nationwide Bank v. Florida Software Servs., Inc., 770 F. Supp. 1537 (M.D. Fla. 1991) (holding that a licensor's refusal to consent to an assignment, under a contract provision that the licensor must not unreasonably withhold approval of assignments, is a breach of the implied covenant of good faith and fair dealing); Mr. Transmission v. Yount, App. No. 88-43-II, 1988 WL 53339 (Tenn. Ct. App. May 27, 1988) (holding wrongful the termination of a franchise agreement, including a trademark license, for failure to pay royalties on credit sales when made, rather than when the credit entity was actually paid); cf. Cordis Corp. v. Medtronic, Inc., 835 F.2d 859 (Fed. Cir. 1987) (granting an injunction to prevent the termination of a license agreement during the patent trial when the defendant-licensor threatened to terminate, allegedly because the plaintiff-licensee had developed an arguably noninfringing variant on a licensed product).

^{86.} Several caveats are in order here. First, the manufacturing licensee's sales of the inventory should be subject to an obligation to pay royalties at the contractual rate, either directly to the licensee or into escrow. This will prevent licensors from strategically using the court-imposed quasi-license. Second, notice that the proposed remedy merely preserves the normal UCC remedies situation — it prevents the terminating licensor from using the intellectual property component of the transaction to do an "end run" around the UCC's detailed

Thus, the licensor could exercise control over output while giving the licensee a chance to recoup some of its investment.

One might well ask why contracting parties do not generally contractually specify such a remedy.87 In the past, one reason may have been that the threat of an injunction was not as strong. Recently, there has been an apparent tightening of the standards for issuing preliminary injunctions in intellectual property cases, especially those involving patents.88 A second reason might be that many termination provisions appear relatively innocuous. Some give the licensor the right to terminate at will, but most state that the licensor can terminate only when the licensee breaches or in several other well-specified circumstances, such as a failure to manufacture or sell a minimum quantity of output. Problems arise, however, when licensors decide to take advantage of these provisions. Only then do many licensees realize the opportunities for licensors to "play games" with these provisions. The cases are rife with reports of termination on the basis of allegedly faulty accounting for royalties, disputes over the scope of the license, and many other issues. Some of these disputes present exceedingly fine legal questions;89 the termination right effectively gives the licensor's interpretation of these legal points powerful strategic backing. Obviously, licensors do not concoct all of these disputes; by the nature of the relationship, however, licensing agreements provide many chances for the licensor to behave opportunistically. When they do,

menu of remedial choices. In addition, of course, the problem that necessitates this novel remedial solution — excessive licensor control — might well dissipate over time, as licensees become more sophisticated about the availability of intellectual property-related injunctions in connection with termination clauses. Licensees might well begin to insist on contractual versions of the remedy described here, or on other devices to offset the advantage to licensors that follows the strong injunction policy of intellectual property law.

The Article Two Revisions Committee has proposed to eliminate the requirement in § 2-706 that an aggrieved seller notify the breaching buyer prior to exercise of the resale remedy. Especially if the revised § 2-706 adopts this approach, my suggested licensee's remedy would require a special provision. This provision would retain the old notice requirement and would add an explicit right of first refusal.

- 87. They apparently do sometimes. See HAROLD EINHORN, PATENT LICENSING TRANSACTIONS § 4.02[1], at 4-9 (1994) ("As a control over commercial sales, the licensor may reserve the right to purchase completed devices, either on hand or in progress, following termination.").
 - 88. See Merges, supra note 52, at 750-59; Merges, supra note 6, at 84-89.
- 89. For example, in Computer Associates Intl., Inc. v. State Street Bank & Trust Co., 789 F. Supp. 470 (D. Mass. 1992), the parties disputed whether the use of licensed software to State Street was covered by the scope-of-use provision in the licensing agreement. The court, ruling on a request by the plaintiff for a preliminary injunction, stated that a reasonable factfinder could find in any of three ways on the question whether the disputed use was permitted by the license agreement in issue the way the plaintiff asserted, the way the defendant asserted, or by determining that the parties had totally failed to contemplate these circumstances and thus left a gap in their contract. Computer Assocs., 789 F. Supp. at 475-76. The court concluded that in such an "omitted case," a court is charged with filling the gap by "work[ing] out an answer that is consistent with all that the parties did agree to in arriving at a contract." Computer Assocs., 789 F. Supp. at 476.

licensees may find that the termination provisions that seemed reasonable at the contract formation stage take on an ominous aura at the enforcement stage.

