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Why the Debtor's State of Incorporation Should Be the Proper Place for Article 9 Filing: A System Analysis

Lynn M. LoPucki

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Why the Debtor’s State of Incorporation Should Be the Proper Place for Article 9 Filing: A Systems Analysis

Lynn M. LoPucki*

TABLE OF CONTENTS

I. Introduction ........................................ 579

II. Three Possible Bases for Article 9 Filing ............ 585
   A. Filing Where the Collateral is Located ............ 586
      1. Interstate Movement of Collateral After Filing ........................................ 586
      2. Interstate Movement of Collateral Contemplated at the Time of Filing .... 587
      3. Temporary Movement ........................................ 588
   B. Filing Where the Debtor is Located ................ 590
      1. Multi-State Enterprises .............................. 590
      2. Interstate Movement of the Debtor After the Filing ........................................ 590
   C. Filing Where the Debtor is Incorporated .......... 591

III. Comparison on the Criteria of Efficiency of Operation ........................................... 593
   A. The Initial Filing ........................................ 593

* William R. Orthwein Professor of Law, Washington University in St. Louis. This Article would not have been written without the inspiration and encouragement of Harry C. Sigman. I thank Carl Ernst, Steve Harris, George A. Hisert, Ronald Mann, Chuck Mooney, Harry Sigman, Barbara Smith, Elizabeth Warren, and James J. White for their comments on earlier drafts of this Article. Carl Ernst, President of the UCC Guide, Inc. and editor-in-chief of BRB Publications, provided invaluable assistance and advice in framing the empirical inquiries and predicting what I would find. Laura Marvel, Technical Support Administrator of the Delaware Division of Corporations, assisted by drawing a random sample of 400 entities incorporated in Delaware. Chris Dufault provided an explanation of the Prentice Hall Legal and Financial Services system for supplying corporate information; John Linnihan provided an explanation of the CT Corporation System. Dorota Jarosz, M.S. Warsaw University, M.A. Washington University, and a doctoral candidate at Washington University in St. Louis, all in mathematics, calculated confidence intervals for projections from samples to universes. Bill Cobb, Cathy Stites, and Heather Suve assisted me in research.
1. What Must a Filer Do to Determine the Proper Place to File? ................................. 593
2. What Feedback is Available as to Accuracy of Filing? ............................................. 602
3. Proving Later that One Filed in the Right System .................................................. 604
4. Convenience in Filing ................................................................................................. 605
B. Changes in the Conditions that Controlled Filing ...................................................... 611
C. Searching .................................................................................................................... 615

IV. Comparison on Other Criteria .................................................................................. 619
A. System Interface with Related Systems ................................................................. 619
   1. Corporation Records ............................................................................................... 619
   2. Local Filing Systems .............................................................................................. 620
   3. Real Estate Filing Systems .................................................................................... 623
   4. Filings Against Individuals ..................................................................................... 623
   5. Foreign Systems ..................................................................................................... 625
   6. State Revenue Raising Systems ............................................................................. 630
B. The Potential for Competition Among Systems ......................................................... 632
C. Transition to the Future ............................................................................................. 636
D. Political Feasibility: The Delaware Issue ................................................................. 638

V. The Problem of Transition ......................................................................................... 646
A. The Problem ............................................................................................................... 646
B. A Proposed Solution .................................................................................................. 647
   Stage 1: The States Determine Whether to Make the Change ................................ 647
   Stage 2: Filings Indicate State of Incorporation ....................................................... 649
   Stage 3: The Incorporation-Based System is Fully Effective .................................. 650

VI. Conclusion ............................................................................................................... 652
Contemplation of the moral, jurisprudential and (perhaps) constitutional problems which are involved when a slave, a horse, an automobile or a piece of industrial equipment crosses the line from State A to State B has long stimulated the legal profession to prodigies of intellect and to orgies of subtlety and refinement.¹

—Grant Gilmore

I. INTRODUCTION

The Article 9 filing system is a mess. Filings are spread among more than 4,300 offices,² each of which imposes its own procedures and requirements. The legal instructions for filing that are standardized in Article 9 are overly complex and ambiguous, frequently making it difficult or impossible to determine in advance the appropriate system in which to file. To compensate for these weaknesses in system design, the leading authorities advise secured parties to “file everywhere possibly required.”³ Most secured parties do not take that advice. Filings are expensive to create and maintain,⁴ the system is lenient in dealing with filing errors,⁵ and most filings are never challenged anyway.⁶ The routine filer sends a financing statement to what

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¹. 1 Grant Gilmore, Security Interests in Personal Property 599-600 (1965).
². This number includes “statewide” filing systems in each state, “local” filing systems in each county or equivalent, federal systems for patents, copyrights, aircraft, ships, and other types of collateral, and a miscellany of others. For example, some states require filing against licenses with the agency that issues the license. See, e.g., United States v. McGurn, 596 So. 2d 1038, 1039-41 (Fla. 1992) (holding that the Florida Division of Alcoholic Beverages and Tobacco is the proper system in which to file the financing statement for a security interest encumbering a Florida liquor license, so that filing in the UCC records is neither necessary nor sufficient). In some jurisdictions, a security interest in a tort action is perfected by making a filing in the case file. See Bluxome St. Assocs. v. Fireman’s Fund Ins. Co., 254 Cal. Rptr. 198, 200 (Ct. App. 1988). A party may also perfect a security interest in a bank account by giving written notice to the bank. See In re Housecraft Indus., USA, Inc., 155 B.R. 79, 93 (Bankr. D. Vt. 1993). If court files and banks are considered “filing systems” for this purpose, the total number of filing systems in the United States may number in the hundreds of thousands. The penalty for choosing the wrong set is possible loss of secured status.
⁴. See infra notes 70-73 and accompanying text (discussing the cost burdens of the filing system requirements).
⁵. See, e.g., U.C.C. § 9-402(8) (1990) (“A financing statement substantially complying with the requirements of this section is effective even though it contains minor errors which are not seriously misleading.”).
⁶. The likelihood of challenge is great if the debtor is in financial difficulty, but that occurs with only a small proportion of filings.
seems the most likely system and lets it go at that.\footnote{See, e.g., Peter A. Alces, Abolish the Article 9 Filing System, 79 Minn. L. Rev. 679, 707 (1995) (citing a commercial lawyer’s letter stating that his clients do not rely on the Article 9 filing system for information).} Because searchers cannot determine in advance all the possible systems in which a valid filing could be waiting, those who want to know whether collateral is encumbered must search “everywhere possibly required.” The resulting costs are enormous. In another article in this Symposium, Professor Peter Alces reports that the maker of a half million dollar loan is likely to pay its attorneys about $25,000 for UCC filing and searching.\footnote{Id. at 691.}

The problem is in large part systemic. That is, it is not just a problem with particular elements of the system, but with the way the whole thing works together. The filing system was designed in the early 1950s, before the computer, the fax, and the photocopier. The trade-offs made in designing the system were based on the cost structure produced by the technology of the time. Since then, new technologies have altered that cost structure dramatically. Today, the distance between searcher and filing system—a major determinant of original system design\footnote{Distance between searcher and filing system was, in fact, the only reason stated by the drafters in the comments to justify local filing. U.C.C. § 9-401 cmt. 1 (“[I]t can be said that most credit inquiries about local businesses, farmers and consumers come from local sources; convenience is served by having the files locally available and there is not great advantage in centralized filing.”). Some of the best scholars continue to repeat this outdated litany today. See, e.g., Robert E. Scott, The Politics of Article 9, 80 Va. L. Rev. 1783, 1828 (1994) (asserting “increased costs to subsequent unsecured creditors and purchasers of . . . discrete goods who [would have to] search in a potentially distant location” if debtor-based filing were adopted).}—is almost irrelevant. The cost of searching through large numbers of records is a tiny fraction of what it was before computerization.

Technology has reduced some kinds of costs more than others. The cost of a search depends hardly at all on how large a database the search covers; the cost depends significantly on how many detached databases the search covers. If the search cannot be conducted electronically, the cost will be astronomical in comparison with the search that can. Most of the rules currently governing the choice among filing systems are based on the location of the debtor or the collateral.\footnote{The UCC rules governing the choice among filing systems based on geographical location are set forth in § 9-103 (interstate) and § 9-401 (intrastate). The choice between “situs” (here called “collateral-based”) and “domiciliary” (here called “debtor-based”) has been a long standing, though not particularly...}
rule, applicable to "ordinary goods," is that filing should be where the collateral is located. I will refer to systems based on this rule as "collateral-based." The alternative rule, applicable to certain mobile goods and most intangibles, is that filing should be where the debtor is located.\(^1\) I will refer to systems based on this rule as "debtor-based." The controlling facts in both types of systems, the locations of collateral and debtors, usually are not matters of record, public or private, and probably cannot be made so universally. Filers and searchers must make expensive and time-consuming inquiries to determine them initially and to respond to later changes in them. In most cases, these locations cannot be determined by computerized search at all. By contrast, the place of a debtor's incorporation is a matter of public record and can be determined by computer search.

The rule I propose—filing against corporate debtors in the jurisdiction where they are incorporated—would govern over half of all filings in the statewide filings systems,\(^3\) but actually change the proper place for filing of only a small proportion of them.\(^4\) The new rule would work two important improvements in the Article 9 filing system. First, because the rule would be simple and virtually unambiguous,\(^5\) the necessity to file and

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\(^1\) See, e.g., Friedrich K. Juenger, Nonpossessory Security Interests in American Conflicts Law, 84 Com. L.J. 63, 74 (1979) (approving the § 9-103 combination of "situs" and domiciliary conflicts rules, but adding that "progress seems to call for a modern version of the domiciliary approach once advocated by Story").

\(^3\) For this purpose, a corporate debtor is deemed located at its place of business, or if it has more than one, at its chief executive office. U.C.C. § 9-103(3)(d).

\(^4\) The system I propose would apply to all registered entities. An entity should be considered "registered" if (1) the state or country has enacted a law that provides for the creation of an entity of the type, (2) the state or country has taken an official act purporting to create that entity (ordinarily the issuance of a charter), and (3) the state or country maintains public records showing the entity to have been created pursuant to its law.

\(^5\) Based on a random sample of 454 financing statements drawn from the records of 17 states, 48.7% of filings indicate facially that they are against registered entities and an additional 12.5% are ambiguous in that regard. That is, they are against trade names that may or may not be the names of registered entities. See infra note 101 (describing the sample and methodology used).

\(^6\) Only about 6.6% of all filings are against out-of-state corporations. See infra note 104 and accompanying text (showing empirical derivation of this figure).

\(^7\) Only in the rarest cases would judgment be involved in determining whether an entity is registered, or where. Some judgment may be involved in deciding whether a corporation identified on the records of the Secretary of State is the one with whom the creditor is dealing. But a correctly spelled name and state of incorporation is a unique identifier. No two entities can properly
search in multiple systems would disappear. Second, with the fact determinative of the proper place of filing both determinate and in computer-searchable form, the process of determining the proper place of filing itself could be computerized. In an incorporation-based system, the processes of filing and searching could become almost entirely electronic. The extensive computerization that this change would make possible should dramatically improve the efficiency of the entire Article 9 filing and searching process.

The instruction where to file is at the core of the Article 9 filing system. A change in that instruction affects numerous subsystems and interfaces in complex and interrelated ways. Systems analysis provides a method capable of dealing with this complexity. It is grounded in a view of systems as goal seeking. To conduct a systems analysis, one must first induce from observations what the system is attempting to do. From my observations, I conclude that the principal goal of the Article 9 filing system is to communicate the existence of prior security interests to those who will take subject to them. Filers leave “messages” for interested parties who will search for them days, months, or years later. The filing system exists to receive and deliver those messages.

have exactly the same ones. See infra note 51 and accompanying text (discussing case).

16. The state of a debtor’s incorporation can be monitored on the public record. In most jurisdictions today, that means that the monitoring can be accomplished electronically.


18. Licker, supra note 17, at 9-10.

19. Lynn M. LoPucki, Computerization of the Article 9 Filing System: Thoughts on Building the Electronic Highway, Law & Contemp. Probs., Summer 1992, at 5, 37. Other goals have been attributed to the system. See, e.g., Alces, supra note 7, at 694-701 (citing opinions from lawyers and academics that the filing system operates as a bulletin board, as a means for “staking a claim,” or to assure against fraud); Steven L. Harris & Charles W. Mooney, Jr., A Property-Based Theory of Security Interests: Taking Debtors’ Choices Seriously, 80 Va. L. Rev. 2021, 2056-58 (1994) (noting the filing system prevents fraud by providing proof that the transaction occurred at the time asserted). The filing system certainly serves these goals as well, but they are considerably less important and are subsumed in the goal I attribute to the system; that is, a system that accomplishes the goal I attribute probably would accomplish the other suggested goals as by-products.
The second step in this analysis is to identify the subsystems that combine to accomplish that goal. Two groups of subsystems dominate: those by which filings are made and those by which filings are found. In the first group are subsystems by which secured parties gather the information needed to prepare a financing statement and determine where it should be filed, subsystems by which they put the financing statement on the public record, subsystems by which they verify the making of their own filing, subsystems for knowing when changes in a filing are necessary, and subsystems for making them. In the second group are subsystems by which secured parties gather the information necessary to know where to search, subsystems by which they conduct searches, and subsystems by which they evaluate search results.

The essentials of the design of the filing system are imbedded in law, principally Article 9. But the filing system is a physical system composed of much more than law. The appropriate design for such a system depends on a series of cost-benefit analyses that depend in large part on how the system is actually used. In an attempt to gather what Professor Elizabeth Warren has referred to as "the hard data that should precede legal reform," I have relied upon empirical studies conducted by others, interviewed people who work in or with the system, and conducted a series of empirical studies in the PHCORP, PHUCC, and Delaware Secretary of State databases.

In its December 1992 Report, the Article 9 Study Group acknowledged serious weakness in the collateral-based aspects of the current filing system and recommended abandonment of the collateral-based aspects of the current system in favor of a debtor-based "single choice-of-law rule." In May 1993, at the ALI-ABA Invitational Conference in New York, I suggested that an incorporation-based system might be preferable as that single rule. That is, filing against a corporate debtor should be in


22. PERMANENT EDITORIAL BOARD FOR THE UNIFORM COMMERCIAL CODE, PEB STUDY GROUP UNIFORM COMMERCIAL CODE ARTICLE 9 REPORT 74-78 (1992) [hereinafter PEB REPORT]. The study group's recommendation stated that "section 9-103 should be revised to provide that, except when perfection is accomplished by taking possession of the collateral, the law of the jurisdiction in which the debtor is located should determine perfection and the effect of perfection or nonperfection of a security interest." Id. at 74.

23. "Corporate," as used here, includes all registered entities. See supra note 12 (defining "registered").
the state in which the debtor is incorporated. The reaction at 
that meeting was mixed, and a number of issues were raised. 
Because many of those issues were amenable to empirical clarifi-
cation, if not resolution, and Professor Edward Adams had in-
vited me to contribute an article to this Symposium on the 
Article 9 filing system, I decided (with Harry C. Sigman’s en-
couragement) to examine the issues more intensively. This Arti-
cle is the product of that examination.24

This Article proceeds in five parts. Part II describes the 
basics of the operation of the collateral-based and debtor-based 
systems under the current version of Article 9, and of the incor-
poration-based system I propose. Part III compares the systems 
on three criteria of operating efficiency. The first is the credi-
tor’s difficulty under each system in determining the correct 
place for the initial filing and making that filing. The second is 
the creditor’s difficulty in determining when changes in the fil-
ing are necessary and making them. The third criteria is the 
efficiency of searching under each system.

Part IV compares the three alternatives on broader criteria, 
considering the degree to which each is compatible with related 
systems—corporate record systems, local UCC filing systems, 
real estate recording systems, systems for filing against individ-
ual debtors, systems for filing in foreign countries, and state rev-
ue raising systems. In addition, Part IV evaluates the extent 
to which incorporation-based filing might engender competition 
among states or filing offices and whether that competition 
would have a positive or negative effect. In Part IV I also specu-
late about the future of the Article 9 filing system and argue 
that incorporation-based filing would provide the best transition 
to that future. Finally, Part IV considers the political feasibility 
of a change to filing at the place of incorporation, examining in 
particular the contention that incorporation-based filing would 
favor Delaware to such an extent that other states would not 
adopt it.

Part V addresses the difficult problem of transition to an in-
corporation-based system and offers a proposal that would avoid 
almost entirely the necessity for either dual filing or dual 
searching during the transition period. In conclusion this Arti-
cle summarizes the foregoing comparisons and concludes that

24. In the meantime, the political fortunes of the proposal—that Article 9 
filing against state chartered entities be in the state of incorporation—have im-
proved greatly. The Article 9 drafting committee has tentatively voted to make 
the change to an incorporation-based system.
the advantages of filing at the debtor's place of incorporation sufficiently outweigh the disadvantages to warrant the cost of change.

II. THREE POSSIBLE BASES FOR ARTICLE 9 FILING

Section 9-103 requires filing for "ordinary goods" in the state where the collateral is located\(^{25}\) and for certain "mobile goods" and most kinds of intangible property in the state where the debtor is located\(^{26}\). The effect of this split is to render the proper place of filing either difficult to determine or indeterminate in a significant number of cases. Goods are considered mobile if they are "of a type normally used in more than one jurisdiction."\(^{27}\) Thus, goods that never move might be mobile goods and goods constantly moving from state to state might not be.\(^{28}\) The creditor who takes a bulldozer as collateral, for example, would be well advised to file both where the bulldozer is located and where the debtor is located. As will be discussed below, the cost of maintaining an Article 9 filing will often be far from trivial.\(^{29}\) That the split nature of the current system some-

\(^{25}\) To discover the proper system in which to file against such goods, UCC § 9-103(1) directs the filer to the law of the state where the goods are located "when the last event occurs on which is based the assertion that the security interest is perfected or unperfected." Because Article 9 has now been adopted in every state, that law will be UCC § 9-401 of the state where the collateral is located. Section 9-401 in turn requires filing in the office of the Secretary of State and/or local filing offices in state. Thus if a New York bank lends to a New York debtor against industrial equipment in California, California's version of the UCC governs place of filing regardless of where the litigation is brought. Although the contract between a secured party and its debtor can determine which state's law governs most aspects of the relationship between them, it cannot determine which state's law governs the requirements for perfection. U.C.C. § 1-105(2); 1 WILLIAM D. HAWKLAND, UNIFORM COMMERCIAL CODE SERIES § 1-105:05 ("The parties are not free, however, to determine the law to govern perfection of a security interest."). The requirement in California's version of UCC § 9-401, see CAL. COM. CODE § 9401 (West 1994), that filing take place "in the Office of the Secretary of State" is read as a directive to file with California's Secretary of State. Hence, the proper place to file is in California, where the collateral is located.

\(^{26}\) U.C.C. § 9-103(3).

\(^{27}\) Id. § 9-103(3)(a).

\(^{28}\) See, e.g., Ingersoll-Rand Fin. Corp. v. Nunley, 11 B.R. 528, 530-33 (W.D. Va. 1981) (holding that mining equipment that had been moved twice in a period of 20 months was not "mobile goods" within the meaning of this provision).

\(^{29}\) The literature is replete with assertions that the costs of Article 9 filing are, or are not, trivial. The apparent contradictions usually resolve easily once the reader understands what type of Article 9 filing the writer has in mind. See, e.g., Homer Kripke, Law and Economics: Measuring the Economic Effi-
times requires filers to maintain more than one filing for a single security interest is a serious defect.\textsuperscript{30}

The difficulties resulting from having both collateral-based and debtor-based rules in the same system are considerable. But having two rules in the current system, each applicable only to certain kinds of collateral, is only part of the problem. The next two subparts demonstrate that systems based solely on the location of the collateral or the location of the debtor would each present serious difficulties of their own.

A. FILING WHERE THE COLLATERAL IS LOCATED

To the extent personal property has a location, it is by definition moveable. If the proper place to file against particular property is at the location of that property, the proper place to file moves whenever the property does. A collateral-based system thus will be most efficient with regard to the collateral that moves the least. Article 9 denominates the goods relatively less likely to move "ordinary goods."\textsuperscript{31}

To focus on the limitations inherent in a collateral-based system, this discussion assumes that ordinary goods are the only kind of collateral. Nonetheless, three systemic problems persist: first, even ordinary goods may move from state to state after the filing is made; second, ordinary goods are often in transit at the time the secured party is attempting to file; and third, ordinary goods sometimes move temporarily to other jurisdictions. The manner in which Article 9 responds to each of these three problems is described in a separate section.

1. Interstate Movement of Collateral After the Filing

An Article 9 filing is an attempt at communication from a filer to a person who will search for filings at a later time.\textsuperscript{32} In a

\textsuperscript{30} See infra notes 70-73 and accompanying text (discussing the burdens associated with maintaining multiple filings). In the current system, the necessity arises from (1) doubt as to the correct place for filing and (2) securing a single loan with two or more types of collateral, each subject to a different rule as to proper place of filing.

\textsuperscript{31} U.C.C. § 9-103(1).

\textsuperscript{32} For a more complete description of this theory of filing systems, see LYNN M. LOFUCKI & ELIZABETH WARREN, SECURED CREDIT: A SYSTEMS APPROACH 326-29 (1995).
collateral-based system, filers file where the collateral is located at the time of filing and searchers search where the collateral is located at the time of the search. But the search may occur years, or even decades, after the initial filing was made. If the collateral is moved between the time of filing and the time of search, the searcher may not realize the necessity for a search in the system in which the filing was made and the communication may fail.

Article 9 attempts, in part and somewhat clumsily, to address this problem in UCC section 9-103(1)(d). That section renders a filing ineffective if the filer fails to discover a movement of the collateral within four months of the time it occurs and make an additional filing in the destination state. Probably most secured parties impose on their debtors by contract either a prohibition on interstate movement of collateral or a requirement that the debtor notify the creditor of such a movement. Nevertheless, interstate movements are common and debtors often fail to give required notice to their creditors. To assure that its filing would remain effective, a secured party would have to verify the continued presence of the collateral in the state at least once every four months.

