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Comment

An Argument for Expanding the Application of Rule 53(b) to Facilitate Reference of the Special Master in Electronic Data Discovery

by Richard H. Agins*

"[S]pecial masters can help redress the imbalance of resources that demoralizes a court that is confronted by the squads of lawyers and masses of data that invariably accompany major cases."[1]

"It is no longer a question of whether or not electronic data will be targeted in a given litigation. Now it is a question of when and how it will be done."[2]

"Yahoo!, one of the big Internet service providers, gets so many subpoenas today for e-mail that they have a separate fax line set up just for subpoenas."[3]

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1. WAYNE D. BRAZIL ET AL., MANAGING COMPLEX LITIGATION: A PRACTICAL GUIDE TO THE USE OF SPECIAL MASTERS 5 (American Bar Foundation 1983).

2. Symposium, *Lawyers Online: Discovery, Privilege, and the Prudent Practitioner*, 3 B.U. J. SCI. & TECH. L. 5, para. 5 (1997) (comments of John Jessen) [hereinafter Symposium].

3. John Jessen, *Special Issues Involving Electronic Discovery*, 9 KAN. J. L. & PUB. POL'Y 425, 437 (2000).

Abstract

The volume and volatility of computer generated data present novel problems of evidentiary discovery, requiring the employment of a neutral party with the requisite technical, legal, and business experience to provide effective oversight and management. A special master, referred to serve as an impartial officer of the court pursuant to Rule 53 of the Federal Rules of Civil Procedure, can bring a greater level of specialized knowledge, flexibility, involvement, and efficiency to pretrial discovery of electronically generated and stored data ("electronic data") than can most trial court judges burdened with managing a full docket.

Introduction

Robust commercial expansion during the past fifty years and the rapid growth of personal computing have together spawned a previously unimaginable volume of electronic data. As the basis of our economy shifts increasingly from manufacturing to information transfer and technology development, this proliferation of data is likely to continue unabated. Much of the information resulting from casual electronic communication is of transitory importance and may readily be discarded. But the majority of commercial data must be retained, either for use by the originating entity or for review by state and federal regulatory agencies. Pursuant to the Federal Rules of Civil Procedure ("FRCP" or "Rules of Procedure") this data is subject to discovery,[4] and as the volume of data expands, the problems of discovery become both more numerous and more complex. This trend suggests the need for intervention by individuals possessing both specialized technical knowledge and procedural and substantive legal knowledge.

Businesses and individuals regularly generate electronic data with no thought either for the challenge presented by its

4. FED. R. CIV. P. 26(a)(1) provides that:

a party must, without awaiting a discovery request, provide to other parties: (B) a copy of, or a description by category and location of, all documents, data compilations, and tangible things that are in the possession, custody, or control of the party and that the disclosing party may use to support its claims or defenses, unless solely for impeachment[.]

sheer volume or for the need to maintain confidentiality. When ostensibly private information becomes the subject of a pretrial discovery request, the uncontrolled generation of electronic data assumes vastly increased importance.[5] In considering an expanded role for the special master[6] in managing electronic data discovery, this Note will touch upon the problems and pitfalls resulting from lax institutional management and control of electronic data, including spoliation of evidence and breach of confidentiality.

Special masters are referred pursuant to Federal Rule of Civil Procedure 53(b), which states in relevant part that:

> A reference to a master shall be the exception and not the rule. In actions to be tried by a jury, a reference shall be made only when the issues are complicated; in actions to be tried without a jury, save in matters of account and of difficult computation of damages, a reference shall be made only upon a showing that some exceptional condition requires it.[7]

Thus, the determinative question under Rule 53 is whether on a trial by jury the issues are sufficiently complicated, or whether on a bench trial there exists an exceptional condition, such that the court may refer a master to manage discovery or other aspects of the case. In addressing these limitations this Note will consider the following additional questions:

- What is the present ability of the judiciary to oversee electronic discovery in the face of the ever-increasing scale of litigation, and will evolving computer expertise within the judiciary render the need for extrajudicial assistance merely a transitory phenomenon?
- What role can the special master fulfill in overseeing discovery of electronic evidence, and how narrowly should this responsibility be construed?
- Are the rules that presently govern the reference of special masters sufficient to cope with the rigors of modern litigation practice arising from electronic discovery?