To their credit, Alces and See do mention wrongful termination cases in their discussion of unconscionability (pp. 359-75). Following the conventional approach, they discuss both procedural and substantive unconscionability. Under the former heading they review a number of cases in which courts rejected claims of procedural unconscionability in the face of evidence that the aggrieved parties were experienced businesspeople (pp. 361-63). Under the latter heading, they review an interesting franchise termination case that brings out some of the termination-related possibilities discussed above (pp. 363-65). This case, Zapatha v. Dairy Mart, Inc., 90 involved termination by a franchisor under an at-will termination clause. The court determined that the termination provision was not unconscionable, in part because the contract required the franchisor, upon termination without cause, to repurchase the franchisee's existing inventory.91 Consequently, the court concluded, "It lhere was no potential for forfeiture or loss of investment."92 This conclusion, which mirrors the analysis earlier in this section, is compelling enough that courts ought to embed it in doctrine. At a minimum, it ought to be the default rule, changeable by the parties by express contractual agreement. In such cases, the law will put the licensee on notice regarding the seriousness of the termination right, and perhaps the licensee will have an opportunity to extract a compensating concession somewhere else in the agreement.

Cases such as Burberrys and Marvel Entertainment suggest the need for a more detailed consideration of contracts bargained for in the shadow of a strong property rule.⁹³ Courts must not allow a licensor who has bargained into a private liability rule to reimpose unilaterally the strong property rule by dint of an all-encompassing termination right. Put another way, courts must be wary, in the context of licensing disputes, of blithely lumping an allegedly terminated licensee in with the class of all naked infringers.⁹⁴ Courts should not permit licensors to withdraw unilaterally the protective

^{90. 408} N.E.2d 1370 (Mass. 1980).

^{91.} Zapatha, 408 N.E.2d at 1377.

^{92.} Zapatha, 408 N.E.2d at 1377.

^{93.} See Guido Calabresi & A. Douglas Melamed, Property Rules, Liability Rules, and Inalienability: One View of the Cathedral, 85 HARV. L. Rev. 1089 (1972) (proposing a framework to integrate analysis of legal relationships traditionally analyzed in separate subject areas, such as property and torts).

^{94.} Some courts have done just that when considering jurisdiction. See, e.g., Marshall v. New Kids on the Block Partnership, 780 F. Supp. 1005, 1008 (S.D.N.Y. 1991) (stating that parties make themselves "strangers" — and hence raise an everyday infringement scenario, justifying federal jurisdiction — when the licensee exceeds scope of license).

umbrella of the private liability rule, or permit them to threaten to do so with impunity. In the spirit of UCC provisions on modification, cure, and remedies, courts should seek to encourage parties to operate within the framework of the contract or, failing that, to salvage as much value as they can from the failed relationship. In the extreme case, such as *Burberrys*, courts should be willing to imply a temporary extension of the underlying license agreement, thereby recognizing that the UCC's remedial impetus requires them to treat a terminated licensee differently from a naked infringer. I am arguing, in other words, for the notion of a remedial implied license. Scourts must yoke these remedial considerations to the doctrine governing the grant of preliminary injunctions in intellectual property cases.

IV. INTEGRATING DOCTRINES TO POLICE INTELLECTUAL PROPERTY CONTRACTS

In Part III I tried to show that some of the cases that Alces and See consider that intertwine intellectual property and commercial code issues, produce some knotty puzzles that call for deft modification of conventional doctrine. In this Part, I extend the point. Here I am concerned with integrating the commercial code doctrines that Alces and See outline with the contract policing doctrines that have grown up within the confines of intellectual property law itself, primarily copyright and patent "misuse." Although Alces and See argue the distinctiveness of commercial code issues, I argue that only when courts and practitioners consider these "internal" policing doctrines coextensively with commercial code-based contracting rules can they confidently view the entire transactional landscape and coherently resolve transactional disputes. In section IV.A, I make these arguments in a general fashion; then, in section IV.B, I consider them in the context of the contemporary debate about the enforceability of so-called shrinkwrap software license agreements. Shrinkwrap licenses are a perfect illustration of the need to keep "internal" intellectual property