2. Interstate Movement of Collateral Contemplated at the Time of Filing

Many, if not most, UCC filings are made to perfect purchase money security interests created at the time a manufacturer or dealer sells the collateral to an end user or reseller. A substantial portion of these sales require interstate shipment of the collateral. At the time the seller is attempting to file, the collateral is in transit. Without a special exception for this circumstance, the seller might file at the place of manufacture before the goods were shipped, in one of the jurisdictions along the route of ship-

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33. This section provides:
When collateral is brought into and kept in this state while subject to a security interest perfected under the law of the jurisdiction from which the collateral was removed, the security interest remains perfected, but if [the law of the destination state requires filing] to perfect the security interest, (i) if [the filing is not made] before the expiration of four months after the collateral is brought into this state... the security interest becomes unperfected....
U.C.C. § 9-103(d).

34. If the debtor notifies the secured party in advance of an intended move, the secured party can file in the destination state before it takes place. But absent such cooperation, few secured parties are in a position to identify the destination until after the move has occurred.
ment as the goods passed through, or in the destination state after the goods arrived. A filing in any of these jurisdictions would remain effective for four months after the collateral left the jurisdiction. Such a system would impose on searchers who wanted to know whether recently arrived collateral was encumbered the burden of discovering all jurisdictions in which the collateral had been physically present in the past four months and searching in each. Such a system would impose on filers who wanted continuous perfection the burden of making multiple filings. They would need to file in the destination state to be perfected when the goods arrived there and file in their own state to be perfected until that time. The possibility that goods in transit would be rerouted after filings were arranged would add to the complexity.  

The current version of Article 9 deals with this problem by making an exception from the rule that generally requires filing where the collateral is located. The exception is for transactions in which (1) the security interest is a purchase money security interest and (2) the parties understand that the goods will be kept in a jurisdiction other than the one in which the goods are located at the time of the filing; that is, the goods are about to be the subject of an interstate shipment.  

The exception is complex and poorly drafted. The gist of it is that the secured party can file in the intended destination state within a specific period of time and the filing will be effective before and after the goods reach the destination state and, in limited circumstances, even if they never reach the destination state. The system's effect of having this exception is to complicate both the problems of filing and later proving that the filing was in right place.  

3. Temporary Movement

If the mere presence of collateral in a jurisdiction were sufficient to make the jurisdiction an appropriate place for filing, chaos would result. The owner of collateral may, for example, ship it from State A to State B. In the course of that shipment, the collateral may pass through States C, D, and E. Because

35. If the seller attempts to file too early, it may file in a state where the goods never go. If the seller waits until the buyers are confident of the ultimate destinations, the goods may arrive in the destination states before the filing, resulting in loss of priority to earlier filers in the destination state who happen to have after-acquired property clauses in their security agreements.

36. U.C.C. § 9-103(1)(c).

37. See infra note 56 and accompanying text.

38. See infra notes 91-97 and accompanying text.
filings remain effective for four months after the collateral has moved to another state, a searcher who wanted to know whether the collateral in this example was encumbered might have to search in all five states.

Not surprisingly, mere presence of the collateral in the state is insufficient to make the state the proper place to file. The collateral must be "brought into and kept in" the state, which "impl[ies] a stopping place of a permanent nature in the state, not merely transit or storage intended to be transitory." This "kept in" rule relieves the searcher of the necessity to search in States C, D, and E.

By solving one problem, however, the designers of the system created another. The mere presence or absence of collateral from the jurisdiction does not determine whether the jurisdiction is the proper place to file. About all the searcher practically can do to determine the "location" of the collateral is to look at the collateral; yet under this rule, looking at the collateral may be insufficient to determine its "location" for the purpose of filing. There is considerable authority that collateral can be temporarily in a state for more than four months without triggering the obligation to file in the state and without invalidating filings in the state from which the collateral was temporarily removed. If the state where collateral is temporarily physically located is not the proper place to file, it would seem to follow that the state where the collateral is not physically located is the proper place to file. Thus, one cannot rely on the physical location of the collateral in determining where to file, making the determination subjective and uncertain.

39. Not all searchers would want to know. See supra note 7 and accompanying text (presenting evidence that searchers do not in fact rely on the system).
40. U.C.C. § 9-103(1)(d) (emphasis added).
41. Id. § 9-103 cmt. 3.
42. See In re Potomac School of Law, 16 B.R. 102, 103-05 (Bankr. D.C. 1981) (holding that temporary storage of books in the jurisdiction does not trigger the jurisdiction's UCC § 9-103(1)(d) even though the books remained in the jurisdiction for more than four months); Barkley Clark, Secured Transactions ¶ 9.04(1) (rev. ed. 1993) (stating that Potomac School of Law "seems correct"). Professors White and Summers observe:

Thus, conceivably if goods were stored even for a period of months in another state, they might be regarded as still "kept" in the original state. We would favor that interpretation in circumstances in which parties should have perceived from the mode of possession or storage that they likely belonged to someone from another state.

B. Filing Where the Debtor is Located

In a debtor-based system, the secured party files in the jurisdiction where the debtor is located, even if the collateral is permanently located elsewhere. There are two fundamental difficulties with debtor-based systems. First, many debtors are located in more than one jurisdiction, making the proper place to file somewhat uncertain. Second, a debtor may move from the jurisdiction after a filing has been made, making the filing difficult for searchers to locate.

1. Multi-State Enterprises

Under the current system, filings against debtors with operations in more than one state are made at the "chief executive office" of the debtor. The text of the UCC does not define "chief executive office." Comment 5(c) to UCC section 9-103 provides that "Chief executive office' does not mean the place of incorporation; it means the place from which in fact the debtor manages the main part of this [sic] business operations." The drafters recognized that "[d]oubt may arise as to which is the 'chief executive office' of a multi-state enterprise, but it would be rare that there could be more than two possibilities."43 Presumably, the drafters assumed that in close cases, the secured party would maintain filings in both places that possibly could be the location of the debtor. For the secured party to have to make two filings rather than one apparently did not seem to the drafters a significant burden. But it is.44

2. Interstate Movement of the Debtor After Filing

The problem of interstate movement of debtors in a debtor-based system is analogous to the problem of movement of collateral in a collateral-based system. Filers file where the debtor is at the time of filing; searchers tend to search where the debtor is at the time of the search. If the debtor has moved from one state to another between the time of the filing and the time of the search, the communication between filer and searcher may fail.

Article 9 attempts to solve this problem in a manner analogous to that used for movements of collateral. In essence, it requires that the filer discover the movement of the debtor within four months of the time it occurs and make an additional filing

43. U.C.C. § 9-103 cmt. 5(c).
44. See infra notes 70-72 accompanying text (discussing the costs of making and maintaining multiple filings).
in the destination state.\textsuperscript{45} As with movements of collateral, secured parties require that their debtors inform them of movements. Nonetheless, interstate movements are common and debtors often fail to give their creditors the required notice. To be sure that its filing would remain effective, a secured party would have to verify the continued presence of the chief executive office of the debtor in the state at least once every four months.

C. FILING WHERE THE DEBTOR IS INCORPORATED

In an incorporation-based system, the secured party would file against the debtor in the state where the debtor is incorporated. The system proposed here would apply to security interests granted by corporations, including non-profit corporations and professional corporations, limited partnerships, limited liability companies, and any other entity existing under a charter granted by a state or the federal\textsuperscript{46} government ("registered entities").\textsuperscript{47} The system would not apply to individuals, unregistered partnerships, trusts, estates, other unregistered entities, or, initially at least, companies registered outside the United States.\textsuperscript{48}

Although a secured party might have difficulty determining the state of its debtor's incorporation,\textsuperscript{49} its debtor always will have one and only one. Without the grant of a corporate charter, the debtor will not be subject to the system I propose. With the grant of a charter, an entity is formed. The state granting the charter is its state of incorporation and the proper state in which to file. An entity incorporated in one state cannot simultane-

\textsuperscript{45} U.C.C. § 9-103(3)(e).

\textsuperscript{46} The federal government grants charters to banks, savings and loan associations, credit unions and other entities. See, e.g., 12 U.S.C. § 21 (1988) (authorizing the formation of national banking associations); American Nat'l Red Cross v. S.G., 112 S. Ct. 2465, 2472 (1992) (discussing the America Red Cross's federal charter).

\textsuperscript{47} See supra note 12 (defining registered entity).

\textsuperscript{48} See infra part IV.A.4 (discussing filings against individuals); part IV.A.5 (discussing filings against foreign debtors).

\textsuperscript{49} The difficulty might be that a particular representative of the debtor does not know the debtor's state of incorporation or that the representative cannot be trusted to report it accurately. In most circumstances, the secured party will be able to overcome these problems by verifying the existence of the debtor corporation with the government that registered the corporation. See infra note 78 (discussing procedure for searches of state corporate records). But further effort may be required to establish that the corporation on which the government reports is the organization with whom one is dealing. See infra note 52 (discussing the necessity for the searcher to determine who owns the collateral).
ously be incorporated in a second. If two states each charter a corporation by a particular name, the effect is to create two corporations. When that happens it will be up to the secured party to determine which of the two owns the collateral, obtain the security interest from that corporation, and perfect by filing against that corporation.

A corporation can move from one state to another by forming an affiliate in the destination state and merging into it. As

50. See, e.g., MODEL BUSINESS CORP. ACT § 1.40(4) (1984) (defining a “corporation” as “incorporated under this act” and “not a foreign corporation”); id. § 1.40(10) (defining a foreign corporation as a “corporation . . . incorporated under a law other than the law of this state”). One can thus conclude that if a corporation is already incorporated under the law of another state, it is a “foreign corporation” and therefore ineligible to incorporate under the laws of this state as well. The following peculiar law seems to me to recognize, rather than contradict, the idea that a corporation can be organized under the laws of one and only one government:

(a) The Jewish War Veterans of the United States of America, Incorporated, organized and incorporated as a nonprofit entity under the laws of the State of New York, is hereby recognized as such and is granted a federal charter

(b) The corporation shall retain and maintain its status as a corporation organized and incorporated under the laws of the State of New York. 36 U.S.C. § 2701(a)-(b) (1988).

51. See, e.g., Advance Fin. Corp. v. Isla Rica Sales, Inc., 747 F.2d 21, 27 (1st Cir. 1984) (holding that the issuance of charters for “Monte Foods, Inc.” by Alabama and Georgia to a single individual who operated a single business created two corporations).

52. In this respect, the system I propose does not differ from collateral-based or debtor-based systems. In those systems as well, the secured party must determine at its peril which person or entity owns the collateral, obtain the security interest from that person or entity, and perfect against that person or entity. If the secured party does not obtain its security interest from the owner-debtor, the security interest will not attach and therefore cannot be perfected. UCC § 9-203(1)(c) permits a security agreement to attach only if “the debtor has rights in the collateral.” Generally speaking, the security interest can attach only to the rights held by the debtor. Pleasant View Farms, Inc. v. Ness, 455 N.W.2d 602, 604 (S.D. 1990) (citing David Epstein et al., Debtors and Creditors 223 (3d ed. 1987)) (“When a debtor has rights in collateral, the security interest she creates is coextensive with her rights.”). A security interest cannot be perfected unless it has attached. U.C.C. § 9-303(1).

The system I propose is vulnerable to fraud by a debtor who forms two corporations by the same name in different states, takes title to the collateral in one of them and causes the other to grant the security interest in that collateral. The analogous vulnerability of a collateral-based system is to a debtor who moves the collateral into the state to borrow against it and then back out after the loan has been granted. In either system, a careful creditor can always escape the fraud, but only through off-record investigation. I would not expect either type of fraud to be very effective or very common, or for the system I propose to be any more vulnerable to fraud than the present regime.
will be discussed below, such movement rarely occurs and is easy for searchers to discover when it does.

III. COMPARISON ON THE CRITERIA OF EFFICIENCY OF OPERATION

Comparing the efficiency of collateral-based, debtor-based, and incorporation-based systems requires a consideration of the effort required of filers and searchers in three contexts. The first is the effort of the secured party to make an initial filing and be confident of its priority. The second is the effort required of secured parties or searchers to discover and respond to changes in the circumstances that controlled the place of filing. The third is the effort required of searchers to obtain and interpret searches generally.

In each of the comparisons made below, I assume that the secured party wishes to make and maintain an effective filing and that the searcher wishes to find all filings that will be effective against the searcher if it makes the contemplated loan. The reader should keep in mind that, under the current system, most filers and searchers deliberately choose to be considerably less diligent and accept whatever risks accrue.

A. THE INITIAL FILING

1. What Must a Filer Do to Determine the Proper Place to File?

In a collateral-based system, the initial task of the secured party is to determine the current location of the collateral. In some transactions, that will be difficult. Goods may be in transit and their precise whereabouts unknown. The goods may be at a remote location. In any event, the careful secured party will want to look at them to be sure they are in the state, and that will take some time and effort. Recall that even if goods are present in the state at the time of filing, the state is not the proper place for filing if the goods are in the state only temporarily or if the secured party “should have perceived from the mode of possession or storage that they likely belonged to someone from another state.” The secured party must also be alert for the UCC section 9-103(1)(c) situation in which the security interest is purchase money and the parties intend that the goods

53. See infra notes 121-125 and accompanying text.
54. See supra note 7 and accompanying text.
55. See supra note 42 (discussing temporary storage).
be kept in another jurisdiction. In that circumstance, the other jurisdiction is the only proper place for filing.\textsuperscript{56}

To know where to make its initial filing in a debtor-based system, the secured party must determine the current location of the "chief executive office of the debtor," which is the "place from which in fact the debtor manages the main part of this [sic] business operations. This is the place where persons dealing with the debtor would normally look for credit information . . . .\textsuperscript{57} This two-prong test may not establish one correct place to file because the debtor may manage its business at a location other than where persons dealing with the debtor would normally look for credit information.\textsuperscript{58} An increasing number of businesses are run by chief executive officers who work from a

\textsuperscript{56} Defenders of collateral-based systems will probably assert that most secured parties affected by UCC \textsection{9-103}(1)(c) will be manufacturers, dealers, or their financiers, who will be fully aware of that section and welcome the "safe harbor" it provides. I concede that will be true of most secured parties affected. But casual sellers who do not consult attorneys expert in Article 9 may be tripped up by this complex, obscure provision. Users at every level of sophistication probably will have lower costs in an incorporation-based system. But those who use an idiosyncratic system frequently have much greater opportunity to discover and adjust to its weaknesses than do infrequent users. For that reason, I anticipate that the greatest benefits of reform will accrue to infrequent users.

\textsuperscript{57} U.C.C. \textsection{9-103} cmt. 5(c).

\textsuperscript{58} This might occur in any case where the headquarters of the company was in a state other than the one where the company did its borrowing and paid its bills. For example, In Advance Financial Corp. v. Isla Rica Sales, Inc., 747 F.2d 21 (1st Cir. 1984), the debtor corporation had offices in both Georgia and Alabama. The court held that because the debtor clearly "had its headquarters in [Georgia]" it was "totally beside the point" that "some of the documents submitted to [the secured party] (including in various instances bills of lading which accompanied the merchandise and certain of the invoices themselves) showed an Alabama address for the seller." \textit{Id.} at 24. The cavalier manner in which the court disposed of evidence that creditors might look to Alabama for credit information demonstrates the primacy of headquarters to these judges. The case also demonstrates the potential for the place creditors might be expected to look for credit information about a company to be different from the place of the company's headquarters.

The potential for this separation also is illustrated in Bavel v. Ft. Thomas Bellevue Bank (\textit{In re Triple A. Coal Co.}), 55 B.R. 806, 809 (Bankr. S.D. Ohio 1985), where a bankruptcy court used the term "nerve center" to refer to the chief executive office. "Nerve center" is a term of art employed in federal diversity cases and bankruptcy venue cases to indicate the "principal place of business" of the debtor. The nerve center of a business may be virtually anywhere the chief executive officer works. \textit{See generally} Lynn M. LoPucki & William C. Whitford, \textit{Venue Choice and Forum Shopping in the Bankruptcy Reorganization of Large, Publicly Held Companies}, 1991 Wis. L. Rev. 1, 18 n.22 (citing cases applying the "nerve center" test).
place other than the financial hub of the company. These changes in the workplace have undermined the workability of the rule requiring filing at the location of the debtor.

Amending the statute to designate one of the two prongs as determinative would not solve the problem. Designating the chief executive office as the proper place to file is unworkable because creditors may have no practical means of determining where that is. Designating the place where creditors normally look for credit information as the proper place to file may require a filer to discover where most other creditors have in fact looked for credit information. The filer might need to conduct a survey to determine where to file a financing statement. Moreover, if this test were interpreted as permitting debtors to designate where creditors should look for credit information, and consequently where to file, the test no longer would be debtor-based because the debtor's actual location would have become irrelevant.

A second problem with filing in the state of the debtor's chief executive office arises when a parent corporation is located in a jurisdiction different from its subsidiary. In the leading case to address this problem, Mellon Bank, N.A. v. Metro Communications, Inc., the court created a presumption that a subsidiary manages itself. The business owned by Metro Communications, Inc. was located in Maryland at the time that TCS, a corporation located in Pennsylvania, acquired full ownership. For approximately a year, the actual management of the business owned by Metro Communications, Inc. progressively was shifted from per-

59. In a study of the 43 largest bankruptcy reorganizations of publicly held companies between 1979 and 1988, Whitford and I found several cases in which these companies with assets in excess of $100 million were run from "headquarters" in states remote from the financial operations. See LoPucki & Whitford, supra note 58, at 12. They included Baldwin-United, a Cincinnati company run from the New York offices of Victor Palmeri, a turnaround manager, see id. at 28 n.60, Tacoma Boat Building Company, a Tacoma, Washington company that successfully argued that its "chief executive office" was in what amounted to a residential apartment in New York, see id., even though its filings with the SEC listed its "chief executive office" as being in Tacoma Washington, see id. at 27 n.59, and AM International, a Chicago company that moved its "headquarters" three times in the five years before bankruptcy. Id. at 19. Two of the three moves by AM International were to accommodate new chief executive officers who lived in other states and did not wish to move. Id. The rapidity with which even the largest companies move their headquarters, see infra note 118, and the fact two of the 43 companies we studied litigated the location of their headquarters at the time of the filing of their reorganization case demonstrate the problematic, ephemeral nature of many corporate headquarters.

60. LoPucki & Whitford, supra note 58, at 28 n.60.

61. 945 F.2d 635 (3d Cir. 1991).
persons employed by Metro Communications in Maryland to persons employed by TCS in Pennsylvania. At the end of the year, the operations of Metro Communications were managed entirely from Pennsylvania. The bankruptcy court determined that Mellon Bank’s filing in Maryland during the transition year failed to perfect its security interest because the headquarters of the company had moved to Pennsylvania “at least some time before [the filing].” The court of appeals reversed, stating:

The bankruptcy court’s analysis is flawed in several respects. First, there is a presumption that a corporation, even when it is a wholly owned subsidiary of another, is a separate entity. The law recognizes the legal distinction of affiliated corporations as do business people. To require creditors to analyze and understand the internal power structure of related corporations to determine whether the wholly owned subsidiary was “truly independent” from its parent corporation is misplaced and would introduce great uncertainty into commercial transactions, especially with respect to the filing of financing statements. The court held Maryland, where the subsidiary was located, to have been the proper place for filing.

The court correctly concluded that great uncertainty would result if the secured creditors of a subsidiary had to determine whether the parent managed the subsidiary or the subsidiary managed itself. The court was wrong, however, in its conclusion that its presumption that a subsidiary manages itself could in some way free creditors from “analyze[ing] and understand[ing] the internal power structure of related corporations” to determine the proper place to file in a debtor-based system. The court’s error becomes apparent if we merely assume that the persons in Pennsylvania who actually managed the Maryland subsidiary had been employees of the Maryland subsidiary rather than the Pennsylvania parent. There would then have been no doubt that the Maryland subsidiary was managed from Pennsylvania and that the proper place to file was in Pennsylvania. Thus, under the court’s test, the secured party could know where to file only by knowing which of the two corporations employed the person who managed the subsidiary—the “internal power structure” of the corporation. To an outsider, management of the subsidiary by its own employee in Pennsylvania would look the same as the situation in Metro Communications, but the proper place to file would be Pennsylvania rather than Maryland. If we then add another twist to the

62. Id. at 644.
63. Id. at 642.
64. Id.
65. Id.
facts—that the management of the Maryland subsidiary was progressively shifted from the subsidiary’s employees in Maryland to the subsidiary’s employees in Pennsylvania—Mellon Bank faces essentially the dilemma from which the court of appeals claimed to have rescued it. Mellon would have to “understand and analyze the internal power structure of related corporations” to know where to file.

Once the location of a debtor is in doubt, the scope of the inquiry the creditor must make to determine that location is enormous. In determining the location of a debtor for this purpose, the courts have considered where the debtor kept its financial records, where the board of directors met, where debtor’s top management most often worked, whether the business location was temporary or permanent, and numerous other factors.

Comment 5 to UCC section 9-103 responds to this argument by noting that even if the standard for determining the location of the debtor is indeterminate, “it would be rare that there could be more than two possibilities. A secured party in such a case may easily protect himself at no great additional burden by filing in each possible place.” This cavalier treatment of the costs of an additional filing is highly misleading. The true costs of a second filing are far from trivial.

Filing fees range between three dollars and twenty-five dollars, but these fees are only a small part of the total cost. The filer will spend some time and effort in making the filing, and if the filer employs a search company, it will pay an additional fee. The expense of maintaining the filing after it is made is likely to be considerably larger still. If the filing is to extend beyond five years, the secured party must file a continuation statement. If the changes in the circumstances reported on the face of the filing change, the secured party may have to file an amendment. If a termination statement is required, the secured party may have to file it. The filings that must be made in the second

68. See, e.g., In re Ericson, 6 B.R. 1002, 1007 (D. Minn. 1980) (“[T]he location where Ericson does most of his work in supervising the work of the partnerships is his place of business.”).
70. See infra notes 217-219 and accompanying text.
71. The likelihood of any of these events occurring can be estimated from the fact that continuations, amendments, and terminations account for about 44% of the filings in the system. This percentage is based on Carl Ernst’s esti-
jurisdiction are not mere carbon copies of those made in the first. The filing fees, the filing numbers, the times of filing, and probably even the dates of filing will be different for the two sets of documents. The additional filing may be in a state that requires dual filings,\footnote{U.C.C. § 9-401, third alternative subsection (1). Twelve states have adopted this alternative, including New York, Pennsylvania, Ohio, and Massachusetts. See infra Table A-1 (listing states).} pushing the total number of filings to three.