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5. Electronic discovery expert, John Jessen, relates the story of a meeting with the president of a corporate client, who could not fathom that his company generated twenty-two million e-mail messages *per week*. *See* Jessen, *supra* note 3, at 427-34.

6. The terms "master" and "special master" are used interchangeably in this Note, as they are in practice.

7. FED. R. CIV. P. 53(b).

- What modification to the Federal Rules of Civil Procedure, if any, is appropriate in response to the demands posed by electronic discovery?

Because district court judges must hear and rule on many cases simultaneously, the Rules of Procedure provide a means for delegation of certain limited aspects of case management to non-judges, freeing Article III judges to perform those tasks that they alone are permitted to discharge. *Rule 53 - Masters*, governs, inter alia, the assignment or "reference" of a master by the district court judge to manage tasks such as discovery in complex litigation.[8] Note, however, that Rule 53 does not grant judges unbridled discretion to delegate responsibility. Rather, it specifically imposes the requirement that "[a] reference to a master shall be the exception and not the rule."[9] This seemingly straightforward mandate, intended to retain the responsibility for case management firmly within the judge's grasp, has given rise to much creative interpretation.

Lawyers and jurists often are called upon to theorize how the framers of legislation would have treated a present-day fact pattern had it occurred at the time the legislation was enacted. We must adopt this same theoretical, historical stance in interpreting the word "exception" within Rule 53(b). The commercial climate of 1937 (or of the earlier Equity rules, from which Rule 53 is derived) was very different from that of today, owing largely to changes in scale and technology spawned by subsequent computerization. Accordingly, the meaning of "exceptional condition" must be construed in light of the litigation climate of the 1930s rather than through the contextual lens of the year 2003.[10]

The drafters of the Federal Rules of Civil Procedure, adopted originally in the 1930s, could not have envisioned how computerization would affect their newly created body of procedural law. Fortunately, our legal system permits, and in fact

8. *See* FED. R. CIV. P. 53.

9. FED. R. CIV. P. 53(b).

10. Because the determination of what constitutes an "exceptional condition" is a matter of fact and of degree, today's court must evaluate whether the discovery demands of a case present a greater degree of difficulty than other similar cases heard by the court, or more exactly, whether a group of cases share factual similarities that present a more complex discovery scenario than all other cases.

expects, that our legislators will effect changes in the law in response to evolving requirements of our society. As we shall see, nowhere are these evolving requirements more demanding of statutory modification than in the area of electronic data discovery management. Conditions considered exceptional in the 1930s may occur today with far greater regularity because of the proliferation of electronic evidence and because of our transition from manufacturing to an information-based society. Accordingly, the involvement of a master in sorting out and managing the substance of discovery may be appropriate under far broader circumstances than in the past.

As its principal undertaking, this Note will reconsider the "exceptional condition" requirement of Rule 53(b) in light of the demands placed on federal judges by the accelerating growth of electronic data discovery. Further, it will propose revised wording of the Rule to enable reference of a special master under broader circumstances than at present, without resort to the transparent contrivances so often relied upon. In the course of our analysis, we will consider the characteristics of the electronic data processing ("EDP") environment that militate in favor of involving a specially qualified court officer, such as a special master, in the discovery phase of litigation.

Background

Managing the Discovery Process

Although the Rules of Procedure characterize discovery as a cooperative process, it is in fact highly adversarial and presents substantial opportunity for overreaching and abuse. As the volume of data increases, and as retrieval of that data becomes easier, the potential for abuse increases correspondingly.