^{95.} Another context in which this would prove a useful concept is the "electronic repossession" case. In these cases software vendors have used hidden "erase" commands embedded in licensed software to expunge licensed software from computers owned and operated by a licensee. This is a highly effective "self-help" remedy, but it is capable of such extreme opportunistic leverage that if courts permit it, they must police it very carefully. See American Computer Trust Leasing v. Jack Farrell Implement Co., 763 F. Supp. 1473, 1496-97 (D. Minn. 1991) (holding that erasure was permissible, without referring to Article 2 or to general practice among licensing parties), affd. sub nom. American Computer Trust Leasing v. Boerboom Intl., Inc., 967 F.2d 1208 (8th Cir.), cert. denied, 113 S. Ct. 414 (1992); cf. Raymond T. Nimmer, Uniform Codification of Commercial Contract Law, 18 Rutgers Computer & Tech. L.J. 465, 470 (1992) (discussing how computers and computer software fit into the commercial law).

policies in mind in applying commercial code concepts to transactions with a substantial intellectual property component.

A. Integrating "Commercial" and "Internal" Policing Rules

A number of doctrines affecting the content of intellectual property contracts have grown out of intellectual property cases over the years. These doctrines are what I term "internal" policing doctrines; they owe their origins — usually as defenses pled by accused infringers — to courts deciding intellectual property disputes. They are internal in the sense that they are contractual restrictions that have grown out of the body of law that defines, interprets, and enforces intellectual property rights. The implicit contrast is with the "external" limits that emerge directly from the law governing transactions.

Under a variety of doctrines, courts have crafted limits on the terms that an intellectual property holder may include in a licensing agreement. Always, the rationale has remained the same: to prevent rightholders from leveraging or extending their rights via contract. These rules primarily run under the banner of "misuse." As applied to both copyright and patent, courts have invoked this catch-all doctrine to nullify intellectual property licenses that contain terms that effectively extend intellectual property rights by contract. For example, a significant body of case law prohibits

^{96.} The issues that misuse cases raise are not unique to intellectual property. Real property law, too, long ago prohibited certain restraints on alienation. Robert Ellickson has explained that such restraints may have beneficial effects, however, as responses to bilateral contracts that impose negative externalities on a community of property holders: "Although alienability generally enhances efficiency of land use, group-imposed restraints on alienation are defensible when they bar a transfer that would harm others more than it benefits the parties to the transaction." Robert C. Ellickson, *Property in Land*, 102 YALE L.J. 1315, 1376 (1993). Ellickson gives the following example in the context of his general discussion of norms and rules governing real property in close-knit communities:

For example, a preliterate group with abundant land might understandably restrict transfer of village land. Because of internal kinship ties, most of a village's current residents would have in effect offered up their relatives as "hostages," a fact that would help ensure that the residents would cooperate, say, in defending the village against enemies. An outsider who acquired land in a village, by contrast, would be less likely to have kin there and therefore would not be as reliably loyal. By prohibiting or regulating land sales to strangers, a village can help ensure its future close-knittedness.

Id. (footnote omitted). Thus, courts should respect the restraint on alienation and refuse to enforce the bilateral sales contract.

I would argue that the same essential logic drives the law of patent and copyright misuse. Under these doctrines, courts refuse to enforce voluntary, bilateral contracts that presumably benefit both parties. The rationale is that these contracts undercut the policies at the heart of the federal intellectual property regimes that were the source of the contracted-for rights. The only workable rationale for such a prohibition must be that the contracts, though mutually beneficial to the transacting parties, harm third parties.

For example, some have explained the law of patent misuse as applied to tie-ins as an attempt to prevent a patentee from leveraging her monopoly into other markets. See, e.g., WARD S. BOWMAN, JR., PATENT AND ANTITRUST LAW (1973). For copyright misuse, see Lasercomb Am., Inc. v. Reynolds, 911 F.2d 970 (4th Cir. 1990). See generally Thomas M. Susman, Tying, Refusals to License, and Copyright Misuse: The Patent Misuse Model, 36 J.

licensing agreements that condition access to a patented technology on purchase of a nonpatented component.⁹⁷ A similar doctrine exists for copyright licenses.⁹⁸ Although some academic commentators have argued that the reasoning of these cases is wrong,⁹⁹ or that these cases should be subsumed under general antitrust principles,¹⁰⁰ such cases remain a durable staple of the intellectual property landscape.¹⁰¹