Most importantly, the filing of the additional financing statement or statements will be based on different assumptions of fact or law than the first. Maintenance of the additional filing or filings will require that the secured party monitor different circumstances to discover the necessity for change. For example, assume that the secured party files in State A because the debtor's chief executive officer works from an office in State A and makes a second filing in State B because the company bills and pays its bills from State B. To determine whether there has been a change in the circumstances controlling filing, the secured party must monitor both the chief executive office and the accounting office. If one of them seems to have moved to State C, the secured party may need to add and maintain a third filing in State C. In essence, the cost of maintaining two filings may be large because the cost of maintaining each is large.

Finally, it should be noted that in many transactions, particularly those involving small equipment purchases at branch offices, neither the creditor nor the persons acting on behalf of the debtor may be aware of the facts necessary to determine where "the debtor is located." Branch managers will certainly know the name under which the branch and the main office do business, but they will not necessarily know whether the branch is separately incorporated. Yet, under Metro Communications, the fact of separate incorporation will in many cases be determinative of the place of filing.\footnote{If the branch manager does not know whether the branch is separately incorporated the branch manager could hardly know the name of the debtor. However, considering how undemanding the courts have been of filers under the "seriously misleading" standard of UCC § 9-402(8), filers might not need to know their debtors' true names to make effective filings. If the filing is made against "McDonald's Restaurants" and it turns out that the debtor is incorporated as "McDonald's Restaurant of Clayton, Inc.," the courts are likely to hold the filing effective. See, e.g., In re Thriftway Auto Supply, Inc., 156 B.R. 300, 303 (Bankr. W.D. Okla. 1993) (holding effective a filing made against}

mates of the numbers of UCC-1 filings in 1993 and the numbers of continuations, terminations, and amendments reported by the statewide filing officers to IACA. See supra note 212 (discussing data).
In an incorporation-based system, the only fact the filer needs to know that it does not necessarily need to know in a collateral-based or a debtor-based system is the debtor’s state of incorporation. For the vast majority of creditors, discovering the debtor’s correct name and state of incorporation will present no problem. The corporate debtor will know that information and relay it to the creditor. The creditor can verify the information either by searching the public record or obtaining a credit report. Because no state permits the formation of two corporations with the same name,74 the correct name and state of incorporation identify a corporation in a way that distinguishes it from all other entities for which the correct name and state of incorporation are given.

Some may argue that the persons executing security agreements on behalf of corporate debtors sometimes will not know the correct name or state of incorporation of their employers. While there may be some factual basis for this argument, the argument is ultimately not persuasive. Name and state of incorporation are the minimum information necessary to distinguish a corporate debtor from other entities.75 Filers may be able to make effective filings without this information under the current system, but such filings do not in fact identify the debtors. The liens they perfect are, to some degree, secret liens.76

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74. See, e.g., CAL. CORP. CODE § 201(b) (West 1990) ("The Secretary of State shall not file articles which set forth a name which is . . . the same as, or resembles so closely as to tend to deceive, the name of a domestic corporation, the name of a foreign corporation which is authorized to transact intrastate business . . . ."); DEL. CODE ANN. tit. 8, § 102(a)(1) (1991) (a corporation’s name "shall be such as to distinguish it upon the records in the office of the division of Corporations . . . from the names of other corporations or limited partnerships organized, reserved or registered as a foreign corporation or foreign limited partnership under the laws of this State").

75. Corporations with identical names may be incorporated in different states. See supra note 51.

76. It might be argued that because there are about twice as many filings made as searches, it is more efficient to leave it to the searcher to identify the debtor from information obtained off the record. That argument ignores the much greater difficulty the searcher may have in obtaining the necessary information. As strangers to the transaction between debtor and secured party, the searcher may have no right to the information necessary to make the identification. See, e.g., U.C.C. § 9-208 (giving the right to demand information about the indebtedness exclusively to debtor); Lynn M. LoPucki, The Unsecured Creditor’s Bargain, 80 VA. L. REV. 1887, 1944-45 (1994) (noting that unsecured creditors, buyers, and bidders at execution sales need information but do not have access to it).
The systems effect of not requiring information sufficient to identify the debtor against whom a filing is made, is to compel some searchers to gather from outside the filing system the information necessary to identify their debtors. The resulting inefficiency is substantial. Only if the debtor's state of incorporation, or another unique identifier, is on the record can searches be conducted entirely on the record.

To require precise identification of the debtor in an incorporation-based system will not impose substantial burdens on either debtor or filer. There is about a 93% chance that the corporation is incorporated in the state where its puzzled employee is located. That employee may need to call someone knowledgeable in the company to discover the correct name and state of incorporation of the company. The filer can easily verify that information by checking it against the corporate records of the state of incorporation. The corporate records of the large commercial states are immediately accessible by telephone; the records of all or substantially all of the states are accessible within twenty-four hours. As more states accept electronic filings, even the intermediate step of a telephone call will cease to

77. Only about 6.6% of filings are made against out-of-state debtors in the current system. See infra notes 100-106 and accompanying text.

78. Prentice Hall Legal and Financial Services provides corporate information from 35 offices throughout the United States. Telephone Interview with Chris Dufault, Prentice Hall Legal and Financial Services (Sept. 27, 1994). Anyone can telephone them during regular business hours, give them a VISA or Mastercard account number, and learn whether a corporation of a given name is incorporated in any of 42 states. Prentice Hall has direct computer access to the corporate records of New Jersey, Florida, and Delaware, and purchases copies of the databases of 39 other states. For the direct access states, information is as up to date as the state's records; for the other states information will be an average of about 45 days old. The eight states not covered by this system are Alabama, Hawaii, Maine, Montana, New Mexico, North Dakota, South Dakota, and West Virginia. Prentice Hall can furnish information from the records of these states within 24 hours of receipt of a telephone request. Prentice Hall will supply corporate information by fax if requested.

CT Corporation System provides corporate information from 26 offices throughout the United States. Telephone Interview with John Linnihan, Senior Team Leader, CT Corporation System (Jan. 4, 1995). Anyone can telephone them during regular business hours and request a search of the corporate records of any of the 50 states. They have an experimental direct connection to the corporate records of Missouri, access to reproductions of the databases of 17 states on LEXIS, and make telephone and documentary requests for information to the offices of all states through correspondents located near the records. By requesting expedited searches from the corporate records office of the state, they can obtain corporate name information from nearly all states within 24 hours of the request.
be necessary. Verification of the existence of the corporation in the state named can be part of the filing process.79

The system cost of requiring a unique identifier for Article 9 filings will be more than offset by several efficiencies. One such efficiency will be the virtual elimination of "false positives" on searches,80 together with the cost to searchers of investigating them. Use of a unique identifier also will improve the accuracy of communication. Under the current system, the filer does not bear the cost of many kinds of filing errors; the system permits the filer to externalize those costs by shifting them to the searcher.81 The effect is to encourage filers to do a sloppy job of filing, even when that saves them less than it costs later searchers. By clearly and precisely defining the role of both filer and searcher, an incorporation-based system would bring market forces to bear on the processes of both filing and searching, encouraging optimal levels of diligence.82

The ABA Task Force and the Article 9 Study Group both recognized the necessity for unique identification of the debtor,

79. See infra notes 89-90 and accompanying text.
80. See infra notes 126-138 and accompanying text (discussing the problem of false positives).
81. This occurs whenever a financing statement that would not be found in a search under the correct name is nevertheless held effective. Searchers must thereafter conduct more than one search. The classic example is cases holding filings in trade names to be effective. See, e.g., National Bank v. West Texas Wholesale Supply Co., 714 F.2d 1316, 1321 (5th Cir. 1983) (holding security interest properly perfected even though financing statement was filed only in trade name of debtor). Filers no longer have compelling reasons to discover the correct name of the debtor, and searchers are put to the expense of conducting an additional search.

A filer's incentive is to exercise only such care as is statistically beneficial to the filer. Assume that means that the filer will adopt a policy that results in erroneous or ambiguous names on five percent of its filings. The debtor has no incentive to improve the filer's accuracy. The debtor might later get a windfall from the filer's error; the debtor can save no costs for its future searcher by making earlier filings more accurate—it is the rule that determines the ease of the future search, not the accuracy of the filings it discovers.

82. In their comment on this Article, Professors Mooney and Harris point out that in variously constituted filing systems, it may cost more for filers to file correctly than for searchers to guard against or suffer the resulting loss. Steven L. Harris & Charles W. Mooney, Jr., Choosing the Law Governing Perfection: The Data and Politics of Article 9 Filing, 79 Minn. L. Rev. 663, 677 (1995). I agree with their observation and draw from it the following conclusion: while clarity and precision in the instruction where and how to file are alone enough to bring market forces to bear on the processes of both filing and searching, they are not alone enough to render any filing system design that incorporates them efficient. Filing at the place of incorporation is the best solution not merely because it is clear and precise, but because it results in a particularly efficient division of responsibility between filer and searcher.
but recommended that the drafters consider requiring social security numbers or tax identification numbers on filings. Some commentators have agreed. But the use of name plus state of incorporation to identify registered entities is superior to the use of tax identification numbers. Tax identification numbers, like social security numbers, are not matters of public record and public disclosure would raise privacy issues; in all probability, the federal government would not furnish lists of tax identification numbers or social security numbers for this purpose. By contrast, the name and state of incorporation of a debtor are matters of public record at the location where filings would be made. Moreover, computer entry of tax identification numbers would take more time and result in more errors than computer entry of the state of incorporation.

In an incorporation-based system, the legal instruction where to file is unambiguous. A secured party may have difficulty determining the debtor’s state of incorporation. Yet, unlike in collateral-based or debtor-based systems, one and only one proper place to file would exist in an incorporation-based system. At filing, the secured party could know it was filing in the proper place. Rarely would a secured party need to resolve uncertainty by making an additional filing. The necessity to “file everywhere possibly required” would disappear.

2. What Feedback is Available as to Accuracy of Filing?

Filers who desire a high level of certainty that their filing was in fact made and properly indexed often conduct a post filing search to verify that fact. In a collateral-based system,

85. LoPucki, supra note 19, at 22-23.
86. See infra notes 88-90 and accompanying text.
87. Many corporations are members of corporate groups. If all members of the group are commonly owned, the owners may pay little attention to which corporation within the group owns the collateral. This may prompt secured parties to file against all members of the group as a precaution against initial misidentification of the owner or a later change in ownership of the collateral. But identifying the owner of the collateral is no less a problem in the current collateral and debtor-based system.
88. The filer will file first, wait for its filing to be indexed, and then conduct a search that will show both its own filing and all filings with priority over its
that search will show the filer's financing statement and any effective filings made prior to it in the jurisdiction against the debtor. But that search will tell the filer little about whether the filing is in the right jurisdiction. A debtor-based system has a considerable advantage in this regard. Most filers have sufficient information about their debtors to form some sort of expectation as to how many filings there will be against them. In ordinary circumstances, all of those filings will be made in the same office. If the filer's post-filing search reveals substantially fewer or more filings than expected, the filer can decide whether to investigate further. For example, failure of a post-filing search against a debtor that should have many filings to discover many filings indicates that the filer has filed in the wrong office. I will refer to this system characteristic as the "echo effect."

An incorporation-based system can both provide a strong echo and "trap" some kinds of errors in filings. Because both the corporation records and the statewide UCC filing records would be under the control of the same Secretary of State, the Secretary could link them electronically. Each time a UCC filing would be made against a corporate debtor, the computer could match the name of the debtor to the names of the corporations formed under the laws of the state. If there were no match, the filing would be erroneous. The system could notify the filer of that fact. If there were a match, the system could display a list of filings against the debtor, the equivalent of the echo effect available in a debtor-based system.89

The feedback advantages of an incorporation-based system do not depend on the existence of an automatic computer link between the corporate and statewide UCC filing records. If no such link existed, the filer still could telephone the corporation division of the Secretary of State's office to make the verification.

As increasing numbers of filings are made electronically, error trapping can sharply reduce the number of errors entering the filing system.90 Although error trapping could not eliminate

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89. The echo effect is stronger in an incorporation-based system because all effective filings against a debtor will be in the same system. In a debtor-based system, uncertainty about the location of the debtor will cause significant numbers of filers to make more than one filing, leading to the possibility of a false echo.

90. When the filing is made electronically, almost any error that would lead to rejection can be corrected without significant prejudice to the filer. For
errors in which the filer mistakes one corporation for another, it
could eliminate filings on which the name does not match the
name of any corporation formed in the state.

3. Proving Later that One Filed in the Right System

In a dispute over whether a filing was made in the right
system, the secured party ordinarily will have the burden of
proof. The secured party should find it easy to prove where
and when it filed, in any of the three types of systems.
The major difference among systems will be in the difficulty of prov-
example, if the filing lacks a signature or a description of collateral, the filer can
easily supply one. A more difficult problem is presented where the corporate
debtor's name on the filing does not match that of any corporation registered in
the state. The system might notify the filer of its error and accept the filing
nevertheless. If so, the system would contain filings that might be effective,
even though they were against corporate names not then in use. Some search-
ers would feel compelled to search for likely errors of this kind, particularly the
error of using a trade name. In a system where all filing was electronic and the
program was capable of displaying names similar to the one against which the
filer was attempting to file, the better approach would be to require that the
filing officer reject such a filing. If the filer did not have the information it
needed to positively identify its debtor, but needed to file immediately, it could
make multiple filings.

For the foreseeable future, however, in which many filers are not in a posi-
tion to make an immediate correction, filing officers should be required to ac-
cept filings that are facially erroneous and retain them at least until the filer
has had a reasonable opportunity to cure. If the filer does not cure within a
fixed period of time, perhaps 10 days, the filing officer should delete the filing
from the records in which searches are made. If the filer does make a timely
cure, the filing officer should link the two filings so that the erroneous filing can
be discovered only on a search that discovers the correct filing. A search in the
correct name of the debtor then will discover all filings that have been on the
record for a period longer than 10 days. The prejudice to searchers from this
delay would be mitigated by the fact that financing statements spend much of
their first 10 days in the filing office in the "basket." That is, they have not yet
been indexed, so are not discoverable on a search. If the filing officer gives expe-
dited treatment to corrections, there might not be additional prejudice to
searchers from giving filers the opportunity to file an erroneous statement and
then cure.

91. See, e.g., Mellon Bank, N.A. v Metro Communications, Inc. (In re Metro
Complaint was brought as an assertion of its secured status. It therefore has
the burden of proving same by a preponderance of the evidence."), rev'd on other
92. The most common method of making the proof is to obtain a copy of the
filing on which the filing officer has certified the date and time of its making.
For a recent filing, obtaining such a certificate should present no problem. But
disputes may arise or be litigated many years after filings are made. If the
filing officer has exercised its right to remove lapsed filings and destroy them
one year after lapse, see U.C.C. § 9-403(3), by the time the filer requests certifi-
cation, the filing officer may have no way of giving it. For that reason, among
ing the existence of the conditions that made the particular system the proper one in which to file. In a collateral-based system, the secured party might need to prove not only that the collateral was in the jurisdiction where the filing was made, but perhaps even the time at which it entered the jurisdiction, the length of time it was there,93 or the intention of the debtor in bringing it into the jurisdiction.94 In part to prepare to make that proof, careful filers today photograph the collateral and make contemporaneous written records of its location and condition.95 In a debtor-based system, any dispute over the location of the debtor is likely to result in extensive inquiry into the debtor's circumstances.96

By contrast, the debtor's state of incorporation at all relevant times is a matter of public record. The filer need make little or no preparation at the time of filing to prove the debtor's place of incorporation in a later trial or hearing. At the time of trial, the filer can obtain a certificate from the filing officer showing the facts regarding time and place of incorporation.97

4. Convenience in Filing

The three factors that probably most affect the convenience of the filing process are first, whether the filer will be notified of defects in the filing and given the opportunity to correct them at the time of filing; second, the number of different filing offices with which a filer must deal; and third, the number of filings necessary for a single transaction. The basis for the filing system is not likely to affect significantly the proportion of filings that are rejected. Between 10% and 25% of all filings are re-

93. Id. § 9-103(1)(d)(i) (requiring filing within four months of the interstate movement of collateral that is an ordinary good).
94. Id. § 9-103(1)(c); see also supra note 42 (listing authorities).
96. See, e.g., Mellon Bank, N.A. v. Metro Communications, Inc., 945 F.2d 635, 642-44 (3d Cir. 1991) (reversing lower court's determination that debtor's location had changed pursuant to leveraged buyout); Aoki v. Shepherd Mach. Co. (In re J.A. Thompson & Son, Inc.), 665 F.2d 941, 949-50 (9th Cir. 1982) (listing factors to be considered in determining the location of a corporate debtor for filing purposes).
97. See supra note 92 (discussing the difficulty in obtaining such proof in a collateral-based system).
jected by the filing office. At best, rejection puts the filer to the inconvenience of making another attempt. At worst, the filer will lose priority to a competitor who files after the filer's first attempt, but before the filer makes the correction. The problem of rejected filings is minimized by hand delivering filings to the filing officer, filing them through a service, or filing them electronically. If a filer uses any of these methods, the filing officer can reject the filing immediately and make the filer aware of the deficiency. But filers are equally likely to be able to file by hand or electronically in collateral-based, debtor-based, or incorporation-based systems.

Limiting the number of filing offices with which one must deal increases the convenience of the system, because the hours, acceptable forms, filing fees, acceptable methods of payment, and other aspects of filing procedure differ substantially from one filing office to another. Learning the procedures of additional offices and complying with those procedures add significant cost to the filing process.

Probably the best measure of total system inconvenience from dealing with multiple filing offices would be the total number of filer-filing office relationships created. As that number would be difficult to compile, I use as a rough index of it, the number of filings made by creditors who list an out-of-state address. To estimate the number of those filings, we drew a random sample of 454 financing statements filed in seventeen states during 1993. Secured creditors listed out-of-state addresses in a random sample of 454 financing statements filed in seventeen states during 1993.
addresses on 29% of the financing statements in the sample. Based on this sample size and result, we are 95% confident that the percentage of creditors listing out-of-state addresses on financing statements filed in those seventeen states is between 25% and 34%.\textsuperscript{102} Secured creditors listed an out-of-state address on 38% of the financing statements in the sample that were filed against registered\textsuperscript{103} debtors.

Further analysis of the sample suggests that the total number of “out-of-state” filings would increase as a result of the

\begin{footnotesize}
\begin{enumerate}
\item[\textsuperscript{102}] The binomial exact 95\% confidence interval for the proportion of filings containing a secured creditor with an out-of-state address is 25.12\% to 33.76\% based upon a population of 1,232,000 filings, and a sample of 447 in which 131 creditors list out-of-state addresses.
\item[\textsuperscript{103}] For a definition of “registered” and a description of the entities included, see supra note 12 and accompanying text.
\end{enumerate}
\end{footnotesize}
change to an incorporation-based system, but that the increase would be small. Of the 454 financing statements in our sample, 424 were filed against debtors incorporated in the state; in an incorporation-based system, these filings would be made in the same state and the same portion of them would be "out of state" filings. The other thirty of the 454 financing statements in our sample were filed against foreign corporations; in an incorporation-based system, these thirty filings would be made in other states. Eight of these thirty filings were made by in-state lenders; in an incorporation-based system they would be made by out-of-state lenders—an increase in out-of-state filings of eight. Twenty-two of these thirty financing statements (73.3%) were filed by lenders who were out-of-state, so they were out-of-state filings in the current system. In an incorporation-based system, twenty of these filings would continue to be out-of-state filings because the debtor was incorporated in a state other than that listed in the secured party's address. Two would become in-state filings because the debtor's state of incorporation was the same foreign state listed in the secured party's address. Thus, incorporation-based filing would have increased the number of out-of-state financing statements in our sample of 454 by six. That is 1.3% of the sample and 2.8% of that portion of the sample that consists of financing statements filed against corporations. Projecting to the entire population of financing statements filed in statewide systems, a 1.3% increase in out-of-state filings would be a 33,800 financing statement increase.

The mere fact there would be some increase in the number of filings that are out-of-state does not mean there will be a net increase in inconvenience to the secured parties. Of the thirty debtors incorporated out-of-state in our sample, fifteen (50%)
were incorporated in Delaware. 107 Although most of the out-of-state filers making these filings are located in states other than Delaware, they probably lend to debtors incorporated in Delaware with some frequency. In an incorporation-based system, they may find it more convenient to file in Delaware than in the state where they file under the current system, because they will have frequent contact with the Delaware filing system. On the whole, secured parties probably will find it more, rather than less, convenient to file in their debtors' states of incorporation.

In an incorporation-based system, other factors might also mitigate the inconvenience faced by secured parties filing out of state. First, many secured parties already file through service companies familiar with the procedures of the states in which they make "foreign" filings; they can continue to do so under an incorporation-based system and thus may suffer no additional inconvenience. Second, as out-of-state filings become more common in Delaware, Delaware probably will become more responsive to the needs of out-of-state filers. If Delaware does not, it may discourage companies from remaining incorporated there. Finally, as lenders attempt to reach national markets, the proportion of transactions that are interstate likely will increase. As it does, the percentage of interstate filings that would occur in differently based systems likely would converge anyway.

As previously noted, in collateral-based or debtor-based systems, a secured party may find it necessary to make more than one filing to perfect in a single transaction. The problem is most acute in a collateral-based system, where the secured party must file a financing statement in each jurisdiction where collateral is located. In financing the inventory of a business that operates nationwide, for example, the secured party may have to make a filing in each of the fifty states. In an incorporation-based system, only a single filing is necessary to perfect with regard to each debtor.

In an incorporation-based system, a single transaction theoretically might result in multiple filings because it involves multiple debtors incorporated in different states, or because it involves individual debtors along with registered debtors incorporated elsewhere. Whether that will increase the total number

107. Fifteen of the 454 UCC-1s in this sample (3.3%) were filed against Delaware corporations. From a larger sample, I concluded that 128,387 of the 2,574,000 UCC-1s filed in 1993 (5.0%) were filed against Delaware corporations, suggesting that 3.3% may be a low estimate of the percentage of all UCC-1s filed that are filed against Delaware corporations. See infra Table 5 (providing data).
of filings secured parties must make depends on whether secured parties under the current system are, to any significant degree, including such debtors together on a single financing statement. To answer that question, I examined our sample of 454 financing statements filed in statewide filing systems during 1993 to determine the numbers of debtors listed on them. The results are shown in Table 1.