It has been noted that:

> [t]he processing tools required to make use of vast amounts of electronic data exist in the form of powerful, inexpensive microcomputers . . . [that] did not exist 10 or 15 years ago. Today, we have hardware and software tools that can be used to identify, locate, retrieve, and review large volumes of disparate data sets.[11]

11. Symposium, *supra* note 2, at para. 7 (comments of John Jessen).

Courts have accepted this newfound ability to sift through huge quantities of electronic data efficiently, but have done so without first acquiring a thorough understanding of the EDP environment. Therefore, "courts are approaching electronic data in a way no one could have anticipated, by allowing discovery of backup systems consisting of hundreds of thousands of tapes."[12] There is substantial evidence that the judiciary has scant understanding of EDP and of the excessive burden that may be imposed upon litigants by merely extending the rationale of traditional discovery to a computerized environment.[13] Those judges who have the requisite understanding of EDP can curtail overly broad requests for the production of electronic data by invoking Federal Rule of Civil Procedure 26(b)(2), which provides that:

> [t]he frequency or extent of use of the discovery methods otherwise permitted under these rules . . . shall be limited by the court if it determines that (i) the discovery sought is unreasonably cumulative or duplicative, or is obtainable from some other source that is more convenient, less burdensome, or less expensive . . . .[14]

Even judges lacking an understanding of EDP must, at a minimum, acknowledge the need to safeguard litigants' due process rights by (1) employing adequate procedural controls covering electronic data discovery requests, and (2) applying the same standards of reasonableness as those used for evaluating paper-based discovery. This prompts the dual inquiries, "What is reasonable?" and "Who should make this determination?" Clearly, an individual with substantial understanding of both the legal system and the intricacies of commercial EDP is needed to resolve these questions fairly and correctly.

This Note suggests that a properly qualified special master can provide substantial assistance to the court where electronic data discovery raises difficult questions related to the quantity or format of information, or to the maintenance of ongoing operations of the producing party while discovery is in progress.

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12. *Id.* at para. 8 (comments of John Jessen).

13. *See* Corinne L. Giacobbe, Note, *Allocating Discovery Costs in the Computer Age: Deciding Who Should Bear the Costs of Discovery of Electronically Stored Data*, 57 WASH. & LEE L. REV. 257, 300-01 (2000).

14. FED. R. CIV. P. 26(b)(2).

It is important to recognize when considering the impact of computerization upon civil discovery that the need for new discovery management protocols is the result of the format and the volume of electronic data, and not of its substantive content. Electronic discovery expert John Jessen notes in a comment reminiscent of that by the late Senator Everett Dirksen,[15] that:

> We have had about half a dozen cases now where the total number of [relevant] electronic things brought into play . . . went over one billion. A billion pieces of discovery material. Those kinds of numbers introduce a whole host of issues about scope and management. How do you manage a billion things like that in an evidentiary way? Each one is very simple . . . but a lot of small numbers start to get you. You start multiplying a second or two by a billion, you've got some serious problems.[16]

The key to successful electronic data discovery management, then, is to enlist the services of an individual with the requisite time, legal knowledge, and business skills to determine the appropriate boundaries of discovery requests, the feasibility of producing the requested data, and the apportionment of costs among the parties. This same individual must oversee the execution of the discovery process and must report his findings to the court as required by Rule 53 and as specified in the order of reference. Assuming that all the other requirements for an order of reference are fulfilled, the special master would seem to be eminently qualified for this responsibility.

Privacy Concerns and 'Meta-data'

Many United States residents act under the comforting but mistaken belief that an unrestricted right of privacy protects all of their written communications. For the most part, we feel secure in the knowledge that a letter placed in the corner mailbox will arrive at its destination unopened and unread. It is with surprise and alarm then, that we discover the unwelcome truth:

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15. Democratic Senator Everett Dirksen (1896–1969) is reputed to have commented with respect to excessive federal spending, "A billion here, a billion there, pretty soon it's real money." RESPECTFULLY QUOTED: A DICTIONARY OF QUOTATIONS REQUESTED FROM THE CONGRESSIONAL RESEARCH SERVICE (Suzy Platt ed., 1989), *available at* http://www.bartleby.com/73/800.html (last visited Dec. 3, 2003).