COPYRIGHT OFF. SOCY. U.S. 300 (1989). The "anti-leverage" theories of commentators such as Bowman fail to recognize that these doctrines are concerned not only with the short-term competitive impact of tie-ins, but with the long-term, dynamic effects as well. To be specific, a tie-in that allows a patentee easy entry into, and — admittedly temporary — supracompetitive profits in a market related to the market for the patented good might drive other firms from the market for the tied good or deter other market entrants. Especially when licensees face high switching costs in moving from the tying-tied-product pair to the next best alternative, patentees might achieve just enough market power at just the right moment in the development of the ancillary market (that is, the market for the tied product) to gain a significant competitive advantage. A number of technologies appear to have had such critical moments at times in their histories, as theorists of "path dependent" industry development have shown. See, e.g., CHANDLER, supra note 14, at 197-203. When these conditions hold, permitting tie-ins might well harm third parties — in the form of producers and purchasers of the tied good who would have offered the tied good in competition with the patentee, but who do not, because the tie-in excluded them at a critical moment in the development of the market. Thus under the rationale identified by Ellickson, misuse doctrines, properly applied, make sense. They effectively prevent the parties to the license from imposing negative externalities on nonparties, namely consumers and competitors.

97. See, e.g., Brulotte v. Thys Co., 379 U.S. 29 (1964); Morton Salt Co. v. G.S. Suppiger Co., 314 U.S. 488 (1942). A relatively recent article by one of the coauthors of the book under review criticizes Brulotte. See Harold See & Frank M. Caprio, The Trouble with Brulotte: The Patent Royalty Term and Patent Monopoly Extension, 1990 UTAH L. REV. 813.

98. See, e.g., Lasercomb, 911 F.2d at 970 (finding copyright misuse); M. Witmark & Sons v. Jensen, 80 F. Supp. 843 (D. Minn. 1948), appeal dismissed sub nom. M. Witmark & Sons v. Berger Amusement Co., 177 F.2d 515 (8th Cir. 1949) (finding that the practice of requiring blanket licenses of movie theater owners for the use of musical composition copyrights constituted copyright misuse); see also United States v. Loew's, Inc., 371 U.S. 38 (1962) (holding that the block-booking of movies for television performance, in other words, licensing only a large collection rather than individual films, violated the antitrust laws); United States v. Paramount Pictures, Inc., 334 U.S. 131, 158 (1948) (holding that the block-booking of movies for theater performance is an antitrust violation because "the result is to add to the monopoly of the copyright [on each movie] in violation of the principle of the patent cases involving tying clauses").

99. These authors argue that misuse tie-in cases mistakenly assume that a patentee can increase profits by means of a tie-in. See, e.g., Bowman, supra note 96; Ward S. Bowman, Jr., Tying Arrangements and the Leverage Problem, 67 Yale L.J. 19 (1957). But see Louis Kaplow, Extension of Monopoly Power Through Leverage, 85 Colum. L. Rev. 515, 541 n.108 (1985) (critiquing Bowman's view).

100. See, e.g., Byron A. Bilicki, Note, Standard Antitrust Analysis and the Doctrine of Patent Misuse: A Unification Under the Rule of Reason, 46 U. Pitt. L. Rev. 209 (1984); Mark A. Lemley, Comment, The Economic Irrationality of the Patent Misuse Doctrine, 78 Cal. L. Rev. 1599 (1990). But see Kenneth J. Burchfiel, Patent Misuse and Antitrust Reform: "Blessed Be the Tie?," 4 Harv. J.L. & Tech. 1 (1991) (defending patent misuse on the basis that the antitrust standard is difficult and expensive); Robert P. Merges, Reflections on Current Legislation Affecting Patent Misuse, 70 J. Pat. & Trademark Off. Socy. 793 (1988) (defending a separate doctrine of patent misuse). See generally Kaplow, supra note 49.

101. See, e.g., Senza-Gel Corp. v. Seiffhart, 803 F.2d 661, 665 & n.5 (Fed. Cir. 1986) (finding patent misuse in a tie-in situation); cf. USM Corp. v. SPS Technologies, Inc., 694 F.2d 505,

There are other contract-policing doctrines that have emerged from intellectual property cases over the years. For instance, the "first-sale" doctrine in copyright law prohibits the seller of a copy of a copyrighted work from controlling the buyer's use or resale of the copy. Although the rule has been subject to amendment¹⁰² and subtle interpretation¹⁰³ in recent years, courts continue to apply it in a number of circumstances.¹⁰⁴ Patent law has traditionally espoused a corresponding doctrine. One recent case, however, if followed, could significantly reduce the scope of the doctrine's operation; this case held that postsale restrictions on use were enforceable so long as the seller clearly gave notice of the restrictions at the time of sale.¹⁰⁵