<table>
<thead>
<tr>
<th>Occurrence</th>
<th>Number</th>
<th>Percent of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Only one name shown</td>
<td>342</td>
<td>75%</td>
</tr>
<tr>
<td>2. Two or more individual names</td>
<td>53</td>
<td>12%</td>
</tr>
<tr>
<td>3. Individual and trade names</td>
<td>27</td>
<td>6%</td>
</tr>
<tr>
<td>4. Individual and registered entity names</td>
<td>13</td>
<td>3%</td>
</tr>
<tr>
<td>5. Registered entity and trade names</td>
<td>12</td>
<td>3%</td>
</tr>
<tr>
<td>6. Duplicate names</td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td>7. Trade names</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>8. More than one registered entity</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>9. Other</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>454</td>
<td>100%</td>
</tr>
</tbody>
</table>

The data on this table suggest that the change to an incorporation-based filing system would have little or no effect on filers' ability to combine filings against multiple debtors. Only the fifteen filings in categories 4, 8, and perhaps 9—3% of the sample—include a registered entity along with another entity on the same financing statement. When multiple debtors are listed on a single financing statement, they typically are two individual debtors with the same surname (probably husband and wife) sometimes listed along with a single corporate debtor. (In only one, or perhaps two, instances were more than one registered entity included on the same financing statement.) Almost invariably, the corporation will be of the "mom and pop" variety, incorporated in the state where the filing was made.109 Our ran-

108. I considered a name to be a trade name if it did not contain words of incorporation, such as "Incorporated," "Company," or "Corporation," and we were unable to discover a corporation by that name in the corporate records to which we had access. The data on this table probably overstate the number of trade names and understate the number of registered entity names. I doubt, however, that the error is substantial.

109. Of the 13 registered entities listed along with non-registered entities on financing statements in our random sample, we were able to identify 12 as in-
dom sample of 454 financing statements from seventeen states contained no verifiable instance of a financing statement listing an out-of-state registered entity along with another individual or entity, suggesting that the number in the system is negligible.

B. Changes in the Conditions that Controlled Filing

Part A.1 discussed the difficulty of determining the proper place to file in each of the three systems under consideration. Once that proper filing is made, the conditions that determined the proper place could change. The overall efficiency of each system depends upon the efficiency with which each system deals with such changes in conditions.

In a collateral-based system, movement of collateral to another state triggers the necessity for refiling. Under the current system, if goods are mobile, of a type normally used in more than one jurisdiction, and meet certain other requirements, filing against them is at the location of the debtor. Thus, the types of goods subject to collateral-based filing in the current system are the types least likely to move. I know of no easy way to estimate the frequency with which ordinary goods that serve as collateral in fact move from one jurisdiction to another.

The drafters of UCC section 9-103 apparently contemplated that secured parties would monitor the presence of their collateral in the state of filing at intervals of no greater than four

110. This is not to say that such filings did not exist in the sample. If an entity was incorporated out of state, we would have been unable to verify that fact in about half of all instances, because we had access to only half of the state records of incorporations. As to the individual and registered entity combination, however, we were able to verify 12 of 13 as in-state corporations. The potential for unverified combinations of in-state debtors with out-of-state registered entities lies almost entirely with the 41 filings that appear to be against trade names.

111. This analysis does not take account of a related inefficiency that might be present in an incorporation-based system. Secured parties may today be making significant numbers of related in-state filings, each on a separate financing statement that would, in an incorporation-based system, result in a combination of in-state and out-of-state filings. This inefficiency is unlikely to be large and in any event, would be very difficult to measure.

112. See U.C.C. § 9-103(3)(a). The other requirements are that the goods must be equipment or inventory leased or held for lease by the debtor to others, and not covered by a certificate of title. Id.
Courts and commentators view the system as functioning in that manner. While I have no basis for estimating how much monitoring is done for the purpose of discovering interstate movement of the collateral, defenders of the current system are on the horns of a dilemma. If any significant number of creditors monitor for this purpose, the expense must be considerable. If, as I suspect, relatively few creditors monitor for this purpose, the current system is highly vulnerable to fraud. A debtor who wishes to free the collateral from a troublesome security interest need only take it to another state, wait four months, and sell it.

In a debtor-based system, movement of the chief executive office of the debtor to another state triggers the necessity for re-filing. The chief executive offices of debtors in financial difficulty move with surprising frequency. In our study of the forty-three largest bankruptcy reorganizations of the 1980s, Professor William Whitford and I found that at least 15 of the 43 companies we studied (35%) moved their headquarters at or about the time of the reorganization case. Although nonbankrupt companies move their headquarters less frequently, the rate of change is still rapid enough to foil a system that looks to headquarters to

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113. Id. § 9-103(3) cmt. 7 ("The four-month period [for filing in the destination state after a move] is long enough for a secured party to discover in most cases that the collateral has been removed and refile in this state.").

114. E.g., General Motors Acceptance Corp. v. Rupp, 122 B.R. 436, 440 (D. Utah 1990) ("In simplistic terms, the Four Month Rule of § 70A-9-103 allows a perfected lienholder in one state a grace period of four months after the collateral is moved to another state during which to reperfect the security interest in the new state."). Professors White and Summers observe:

The drafters believed that a secured lender should at least have some time to trace collateral taken into another state and a grace period to reperfect in the destination state. . . . The 4-month rule . . . strikes a good balance between the interest of a lender out-of-state and third parties in-state. The secured party has a four-month grace period to reperfect in-state.

2 WHITE & SUMMERS, supra note 42, § 24-21.


116. See, e.g., In re C Tek Software, 117 B.R. 762, 769-70 (Bankr. N.H. 1990) (holding security interest perfected against the trustee more than four months after removal of collateral and debtor to another state, but stating in dicta that it would hold to the contrary if a bona fide purchaser were involved).

117. Although a few of the debtors in these cases may have been manipulating the location of their headquarters to establish venue for their bankruptcy reorganization in a desirable district, Whitford and I concluded that most were the result of changes in control of the companies rather than bankruptcy strategy. See supra note 59 (discussing study).
determine the proper place for filing.118 And given that bankruptcy is the principal threat to perfection by filing, it may be that the rate of movement around the time of bankruptcy is the more relevant of the two. Smaller companies also move their headquarters frequently.119

The drafters of Article 9 apparently contemplated that secured parties would monitor their debtors for interstate movement of their chief executive offices, and refile in the destination states within four months. If secured parties are in fact monitoring and refileing, the expense must be considerable. If they are not, their secured status is highly vulnerable.120

An incorporation-based system will suffer hardly at all from the problems of interstate movement that plague collateral-based and debtor-based systems. A corporation cannot change its state of incorporation.121 A business that is incorporated can change the state in which it is incorporated in at least two ways. The first is to form a corporation under the laws of the destination state and transfer all of its assets to that corporation.122 This type of movement from one state to another might confuse searchers in an incorporation-based system, but that is only because the underlying transfer of assets is an off-record transac-tion.

118. Researchers in a study of the Fortune 500 companies found that 62 (12%) moved their headquarters during the decade ending in 1985. Joseph H. Eisenberg & Roger Friedland, How Big the Head Office: The Organization and Urban Sources of Variation in the Size of Corporate Headquarters Complex, (unpublished manuscript, on file with author); see also Jolie Solomon, Workplace: Corporate Elite Leaving Home Towns for Headquarters in Faraway Places, WALL ST. J., Feb. 21, 1990, at B1 (“At companies as varied as Armco Inc., International Paper Co. and RJR Nabisco Inc., top executives are moving to so-called elite headquarters that, while not necessarily impressive or opulent, are distant from operations.”). See generally Joseph H. Eisenberg & Roger Friedland, Corporate Headquarters Relocation, REAL ESTATE ISSUES, Fall 1990, at 38-41 (discussing factors that cause relocation).

119. See, e.g., Lou Cannon, Firms Flee California’s Conditions as Other States Beckon, WASH. POST, Sept. 1, 1991, at A3 (reporting a survey showing that 14% of California companies intended to relocate outside the state).

120. See, e.g., C Tek Software, 117 B.R. at 764-65 (involving a secured party who failed to discover move of debtor’s chief executive office from New York to New Hampshire and refile within four months).

121. See supra note 50 (quoting statute under which a corporation incorporated in one state cannot reincorporate in a second).

122. This type of change probably is rare. To transfer assets from one corporation to another requires the making and recording of deeds to real property, the retitling of motor vehicles, the transfer of insurance coverage, and numerous other administrative actions. It also may have tax consequences such as the recognition of capital gains and the incurrence of various kinds of transfer taxes. By contrast, merger effects an automatic transfer of the assets, making it far less expensive in most circumstances.
An off-record transfer of assets is equally likely to confuse searchers in both collateral-based and debtor-based systems.\textsuperscript{123} The second, more commonly used method of changing state of incorporation, is to form a corporation under the laws of the destination state and then merge the original corporation into it.\textsuperscript{124} The latter technique is commonly referred to as "reincorporation." In an incorporation-based system, interstate movement by reincorporation presents no significant threat to filers or searchers. For the reincorporation to be effective under corporate law, the surviving entity must file the articles of merger in the corporate records of both the source and destination states. A search of the public filings in either will reveal the fact of reincorporation, the date of reincorporation, and the name of each non-surviving entity against which there may be valid filings.\textsuperscript{125}

In an incorporation-based system, filings initially made against the correct name of a corporate debtor should remain effective without regard to later name changes. With that rule in place, filers would not have to monitor their debtors to discover name changes. As discussed in the next section, the effect is not to shift the burden of dealing with name changes to the searcher, but to eliminate the burden entirely.

\textsuperscript{123} UCC § 9-402(7) provides that "[a] filed financing statement remains effective with respect to collateral transferred by the debtor even though the secured party knows of or consents to the transfer." As the comments to that section concede, "any person searching the condition of the ownership of a debtor must make inquiry as to the debtor's source of title, and must search in the name of a former owner if the circumstances seem to require it." U.C.C. § 9-402 cmt. 8.

\textsuperscript{124} Reincorporation through merger may be considerably less expensive than reincorporation through transfer of assets. There is anecdotal evidence suggesting that is in fact the case. See infra note 183 (citing estimates of the cost of reincorporation). Merger saves the costs of recording the transfers and may not be taxed as heavily.

\textsuperscript{125} In New York, for example, if the surviving corporation in a merger between domestic and foreign corporations is to be a domestic corporation, then a certificate setting forth as to each constituent foreign corporation the jurisdiction and date of its incorporation must be delivered to the New York department of state. N.Y. Bus. Corp. § 907 (1986 & Supp. 1994). If the surviving corporation is to exist under the law of any other jurisdiction, then a certificate setting forth the jurisdiction and date of incorporation of the surviving corporation must be delivered to the New York department of state. \textit{Id.} Failure to comply with this filing requirement has been held to invalidate an otherwise valid merger. Koro Co. v. Bristol-Myers Co., 568 F. Supp. 280, 282-85 (D.D.C. 1983); see also 3 \textit{MODEL BUSINESS CORP. ACT} § 1107(a)(3) cmt. (1993) (requiring that a foreign corporation that survives in a merger with a domestic corporation file articles of merger "to accomplish the disappearance of the domestic corporation").
C. Searching

To be effective, a search must be conducted in every filing office in which an effective financing statement may be on file. As a consequence, ambiguity in the system's rules on where to file expand the searcher's task as well as the filer's. That is, if the filer can determine, from the statute and the circumstances, that one of two states is the proper place to file, but cannot determine which, the filer should probably file in both.\(^\text{126}\) Observing the same statute and circumstances, the searcher should probably search in both.\(^\text{127}\) The system cost of ambiguity in the rules prescribing where to file is thus the total of the additional filing cost and the additional search cost. In the statewide filing systems, the number of searches requested is only about 30.6% of the number of filings made.\(^\text{128}\) But the cost of searching is considerably higher than the cost of filing.\(^\text{129}\) Uncertainty as to the proper place to file in a collateral-based or a debtor-based system probably will add as much cost in extra searches as it will in extra filings.\(^\text{130}\) In an incorporation-based system, uncer-

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\(^{126}\) The cost of filing is usually small in relation to the value of the secured position it preserves. The conventional wisdom is to "file everywhere possibly required" when faced with a question as to which of several places is the proper place to file. See supra note 3 and accompanying text.

\(^{127}\) Although the searcher may suspect that the filer saw the same ambiguity and followed the conventional wisdom by filing everywhere possibly required, the cost of the search, like the cost of filing, is usually small in relation to the secured position to be preserved. Again, the customary solution would be to search everywhere.

\(^{128}\) Thirty-six states reported to the International Association of Corporation Administrators the number of search requests received. Annual Report of the Jurisdictions, IACA UPDATE (Int'l Ass'n Corp. Admin., Sacramento, Cal.), Apr. 27, 1994, at 1-2. For those 36 states, the number of search requests was 1,206,661. That number is 56% of the number of financing statements (UCC-1s) filed (2,154,000) and 30.6% of the total number of UCC filings (UCC-1s, UCC-2s, and UCC-3s, but not including search requests) (3,938,275). From these figures, it is clear that the number of filers who do not conduct searches is substantial.

\(^{129}\) See, e.g., LoPucki & Warren, supra note 32, at 337 (estimating the typical fee for searching a single name through a search company to be about $50).

\(^{130}\) Searching is inherently more difficult than filing. A filer initiates and completes the filing process by correctly filling out a form UCC-1 and forwarding it to the appropriate filing officer along with the appropriate fee. A searcher initiates the search process by correctly filling out a form UCC-11 and forwarding it to the appropriate filing officer along with the appropriate fee. But this is only the beginning of the search process. The searcher must review and interpret the search results, determine whether to order copies of some or all of the financing statements listed on the search results, make that order, and then review the financing statements themselves.
tainty as to the proper place to file is negligible, so uncertainty as to the proper place to search will be negligible as well.131

As discussed above, the change to an incorporation-based system eliminates the need for filers to physically monitor the movement of debtors and collateral. The change would have an analogous effect on searchers, freeing them of the need to inquire into recent movements of debtor or collateral. To illustrate, in the current system, a filing against ordinary goods in State A remains effective for four months after the collateral has moved to State B. During that four month period a search in the state where the collateral is located will not discover the filing. Searchers in the current system are admonished to verify that the collateral has been in the state for at least four months and, if it has not, to conduct additional searches in the state or states where it has been during that period. The same is true with regard to movement of a debtor when the location of the debtor is controlling. It is important to realize that the four month rules for interstate movement of collateral and debtors do not affect only cases where there has been such movement. Every searcher must either investigate sufficiently to determine that no move has occurred during the period or take the risk that there is a valid filing in another state that it will not find.

This problem is virtually nonexistent in an incorporation-based system. Absent reincorporation by merger, all filings will be in UCC records in the state where the debtor currently is incorporated. The searcher can discover reincorporation by merger through a search of the corporate records in the state where the debtor is incorporated. If the state were to link its own UCC and corporate records electronically, a search in the current state of incorporation could both verify that it is the right state in which to search and alert the searcher to any reincorporation by merger that had occurred. No off-record inquiry or monitoring would be necessary; a second on-record search would be necessary only in the rare case where the debtor had reincorporated by merger.

An incorporation-based system could also deal with changes of name more efficiently than collateral-based or debtor-based

131. Recall that a reincorporation leaves a record in both the destination state and the state of origin. See supra note 125. The current state of incorporation always will be the appropriate place to begin a search. It also will be the appropriate place to end it except in the rare case where the record shows a reincorporation. Of course, regardless of which of the three alternative types of systems is employed, the searcher must identify prior owners of the collateral and search in their names as well.
systems. The current system necessitates that some filers monitor their debtor for changes of name and also that searchers discover changes of name. Specifically, any filer who relies on after acquired property as collateral must monitor the debtor for changes of name because its filing will cease to be effective against property acquired by the debtor more than four months after a change of name. In addition, every searcher needs to discover past changes in the debtor's name because, if the debtor owned the collateral at the time of the name change or acquired it within four months thereafter, the collateral may be encumbered by a filing against the debtor in its former name. Searchers are expected to discover the name change and search under both the current name and the former name. Discovery of a change of name by a corporate debtor can be reasonably ensured only by a search of the corporate records in the state of the debtor's incorporation. Probably few searchers go to that expense.

In an incorporation-based system, filers would not need to monitor for name changes. Searchers would need to discover them, but they could do so merely by searching the corporate records of the state where they were about to conduct the UCC search. If that state were to link the UCC and corporate records electronically, a single search might serve both purposes. The searcher could discover effective filings against the search subject whether made in the current or the former name.

A "false positive" occurs when search results include a filing against an entity other than the search subject. The most common reason for false positives is that the other debtor and the search subject have identical, or confusingly similar, names. For example, a search in the LEXIS corporations database for "Web Graphics" yielded thirty documents. Seven of them were registrations of corporations named "Web Graphics, Inc." incorporated in different states. Three were registrations by foreign corporations to do business in a state. The documents also included registrations for corporations named "Web-Graphics, Inc.," and "Web Graphics Co., Inc." These names would be considered legally equivalent to "Web Graphics, Inc." for the pur-

133. Id.
134. The searcher cannot count on discovering a corporate name change from observations of the debtor's conduct of its business. Most debtors do business in one or more trade names. A change in the name of the corporation may be invisible to all but those who search the corporate records.
135. See supra note 125 and accompanying text.
In a search conducted for filings against one of these corporations, filings against the others would be false positives. False positives can also result from attempts by the searcher to find filings which, though not correct, are still effective because they are "not seriously misleading." For example, a searcher interested in filings against Web Graphics, Inc. might elect to search for all filings containing the words "Web Graphics." Such a search would yield false positives filed against Web Graphics Supply, Inc., Nevada Web Graphics, and other corporations.

In collateral-based or debtor-based systems, search results frequently include false positives. If the searcher cannot satisfy itself from the face of the search that the filing is a false positive, it must conduct an off-record investigation to make the determination. False positives impose a substantial cost on searchers and often subject them to some level of risk.

An incorporation-based system could be designed to produce virtually no false positives. The name of the debtor plus the state of its incorporation is a unique identifier; no other corporation can have both the same name and state of incorporation. Because the filer would be able to verify the correct name and place for filing by searching the corporate records of the state where it intended to file, the courts would have less reason to tolerate filings in incorrect names. Once the corporate and UCC records of a state were linked, the filing officer could discover any error in the spelling of a debtor's name, notify the filer, and require a prompt correction. A misspelling could be permitted to remain in the system for no more than ten days.\(^\text{136}\) Filings that misspelled the debtor's name so badly as to name the wrong corporation would not show up on a search under the right corporate name, making them clearly ineffective. Filings that named the wrong state of incorporation presumably would be filed in the wrong state and suffer the same fate.

In addition, if the corporate and UCC records of the state were linked, the system could, in many instances, know that a filing probably was in the wrong state and notify the filer of its error. This kind of error trapping would make it more difficult for the kinds of errors that produce false positives to enter the system in the first place.\(^\text{137}\) To put it another way, to make an

\(^{136}\) See supra note 90 and accompanying text (explaining the value of allowing misfilings to remain in the system for 10 days).

\(^{137}\) In the process of electronic filing, a second, more sophisticated form of error trapping would also be possible. When the filer has finished entering the
erroneous filing in an incorporation-based system, the filer must do more than mistake the debtor’s name; the filer must mistake the debtor for some other corporation.\textsuperscript{138}

This and the preceding section highlight what may be the single most important advantage of an incorporation-based filing system: all of the information necessary for filer or searcher to deal with interstate movement is in the records of the two Secretaries of State and discoverable from the records of either. In such a system, filers need not monitor the physical locations of their debtors or their collateral, or update their filings, to ensure that those filings can be found.

IV. COMPARISON ON OTHER CRITERIA

A. System Interface with Related Systems

To weigh the relative merits of an incorporation-based filing system one must consider not just how well the system can deal with UCC filings against corporations, but also how well the system can interface with related systems.

1. Corporation Records

An incorporation-based system could produce a virtually seamless interface with the corporation records maintained by the various states. Because the UCC filings against a corporation always would be in the same state as the record of its incorporation, the Secretary of State could achieve a complete integration of the two. A search of either set of records could include a search of the other, producing advantages such as name error trapping during the electronic filing of financing statements and automatic searching under both the current and all former names of the corporation.

name and address of the debtor, the computer could first determine whether the name matched that of a corporation registered in the state. If it did, the computer could then compare the debtor’s address as shown on the filing with the debtors’ address as shown on the corporate records. If the two matched, the probability that the filing was correct would be very high. If the addresses did not match, the computer could alert the filer to the mismatch and offer the filer additional information about the corporation such as the names of officers and directors. The ultimate decision as to whether to go ahead with the filing could be left to the filer.

138. The computer program that facilitates electronic filing might offer a “point and shoot” feature in which the user has access to a list of all entities registered in the state, places the cursor on the one it wishes to file against, and “clicks” on it.
These advantages theoretically could be achieved in collateral-based or debtor-based systems. One way would be for the filing officers to link the UCC records and corporate records of all the states into a single, computer-searchable system. But that would require a level of cooperation and coordination between filing officers that has not yet been evident. Another way would be to require all filing officers to sell their databases to private vendors who would link them. Despite some early optimism that states would sell their databases voluntarily and the ability to search nationwide would emerge without the necessity for coercion, that does not seem to be occurring. Some states now sell their databases, but the resulting system will not work as smoothly as an incorporation-based system until all states sell all computerized portions of their databases. Concerns over privacy, imagined or disingenuously asserted, are the achilles heel of this strategy of private aggregation. Once a state decides to sell its database or is compelled by federal law to do so, the state loses some measure of control over use of the information in it. An incorporation-based system can integrate the UCC and corporate records without requiring the state to surrender control of the records or the manner in which they are used.

2. Local Filing Systems

In all states except Georgia and Louisiana, there exists both a "statewide" Article 9 filing system maintained by the Secretary of State or some other agency of state government and "local" Article 9 filing systems maintained by the government of each county or other political subdivision of the state. This fragmentation of Article 9 filing is perhaps the system's principal weakness. Not only must the filer determine the correct state in which to file, but the filer must determine whether the filing should be state, local, or both state and local. If a local filing is required, the filer must determine the proper locality. The criteria for making these determinations are sufficiently inconsistent to belie the possibility of an underlying rationale. To illustrate, farm equipment is not property of a type normally used in more than one state, so it constitutes ordinary goods for purposes of UCC section 9-103. The location of the collateral determines the proper state for filing. The second alternative subsection 1 to UCC section 9-401(1) directs that filings against farm equipment be in the county where the debtor is located. Thus, the location of the debtor determines the proper county for filing.