16. Jessen, *supra* note 3, at 428.

with a few notable exceptions[17] our electronic communications do not enjoy the same degree of privacy, as do our conventional writings.

> [T]he content of electronic data files – especially things like electronic mail – will shock and amaze. The mind-set that is brought to the electronic world by the average user forces them [sic] to take computer use in a very casual way. They often put things into a computer system that they would never put into writing on a real document . . . . They believe that if anyone got their hands on a piece of their electronic mail, privacy rights prohibit disclosure.[18]

It has been estimated that as much as eighty percent of all possible documents now sought in discovery exist only in electronic format,[19] and that these documents often contain information that would be unavailable in non-electronic format, i.e., "meta-data."[20] "[I]f you merely print out paper copies of electronic files, you may miss some of the juicier pieces of evidence."[21] Electronic mail ("e-mail") presents even more fertile ground for discovery of documents produced by unsuspecting actors. "The general practitioner doesn't know that once you hit

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17. Rule 26 of the Federal Rules of Civil Procedure confers privilege upon certain attorney work product and client communications arising from the attorney-client relationship. In *IBM v. Comdisco*, a motion to compel discovery of an e-mail communication from a business manager to a sales representative concerning legal advice received by the manager was denied because the court held that the persons involved with the communication were "outside the circle of confidentiality." 91-C-07-199, 1992 WL 52143, at *1-2 (Del. Super. Ct. Mar. 11, 1992).

18. Symposium, *supra* note 2, at para. 9 (comments of John Jessen) (citation omitted).

19. *See* Charles Christian, *Survey Shows Many London Firms in IT Fog,* N.Y. L.J., May 8, 2001, at 5.

20. "'Meta-data' is 'data about data.' That is to say, meta-data is definitional data that provides information or documentation of the data to which it refers." Christopher T. Furlow, Article, *Erogenous Zoning on the Cyber-Frontier*, 5 VA. J. L. & TECH. 7, 11 n.36 (2000) (quoting Dennis Howe, *Free On-Line Dictionary of Computing, at* http://www.nightflight.com/cgi-bin/foldoc.cgi?query=meta-data> (last visited Jan. 10, 2003)).

21. Christian, *supra* note 19, at 5. In a wrongful discharge action, for example, the plaintiff former employee will benefit by showing that a disciplinary warning allegedly written by the defendant employer prior to discharge was actually written after notice of litigation, and was backdated. Meta-data within the word processing file will clearly show the original date on which the letter was written, notwithstanding the date printed on the face of the document. This meta-data provides the proverbial "smoking gun." Christian, *supra* note 19, at 5.

'delete' and get it out of your inbox that it's not gone[.]"[22] Plaintiff's counsel seeking to discover the smoking gun should not overlook the significance of this fact, nor should corporate counsel seeking to ensure that his client never creates incriminating correspondence in the first place. Further, the master charged with overseeing discovery must be keenly aware of limitations upon the right of the requesting party to discover this data and of the corresponding obligation of the opposing party to produce it when properly requested.

Data Systems and the Role of Counsel

Until recently, attorneys have been unschooled for the most part in the techniques of electronic data processing, and have been unaware of the related discovery considerations. The transition of business to EDP, however, has made it necessary for counsel to advise clients regarding the processing, protection, and preservation of electronic data for possible future litigation. Attorneys who fail to do so unnecessarily risk facing charges of malpractice.[23] More so than ever before, the operations executive must consider the foreseeability of litigation when designing and implementing EDP systems, and both in-house and independent counsel must share these concerns actively.

Because the first priority of a business is to conduct its operations profitably and efficiently, records management and storage systems are tailored to achieve that result, rather than to afford primacy to the requirements of potential discovery. Effective counsel must take the initiative to help operations executives harmonize the performance of daily operating functions with the need to retrieve data quickly and inexpensively in the event of litigation. Failure to plan in advance for discovery may result in significant unforeseen costs and in the imposition of sanctions if the court believes that the producing party purposefully has obstructed discovery.