Perhaps because they developed internally, alongside of doctrines concerning validity and infringement, many implicitly consider these and other contract policing doctrines part of the state's endowment when it grants an intellectual property right. Thus courts — again implicitly — deal with them separately from other rules bearing on intellectual property contracts, such as the UCC rules that are the subject of Alces and See's volume. Although this makes sense historically given that different groups of practitioners have traditionally dealt with intellectual property and commercial transactions, there is no denying that both sets of rules — the internal policing rules such as misuse and those contract rules bearing particularly on commercial transactions involving intellectual property — are of great importance to practitioners whose job it is to draw up intellectual property transactions. If a practitioner wants to know what contract terms this branch of law will tolerate, she is as interested in knowing that she cannot tie the sale of a patented product to an unpatented one as she is in knowing that under the UCC cases in this area, she must carefully structure termination provisions.¹⁰⁶ It would be convenient if practitioners could find an integrated treatment of both sets of rules. But they will have to

^{511 (7}th Cir. 1982) (Posner, J.) (concluding that there is an increasing convergence of patent-misuse analysis with standard antitrust analysis), cert. denied, 462 U.S. 1107 (1983).

^{102.} Record Rental Amendment Act of 1984, Pub. L. No. 98-450, 98 Stat. 1727 (1984) (prohibiting buyers of record albums from "renting" them); Computer Software Rental Amendments Act of 1990, Pub. L. No. 101-650, 104 Stat. 5134 (1990). Congress designed these laws to shut down the market for rental shops catering to home tapers.

^{103.} Mirage Editions, Inc. v. Albequerque A.R.T. Co., 856 F.2d 1341 (9th Cir. 1988), cert. denied, 489 U.S. 1018 (1989) (holding that the right to control creation of derivative works "trumped" first-sale doctrine in case involving repackaging of purchased copyrighted works and resale in different form).

^{104.} See Intel Corp. v. ULSI Sys. Technology, Inc., 995 F.2d 1566, 1570 (Fed. Cir. 1993), cert. denied, 114 S. Ct. 923 (1994); Lisle Corp. v. Edwards, 777 F.2d 693, 695 (Fed. Cir. 1985); Cyrix Corp. v. Intel Corp., 879 F. Supp. 666, 671 (E.D. Tex. 1995).

^{105.} Mallinckrodt, Inc. v. Medipart, Inc., 976 F.2d 700 (Fed. Cir. 1992).

^{106.} See the cases discussed supra section III.B.

wait for the second edition of Alces and See's book, or perhaps for another book altogether.

B. More on the Need for Integrated Treatment: Of "Shrinkwrap" Software Licenses and Intellectual Property Policy

One crucial area that calls for integrated treatment is the law of prepackaged software licenses. These ubiquitous agreements impose a series of restraints on "licensees" — who look, act, and feel like buyers — that push the limits of intellectual property policy and sometimes, as I argue below, exceed them. Especially now, when the Article 2 Revisions Committee is in the midst of a major restatement of the law in this area, it is essential to consider how current practices, as well as the proposed new rules, square with the central policies of intellectual property law, especially copyright. Although Alces and See come closer here to the model of deep integration I have discussed above, their discussion still falls a bit short. But before critiquing their discussion of these cases and related matters, it is important to describe how software licensing developed, what activities these contracts typically try to control, and how all this relates to intellectual property policy.

In the beginning, an authoritative recent article tells us, uncertainty surrounded software licensing. Software was new; lawyers did not know exactly which legal categories would cover it. So they fell back on a basic, foundational principle that they hoped would provide a safe haven: freedom of contract. To judge from the development of the industry since then, this old chestnut has not disappointed. Despite a few minor setbacks, the practice of explicitly licensing software, against the backdrop of strong statutory protection, has served the industry well. It allows sellers of software to market their products with some degree of comfort, despite the changing landscape of copyright law. At the very least, it is apparent that software licensing has not mortally harmed the industry; its growth rate and current absolute size attest to that.

In the custom programming segment of the market, in which negotiated agreements are the norm, protecting rights by contract makes sense. The custom nature of the good, together with the relatively high price tag on the transaction, dictate custom-tailored contracts. But the prepackaged software industry is different. The adoption of the licensing model here, born of historical necessity, has always seemed anomalous. After all, people usually purchase books and videotapes outright, rather than subject to a license. If not for the fact that buyers have always obtained software by a li-

^{107.} Thomas M.S. Hemnes, Restraints on Alienation, Equitable Servitudes, and the Feudal Nature of Computer Software Licensing, 71 Denv. U. L. Rev. 577, 577-79 (1994).