139. LoPucki, supra note 19, at 15-19.
Putting the two steps together, the filer must determine where the collateral is located (to find the right state) and where the debtor is located (to find the right county in that state) to make this single filing.

The argument historically made for local filing against personal property is that local filing and searching are convenient: "[M]ost credit inquiries about local businesses, farmers and consumers come from local sources; convenience is served by having the files locally available and there is no great advantage in centralized filing."\(^{140}\) It is telling that the language of that comment is nearly forty years old, and the factual assertion it continues is even older.\(^{141}\)

Inexpensive long distance telephone service, fax machines, and service companies have made remote access to filing systems far easier and less expensive, greatly reducing the advantages of local filing systems for security interests in non-realty related property. Today, the disadvantages of maintaining both state and local filing systems in a state are generally acknowledged to exceed the advantages. Local filing is presumed to persist because local filing officers have sufficient political power to prevent its abolition.\(^{142}\)

The switch to an incorporation-based filing scheme would provide an opportunity to sharply reduce or eliminate local UCC filing. Ideally, Article 9 would require only a single filing against a registered entity and that filing would be in the statewide filing system. To aid in assessing the magnitude of the benefits and the temporary disruption from the elimination of non-real estate filing against corporate debtors, I compiled estimates of the number of filings affected by such a change. My calculations and an explanation of the method I employed appear in Appendix A.

\(^{140}\) U.C.C. § 9-401 cmt. 1.

\(^{141}\) The 1952 comments stated, "in general demands for credit information about individual consumers and farmers come from local sources. State filing for security interests in the property of such debtors serves little useful purpose; the information will be more conveniently available to those who need it if kept in county files." Id. § 9-401 cmt (1952).

\(^{142}\) I deliberately avoid the description most often used, "to preserve jobs." That wording implies there are significant numbers of individuals who would lose their current jobs if local UCC filing were abolished. I suspect this is untrue. Local UCC filing is usually part of a larger operation that includes local real estate records, tax records, court files, and other public records. Elimination of the local UCC filings would reduce the gross revenues of the filing office. That reduction could eliminate jobs, but it need not. Revenues could be raised by other means, and employees could do other work.
I estimate that 1,347,701 non-real estate related filings are made annually against registered entities in the local filing systems of the fifty states. If all filings against corporations were made at the state level, traffic in the local filing systems would decline by that number, which is approximately one third of all local filings. Well over half of the decline at the local level would be offset by an increase at the state level. I estimate, however, that there are 772,947 dual filings in third alternative states.143 Probably the bulk of them are against corporate debtors; their elimination would constitute a net reduction in the total number of filings.144

Although non-real estate related local filing, including dual filing, should be eliminated, the desirability of switching to an incorporation-based system does not depend on it. Article 9 could continue to direct that some filings against corporations be made in the local records, either instead of, or in addition to, a statewide filing in the state of incorporation. It would, however, have some odd consequences. In a state where the second alternative UCC section 9-401(1) was in effect, searchers would have to realize that the statewide system in the state of incorporation was the proper place to search against an incorporated farm while the local system of the county of the debtor’s residence was the proper place to search against an unincorporated one. In a state with the third alternative UCC section 9-401, filers would have to realize that a dual filing might have to be made in the statewide system of one state and in some county system of another state.145

143. See infra Table A-1 (showing compilation of the estimate).
144. The savings in filing fees from elimination of local filings may be greater per filing than the savings from elimination of statewide filings. The fee for filing a UCC-1 at the county level in Pennsylvania was $51 as of January 1, 1995. It’s That Time of Year Again in Pennsylvania, UCC FILING FLASH, Dec. 1994, at 3. The highest statewide fee in 1994 was only $25. See infra note 219 and accompanying text. The savings in costs of filing other than filing fees may also be greater. Because local filings are spread among so many different filing offices, each handling a relatively small volume, they tend to be relatively difficult filings to accomplish.
145. It would make little sense to require dual filing in the state of the debtor’s incorporation when the debtor had no significant presence in that state. The choice of the county in which to make the local filing would be arbitrary. To illustrate, assume that a New York bank lends money to a Pennsylvania corporation whose operations are all in New York. If Article 9 required dual filing in Pennsylvania, in what county should that filing take place? A filing in the county where the state filing office is located would not be significantly more accessible than the filing in the state filing office; yet considering that the debtor has no operations in Pennsylvania, any other choice of county would be completely arbitrary.
3. Real Estate Filing Systems

Real estate filing systems are entirely collateral-based. That is, all mortgage or deed of trust filings are made in the county where the real estate is located. Filings against goods that have been affixed to the real estate and become “fixtures” under real property law are governed by the real property rule. In the current system, the difficulty of determining when goods are fixtures has resulted in much over-filing as secured parties attempt to deal with the problem by “fill[ing] everywhere possibly required.” The switch to an incorporation-based system would do nothing to alleviate the problem and nothing to make it worse. Even an incorporation-based Article 9 should direct that filings against goods that are fixtures be made in the real estate records, even when the debtor is a corporation.

4. Filings Against Individuals

A legislative change to require filing in the state of incorporation might or might not be accompanied by a change in the rules regarding the place of filing against individual and unincorporated debtors. If the rules for filing against individual debtors did not change, the simplicity of the new rule for corporations would be partially offset by the fact that the new rule for corporations would be conceptually different from the rules for individuals. For example, under the current system, a filing against ordinary goods is made at the location of the goods, regardless whether the debtor is a corporation or an individual. Under a system in which only the corporate rule changed, a filing against ordinary goods would be made at the location of the goods if the debtor were an individual and in the state of incorporation if the debtor were incorporated. The distinction between ordinary goods and mobile goods would be preserved in Article 9, but would be made only with regard to filings against individuals.

146. There are a few exceptions. See, e.g., U.C.C. § 9-401(5) (requiring filing against fixtures of transmitting utilities in the statewide filing system).
147. U.C.C. § 9-401(1)(a) in the first alternative, (1)(b) in the second and third alternatives.
148. SPEIDEL ET AL., supra note 3, at 128.
149. The conditions that make personal property filing problematic, for the most part, do not affect real estate related personal property filings. The location of a fixture is generally both easy to discover and relatively stable. Multiple filings in response to uncertainty as to the appropriate place for filing against unquestionably real estate-related collateral are probably rare.
Greater simplicity could be achieved if the switch to an incorporation-based system for corporations were accompanied by a switch to an exclusively debtor-based system for individuals. Persons filing or searching against individuals in such a system would need to grapple with changes in residence that might not appear on the public record. But filers and searchers would gain many advantages, among them the fact that there would be only one proper place to file against any person at any given time.

I have argued elsewhere that the Article 9 filing system should strive for the capacity to report, on the basis of only information that can be accessed electronically, "whether particular personal property is encumbered by liens." For the system to accomplish that, the facts controlling the proper place of filing must be facts, such as place of incorporation, that appear of record. Today, the location of an individual debtor is not such a fact. But it could easily be made such. In the eyes of federal tax law, every taxpayer has, at any given time, a "tax home" which serves as the basis for determining the deductibility of travel expenses. Citizens are also permitted or required to declare their residences or domiciles for various other purposes. We may be near the point where it is feasible to determine a single place of residence for any individual on the basis of some easily-maintainable public record.

From a systems standpoint, selecting a place for filing against an individual that does not change over the individual's lifetime may be more efficient than tracking changes of residence. The unchangeable place might be the individual's place of birth or a place selected by the individual at the time he or she

150. Recall that the Article 9 Study Group has already recommended the switch to a debtor-based system for incorporated and unincorporated entities. See supra note 22 and accompanying text.
151. LoPucki, supra note 19, at 37.
152. See, e.g., Andrews v. Commissioner of Internal Revenue, 931 F.2d 132, 138 n.9 (1st Cir. 1991) (describing the tax home concept in a manner that results in nearly any individual having one and only one tax home but commenting that "[t]his is not to say we could not imagine a rare case where a finding of 'two tax homes' would be appropriate and would fit within the policies underlying section 162(a)(2)"; see also 26 U.S.C. § 911(d)(3) (1988) (defining "tax home").
153. See, e.g., FLA. STAT. ANN. § 222.17 (West 1989) (permitting persons domiciled in Florida to evidence the same by filing in the office of the clerk of the circuit court for the county in which the person shall reside, apparently to buttress a claim to protection of a Florida homestead against creditors).
enters the system. Even if most individuals did not reside where they were "located" for purposes of this system, the advantage of a place for filing that could change only with a change in the public record probably would outweigh the advantage of being able to search at the debtor's residence.

5. Foreign Systems

Conceptually, the most difficult interface for an incorporation-based filing system will be with the filing systems of other countries. Most countries require the registration of at least some kinds of security interests. Their filing systems are, almost without exception, either collateral-based or debtor-based. For the U.S. to adopt an incorporation-based system will cause theoretically difficult problems of coordination. Initially, these problems will have relatively little practical dimension. Neither the international movement of encumbered goods nor the existence of intangible property with substantial nexus to more than one country have yet become common enough to stress even the current, haphazard system. Most companies are still compartmentalized by country. They do business in foreign countries through subsidiaries incorporated under the laws of those countries, rendering even their accounts and general intangibles in those countries local to the countries. But with

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154. Presumably, the election would be evidenced by filing in a statewide system. Some cooperation among statewide systems would then be desirable, if not necessary, to prevent debtors from filing inconsistent declarations.

155. English-speaking countries other than the United States seem to prefer the term "registration" to "filing." Hence, translations from other languages typically use "registration" rather than filing. No functional difference exists between the two. Although some registrations include the entire security agreement rather than merely a notice that the agreement may exist, the principal purpose of both "registrations" and "filings" is to put third parties on notice of the secured party's interest. In administrative law systems such as the People's Republic of China, there may be two registration processes—one a registration with the government that authorizes creation of the security interest and the other a registration with a public filing system that perfects it. See Todd R. Benson, Taking Security In China: A Systems Comparison of Chinese and U.S. Practices (Nov. 9, 1994) (unpublished manuscript, on file with author).


157. Id. ("A survey of the existing systems shows three main approaches: registration at the location of the encumbered goods, at the debtor's domicile, and central registration. Occasionally these approaches are combined in various ways."). The filing of notice of a floating charge in the United Kingdom, however, is in the Company records, making it an incorporation-based system. Id. at 183 (citing Companies Act, 1948, §§ 95(1)(c), 104 (Eng.)).
globalization of the world economy, that can be expected to change.

The most basic principle governing the validity and effect of security interests in various countries is that the law of the country where the goods are located governs.\textsuperscript{158} That is simply because, without the cooperation of the government of the country where the goods are located, enforcement of a security interest is impossible. Even intangible property is in many instances subject to the same principle.\textsuperscript{159} Internationally, the system for registration of security interests is collateral-based. Perfection outside the country where the collateral is located is meaningful only if the country where the collateral is located chooses to recognize it. It follows that the starting point for international cooperation is that every secured party must comply with the filing requirements of the country where the collateral is located, unless that country has ceded jurisdiction through its conflicts of law rules.

Article 9 has ceded jurisdiction to foreign filing systems to what is probably an excessive degree. With regard to accounts, general intangibles, and mobile goods, Article 9 defers to the law of the jurisdiction in which the debtor is located to determine the place of filing, provided only that the law of that jurisdiction provides for filing or recording to perfect.\textsuperscript{160} With regard to accounts and general intangibles for money due or to become due, Article 9 offers an alternative method of perfection. The secured party may perfect by notification to the account debtor.\textsuperscript{161}

Two aspects of this treatment are questionable. First, it forces involvement with foreign filing systems that may not be reasonably functional. For example, if a corporation formed

\textsuperscript{158} Id. at 212 ("[T]he validity and effect of a security interest in goods is everywhere subject to the law of the country of importation.").

\textsuperscript{159} Perhaps "lack of principle" would be a better term, because what I am talking about is the ability to use force to allocate the benefits represented by the collateral. See infra note 171 (providing examples of intangible property that should be subject to U.S. law even though owned by a foreign-based company).

\textsuperscript{160} U.C.C. § 9-103(3). If the foreign system does not provide for filing or recording in its own system to perfect, Article 9 requires filing in the U.S., at the site of the debtor's "major executive office in the United States." Id. § 9-103(3)(c). Even if the debtor has no such office in the United States, filing nevertheless appears to be necessary because the UCC's filing exceptions do not include security interests in the accounts, general intangibles, or mobile goods of debtors located outside the United States that do not have offices in the United States. Id. § 9-302(1). But Article 9 gives no clue as to where the secured party should file.

\textsuperscript{161} Id. § 9-103(3)(c).
under the law of Delaware has its chief executive office in Ethiopia, filings against its U.S. accounts, general intangibles, and mobile goods will be in Ethiopia.\textsuperscript{162} This is so without regard to whether the Ethiopian filing system is national or split among many localities, and without regard to whether it is reasonably functional and accessible.\textsuperscript{163} The second questionable aspect is that the "alternative" of notification to the account debtor places a potentially unreasonable burden on searchers against foreign debtors. Unless they have a sophisticated knowledge of the foreign law and an uncanny ability to predict how U.S. courts will interpret UCC section 9-103(3)(c), they must search the foreign filing system and interrogate the account debtors to verify that the accounts are unencumbered.\textsuperscript{164}

Article 9's treatment of ordinary goods is less problematic. For ordinary goods located in the U.S., Article 9 requires filing in the U.S., without regard to whether the debtor is located in the U.S. If the ordinary goods are brought into and kept in the U.S. while subject to a security interest perfected under the law of a foreign country from which the collateral was removed, Article 9 provides a four-month grace period after the goods have entered the U.S. for the secured party to make its U.S. filing.\textsuperscript{165} Although this scheme is much less dependent on foreign filing systems than the scheme for accounts, general intangibles and

\textsuperscript{162} Id.  § 9-103(3)(b).
\textsuperscript{163} UCC § 9-103(3) specifies the applicable law without regard to whether the system in which that law requires filing has integrity. At worst, the foreign filing officer might accept bribes in return for falsely certifying that secured parties have filed financing statements as of particular dates. Such certificates might enable those secured parties to defeat U.S. secured parties, holders of statutory or judgment liens, or U.S. bankruptcy trustees. At a more subtle level, the foreign filing officer might, through search errors, induce creditors to lend against already encumbered collateral. At the subtlest level, the foreign filing office might be unreasonably slow or expensive in processing filings and searches. The latter two problems might be dealt with adequately by market forces. A bad filing system would get a bad reputation. Lenders would be reluctant to deal with it or debtors within its jurisdiction. Those debtors presumably would pressure their government for an adequate filing system, or reincorporate to another jurisdiction. But the first problem would disadvantage persons in the United States who may have no leverage over those who operate the foreign filing system.

\textsuperscript{164} That is, every searcher must make sure that a competing secured party did not perfect by either method. This point is a narrow application of a broader one Warren and I have made elsewhere about the operation of filing systems. Relaxing the requirements for making a valid filing (here by providing an alternative to filing) tends to increase the demands the system makes on searchers (here by requiring that they investigate both alternatives). See LoPucki & Warren, supra note 32, at 495.
\textsuperscript{165} U.C.C. § 9-103(1)(d).
mobile goods, neither is it entirely free of them. Priority in ordinary goods in the United States will sometimes depend upon whether filings were or were not made in foreign systems.166

The United States should make the switch to an incorporation-based system despite the difficulty of relating the new system to a world dependent almost entirely on older ones. First, the reasons for adopting an incorporation-based system in the U.S. are applicable to the rest of the world. Collateral-based and debtor-based systems were the product of the technologies of their times. Improvements in communications and the adoption of computer technology have since tipped the balance in the U.S. They will soon do so in other countries if they have not already. If the change to an incorporation-based system is not made before the global economy fuses into one, the world may be stuck with the relatively inefficient hybrid we now have.167 Second, the weaknesses in the way Article 9 currently deals with filing in international secured transactions inevitably will be exploited.168 A change in the U.S. approach to filing in international secured transactions is inevitable. There will be greater flexibility in making both that change and the change to an incorporation-based system if they are made at the same time.

In implementing an incorporation-based system in the U.S., Article 9 should require filing in the U.S. against any debtor incorporated in the U.S., even if that debtor's chief executive office is outside the U.S. Without such a requirement, searchers in the U.S. would in every case have to concern themselves with the possibility that their debtor's chief executive office might be outside the U.S.

If the U.S. adopts an incorporation-based filing system without changes in foreign laws, the effect will be to require dual

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166. That will be true with regard to goods that were putatively in the foreign country within four months prior to the U.S. Article 9 filing or bankruptcy filing.

167. Traditional economic theory would suggest that if an incorporation-based filing system is the most efficient solution, the change to that system can be made at any time. The new economic theory of increasing returns suggests the contrary. Even small investment in an inefficient solution can lock an economy into that solution permanently. Investment made in facilitating the inefficient solution is sunk cost that need not be taken into account in determining whether to change to the efficient solution. As time passes without making the change, that sunk investment becomes greater and greater. See W. Brian Arthur, Positive Feedbacks in the Economy, Sci. Am., Feb. 1990, at 92.

168. The Banking Law Committee of the New York State Bar Association has already endorsed an amendment to UCC § 9-103(3)(c) to address this problem. See Memorandum from Bradley Y. Smith to Messrs. Mooney, Harris, and Burke (May 18, 1994) (on file with author).
filings in some cases. If collateral has some relationship to both the U.S. and a foreign country, the secured party will want to comply with the laws of both countries by filing in each. This "file everywhere possibly required" solution should by now be familiar to the reader as a symbol of system failure. But dual filing in the relatively small number of international secured transactions may well be the best solution until the entire world system can be reconstituted as an incorporation-based system.

The establishment of a new filing system in the United States for filing against foreign-incorporated entities (the "U.S.169 and Foreign Entity Filing System")170 would be an alternative worthy of consideration. Filing should be required in the U.S. and Foreign Entity Filing System for security interests in all property within the jurisdiction of the United States, including, in appropriate cases, accounts, general intangibles and mobile goods.171 With such a filing system in place, the United States government could then negotiate with foreign countries individually for U.S. recognition of their filing systems and a corresponding exception from filing in the United States against entities formed under their laws. That negotiation should deal

169. The United States government charters some corporate entities, such as banks. See supra note 46 and accompanying text. This filing system would also be the place for filing against these entities.

170. I leave the question of who should operate the new filing system to be answered by others.

171. UCC § 9-103(3) treats accounts and general intangibles as though they were located at the chief executive office of the debtor and directs most filing against such collateral to the foreign country. That is probably inappropriate with regard to many kinds of accounts and general intangibles. One example would be licenses granted by the United States government or the government of a state. Such licenses can in many cases be encumbered directly; where they cannot be, their proceeds usually can be. See, e.g., In re SRJ Enter., Inc., 150 B.R. 933, 935 (Bankr. N.D. Ill. 1993) (discussing attempts to lien the proceeds of FCC licenses which cannot be liened directly). A foreign government should not be the custodian of records determinative of the ownership of property that will appear to extenders of credit in the U.S. to be located in the U.S. Florida, for example, requires filing with the Florida Division of Alcoholic Beverages and Tobacco to perfect a security interest in a Florida liquor license. FLA. STAT. ANN. § 561.65(4) (West 1987). In a debtor-based system, that filing might instead be outside the United States. Another kind of property inappropriate for foreign filing would be accounts payable from account debtors in the United States to the foreign debtor in the United States. This property too would be regarded by U.S. extenders of credit to be located in the U.S. Requiring foreign filing would not be of concern to me if the foreign filing system were a system with integrity, the foreign system were easily searchable, and the U.S. information system made U.S. extenders of credit aware of the role of the foreign filing system. Whether these criteria are met in any particular instance should be decided by the United States before recognition of the foreign filing system, in the context of treaty negotiations.
with issues of the quality and integrity of the foreign country's filing system, its accessibility, and the availability of published information on how to use it. The negotiations might also be instrumental in persuading other countries to convert to incorporation-based filing systems sooner than they otherwise might. Conversion of only a few key countries to incorporation-based systems could assure that the rest of the world would follow. Proposals, such as that made by Unidroit, to add new, permanent regional filing systems to deal with the growing problem of security interests in mobile equipment would be mooted.\textsuperscript{172} With what is by far the largest volumes of filings in the world, the United States is in a position to be a world leader.

6. State Revenue Raising Systems

State revenue raising systems interface with the Article 9 filing system in two ways. First, even the modest fees charged for making Article 9 filings appear to be more than sufficient to pay the costs of operating the filing system.\textsuperscript{173} A change in the filing system that reduced the numbers of filings might reduce the general revenues of the state. With respect to statewide filings, I have attempted to quantify this reduction in subsection D of Part IV.

Second, some states tax the underlying secured transactions\textsuperscript{174} and may use the filing system as a means of monitoring their occurrence and auditing payment of the taxes.\textsuperscript{175} For ex-
ample, in Florida, where the tax applies to "security agreements, or other evidences of indebtedness filed or recorded in this state" the standard form financing statement requires that the filer check one of two boxes: "(1) All documentary stamp taxes due and payable or to become due and payable . . . have been paid" or "(2) Florida Documentary Stamp Tax is not re-

quired." It turns out, however, that the Florida Department of Revenue does not in fact make substantial use of the answers to those questions in auditing the payment of the tax. The effect on the Florida Department of Revenue of having a small number of Florida-taxable financing statements filed in the debtor's state of incorporation outside Florida, rather than in Florida on Florida's Official Form, would be minuscule.