A balance must be achieved between a plaintiff's need for data and a defendant's cost of production. In a paper document

22. D. Ian Hopper, *Computer Sleuths Seek Enron E-mails, at* http://news.findlaw.com/20020116101116950 4.htm (last visited Jan. 17, 2002).

23. Christian, *supra* note 19, at 5.

storage environment, once the underlying structure is understood, recovery of requested documents can proceed without difficulty, albeit slowly and laboriously. By contrast, the electronic search of random access media (i.e., hard drives and removable storage devices) is relatively simple and rapid. Offsetting this advantage, however, is the fact that a serial-access archival medium such as magnetic tape does not afford the rapid search capability of random-access media. Consequently, electronic discovery often is just as burdensome as its manual counterpart, and is further unfairly encumbered by the court's misapprehension of both the feasibility and the cost of compliance. Counsel for the producing party therefore must be wary of this possibility and must immediately bring to the court's attention any undue burden imposed by the scope of the opposing party's discovery request. The special master also must understand the cost and feasibility constraints applicable to electronic discovery.

Electronic data processing has invested the notice requirements of discovery with heightened importance. In the precomputer era, discovery required searching through, or making available for search by the requesting party, the contents of the producing party's relevant files while conducting ongoing business as usual. The fact that archived records were being searched had little if any practical effect upon ongoing operations. By contrast, a computer-dependent business facing litigation must continue its EDP operations while complying with a discovery request that presupposes a static computer environment. In an EDP environment, however, electronic data is continuously modified, overwritten, and destroyed in the normal course of business, rendering illusory the concept of a static environment. This necessitates the employment of special procedures to ensure that the producing party's business may continue to operate during discovery without interruption, and also imposes an obligation upon the requesting party to provide the greatest possible advance notice of its specific requests.

The Master, The Magistrate, and The Expert

Before considering the possible expansion of the special master's role, it is necessary to review the historical context and the enabling statutory authority for the appointment of magis-

trates, masters, and experts, and to explore the differences among their functions in litigation. This is so because the court often may elect to employ one to the exclusion of the others.

"A special master or master is an individual who is appointed by the court to assist in performing specific functions in a pending action."[24] The master is required to prepare a report on the matters assigned to him, and if appropriate, of his findings of fact, for submission to the court and to the parties.[25] In non-jury actions, the court is required to accept the master's findings of fact unless they are clearly erroneous.[26] "The term master includes a referee, an auditor, an examiner and an assessor."[27]

The underlying statutory authority for reference of a magistrate has substantive consequences. Whereas the master is empowered under the Federal Rules of Civil Procedure,[28] the magistrate judge is authorized under the United States Magistrates Act.[29] Because the magistrate is a salaried court officer his reference as a master, unlike that of the non-jurist, imposes no additional expense upon the parties and, accordingly, does not require their consent.[30] Further, because the statutory ap-

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24. JAMES W. MOORE ET AL., MOORE'S FEDERAL PRACTICE ¶ 53.05 (2001).

25. *See* FED. R. CIV. P. 53(e)(1).

26. *See* FED. R. CIV. P. 53(e)(2).

27. MOORE ET AL., *supra* note 24, ¶ 53.05.

28. *See* FED. R. CIV. P. 53.

29. *See* 28 U.S.C. §§ 631-639 (2003).

30. MOORE ET AL., *supra* note 24, ¶ 53.05. In his exhaustive treatment of the reference of special masters in *Managing Complex Litigation: A Practical Guide to the Use of Special Masters*, Professor Wayne D. Brazil considers whether, despite the consent of the parties, the imposition of the "exceptional condition" requirement by Rule 53 nonetheless must be met. BRAZIL ET AL., *supra* note 1, at 307.