^{108.} See Merges, supra note 3, at 2-3.

cense, they would probably resist the imposition of a contract regime by a single firm, say, or by the entire industry after long acquiescence in the practice of outright purchase.

Innumerable commentators have catalogued the many conceptual and doctrinal problems that shrinkwrap licenses present for traditional contract law. In the context of this review, however, I will limit my observations to the area of contract enforceability. As mentioned in section IV.A, the law of intellectual property has always contained a distinctive set of policing mechanisms to deny the enforceability of contract terms that in some way undermined precious intellectual property policies. The UCC drafting committees and the courts must bring such issues as misuse and statutory preemption front and center in the current debate about the enforceability of shrinkwrap license agreements. They must consider these internal policing doctrines in parallel with questions of contract formation, unconscionability, and the like.

One internal policing mechanism that has only recently surfaced in software protection discussions is preemption of state law. This statutory principle, 110 which has been applied almost exclusively to overturn state legislation, has in theory been available as a limit on the terms that parties can include in a private contract; 111 but no court — so far as I can determine — actually has ever used this principle to render unenforceable a particular licensing agreement. In an excellent law review article, 112 Professor David Rice has argued strenuously for its application in the context of a particular shrinkwrap license term — prohibitions on "reverse engineering" — but so far no reported cases have adopted this approach.

Professor Rice asserts that federal courts should refuse to enforce contracts containing restrictions on reverse engineering, to the extent those restrictions conflict with the reverse engineering privilege found to exist under the fair use provision of the federal copyright statute. Courts ought to treat the right to fair use in this context, in other words, as an immutable statutory endowment, rather than as a default rule that the parties can change by mutual agreement.¹¹³ It is clear from this formulation of the issue that preemption would serve the role traditionally reserved for doctrines

^{109.} See, e.g., David A. Rice, Public Goods, Private Contract and Public Policy: Federal Preemption of Software License Prohibitions Against Reverse Engineering, 53 U. PITT. L. REV. 543 (1992).

^{110. 17} U.S.C. § 301 (1988 & Supp. V 1993).

^{111.} See, e.g., Fantastic Fakes, Inc. v. Pickwick Intl., Inc., 661 F.2d 479, 483 (5th Cir. 1981) ("It is possible to hypothesize situations where application of particular state rules of construction would so alter rights granted by the copyright statutes as to invade the scope of copyright law or violate its policies.").

^{112.} Rice, supra note 109.

^{113.} Id. at 605-16.

such as patent misuse: the policing of voluntary, bilateral contracts. As I have stressed elsewhere in this review, I believe that these doctrines are crucial not only from the perspective of intellectual property policy but also from the point of view of a practitioner asked to draft an agreement dealing with intellectual property. The implicit critique of Alces and See's book, of course, is once again that they omit these matters from their otherwise careful treatment of shrinkwrap licenses.

In general there is much merit at the heart of Professor Rice's proposal. There is something wrong with the wholesale undermining of a statutory right. I disagree, however, with the implicit premise that the right to reverse engineer is an immutable right, one that a prospective licensee cannot surrender in a transaction. Instead, I believe that preemption should occur only when the practice of contracting away a statutory right has become pervasive and perpetual in a particular industry setting. Once one accepts this gloss on Rice's proposal, however, it turns out to produce the same policy recommendation — the preemption of no-reverse-engineering clauses — that Rice himself advocates.

1. Contracts as "Private Legislation"

In Friedrich Kessler's classic 1943 article on contracts of adhesion, 114 he argued that when an entire industry put forth nearly identical contract terms under which consumers could purchase its products, the industry was in effect exercising a form of "private legislation." In his words,

Freedom of contract enables enterprisers to legislate by contract and, what is even more important, to legislate in a substantially authoritarian manner without using the appearance of authoritarian forms. Standard contracts in particular could thus become effective instruments in the hands of powerful industrial and commercial overlords enabling them to impose a new feudal order of their own making upon a vast host of vassals.¹¹⁵

Kessler saw standard form contracts as evidence of a regression to the days when status predominated over contract. Kessler believed that courts had not yet caught on to this and thus were adding to the problem. In his view, contract case law continued to perpetuate the rhetoric of freedom of contract under the mistaken

^{114.} Friedrich Kessler, Contracts of Adhesion — Some Thoughts About Freedom of Contract, 43 COLUM. L. REV. 629 (1943) (defining notion of "private legislation" in context of adhesion contracts).