That an incorporation-based filing system would reduce the ability of the states to impose documentary taxes on the filing of financing statements, as opposed to the underlying secured
transactions, could prove to be an important advantage. A state that seeks to raise revenue through its Article 9 filing system can do so by raising the filing fee. To link the Article 9 filing system to a separate, complex scheme of taxation is an inefficient alternative.\footnote{180} First, if a state taxes the filing of the financing statement rather than the underlying transaction, it blocks the secured party from filing everywhere possibly required as a strategy for dealing with uncertainty as to the proper place to file. Second, the issue of whether the tax has been paid can easily become intertwined with the issue of whether the security interest is perfected. Although the courts have so far generally kept the two separate,\footnote{181} these decisions are based only on statutory interpretation and could be reversed by a revenue-seeking legislature. The change to an incorporation-based filing system may be the best way to prevent that from happening.\footnote{182}

B. THE POTENTIAL FOR COMPETITION AMONG SYSTEMS

In any of the three types of filing systems discussed in this Article, there is some potential for "system-shopping." In a collateral-based system, the debtor theoretically might move collateral to a jurisdiction whose version of Article 9 was more favorable; in a debtor-based system, the debtor theoretically might move its headquarters to such a jurisdiction. Neither kind of move is likely to be cost-justified in any significant number of cases. Thus, in a collateral-based or debtor-based

\footnote{180. The advantage in making the link is that documentary taxes may be relatively progressive. The taxes are based on the dollar amount of the transaction, while the filing fees are the same for all transactions. But exceptions to the documentary taxes make it somewhat difficult to tell whether they are in fact progressive. \textit{See, e.g.}, Md. Code Ann. Bus. Reg. § 12-103(k) (1994) (excluding from the tax security interests that seem likely to be held by relatively affluent creditors). Taxes imposed on creditors seldom come to rest there. Probably most loan closing statements will show the tax as a charge to the debtor, adding to the complexity of determining whether the tax is in fact progressive.}


\footnote{182. A legislature that attempted to render security interests in property within the state unperfected for failure to pay documentary taxes might find that it has exceeded its authority in an incorporation-based system. By incorporating in another state, the debtor renders the other state the arbiter of what is or is not perfection.}
system, there would be little danger of states adopting nonuniform versions of Article 9 to attract business.

The same cannot be said of an incorporation-based system. It is at least conceivable that significant numbers of debtors might change their places of incorporation to gain the benefits of a preferable version of Article 9 or a better filing system. The cost of reincorporation is significant. But so is the cost of Article 9 filing and searching. If other factors bearing on the choice of a state of incorporation were approximately equal, some debtors could be expected to choose on the basis of which jurisdiction's version of Article 9 or filing system was most favorable to themselves and their lenders.

Two issues must be addressed: first, whether states would modify Article 9 or their filing systems to compete for incorporations in an incorporation-based system, and second, if they did, whether the resulting modifications would be desirable. A definitive response to these issues is beyond the scope of this Article. Instead, I offer three preliminary observations. First, there would be little reason for a state to cultivate a system that favored either debtors or secured parties at the expense of the other. The state must lure debtors to incorporate in its juris-

183. See, e.g., Bernard S. Black, Is Corporate Law Trivial? A Political and Economic Analysis, 84 Nw. U. L. Rev. 542, 586-87 (1990) (“Re-incorporation by a private company will usually be cheap—a few thousand dollars for legal fees and not much more. . . . [For public companies] the total, one-time tax-deductible cost is about $40,000-80,000.”); Roberta Romano, Law as a Product: Some Pieces of the Incorporation Puzzle, 1 J.L. Econ. & ORGANIZATION 225, 246 (1985) (estimating “a typical cost of approximately $40,000” for reincorporation of a public company). In some circumstances, reincorporation costs may be considerably higher. See, e.g., Memorandum from Ronald Mann to Lynn LoPucki (Jan. 16, 1995) (on file with author) (reporting a legal fee of $400,000 for the reincorporation of a Texas corporation as a Texas real estate investment trust).

184. See supra note 8 and accompanying text.


186. A filing system might, for example, protect the privacy of debtors by restricting the categories of persons who could conduct searches or protect the
diction by offering advantages in borrowing money, but no advantages can be gained if the state does not lure lenders to its system as well. Second, there might be some tendency for the system to favor filers over searchers. Debtors would be neutral in the struggle between filers and searchers. Banks might be as well, because they both file and search. But there are a large number of filers, principally the sellers of equipment, who file but do not search. One would therefore expect the current system to tend to favor filers over searchers, and there is considerable evidence that it does. This tendency could be expected to continue under an incorporation-based system. The consequences might be more severe because the gains to particular states from favoring filers over searchers might be greater than the gains to other states. Third, there may be some tendency to favor those who make filings or conduct searches, that is, debtors and secured parties, over those who do not, such as unsecured creditors and buyers.

To explore this possibility further, assume that all fifty states have adopted a choice of law rule that looks to the state of incorporation to determine whether a security interest is perfected. Further assume that Delaware, in an effort to bring more incorporations to the state, amends its version of Article 9 to provide that all security interests are automatically perfected, without filing or possession. The benefits to debtors and their secured creditors—freedom from the necessity to file financing statements and immunity from attack by the trustee in bankruptcy—might well outweigh the detriment to those parties from lack of the information that a filing system would have provided. At the same time, the detriment to the economy as a whole—a reduction in information available to unsecured creditors, buyers, and others—might well outweigh the benefit to

debtor's ability to substitute new lenders by mandating the prompt filing of termination statements. For a critical view of the current provisions mandating the filing of mortgage satisfactions and termination statements, see LoPuckii & Warren, supra note 88, at 172-73. 187. A filing system is most efficient when it maximizes the net benefits of the system over its costs. A system would "favor" filers over searchers when it deviated from that most efficient ideal by reducing filers' costs in ways that imposed even greater costs on someone else. For an example of how a filing system might do that, see supra note 81 and accompanying text.

188. See supra notes 76, 81.

189. See, e.g., LoPucki, supra note 76, at 1888-92 (arguing that Article 9 systematically disadvantages involuntary and unsophisticated creditors).

190. Secured parties might, for example, rely on a combination of debtor representations and credit reporting systems to determine whether collateral was free of prior security interests.
debtor and secured parties. Although true believers in law and economics might assert that any gains to Delaware corporations and their secured creditors from Delaware's change in the law would be more than offset by increased interest charged by unsecured creditors and buyers' unwillingness to deal with them, their assertion rests on an assumption that markets are perfect and transaction costs nonexistent. In reality, many unsecured creditors and buyers would be unable to react and the result might be a substantial, permanent subsidy to the Delaware corporations and their secured parties.\textsuperscript{191} Once Delaware broke ranks, the benefits of uniformity would be lost. The drafters of the law governing an incorporation-based filing system should give careful consideration to this possible scenario.

In the context of the bankruptcy reorganization of large, publicly held companies, Whitford and I concluded that the best way to deal with forum shopping was not to prevent it, but to monitor it through empirical research and deal with the issues that arise one at a time. Competition can be permitted to continue on some issues, but be cut off by legislation on others.\textsuperscript{192} In the context of Article 9, where by ordinary procedures an adjustment of the statutory scheme may take ten years or more after the necessity for it is manifest, such regulation of competition may be possible only with the help of the federal government.

Most commentators see the Article 9 revision process as dominated by the representatives of secured parties.\textsuperscript{193} Even if the change to an incorporation-based system were to result in a race to the bottom\textsuperscript{194} as states adopted inefficient, nonuniform

\begin{itemize}
\item \textsuperscript{191} LoPucki, \textit{supra} note 76, at 1956-57.
\item \textsuperscript{192} LoPucki \& Whitford, \textit{supra} note 58, at 44-51.
\item \textsuperscript{194} The term "race to the bottom" refers to a theory initially propounded by William L. Cary. See Cary, \textit{supra} note 185, at 672. The theory is that "state
amendments to Article 9 in the hopes of attracting more incorporations, that might not directly harm unsecured creditors or buyers. From their perspective, Article 9 already may be at the bottom.\textsuperscript{195} But it would prevent future reforms designed to improve the treatment of unsecured creditors and buyers.

To the extent that the fear is of loss of uniformity in Article 9 as a result of competition among the states for corporate charters, the best solution may be to divorce the Article 9 choice-of-law rules from the Article 9 place of filing rules. That is, the switch to an incorporation-based filing system would be accomplished by adding provisions making the state of incorporation the proper place to file, without disturbing the rules that determine choice of law for other issues, including whether filing is necessary to perfect. This would eliminate the threat, for example, of a Delaware nonuniform amendment granting automatic perfection to all security interests. But such a bifurcation of the conflicts rules would significantly reduce the benefits of the change to an incorporation-based system. It would make Article 9 considerably more complex.\textsuperscript{196}

C. \textbf{Transition to the Future}

One advantage of an incorporation-based filing system is that it provides a better transition to the future. In assessing competition for corporate charters harms shareholders by driving states to adopt corporate law rules that are too lax with respect to managers and controlling shareholders.” Bebchuk, \textit{supra} note 185, at 1444.

\textsuperscript{195} LoPucki, \textit{supra} note 76, at 1948.

\textsuperscript{196} Article 9 would continue to distinguish ordinary goods from mobile goods, because the distinction would determine which state’s law controlled perfection. An additional conflicts rule would mandate filing in the state of incorporation. The complexity probably would adversely affect the teaching of Article 9 more than it would practice under it, because practitioners have much occasion to determine what state filings should be in, but little or no occasion to determine what state’s law governs the means of perfection.

But the teaching of Article 9 is itself no small task. If we estimate that 15,000 students a year devote 126 hours each (at $10 an hour) to the secured transactions course, that is an annual expenditure of $18,900,000. If the professor’s time devoted to the course costs each of 177 accredited law schools $10,000, that is an additional expenditure of $1,770,000. The total annual expenditure under these assumptions is $20,670,000. The expense of teaching Article 9 to practicing lawyers in Continuing Legal Education programs is probably considerably higher.

Small as this savings may be, it completely dwarfs the shift in fees to Delaware that has been cited by some as a reason for not changing to incorporation-based filing. The latter is only about $2.4 million. \textit{See infra} Table 6 (estimating annual reduction in filing fees to states other than Delaware resulting from the proposed change to an incorporation-based filing system).
that claim, the first step is to predict the future of the filing system. Three alternatives have been suggested. Several commentators have suggested that there eventually will be a nationwide filing system in the United States. If so, it is not imminent. One of the strengths of the current system is its ability to experiment with new ideas. The sheer size of a national filing system would make that difficult. Critics also fear that the federal government would do a poor job in system design and that congressional deadlock would unduly inhibit the making of repairs.

In an earlier article, I described a possible future in which the filing systems of the fifty states continue to operate independently, but cooperate sufficiently to permit a single search to discover a relevant filing regardless of which state-wide system contains it. With that first step in place, it would be possible to eliminate from Article 9 all distinctions regarding place of filing. Any filing could be made in any filing office and discovered on any search. With transparent software, such a "distributed processing" system would appear to both filer and searcher to be a national filing system. In an alternative vision of this system of the future, each filing office would sell the use of its database to private vendors who would aggregate the data into a privatized "national" system for search purposes ("private aggregation").

Neither a distributed processing nor a private aggregation system appears imminent. Lack of interstate cooperation and

197. I have omitted from consideration a fourth alternative suggested by Dean Baird: a collateral-based system in which each separate item of collateral is described—in essence, a certificate of title system without the certificates. Douglas G. Baird, Security Interests Reconsidered, 80 VA. L. REV. 2249, 2251-57 (1994).

198. See, e.g., id. at 2253-54 (discussing possibilities for a nationwide, electronic filing system); David M. Phillips, Secured Credit and Bankruptcy: A Call for the Federalization of Personal Property Security Law, LAW & CONTEMP. PROBS., Spring 1987, at 53, 71 (proposing a national filing system).


200. Critics making this point almost invariably mention the Post Office. As I am still having difficulty finding three-cent stamps a month after the postage rate increased, I sympathize.

201. LoPucki, supra note 19, at 15-19.

202. Thirty-nine states currently sell their UCC databases. LEXIS and Westlaw make available 17 states for searching in the aggregate. For a list of companies that supply information from the corporate records of the various states, see THE SOURCEBOOK OF PUBLIC RECORD PROVIDERS 61-63 (Carl R. Ernst ed., 2d ed. 1994).
concerns, real or imagined, over "privacy" may delay these approaches for decades. But users of the UCC filing systems will not tolerate state insularity forever. With the invention of the computer, the ability to conduct a single search of the UCC filings in all fifty states became inevitable. It is just a matter of time.

When filings can be discovered regardless of where they were made, the place where they were made will be of little interest to searchers. The debtor's place of incorporation will be considerably more useful information. Place of incorporation is an element of the most efficient system for unique identification of incorporated entities world wide. In a system where searches are nationwide or even international, debtor's state or country of incorporation will be a crucial piece of information. Given that it will be permanently of use in any type of filing system, we should not hesitate to adopt now a type of filing system that will require its collection.

To begin requiring that each filing indicate the debtor's state of incorporation will initially increase one element of system cost. But in both the short and long run, it will effect greater savings. Including state of incorporation on filings will reduce the cost to searchers of dealing with false positives even before the switch to an incorporation-based system. During the interim period in which filing and searching in the United States continues to be state-based, but is also incorporation-based, state of incorporation will be not only a means of identifying the debtor, but also a determinant of the proper place to file. When filing and searching become nationwide, state of incorporation in essence will become part of the debtor's name.

The cost of transition to an incorporation-based system is, therefore, an investment in the future. The same cannot be said for efforts to refine our methods for dealing with the problems inherent in collateral-based or debtor-based systems.

D. Political Feasibility: The Delaware Issue

When I initially proposed filing at the place of incorporation at the ALI-ABA Article 9 Invitational Conference, there seemed

203. To know where a filing was made might help searchers determine whether the filing is a false positive with respect to their search. But I have difficulty imagining how.

204. Addition of the debtor's state of incorporation is already a common means of identifying corporations in contracts and other documents—for example, "XYZ Corp., a Delaware corporation."
to be a consensus in the room that whether or not it was a good idea, it was not politically feasible. Many of those present assumed that, were it to be adopted, a substantial number of filings currently made in other states would instead be made in Delaware. The unstated minor premise was that statewide UCC filing systems are cash cows producing substantial revenues for the states. The other states would not let Delaware rustle their cows.

This "public choice" argument rests on the incorrect assumption that the amount of filing fees that would be shifted to Delaware would be large. Based on an empirical study that I report in this section, I estimate that the change to an incorporation-based system would result in only about a $2.4 million (5.3%) aggregate decrease in fees paid to the statewide filing systems of the forty-eight states other than Delaware and Georgia.\footnote{See infra Table 6 (showing derivation of the estimate). I omitted Georgia from the estimate because it did not maintain a statewide filing system or index during 1993. Kentucky maintained only a limited statewide filing system, but I included it in these calculations.}

With the help of research assistants, I conducted a study to determine the numbers of filings made against Delaware registered entities in the statewide filing systems of other states during the year 1993. It seemed likely at the outset, and ultimately proved to be true, that out-of-state filings are more often made against those Delaware registered entities that conduct relatively large businesses. To assure that the sample would contain a sufficiently large number of those entities to accurately project to the remainder, I treated the universe of Delaware registered entities as consisting of two kinds: (1) large companies listed in the Standard & Poors database (S&P-CORPDE on Westlaw), and (2) other Delaware entities shown on the records of the Delaware Secretary of State. We drew separate samples for the two universes and I made separate projections from the samples to those universes.

The "Standard & Poors sample" consists of 120 companies randomly selected from among the 3945 companies listed in the Standard & Poors database.\footnote{We selected every 32nd company from the Standard & Poors database by record number. Thirty-two is the largest integer that could be used to draw a 120 company sample from that database, which contained 3945 companies at the time the sample was drawn. We erroneously drew only the first 120 records before the record numbering in the database changed; we should have drawn 123. Though there is no reason to believe that the three records not drawn differ systematically from the 120 that were drawn, they may. The 120 compa-}
consisted of 400 companies randomly selected from among the approximately 229,635 companies listed in the records of the Delaware Secretary of State. To avoid double counting of filings against companies included in both databases, we removed all firms listed in the Standard & Poors database from the Dela-

gies, Inc., Parker & Parsley Petroleum Co., Paychex, Inc., Pope Resources, Pro-
logy Inc., Valley Systems Inc., Western Beef Inc., Western Co. of North America, Winston Resources Inc., and Xytronyx Inc.

207. The Delaware sample was drawn by the Office of the Delaware Secretary of State from its database, pursuant to my written specifications. The database contains one listing for each entity registered in Delaware, including corporations, business trusts, limited partnerships and limited liability partners-
ships. Foreign entities registered to do business in Delaware were not in-
cluded in the sample.
ware sample. There were eight such companies, leaving 392 companies in the Delaware sample.

To determine the number of filings made against each of the companies in the samples, we conducted UCC searches in the PH-UCC database on Westlaw for the year 1993. Our search protocols were such that we may have over-counted filings, but it is highly unlikely that we under-counted filings. The PH-UCC database contains the index entries for UCC filings in seventeen states, 51.1% of all UCC filings made that year in all states. Those searches revealed the following numbers of filings:

208. The Delaware Secretary of State drew for us a sample representative of all Delaware companies. We removed all Standard & Poor's companies from the sample so that it would be representative of only non-Standard & Poor's Delaware companies. The companies removed were Core States Financial, General Automation, Inc., KLH Engineering Group, Inc., Natural Earth Technologies, Inc., Nature's Elements Holding, Summit Tax Exempt Bond Fund L.P., Cherry Corporation (The), and United Newspapers.

209. In conducting these searches, we followed these protocols:

First, we searched under the exact name of the entity, omitting the following words of incorporation: Inc., Incorporated, Corp. Corporation, Co., Company, Ltd., L.P., Limited, LLC, or Limited Liability Company. Courts usually hold errors in names not seriously misleading if they differ only in the omission of one of these words or the substitution of one of these words for another. Secretaries of State generally will not incorporate a company under a name that differs from the name of an existing company only in the substitution of one of these words for another. See, e.g., DEL. CODE ANN. tit. 8, § 102 (1993 & Supp. 1994) (providing requirements for certificate of incorporation).

Second, in other respects, only an exact match was regarded as the same entity. For example, we did not consider "Timberland Manufacturing, Inc." to be the same debtor as "Timberland, Inc."

Third, if the name matched, we counted the filing as against the entity in our sample. The effect of this protocol was undoubtedly to overestimate the number of filings against companies in our sample because the same name may be used by companies incorporated under the laws of different states. It is one of the weaknesses of the current filing system that it is impossible to determine from the face of the records whether a filing is against a particular entity rather than one of the same name incorporated in a different state. See LoPucki, supra note 19, at 22-23.

We considered a protocol that would have ignored a filing if it was in State X and a corporation by the same name was incorporated under the law of State X as well as in Delaware. Had we followed such a protocol, our count would have been approximately seven percent lower, but it would have ignored an unknown number of filings that were actually against the Delaware corporation.

210. The possibility of an under count stems from the possibility of erroneous or misindexed filings that cannot be discovered on a search. The filers have paid fees to the state that took their filing, but we could not count it because we could not find it.

211. See supra note 101 (describing the database and the method for drawing the sample).
Table 2.
Numbers of UCC Filings in Seventeen States Against Registered Entities in Randomly Selected Samples

<table>
<thead>
<tr>
<th>Documents</th>
<th>Standard &amp; Poors sample (120 companies)</th>
<th>Delaware sample (392 companies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financing statements</td>
<td>493</td>
<td>83</td>
</tr>
<tr>
<td>Subsequent UCC filings</td>
<td>283</td>
<td>78</td>
</tr>
<tr>
<td>Other filings (e.g., tax liens)</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>785</td>
<td>173</td>
</tr>
</tbody>
</table>

To project these figures nationally, I made the assumption that filings against the companies in my two samples comprise the same proportion of filings in the 48.9% of statewide filings we could not search as they did in the 51.1% of statewide filing that we did search.\footnote{212 Not all state filing officers have published the number of UCC filings made in the state during 1993. I obtained reported figures or estimates of the numbers of UCC filings in each of the 48 statewide systems from Carl Ernst of BRB Publications. Ernst compiled that data starting from base figures for 40 states published in IACA Update 1994. See supra note 128 (discussing the IACA Update). Based on telephone conversations with the filing offices, he determined that some of the figures in that publication were misleading because the various Secretaries of State had overstated the number of UCC-1s filed by including other kinds of filings in their counts. Through his contacts with the filing officers of the eight states that did not report to IACA, Ernst also obtained estimates for those eight states. His compilation puts the total number of UCC filings in the 48 states during 1993 at 4,586,687. Of those, 2,342,960 (51.1%) were in the 17 states in which we were able to search. As Ernst did not estimate the numbers of filings in the statewide systems that were not UCC-1s, I used the numbers published in IACA Update 94. For nine non-reporting states, I estimated the number of filings by making the assumption that the ratio of UCC-1 filings to other UCC filings would be the same for those states as it was for all other states in the aggregate.} I projected from the seventeen state count of UCC filings against the 120 Standard & Poors companies in the sample that in the forty-eight states other than Delaware and Georgia (which had no statewide filing system in 1993) there would be 50,503 statewide UCC filings against the 3945 companies incorporated in Delaware and listed in the Standard & Poors database.
Table 3.
UCC Filings Against Delaware-Registered Entities Listed in the Standard & Poors Database

<table>
<thead>
<tr>
<th>Filings counted in 17 states against 120 entities</th>
<th>UCC-1 filings</th>
<th>Other filings</th>
<th>Total filings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of all UCC filings which are in these 17 states(^{213})</td>
<td>49.8%</td>
<td>52.7%</td>
<td>51.1%</td>
</tr>
<tr>
<td>Projected filings against sample companies in 48 states</td>
<td>989</td>
<td>554</td>
<td>1,537</td>
</tr>
<tr>
<td>Projected filings against all Standard &amp; Poors companies in 48 states</td>
<td>32,515</td>
<td>18,228</td>
<td>50,503(^{214})</td>
</tr>
</tbody>
</table>

I projected from the seventeen state count of UCC filings against 392 companies randomly selected from among all those incorporated in Delaware but not listed in the Standard & Poors database (225,690) that in all forty-eight states there would be 195,233 statewide UCC filings against those companies.

Table 4.
UCC Filings Against Delaware-Registered Entities Not Listed in Standard & Poors

<table>
<thead>
<tr>
<th>Filings counted in 17 states against 392 entities</th>
<th>UCC-1 filings</th>
<th>Other filings</th>
<th>Total filings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of all UCC filings which are in these 17 states</td>
<td>49.8%</td>
<td>52.7%</td>
<td>51.1%</td>
</tr>
<tr>
<td>Projected filings against sample companies in 48 states</td>
<td>167</td>
<td>171</td>
<td>339</td>
</tr>
<tr>
<td>Projected filings in 48 states against all 225,690 Delaware incorporated, non-Standard &amp; Poors companies</td>
<td>95,871</td>
<td>98,391</td>
<td>195,233(^{215})</td>
</tr>
</tbody>
</table>

\(^{213}\) I compiled these percentages based upon data and estimated data for each of the 48 states. I used Ernst's estimates of the numbers of financing statements filed in each state. I used the numbers of other UCC filings reported by the states to IACA. For those states that did not report other UCC filings to IACA, I estimated the number of other filings based on the assumption that the proportion of other UCC filings to financing statements in each of the nine nonreporting states was the same as the proportion of other UCC filings to financing statements in the states for which both figures were available (71.1%).