> While it is not clear that the Supreme Court would hold that the exceptional condition requirement is as difficult to satisfy for pretrial references as for trial-stage appointments, it is clear that district judges who wanted to delegate pretrial tasks would have substantially less freedom if they were constrained by Rule 53(b).

BRAZIL ET AL., *supra* note 1, at 316 (footnotes omitted). Rule 53(b) articulates the "exception not the rule" constraint imposed upon reference of a master, but also announces that "[u]pon the consent of the parties, a magistrate judge may be designated to serve as a special master without regard to the provisions of this subdivision." FED. R. CIV. P. 53(b). It is noteworthy that the Magistrates Act permits appointment of a magistrate as master without the consent of the parties while Rule 53 suggests that the consent of the litigants lifts the strictures upon appointment of a master, the absence of an exceptional condition notwithstanding. It is

pointment of a magistrate does not contain the "exceptional condition" requirement found in Rule 53(b), the district judge enjoys greater latitude in appointing a magistrate to serve as a master.

As a subordinate judicial officer, the magistrate may "relieve a district court of specified functions (such as hearing and determining non-dispositive pretrial matters and submitting proposed findings of fact and recommendations for rulings on case-dispositive motions) but may not perform final adjudicative [i.e., Article III] functions . . . ."[31] This expanded power, coupled with cost savings to the parties, enhances the attractiveness of choosing a magistrate with the requisite knowledge and skills to serve as master.

The magistrate has broader powers and authority than his non-jurist counterpart and therefore, can be of greater assistance to the district judge in certain respects than can the special master. But this benefit comes with a countervailing cost. The court system, rather than the parties, absorbs the cost of the magistrate's services, thereby imposing an additional expense on taxpayers who already are obliged to provide the litigants with a no-cost forum for dispute resolution. In balancing these factors, the district court judge will have to consider the needs of his court, the relative financial resources of the litigants and other issues of fairness, as well as constitutional guarantees of due process.[32]

The third adjunct to the discovery process is the court-appointed expert, whose function is to assist in the evaluation of technical issues. In the realm of electronic data discovery, the expert will need to possess knowledge of business management systems and procedures, and of the technical aspects of electronic data processing, retrieval, and storage. Because this may

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among the principal purposes of this Note to consider these conflicting requirements and to conclude whether the challenges of electronic discovery, per se, constitute such "exceptional condition."

31. MOORE ET AL., *supra* note 24, ¶ 53.05.

32. "[T]here are doctrines, rights, and policies that confine how judges may exercise [their] power when appointing a special master. Among the most obvious of these are Article III, the Seventh Amendment right of trial by jury, the due process clause of the Fifth Amendment, and the equal protection norm that the Supreme Court has found implicit in that clause." BRAZIL ET AL., *supra* note 1, at 382-83 (discussing how these rights are vindicated procedurally).

be beyond the capabilities of a single advisor, the court may elect to appoint several individuals each possessing unique expertise. The expert plays an informal role that is not specifically regulated and, while he may be helpful either directly to the judge or indirectly to the special master, this type of employment should be used with caution, subject to the consent of the litigants.[33]

There are several notable differences between the expert and the special master that may bear upon a judge's choice of employment. A court-appointed expert, unlike a master, enjoys no special presumption as to his opinion and is subject to cross-examination and other discovery. The findings of the master, by contrast, can be impeached only if found clearly erroneous. Because an expert is appointed pursuant to Federal Rule of Evidence 706, he is not subject to the same "exceptional condition" requirement as the special master.[34] This may cause the judge who regularly encounters formalistic or conservative appellate review to favor the appointment of an expert over that of a master.

Unique Challenges of Electronic Data Discovery

Preservation of Data

Spoliation is among the most serious concerns confronting counsel engaged in electronic data discovery.[35] Counsel for the requesting party requires assurance that all relevant data will be preserved for discovery, while counsel for the producing party seeks confirmation that client data processing and storage operations will suffer no harm as a result of the discovery process.