^{115.} Id. at 640. Interestingly, an experienced copyright practitioner has argued recently in print the similarity between software licensing and feudal landholding arrangements. Hemnes, supra note 107, at 585 ("The system of software distribution under license is analogous to the feudal system of land tenure.").

^{116.} Kessler, supra note 114, at 641.

impression that contract law was all about decentralizing the "law-making process." The cases assumed the classic nineteenth-century conception of contract as a quintessentially bilateral relationship. This assumption blinded them to what Kessler saw in the changing economic landscape, in which large firms were gaining more and more power — power that they employed to force uniform contracting terms and practices on consumers. Rather than having the courts slavishly repeat outmoded doctrine, Kessler argued that courts should be willing to revise cherished principles of contract formation and interpretation in recognition of the very different ramifications that the freedom-of-contract principle has in markets in which sellers possess concentrated power. 118

In the next section, I argue that Kessler's conception of the unique status of uniform, standardized contracts holds the key to the resolution of the shrinkwrap licensing debate.

2. Shrinkwrap Licensing as Private Legislation: Preemption of Rules Made Immutable by Standard Form Contracts

As David Rice recognizes, the received law of federal preemption in the intellectual property area does not fit comfortably into the role of a contract policing-mechanism. Courts have almost uniformly applied preemption doctrine to strike down state legislation, 120 not bilateral contracts. Yet, anyone observing the erosion

From the analytical perspective of the default rule literature, the shrinkwrap licensing controversy turns on the enforceability of contract rules made effectively immutable by standard industry licensing practices. Likewise, the issue of federal preemption of individual contract terms, discussed earlier, turns on which statutory rights are default rules and which are immutable. I have argued this in my patent law casebook. See Merges supra note 52, at 898-900.

^{117.} Id.

^{118.} As examples of difficulties courts have had with standardized contracts, Kessler cites cases on insurance contracts dealing with warranties and offer and acceptance. Id. at 633-34. Today, we might use a new vocabulary to describe this phenomenon. Under the rubric of "default rule" analysis, scholars interested in contract have sharpened our understanding of the source of contract terms. On default rules, see Ian Ayres & Robert Gertner, Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules, 99 YALE L.J. 87 (1989). Unlike Kessler, who asserts repeatedly that the parties to a contract make their own law, contributors to the default rule literature conceptualize contract law as emanating from two sources: (i) the parties, in the case of negotiated terms; and (ii) the state, in the case of nonnegotiated background terms, or default rules. This understanding of contract law thus brings state lawmaking back in to the transaction. Yet it shares with Kessler the notion that the parties are the dominant and, in most cases the ultimate, source of the legal rules that govern their interaction. Default rule analysis divides state-supplied contract terms into two classes. True default rules are rules that apply unless parties contract out of them. Immutable rules, conversely, apply notwithstanding the parties' attempts to contract around them.

^{119.} Rice, supra note 109, at 604 ("Courts... tend to treat state contract law as not generally preempted under Section 301(a).").

^{120.} Id. at 577-88.

^{121.} Cf. Fantastic Fakes, Inc. v. Pickwick Intl., Inc., 661 F.2d 479, 483 (5th Cir. 1981) (holding that federal copyright law did not preempt the application of a state law rule of contract construction, which stated that an undertaking by a licensee to place a licensor's

of finely tuned federal intellectual property policy through the mechanism of contract should be attracted to Professor Rice's proposal.

I propose to unite Rice's impulse to preempt with Kessler's insight that uniform standardized contracts are a form of private legislation. Standard form software licensing contracts, by virtue of their very uniformity and the immutability — in other words, nonnegotiability — of their provisions, have the same generality of scope as the state legislation that is often the target of federal preemption. Furthermore, these contracts have the same effect as offending state legislation: wholesale subversion of an important federal policy. Under this analysis, I essentially second Professor Rice's proposal with one caveat. Only when a licensing provision in contravention of the federal statute has become totally pervasive will the statute preempt it.