\(^{214}\) This total is not the sum of the “UCC-1 filings” and “Other filings” listed on this table due to rounding.

\(^{215}\) This total is not the sum of the “UCC-1 filings” and “Other filings” listed on this table due to rounding.
Adding the two projections together, the total number of UCC filings made against Delaware corporations in statewide systems outside Delaware in 1993 was 245,736. This is 5.3% of the 4,607,113 UCC filings in the forty-eight states.

<table>
<thead>
<tr>
<th>Table 5. UCC Filings Against All Delaware-Registered Entities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>UCC-1 filings</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Projected filings against all Standard &amp; Poors Delaware-Registered entities in 48 states (from Table 3)</td>
</tr>
<tr>
<td>Projected filings against all Delaware-Registered, non-Standard &amp; Poors, entities in 48 states (from Table 4)</td>
</tr>
<tr>
<td>Projected filings against all Delaware Registered entities in 48 states</td>
</tr>
</tbody>
</table>

Based on this sample size and result and making the assumption that the 48.9% of the filing system we could not search is the same as the 51.1% we could, we are 95% confident that the number of total filings against all Delaware Registered entities in forty-eight states was between 159,884 and 331,589.216

To estimate the total fees that the forty-nine states would lose as a result of the change to an incorporation-based system, we first consulted the UCC Filing Guide217 to determine the cur-

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216. The normal 95% confidence interval for the number of filings against the universe of Standard & Poors companies in 51.1% of the filing system is 25,807, plus or minus 16,642, based upon a population of 3945 companies, a sample of 120 companies, a total of 785 filings against those companies, and a sample standard deviation of 23.94.

The normal 95% confidence interval for the number of filings against the universe of non-Standard & Poors companies in 51.1% of the filing system is 99,764, plus or minus 40,591, based upon a population of 226,055 companies, a sample of 392 companies, a total of 173 filings against these companies, and a sample standard deviation of 1.82.

To determine the confidence limits for the sum of the two projections, 125,571, we squared the errors, added the squares, and took the square root of the sum. That yielded a normal 95% confidence interval of 125,571, plus or minus 43,870. Thus we can be 95% confident that the number of filings against all Delaware companies in 51.1% of the filing system is between 81,701 and 169,441. If the other 48.9% of the filing system contained the same proportions of filings, the number of filings against all Delaware companies in 48 states is 245,736, plus or minus 85,852.

217. BRB Publications, updated 1994. In those states where the filing fee for a financing statement depends on whether the filer uses the official form, about 80% of the filings were on the official form. This estimate was made for us by a person in the office of the Oregon Secretary of State. In light of the
rent amounts of the official filing fees for filing financing statements and for filing related documents. The range of filing fees for financing statements was $3 to $25, and the average was $10.43. The range of filing fees for related documents was $4 to $25, and the average was $9.43. Assuming that the average fee actually paid to file these documents is the same as the average of the fees charged by the various filing officers, the reduction in fees paid to the filing officers of the forty-eight statewide filing systems as a result of the change to an incorporation-based system would be as follows:

<table>
<thead>
<tr>
<th>Type of filing</th>
<th>Annual Number of filings</th>
<th>Average cost of filing</th>
<th>Annual reduction in revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCC-1</td>
<td>128,387</td>
<td>$10.43</td>
<td>$1,339,076</td>
</tr>
<tr>
<td>Other filings</td>
<td>116,619</td>
<td>$9.43</td>
<td>$1,099,717</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>$2,438,793</td>
</tr>
</tbody>
</table>

Based on the limits of the 95% confidence level for the total number of filings, the reduction in filing fees to states other than Delaware would be between $1.6 million and $3.3 million. It is worth noting that, because the total number of filings in an incorporation-based system would be smaller than the total number of filings in the current system, the increase in fees to Delaware would be less than the decrease suffered by the other forty-nine states.

218. The related documents are termination statements, continuation statements, amendments, releases, and assignments.

219. This average is for filings on the official form used by the filing officer. About 20% of filings are made on forms other than the official forms. For these filings, most filing officers charge a higher fee. As a result, the methodology I have employed will tend, in this respect, to understate the actual reduction in revenues as a result of the loss of these filings.

220. See supra note 216 and accompanying text (noting the limits were 159,884 and 331,588). This estimate is based on a rough cost of $10 per filing.

221. In an incorporation-based system, the following kinds of filings, among others, would be made less frequently: (1) duplicate filings made because the filer was unsure of the location of the debtor or the collateral, (2) filings made in several states because the collateral for a single security interest is located in several states, (3) filings made in the destination state because debtor or collateral have moved.
V. THE PROBLEM OF TRANSITION

A. THE PROBLEM

Filing at the place of incorporation will improve the Article 9 filing system only if adopted in substantially all states. The transition to the new system must be coordinated; for major states to impose different bases for filing even for a short transition period might cause major disruption. To illustrate the nature of this problem, assume that the Code sponsors promulgate a new UCC section 9-103 which directs filing at the place of incorporation and that Delaware is the first state to adopt it. Further assume that before any other state adopts the new rule, Firstbank makes a loan against the accounts receivable of a Delaware corporation that had its chief executive office in New York. Delaware's new section 9-103 asserts that Delaware law applies and directs filing in Delaware to perfect this interest. New York's old section 9-103 asserts that New York law applies and directs filing in New York. If the issue of perfection arises in a Delaware court, Delaware law would govern; if the issue arises in a New York court, New York law would govern. With no way to control where the issue would arise, Firstbank's best strategy would be to file in both states. Future searchers, understanding that a filing in either state might be sufficient to perfect, would thereafter search in both.

Generalizing on this illustration, adoption of an incorporation-based filing system in some states, but not others, would be to create a dual filing system of the worst kind: one in which searching would be dual as well. This dual filing and searching would occur not just in the state or states that made the change, but throughout the United States, as soon as the first state made the change.

Without a coordinated transition, a deadlock could develop after the change had been made in some states but not others, making the necessity for double filing and double searching permanent. The resulting system probably would be considerably worse than what we have now.

Even if every state amended its Article 9 to require filing in the debtor's state of incorporation as of the same effective

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222. A provisions in the security agreement requesting that the courts apply the law of a particular state would be ineffective. UCC § 1-105(5) authorizes the parties to agree that the law of a particular state govern their rights and duties, but specifically excepts provisions attempting to govern perfection of Article 9 security interests.
To illustrate, assume that Interstate, Inc. is a Delaware corporation with its operations in New York. On the day after the effective date, filings against Interstate, Inc. would begin to accumulate in Delaware. But filings made against Interstate, Inc. prior to the effective date of the new law in New York would be on record only in New York and remain effective for as long as five years. Unless those New York filings were moved to Delaware, to find all filings against the collateral of Interstate, Inc., a searcher would need to search in both states. The necessity for multiple searching would extend to all entities registered in one state at the time of the search, that at some earlier time were located or owned collateral in another. The problems they had under the old system and one more. After five years, this problem would lessen, but not disappear.

B. A PROPOSED SOLUTION

In this subpart, I describe a plan for a transition that will not require any significant amount of dual filing or dual searching. The transition would occur in three stages.

Stage 1: The States Determine Whether to Change

The Code sponsors should promulgate the amendments necessary to implement the change to an incorporation-based system ("Incorporation-Based Amendments") separately from other

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224. The dual search problem may be limited to a small minority of cases. For example, when the collateral is ordinary goods that have remained continuously in the state of the debtor's incorporation, the search can be confined to that state. Similarly, if the collateral is accounts, general intangibles, or mobile goods, and the debtor's chief executive office has at all relevant times been in the state of the debtor's incorporation, only that state's records need be searched.

The number of double searches actually required underestimates the difficulty searchers would experience during the transition. Every time a search was required, the searcher would have to consider the question of whether a second search was required. To answer it, the searcher would have to determine not only the debtor's state of incorporation (which it would have to in any case) but also the location of the collateral or the debtor for the preceding five years.

225. After five years of filing in the state of incorporation, most filings made at the location of the debtor or the collateral would have lapsed. But filings that had been continued at the location of the debtor or the collateral would remain effective. U.C.C. § 9-403(2).
proposed amendments to Article 9, so adoption of the Incorporation-Based Amendments will not be delayed by controversy over other amendments. The Incorporation-Based Amendments should provide that they take effect on the second anniversary of their promulgation, only if states holding a majority of votes in the electoral college that elects U.S. presidents\textsuperscript{226} enacts them within two years.\textsuperscript{227} Unless so adopted, the amendments also should expire as amendments to the Official Text of the Uniform Commercial Code. The two year adoption process would operate as a sort of referendum on the change to an incorporation-based system. If a majority of states endorse the change, the remainder can be expected to follow; return to the old system would be impossible and failure to embrace the new one would be disastrous. If the political process deadlocked at the state level, Congress could impose the change on the recalcitrant minority of states.

If less than the requisite majority of states adopted the amendments during the two year period, but adoption by the requisite majority were imminent, it would be open to the Code sponsors to repromulgate the amendments, perhaps with modifications, for an additional two year period. During that additional two year period, states that previously adopted the Incorporation-Based Amendments contingent upon an event that had not occurred would need to readopt them.

\textsuperscript{226} When a "majority" of states has adopted the change might be decided on a variety of criteria. If the criteria were a majority in number, a problem might arise if the change were enacted by the major commercial states, but ignored by the large majority of all states. State populations or numbers of Article 9 filings might be appropriate bases on which to determine whether a "majority" have adopted the amendments, but neither of those figures are reported with precision, leaving open the possibility of a dispute. The electoral college is particularly appropriate because it reflects, as well as any criteria, the likelihood that the change could be adopted by both the House and Senate of the U.S. Congress. In the event of deadlock among the states, the Code sponsors may wish to appeal to Congress for a resolution.

\textsuperscript{227} The period should not be shorter than two years because some state legislatures meet only in alternative years. To adopt a shorter period would allow insufficient time for all of the legislatures to make a decision on the amendments. The period should not be longer than two years because it would unnecessarily delay implementation. The period could be open ended, making the change effective whenever it had been adopted by a majority of states, but states might have constitutional difficulties adopting statutes with effective dates contingent upon events.
Stage 2: Filings Indicate State of Incorporation

The effective date of the Incorporation-Based Amendments in the majority of states probably would be January 1 of the third year after promulgation. Stage 2 would be the five year period beginning on that date. During this stage, secured parties would continue to file in the systems specified under the old UCC section 9-103, but the amendments would require indication of the state or, in the case of a debtor incorporated outside the United States, the country of incorporation on all financing statements or continuation statements. The purpose of this five year delay in implementation is to reduce the number of filings in the system that do not indicate the debtor’s state of incorporation.

Prior to the Incorporation-Based Amendments taking effect in a state, the filing officers in that state should promulgate new forms with a box for “state or country of incorporation.” The Amendments would require that the filing officer reject any financing or continuation statement that did not specify the debtor’s state of incorporation, but would take no position as to whether an incorrect specification rendered the filing seriously misleading. During this stage, no filings would be rendered ineffective by failure to specify correctly the state of incorporation. Secured parties could not take the new requirement lightly, however, because incorrect specification of the state of incorporation could render their filing ineffective in Stage 3.

Specification of state of incorporation on all filings will be itself a worthwhile improvement in the system. It will ease the problem of searchers in dealing with false positives, it will enable searchers to overcome some mistakes in the spelling of the debtor’s name, and it will facilitate transition to a system in which nationwide searches can be conducted.

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228. UCC amendments historically have been promulgated effective on January 1 of the year following adoption.

229. Filers against unincorporated debtors would specify “unincorporated.”

230. In states that have adopted the Official Text, five years after the effective date of the Stage 1 amendments the only filings not showing whether the debtor is a corporation and if so, the debtor’s state of incorporation, should be the fixture filings made prior to the effective date against transmitting utilities under UCC §§ 9-401(5) and 403(6). A different transition procedure will be needed in Maryland because a financing statement is effective for twelve years in that state. *Md. Code Ann., Bus. Reg.* § 9-403(2) (1992).

231. Harry C. Sigman has proposed a form for use in all states that meets this requirement.
At the end of Stage 2, each statewide filing office would furnish index entries for all filings then effective against out-of-state corporations to their states of incorporation. Those index entries would immediately become available to searchers in the state of incorporation. Relevant entries would be reflected in any search conducted after the exchange date in either the state of original filing or the state of incorporation. After the exchange, searchers would need only search in the records of the state of incorporation. All effective filings would be indexed there. If the searcher needed a copy of the financing statement, the searcher ordinarily would have to obtain it from the state in which it initially was filed.

Toward the end of Stage 2, each filing officer should make an effort to determine the state of incorporation for those debtors listed on otherwise effective filings that did not contain that information. The problem should arise principally in states that adopted the amendments after the end of Stage 1. The most likely solution to this problem would be to require that filers amend their filings to specify the state of incorporation as a precondition to forwarding notice of their filing to the state of incorporation. The number of amendments necessary probably would be small. As discussed earlier, only about 6.6% of filings in statewide systems are against debtors incorporated outside the state of filing.

Stage 3: The Incorporation-Based System is Fully Effective

Stage 3 would be the second five year period after the effective date of the Incorporation-Based Amendments. During this stage, all filing and searching would be conducted in the debtor’s state of incorporation. The financing statements filed in the state where the debtor or collateral was located at the time would however, continue to reside with the state where they initially were filed. After discovering their existence through a

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232. The manner in which financing statements are stored in most states—on microfilm or microfiche—would make it difficult to transfer them physically to the state of incorporation. The amendments, however, should make it possible for states that are able to transfer them physically to do so.

233. See supra note 104 and accompanying text.

234. Under an alternative transition plan, filings during Stage 2 would be made in the state of incorporation. A search would have to be conducted in the state of incorporation and any other state in which the debtor or the collateral had been located in the five years prior to the commencement of Stage 2. Georgia elected such a “double search” transition plan when it began permitting filings to be made in any county of the state beginning January 1, 1995. Two Searches Required Until January 1, 2000, Filing Flash, Aug. 1994, at 4.
search in the state of incorporation, the searcher who wanted a copy would have to order it from the state in which it was filed.

The proper place to file a continuation statement during Stage 3 would be in the debtor's state of incorporation, which may not be the state where the underlying filing was made. The problem might be dealt with in either of two ways. First, the Amendments could specify that the first continuation made during Stage 3 be accomplished by filing the continuation statement in the state where the original financing statement was on file. The filing officer in that state then would be required to forward copies of the original financing statement and continuation statement to the state of incorporation of the debtor as shown on the financing statement. Alternatively, the Amendments could specify that the first continuation made during Stage 3 be accomplished by filing the continuation statement in the state of incorporation, along with a copy of the original financing statement.

The second method seems superior. Its strengths are that it yields a simple rule for where to file (all documents are filed in the state of incorporation) and it does not require the cooperation of the filing officer who holds the original financing statement. Its weakness is that the purported "copy" of the financing statement filed with the continuation statement might be inaccurate and by the time it was challenged, the filing officer who held the original financing statement may have destroyed it. But this weakness would be mitigated by the fact that adequate means of proving the text of any particular original financing statement.

235. So long as a financing statement remains effective, the system must maintain a copy in order to make certifications. The state where the continuation statement would be filed could not maintain that copy because it does not have one. The state where the financing statement was initially filed could not maintain that copy without some way of knowing whether it had been continued. (It would solve the problem if the state could maintain all financing statements permanently, but current law authorizes destruction of a financing statement one year after it lapses. See U.C.C. § 9-403(3).

Some filers can be expected erroneously to file their transition continuation statements in the state where the debtor is incorporated or erroneously to file their subsequent continuation statements in the state where the original filing was made. In either event, the filing officer should be under a duty to forward the continuation statement to the correct office. If the filing officers in both affected states comply, erroneous continuation would be impossible.

236. The copy is necessary principally because the financing statement contains a description of collateral that may limit the reach of the security interest. Later filers may have relied upon that limitation.
statement likely would still exist in the possession of the filer or third parties.  

At the conclusion of Stage 3, twelve years after the effective date of the Amendments to the Official Text of Article 9, all financing statements that remained effective by original filing or continuation would be on file in the debtor's state of incorporation. The transition would be complete.

VI. CONCLUSION

The benefits of the change to an incorporation-based system will be principally in the form of lower total system cost and greater accuracy. The benefits will be greatest for those filers and searchers who seek a high degree of certainty from the system. Filers today are expected to know not only the correct name of their debtor, but also the location of the collateral, the intentions of the debtor with regard to that location, and information about the location of the debtor that is virtually impossible to obtain. Under an incorporation-based system, they will need to know only the correct name and state of incorporation of their debtor. Under the current system, filers are expected to monitor the locations of their collateral and their debtors, and changes in their debtor's names. Under an incorporation based system, they would not need to monitor any of those things.

Verification of the debtor's state of incorporation would require an additional telephone call in some cases. But that tel-

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237. First, the challenger may have a certified copy of the original financing statement, purchased before it was destroyed. Second, many states have sold copies of the microfilm or microfiche of their filings to service companies. The challenger could obtain a copy from the service company. A filer who considered fraudulently attaching an altered copy of the financing statement to its continuation statement probably would be unable to predict in advance whether any challenger would be able to produce an accurate copy of the original filing. In those circumstances, commission of the fraud probably would not be a good risk to take.

238. See supra part III.A.1.

239. See supra part III.B.

240. See supra part III.C.

241. It would, of course, be open to the filer to rely on information provided by the debtor as to its place of incorporation. Even when filers adopt a casual attitude toward determining the correct state of incorporation, the likelihood of much loss appears low; over 93% of all filings are made in the state of the debtor's incorporation. See supra note 104 and accompanying text (estimating the proportion of filers listing out-of-state addresses on financing statements). Because out-of-state activities tend to be carried on by large companies and lenders generally will be aware of the size of the company with which they are
Telephone call is one the filer probably should make under the current system anyway, to verify the debtor's name. The change to an incorporation-based system would make it possible for the filing officers to link the records of UCC filings against a corporation to its incorporation records. For electronic filers, even the necessity for the telephone call would disappear, because both the name and state of the debtor's incorporation could be verified in the process of filing. In this system of the future, it would be impossible unknowingly to file against a corporation not incorporated in the state or against an incorrect corporate name. The number of errors entering the system would slow to a trickle.

An incorporation-based system offers many advantages that do not depend on database linkage or electronic filing. First, under the current system, filers whose filings are challenged may have to prove the location of debtor or collateral at a time in the distant past. Under an incorporation-based system, they would need to obtain only a certificate from the state office that registers corporations. Second, in an incorporation-based system the total number of filings and searches required would be lower because a single filing could perfect a security interest in collateral located in several states and a single search could find that filing. Third, by requiring inclusion of the state of incorporation on filings, an incorporation-based system will more precisely identify the entity filed against. That will increase the accuracy of the system and reduce the searcher's problem in dealing with false positives. When the expected transition to a national search system occurs, this new piece of information will be essential to distinguish among corporations with identical names. Fourth, because an incorporation-based system gives the parties to a secured transaction the ability to choose the system in which they will file by incorporating the debtor in the jurisdiction, it will generate some degree of downward market pressure on filing fees and taxes and perhaps also encourage filing officers to provide better service. Fifth, removing two

dealing, lenders often will be able to guess which debtors require investigation as to state of incorporation.

242. See supra part III.A.2.
243. See supra part III.A.3.
244. See supra part III.A.3.
245. See supra notes 136-138 accompanying text.
246. See supra part IV.C.
247. See supra part IV.B (discussing the potential for "systems shopping" under an incorporation-based system).
principal bases for avoidance of security interests by trustees in bankruptcy—errors in the debtor’s name and filing in the wrong office—should greatly reduce the number of security interests avoided. Finally, both the text of Article 9 and the processes of filing and searching would be simpler. This would make filing and searching, as well as training those who do the filing and searching, easier and less expensive.\textsuperscript{248}

An incorporation-based system would be less convenient for some filers, because they would have to deal with out-of-state filing offices more frequently. But the net increase in out-of-state filings would be only about 1.3% of all filings.\textsuperscript{249} About half of that increase would occur in the Delaware system, which might quickly become as familiar to the creditors affected as are their own states’ systems.\textsuperscript{250}

The transition plan I propose\textsuperscript{251} contemplates that a majority of states would adopt incorporation-based filing systems simultaneously. Until that occurred, none would make the change to incorporation-based filing. The purpose is to avoid the situation in which a substantial number of states, but less than substantially all of them, have adopted incorporation-based systems. Piecemeal adoption would render the Article 9 filing system a de facto dual-filing system with regard to corporations that have a presence outside their states of incorporation.

After the Incorporation-Based Amendments became part of the Official Text of the UCC, there would be a three stage transition to an incorporation-based system. In Stage 1, the states would consider whether to accept the Incorporation-Based Amendments. Only if a majority did so in the first two years would the amendments become effective in any. If the amendments were adopted in Stage 1, the rules currently in UCC section 9-103 would continue to govern place of filing in Stage 2. Filers however, would be required to include corporate debtors’ states of incorporation on all filings, including continuation statements. At the end of the five year period of Stage 2, all effective filings in the system would contain reference to the debtor’s state of incorporation. At the end of Stage 2, the filing officers of the fifty states would exchange index entries. In Stage 3, all filing and searching would be in the debtor’s state of incorporation.

\textsuperscript{248} See supra note 196 and accompanying text (discussing educational costs associated with complexity of Article 9).
\textsuperscript{249} See supra note 106 and accompanying text.
\textsuperscript{250} See supra note 107 and accompanying text.
\textsuperscript{251} See supra part V.B.
incorporation. At no time during this transition plan would dual filing or searching be required.