The dynamic nature of EDP is such that, every time a computer is turned on, certain internal parameters (such as the date) change. Depending upon a company's normal document

33. *See* MOORE ET AL., *supra* note 24, ¶ 53.05.

34. *See id.*

35. Spoliation is defined as the wrongful loss or destruction of evidence. *See* Donald C. Massey, *Discovery of Electronic Data from Motor Carriers – Is Resistance Futile?*, 35 GONZ. L. REV. 145, 166 (1999/2000). A related definition of spoliation which gives rise to "discovery sanctions" is that a party "(1) destroys (2) discoverable matter (3) which the party knew or should have known (4) was relevant to pending, imminent, or reasonably foreseeable litigation." *See* Gates Rubber Co. v. Bando Chem. Indus., 167 F.R.D. 90, 101 (D. Colo. 1996).

retention policies, data that might be relevant to discovery may be deleted, backed-up or overwritten with no intent by the producing party to defraud, mislead or conceal. Counsel wishing to avoid allegations of negligent spoliation[36] therefore has a duty to review his client's computer policies immediately upon receipt of service of process.[37] As soon as potential litigation is anticipated, counsel must explore with technical staff the data processing, retention and destruction protocols to be observed in light of potential discovery demands. Inclusion of executive management in this phase of discussions is merely a courtesy, as they will have limited knowledge of the technical details so crucial to data preservation.

Counsel should immediately confirm that the client understands and has implemented procedures to ensure preservation of electronic data while continuing normal daily data processing routines. This may entail creating "mirror images" of hard drives, performing removable-media backups, or employing other techniques designed to "freeze" data as of the moment of the discovery request without hampering ongoing operations. "The importance [to plaintiff's counsel] of sending opposing parties notice is not only to place the duty to preserve the electronic data on the party, but also to prevent data destruction through the continued use of a computer."[38]

A successful record retention program must combine the application of sound business judgment with concern for legal consequences.[39] The Eighth Circuit, in *Levy v. Remington*, de-

36. At common law, there is a duty to preserve evidence. *Gates Rubber*, 167 F.R.D. at 101. The factors used to assess sanctions for spoliation include the availability of other evidence, culpability, prejudice, interference with the judicial process, other available sanctions, a determination whether the sanctions will adequately punish the offending party and the relative importance of the data destroyed. *Id.* Sanctions may include money damages, evidentiary restrictions, default judgment or the creation of an independent cause of action. *Id.* at 106-07.

37. *See* Kenneth J. Withers, Article, *Computer-Based Discovery in Federal Civil Litigation*, 2000 FED. CTS. L. REV. 2, II.A.2 (2000).

38. Devin Murphy, Article, *The Discovery of Electronic Data in Litigation: What Practitioners and Their Clients Need to Know*, 27 WM. MITCHELL L. REV. 1825, 1834 (2001) (citing James H. A. Pooley & David M. Shaw, *Finding Out What's There: Technical and Legal Aspects of Discovery*, 4 TEX. INTELL. PROP. L.J. 57, 60 (1995)).

39. *See* Patrick R. Grady, Comment, *Discovery of Computer Stored Documents and Computer Based Litigation Support Systems: Why Give Up More Than Necessary?*, 14 J. MARSHALL J. COMPUTER & INFO L. 523, 539 (1996).

veloped a three-pronged test for evaluating record retention programs:

- Is the program reasonable given the totality of the circumstances?
- Is there a present case concerning the documents and what are the frequency and severity of the legal issues concerning the documents?
- Did the corporation institute the record retention program in good faith?[40]

By methodically applying these criteria to all orders for data destruction, inadvertent spoliation of critical data needed for litigation can be avoided.