This doctrine of contract preemption is in addition, of course, to patent and copyright misuse law that has traditionally prohibited certain licensing provisions, such as private patent or copyright term extensions and tie-in agreements. In effect, the proposed contract preemption notion I am advancing would create a third tier of intellectual property policing doctrines. In addition to the general rule that intellectual property is generally freely alienable and the traditional misuse exception that prohibits certain provisions in all bilateral licensing agreements, I am proposing a new policing concept: a prohibition against blanket imposition of a contract term on essentially the entire licensee population. Unlike the traditional misuse exception, which applies regardless of the pervasiveness of the offending contract term, the new doctrine of contract preemption would apply only when the contract term rises to the level of private legislation.

name and a copyright notice on the products manufactured was a covenant and not a condition of the contract; the court recognized, however, that "[i]t is possible to hypothesize situations where application of particular state rules of [contract] construction would so alter rights granted by the copyright statutes as to invade the scope of copyright law or violate its policies."); Brignoli v. Balch Hardy & Scheinman, Inc., 645 F. Supp. 1201, 1205 (S.D.N.Y. 1986) (holding that federal law preempted contract claims in a complaint to the extent that they simply restated a copyright infringement cause of action, but that the law would not preempt the addition of an agreement to pay royalties in exchange for the right to use copyrighted software).

^{122.} See discussion supra section IV.A. On patent misuse, see Merges, supra note 52, at 750-59. On copyright misuse, see Lasercomb Am., Inc. v. Reynolds, 911 F.2d 970 (4th Cir. 1990).

^{123.} Obviously, the policing mechanism must take effect somewhere short of absolute unanimity; otherwise, a software copyright holder will simply license his best friend or his mother without the restriction and avoid the effect of the rule. Perhaps we can dub this the "Mrs. Gates"-keeper provision? Okay, perhaps not.

V. Conclusion: The Dissemination of Transactional Know-How

In this review, I have tried to move beyond the detailed commercial law issues central to the volume by Alces and See to consider the reasons for, and implications of, the growth of commercial transactions having an intellectual property component. Two simultaneous developments seem to be at work: the rapid emergence of a robust market for intellectual property rights themselves, and the insertion of an intellectual property component into traditional commercial transactions. Inspired by the cases that Alces and See discuss, I find that intellectual property rights are often layered on top of transactions involving other assets, and sometimes they are the primary subject matter of a wholly distinct class of transactions. What emerges from this analysis is a sense of how policymakers can use intellectual property rights to change the dynamics of buyerseller interactions that the UCC traditionally structures. I conclude that in light of the changes in commerce ushered in by increasing reliance on intellectual property, the law must become more sensitive to the quiet insertion of an intellectual property element into traditional commercial exchanges. For example, I argued that courts must adjust intellectual property and UCC damages remedies to insure that contracting parties in the midst of contract repudiation disputes cannot undercut the structure of rights accorded by the UCC, at least not without gaining explicit contractual approval.

The forces behind the growing commerce in intellectual property rights will likely intensify in the coming years. If they do, it will be all the more necessary to complete what Alces and See have begun in this volume: the process of constructing a truly integrated contract law governing intellectual property-based transactions. Their contribution, though only one step along the way, is thus important.

To some extent, this book, and others like it, will go some way toward fulfilling its own prophecy. Just as in newly emerging scientific¹²⁴ and engineering¹²⁵ disciplines, the dissemination of knowhow in a new legal field is a crucial step in advancing promising techniques and establishing the field's legitimacy. We know now that lawyers — especially commercial lawyers — truly are "transac-

^{124.} See, e.g., John W. Servos, Physical Chemistry from Ostwald to Pauling: The Making of a Science in America 46-50 (1990) (describing the diffusion of the new field of physical chemistry through publication of journals and textbooks).

^{125.} See, e.g., Ralph Landau & Nathan Rosenberg, Innovation in the Chemical Processing Industries, in Nathan Rosenberg, Exploring the Black Box: Technology, Economics, and History 190, 202 (1994) (discussing the diffusion of knowledge in the chemical-processing industry).

tion cost engineers,"¹²⁶ as Professor Ronald Gilson has described so well. From this point of view, a book such as Alces and See's helps to disseminate the transactional know-how associated with the new form of transaction. This will not only help identify and legitimize a new subcommunity of practicing commercial lawyers; it will also drive down the costs of transactions, which should make them even more common in the future.

^{126.} Ronald J. Gilson, Value Creation by Business Lawyers: Legal Skills and Asset Pricing, 94 YALE L.J. 239, 243 (1984).