The primary weaknesses of an incorporation-based system are in its interfaces with other systems. Those include local Article 9 filing systems, local real estate filing systems, the systems for filing against individuals, and foreign filing systems. The essence of the problem is that those systems are based on filing at the location of the collateral or the debtor. So long as they remain so, incorporation-based filing will not interface smoothly with them. Ultimately, this incompatibility may be the strength, rather than the weakness, of the proposal for incorporation-based filing. Its adoption may provide the occasion for abandonment of the anachronism of local Article 9 filing\textsuperscript{252} and trigger the adoption of debtor-based filing against individuals.\textsuperscript{253} These changes in the U.S. system may catalyze similar changes throughout the world.\textsuperscript{254}

\begin{flushright}
\textsuperscript{252} See supra part IV.A.2.
\textsuperscript{253} See supra part IV.A.4.
\textsuperscript{254} See supra part IV.A.5.
\end{flushright}
Appendix A

The following table shows the number of filings that would be lost to the local filing systems as a consequence of adoption of a rule eliminating the requirement for local, non-real estate related filings against corporations.

<table>
<thead>
<tr>
<th>State</th>
<th>Number of statewide filings (from Filing Flash)</th>
<th>Number of local filings (from Filing Flash)</th>
<th>Percent of local estimated to be real estate</th>
<th>Number of local estimated to be not real estate</th>
<th>Percent of local estimated to be corporate</th>
<th>Number of local corporate not real estate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Alternative States</strong>&lt;sup&gt;255&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connecticut</td>
<td>33,000</td>
<td>47,000</td>
<td>100.0%</td>
<td>0</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Delaware</td>
<td>10,000</td>
<td>5,000</td>
<td>100.0%</td>
<td>0</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Idaho</td>
<td>48,000</td>
<td>3,000</td>
<td>100.0%</td>
<td>0</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Iowa</td>
<td>65,000</td>
<td>31,000</td>
<td>100.0%</td>
<td>0</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Maine</td>
<td>37,000</td>
<td>24,000</td>
<td>100.0%</td>
<td>0</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Oregon</td>
<td>47,000</td>
<td>8,000</td>
<td>100.0%</td>
<td>0</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Utah</td>
<td>36,000</td>
<td>7,000</td>
<td>100.0%</td>
<td>0</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Washington</td>
<td>84,000</td>
<td>25,000</td>
<td>100.0%</td>
<td>0</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td><strong>Second Alternative States</strong>&lt;sup&gt;256&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alabama</td>
<td>37,000</td>
<td>82,000</td>
<td>29.4%</td>
<td>57,592</td>
<td>35%</td>
<td>20,262</td>
</tr>
<tr>
<td>Alaska</td>
<td>15,000</td>
<td>15,000</td>
<td>29.4%</td>
<td>10,590</td>
<td>35%</td>
<td>3,707</td>
</tr>
<tr>
<td>Arizona</td>
<td>31,000</td>
<td>48,000</td>
<td>29.4%</td>
<td>33,888</td>
<td>35%</td>
<td>11,661</td>
</tr>
<tr>
<td>California</td>
<td>218,000</td>
<td>75,000</td>
<td>29.4%</td>
<td>52,950</td>
<td>35%</td>
<td>18,533</td>
</tr>
<tr>
<td>Colorado</td>
<td>41,000</td>
<td>58,000</td>
<td>29.4%</td>
<td>40,948</td>
<td>35%</td>
<td>14,332</td>
</tr>
<tr>
<td>Florida</td>
<td>144,000</td>
<td>123,000</td>
<td>29.4%</td>
<td>86,838</td>
<td>35%</td>
<td>30,393</td>
</tr>
<tr>
<td>Illinois</td>
<td>97,000</td>
<td>131,000</td>
<td>29.4%</td>
<td>92,486</td>
<td>35%</td>
<td>32,370</td>
</tr>
<tr>
<td>Indiana</td>
<td>48,000</td>
<td>164,000</td>
<td>29.4%</td>
<td>115,784</td>
<td>35%</td>
<td>40,524</td>
</tr>
<tr>
<td>Kansas</td>
<td>55,000</td>
<td>64,000</td>
<td>29.4%</td>
<td>45,184</td>
<td>35%</td>
<td>15,814</td>
</tr>
<tr>
<td>Michigan</td>
<td>92,000</td>
<td>123,000</td>
<td>29.4%</td>
<td>86,838</td>
<td>35%</td>
<td>30,393</td>
</tr>
<tr>
<td>Minnesota</td>
<td>62,000</td>
<td>157,000</td>
<td>29.4%</td>
<td>110,842</td>
<td>35%</td>
<td>38,795</td>
</tr>
<tr>
<td>Montana</td>
<td>12,000</td>
<td>16,000</td>
<td>29.4%</td>
<td>11,296</td>
<td>35%</td>
<td>3,704</td>
</tr>
<tr>
<td>Nebraska</td>
<td>17,000</td>
<td>69,000</td>
<td>29.4%</td>
<td>44,478</td>
<td>35%</td>
<td>15,567</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>17,000</td>
<td>31,000</td>
<td>29.4%</td>
<td>21,856</td>
<td>35%</td>
<td>7,660</td>
</tr>
<tr>
<td>New Jersey</td>
<td>58,000</td>
<td>40,000</td>
<td>29.4%</td>
<td>28,240</td>
<td>35%</td>
<td>9,884</td>
</tr>
<tr>
<td>New Mexico</td>
<td>14,000</td>
<td>13,000</td>
<td>29.4%</td>
<td>9,178</td>
<td>35%</td>
<td>3,212</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>60,000</td>
<td>132,000</td>
<td>29.4%</td>
<td>93,192</td>
<td>35%</td>
<td>30,267</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>9,000</td>
<td>9,000</td>
<td>29.4%</td>
<td>6,354</td>
<td>35%</td>
<td>2,646</td>
</tr>
<tr>
<td>South Carolina</td>
<td>24,000</td>
<td>64,000</td>
<td>29.4%</td>
<td>45,184</td>
<td>35%</td>
<td>15,814</td>
</tr>
<tr>
<td>South Dakota</td>
<td>37,000</td>
<td>4,000</td>
<td>29.4%</td>
<td>2,624</td>
<td>35%</td>
<td>988</td>
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<tr>
<td>Tennessee</td>
<td>47,000</td>
<td>161,000</td>
<td>29.4%</td>
<td>133,666</td>
<td>35%</td>
<td>39,783</td>
</tr>
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<td>Texas</td>
<td>252,000</td>
<td>97,000</td>
<td>29.4%</td>
<td>68,482</td>
<td>35%</td>
<td>23,956</td>
</tr>
<tr>
<td>West Virginia</td>
<td>22,000</td>
<td>45,000</td>
<td>29.4%</td>
<td>31,770</td>
<td>35%</td>
<td>11,120</td>
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<tr>
<td>Wisconsin</td>
<td>51,000</td>
<td>149,000</td>
<td>29.4%</td>
<td>105,194</td>
<td>35%</td>
<td>36,818</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,481,000</td>
<td>1,584,000</td>
<td>100.0%</td>
<td>1,315,984</td>
<td>35%</td>
<td>460,594</td>
</tr>
</tbody>
</table>

255. Those states that have adopted the first alternative in UCC § 9-401(1).
256. Those states that have adopted the second alternative in UCC § 9-401.
Third Alternative States

<table>
<thead>
<tr>
<th>State</th>
<th>1993 Filed</th>
<th>1994 Filed</th>
<th>1995 Filed</th>
<th>1996 Filed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>50,000</td>
<td>99,000</td>
<td>15.1%</td>
<td>84,051</td>
</tr>
<tr>
<td>Maryland</td>
<td>31,000</td>
<td>71,000</td>
<td>15.1%</td>
<td>60,279</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>51,000</td>
<td>83,000</td>
<td>15.1%</td>
<td>70,467</td>
</tr>
<tr>
<td>Mississippi</td>
<td>47,000</td>
<td>132,000</td>
<td>15.1%</td>
<td>112,066</td>
</tr>
<tr>
<td>Missouri</td>
<td>57,000</td>
<td>132,000</td>
<td>15.1%</td>
<td>112,068</td>
</tr>
<tr>
<td>Nevada</td>
<td>14,000</td>
<td>12,000</td>
<td>15.1%</td>
<td>10,188</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>73,000</td>
<td>104,000</td>
<td>15.1%</td>
<td>88,296</td>
</tr>
<tr>
<td>New York</td>
<td>147,000</td>
<td>310,000</td>
<td>15.1%</td>
<td>263,190</td>
</tr>
<tr>
<td>North Carolina</td>
<td>62,000</td>
<td>173,000</td>
<td>15.1%</td>
<td>146,877</td>
</tr>
<tr>
<td>Ohio</td>
<td>80,000</td>
<td>230,000</td>
<td>15.1%</td>
<td>195,270</td>
</tr>
<tr>
<td>Vermont</td>
<td>10,000</td>
<td>15,000</td>
<td>15.1%</td>
<td>12,735</td>
</tr>
<tr>
<td>Virginia</td>
<td>41,000</td>
<td>95,000</td>
<td>15.1%</td>
<td>80,655</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>683,000</strong></td>
<td><strong>1,456,000</strong></td>
<td><strong>1,236,144</strong></td>
<td><strong>772,947</strong></td>
</tr>
</tbody>
</table>

**States adopting a non-uniform UCC § 9-401**

<table>
<thead>
<tr>
<th>State</th>
<th>1993 Filed</th>
<th>1994 Filed</th>
<th>1995 Filed</th>
<th>1996 Filed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgia</td>
<td>224,000</td>
<td>158,144</td>
<td>35%</td>
<td>55,350</td>
</tr>
<tr>
<td>Hawaii</td>
<td>11,000</td>
<td>7,766</td>
<td>35%</td>
<td>2,718</td>
</tr>
<tr>
<td>Kentucky</td>
<td>81,000</td>
<td>57,186</td>
<td>35%</td>
<td>20,015</td>
</tr>
<tr>
<td>Louisiana</td>
<td>19,000</td>
<td>13,414</td>
<td>35%</td>
<td>4,695</td>
</tr>
<tr>
<td>North Dakota</td>
<td>50,000</td>
<td>35,300</td>
<td>35%</td>
<td>12,355</td>
</tr>
<tr>
<td>Wyoming</td>
<td>77,000</td>
<td>54,362</td>
<td>35%</td>
<td>19,027</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>462,000</strong></td>
<td><strong>114,160</strong></td>
<td><strong>35%</strong></td>
<td><strong>19,027</strong></td>
</tr>
</tbody>
</table>

Reduction in local filings: 1,347,701

The "reduction in local filings" is the number by which annual local filings would be reduced pursuant to a rule that required local filing against corporations only for real estate related collateral. Presumably, such a rule would cause no reduction in states that have adopted the first alternative subsection (1) of UCC § 9-401. That alternative requires local filings only for real estate related property; such filings would continue to be made locally even after the switch to an incorporation-based system.

The numbers of local filings shown in the third column of Table A-1 are estimates made by Carl Ernst on the basis of his surveys of local filing offices. In 1993, an estimated 1,864,000 local filings were made in the twenty-four Second Alternative States. Assuming the same proportion of real estate related filings in Second Alternative States as in First Alternative

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257. Those states that have adopted the third alternative in UCC § 9-401.
258. Carl Ernst estimates the total number of local filings in Kentucky at 581,000, but estimates that 500,000 of those filings are against automobiles. I have assumed that those 500,000 filings would remain in Kentucky's local system, but Kentucky might choose to shift them to its certificate of title system.
259. Ernst conducted a survey of all local filing officers regarding the numbers of filings made in 1993. He estimates filings in counties from which he receives no response on the basis of filings in counties for which he does receive a response.
States (29.4%). 260 1,315,984 non-real estate related filings were made in the local systems of Second Alternative States. 261

Based on a random sample of filings in the Texas County UCC database, 35% of the non-real estate filings in the local UCC systems of those states are filings against registered entities, amounting to 460,594 local filings against registered entities. 262

The six states that have adopted non-uniform provisions governing local filings 263 most closely resemble Second Alternative States. I therefore applied the same protocols to estimate their non-real estate local filings. 264 These states add 114,160 non-real estate related local filings against registered entities to the overall estimate.

In the twelve Third Alternative States, 1,456,000 local filings were made. Assuming the same proportion of non-dual real estate related filings in Third Alternative States as in First Alternative States (29.4% of local filings), 265 1,236,144 non-real estate related local filings were made, amounting to 84.9% of all local filings. 266 Based on a random sample of filings in the New

260. There are 150,000 real estate related filings in the eight states that have adopted the first alternative UCC § 9-401(1). That is 29.4% of the 510,000 total UCC filings in the state and local systems of those states. See supra Table A-1.

261. See supra Table A-1.

262. Id.

263. The states are Georgia, Hawaii, Kentucky, Louisiana, North Dakota, and Wyoming.

264. I adjusted for the fact that Kentucky has a large number of filings against automobiles, which would not be affected by the change to incorporation-based filing. See supra note 258 (discussing Kentucky).

265. There are 150,000 real estate related filings in the eight states that have adopted the first alternative UCC § 9-401(1). That is 29.4% of the 510,000 total UCC filings in the state and local systems of those states. See supra Table A-1.

266. See supra Table A-1. My method for estimating how many of the 1,456,000 local filings in Alternative 3 states are real estate related filings was to first determine the number of “base” local filings—local filings that do not result from dual filing. I then assumed that real estate filings comprised the same proportion of base local filings in Alternative 3 states that they did of all local filings in Alternative 1 states, 29.4%.

To determine the number of local filings that are dual filings, I assumed that base local filings comprised the same proportion of base filings (defined as state and base local filings, that is, the number of different filings made in a state) in Alternative 3 states that they did in Alternative 2 states, 56.1%. (1,864,000 divided by 1,864,000 plus 1,461,000.) I used Alternative 2 states for the comparison, because their local filings include real estate, consumer and farm filings, the same composition as the base local filings in Alternative 3 states. From these assumptions, I calculated the estimated number of real estate filings in Alternative 3 states as follows:
York City UCC database,\textsuperscript{267} 67% of the non-real estate filings in the local UCC systems, or 772,947 filings, are filings against registered entities.

\[
\begin{align*}
L &= \text{Base local filings} \\
S &= \text{State filings}
\end{align*}
\]

I have assumed that \( L = 56.1\% \) (\( S + L \)), from which we can derive that \( L = 127.9\% \) \( S \). As \( S = 663,000 \), \( L \) must equal 748,527. Thus the percentage of reported local filings that are base local filings is 748,527 / 1,456,000 or 51.4%. (The remainder, 707,473, are dual filings that duplicate filings made at the state level.) If 29.4% of these base local filings are real estate filings, the percentage of reported local filings that are real estate filings is 51.4\% \times 29.4\% or 15.1\%.

As a check on the plausibility of this figure, I obtained from Carl Ernst data on the numbers of local UCC filings made in the offices of the Prothonotaries and Recorders of Deeds in 33 counties in Pennsylvania. (In Pennsylvania, real estate related UCC filings are made in the office of the Recorder of Deeds and non-real estate related filings are made in the office of the Prothonotary.) Filings in the office of the Recorder of Deeds totaled 9,604; filings in the office of the Prothonotary totaled 42,201. Thus, filings in the office of the Recorder of Deeds totaled 18.5\% of all local filings. This figure is somewhat higher than my 15.1\% estimate, but not inconsistent with it. The proportion of real estate filings can be expected to vary from place to place with the type of collateral in the region. Among the 33 Pennsylvania counties, the proportion of real estate filings ranged from a low of 1.8\% in Bradford County to a high of 35.4\% in Lycoming County. I used the 15.1\% figure in making my estimate because it rests on a broader base of data.

267. This estimate is based on analysis of a random sample of 400 filings drawn from approximately 122,000 documents filed in the New York City UCC filing system during 1993. We drew this sample from the NYCUCC database on LE\textsuperscript{X}IS by running a search for documents dated 1993. We divided the universe of documents by the sample size desired, which yielded the quotient 306. We then generated a random number between 1 and 306, which was 163. We included in our sample the 163rd document returned on the search and every 306th document thereafter. Of the 400 filings, 173 (43.3\%) were against registered entities, 206 (51.5\%) were against nonregistered entities, 20 (5\%) were against entities that may or may not have been registered, and one (0.25\%) was against both a registered and a nonregistered entity.

The proportion of filings against registered entities in the New York City system may be atypical of local filing systems in that it contains filings against interests in cooperatives. Those filings would be in the non-UCC real property records in other states. If the 124 filings solely against cooperatives are removed from the New York City sample, 172 (62.3\%) of the 276 filings remaining are against registered entities, 83 (30.1\%) were against nonregistered entities, 20 (7.2\%) were against entities that may or may not have been registered, and one (0.4\%) was against both a registered and a nonregistered entity.

If we remove from the sample the 20 filings with respect to which we were unable to determine the nature of the debtor, 67.2\% of the filings were solely against a registered entity. These are the filings that would no longer be made if local filing against corporate debtors were not required.
Table A-2 summarizes the results of my comparison of collateral-based, debtor-based, and incorporation-based filing systems. The key columns are (2), (4), and (5), which describe the characteristics of the current and proposed systems, respectively. Column (3) shows the characteristics of a system no one advocates—filing entirely at the location of the collateral. I include it for its value in understanding column (2), which is a combination of the systems described in columns (3) and (4). Column (4) is the system the Article 9 Study Group recommended, with all filing at the place where the debtor is located. Column (5) is the system I propose and that the Article 9 Drafting Committee has tentatively decided to adopt, filing at the place of incorporation. The most important bases for comparison are on rows (1), (6), and (15) of the table.

<table>
<thead>
<tr>
<th>Basis for comparison</th>
<th>Collateral and debtor-based</th>
<th>Collateral-based</th>
<th>Debtor-based</th>
<th>Incorporation-based</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Difficulty of determining where to file, III.A.1.</td>
<td>Filer must classify goods as ordinary or mobile, then determine location of collateral or debtor</td>
<td>Filer must determine location of collateral, hazards are 9-103(1)(c), goods temporarily in state, and remote goods</td>
<td>Filer must determine location of debtor, hazards are competing legal standards and the parent-subsidiary problem</td>
<td>Filer need only determine debtor's state of incorporation</td>
</tr>
<tr>
<td>(2) Feedback on the accuracy of filing, III.A.2.</td>
<td>No useful feedback</td>
<td>No useful feedback</td>
<td>Weak echo effect from other filings at location of the debtor</td>
<td>Strong echo effect and near perfect error trapping</td>
</tr>
<tr>
<td>(3) Proving the filing is in the right system, III.A.3.</td>
<td>Must prove goods ordinary or mobile and then the facts in the next two columns</td>
<td>Must prove both the location of the collateral and the debtor's intention as of the date of filing</td>
<td>Must prove the highly subjective location of the debtor as of the date of filing</td>
<td>Creditor can prove incorporation in the state at time of filing with a certification obtained at the time of trial</td>
</tr>
<tr>
<td>(4) Convenience in filing — number of out of state filings, III.A.4.</td>
<td>Slightly more convenient, see column (4)</td>
<td>Probably more convenient</td>
<td>Probably less convenient</td>
<td>Less convenient, results in about a 1.3% increase in out-of-state filings</td>
</tr>
<tr>
<td>(5) Convenience in filing — number of filings per transaction, III.A.4.</td>
<td>Combines all the problems of (2) and (3)</td>
<td>Requires filings in all states where collateral is located</td>
<td>May require a few extra filings where debtor may be located</td>
<td>One filing per transaction. Problem of individual and foreign corporation in same transaction is minimal</td>
</tr>
<tr>
<td>(1) Basis for comparison</td>
<td>(2) Collateral and debtor-based</td>
<td>(3) Collateral-based</td>
<td>(4) Debtor-based</td>
<td>(5) Incorporation-based</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>(6) Changes in the conditions that controlled filing, III.B.</td>
<td>Filers must monitor for movements of collateral and debtors, searchers must know where both have been</td>
<td>Filers must monitor for movement of collateral, searchers must know where collateral has been</td>
<td>Filers must monitor for movement of debtors, searchers must know where debtors have been</td>
<td>No monitoring necessary</td>
</tr>
<tr>
<td>(7) Difficulty of searching, III.C.</td>
<td>Searches must be conducted in multiple systems, multiple items of off-record information required</td>
<td>Same as (1)</td>
<td>Same as (1)</td>
<td>Search need only be conducted in one system, ownership of collateral is only off-record information needed</td>
</tr>
<tr>
<td>(8) Interface with corporation records, IV.A.1.</td>
<td>Searcher must relate to corporate records of all states</td>
<td>Same as (1)</td>
<td>Same as (1)</td>
<td>Searcher need only relate to corporate records of search state, electronic link is possible</td>
</tr>
<tr>
<td>(9) Interface with local filing systems, IV.A.2.</td>
<td>State and local filing is in same state</td>
<td>Same as (1)</td>
<td>Same as (1)</td>
<td>6.6% of local filings might not be in same state with statewide filing</td>
</tr>
<tr>
<td>(10) Interface with real estate systems, IV.A.3.</td>
<td>State and local filings are usually proximate to real estate system</td>
<td>State and local filings are always proximate to real estate system</td>
<td>State and local filings may be in different state from real estate system</td>
<td>Same as (3)</td>
</tr>
<tr>
<td>(11) Interface with filings against individuals, IV.A.4.</td>
<td>Corporate and individual filings abide by consistent rules</td>
<td>Same as (1)</td>
<td>Same as (1)</td>
<td>Corporate filings are incorporation-based, individual filings are on some other basis</td>
</tr>
<tr>
<td>(12) Interface with foreign filing systems, IV.A.5.</td>
<td>Domestic rule is sometimes inconsistent with the international rule; U.S. will be the same as most foreign systems</td>
<td>Domestic rule will be consistent with international rule; U.S. system will be the same as most foreign systems</td>
<td>Domestic rule will be inconsistent with international rule; U.S. system will be different from most foreign systems</td>
<td>Domestic rule will be inconsistent with international rule; U.S. system will be different from all foreign systems</td>
</tr>
<tr>
<td>(13) Potential for competition among systems, IV.B.</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Some</td>
</tr>
<tr>
<td>(14) Transition to the future, IV.C.</td>
<td>Employed distinctions that will disappear over time</td>
<td>Same as (1)</td>
<td>Same as (1)</td>
<td>Employed distinctions that will be permanently useful</td>
</tr>
<tr>
<td>(15) Risk and difficulty of transition, V.</td>
<td>No transition required</td>
<td>[Change to this system is not under consideration]</td>
<td>Risk of incomplete conversion exists; transition difficult</td>
<td>Risk of incomplete conversion exists; transition difficult</td>
</tr>
</tbody>
</table>