A significant distinction between paper and electronic data is the physical storage space that each requires. A given quantum of electronic data content will occupy far less physical space than the equivalent content of paper documentation. Accordingly, businesses create and store significantly more electronic data than they did paper files, simply because they are able to do so.[41] The logical corollary of this observation is that destruction of electronic data requires far less time, effort, and expense. Therefore, businesses routinely carry out data destruction protocols because they are simple to perform and because maintaining a manageably sized data archive speeds recovery and promotes efficiency. "And when data that can be stored is not [stored], adverse litigants quickly claim evil intent, and argue spoliation."[42]

Archival Media

The archival media employed to store data takes various forms. System-wide backups stored on magnetic tape represent the most common archival format for medium to large-sized organizations, but data also may be stored, and may therefore be discovered, on office desktop computer/workstations, notebook computers, home computers, computers of personal assistants/secretaries/staff, palmtop devices, network file servers/mainframe computers, disaster recovery backups (stored off site),

40. Levy v. Remington, 836 F.2d 1104, 1112 (8th Cir. 1988) (cited in Grady, *supra* note 39, at 539).

41. *See* Massey, *supra* note 35, at 147.

42. *Id.* at 147.

personal backups (diskettes and other portable media such as CDs and Zip/Jaz® cartridges).[43]

Because backup tapes are created to permit recovery of lost data in the event of disaster they are not sequentially optimized for retrieval of specific information. Accordingly, if a discovery request is based largely upon extraction of data from archival backups, special programs may have to be written to facilitate this task, requiring the expenditure of considerable time and money.[44] Courts have handed down widely varying decisions in such cases. Most, however, have agreed that the requesting party should bear the cost when its demands are unforeseeable or disproportionate to the benefit likely to be derived, and that the producing party must bear the cost when the request is reasonable and foreseeable. Courts have also ordered sharing of production costs.[45]

Counsel should acquire a thorough understanding of the client's data storage and retention policies and information technology capabilities in order to support his argument regarding allocation of discovery costs. This knowledge should include a review of "legacy data,"[46] an assessment of the degree to which archived data can or cannot be produced in currently machine-readable format, and the potential costs involved in producing such data.[47]

Despite the best efforts and intentions of the producing party, sometimes it may not be possible to provide archival material in the form requested, because:

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43. Sidney S. Kanazawa, *Digital Discovery: Rethinking the Purposes of Discovery,* (Pillsbury Winthrop LLP, Los Angeles, CA) Jan. 10, 2001, at 11.

44. *See* Withers, *supra* note 37, at II.E.1.

45. In *Anti-Monopoly, Inc. v. Hasbro, Inc.*, 1995 U.S. Dist. LEXIS 16355 (S.D.N.Y. 1995), the court ordered the requesting party to pay for the required programming to retrieve the data it sought from the producing party's computers. In *National Union Electric Corp. v. Matsushita Electric Industrial Co.*, 494 F. Supp. 1257 (E.D. Pa. 1980), the producing party was required to pay for the creation of a computer tape readable by the computer of the requesting party's counsel, so that the data could be properly analyzed. *In re Brand Name Prescription Drugs Antitrust Litigation*, 1995 U.S. Dist. LEXIS 8281 (N.D. Ill.), saw a court-ordered sharing of costs. *See also* Simon Prop. Group, L.P. v. mySimon, Inc., 194 F.R.D. 639 (S.D. Ind. 2000); *infra* note 69 and accompanying text.

46. Legacy data describes old data retained in a format that may not be capable of retrieval using modern hardware.

47. *See* Withers, *supra* note 37, at II.F.2.

- Unorganized backup tapes are kept as a substitute for organized archival files;
- Old data are impossible to read using current hardware and software; and
- Old data transferred to current media have lost important elements necessary to establish context or authenticity (i.e., metadata).[48]

Both the special master overseeing discovery and counsel for the opposing parties must be mindful of this eventuality and must be prepared to suggest a workaround when faced with the inaccessibility of archival data.

On-Site Inspection

Federal Rule of Civil Procedure 34(a)(2) states that:

> Any party may serve on any other party a request . . . to permit entry upon designated land or other property in the possession or control of the party upon whom the request is served for the purpose of inspecting . . . testing, or sampling the property or any designated object or operation thereon, within the scope of Rule 26(b).[49]

Reading this rule with the benefit of hindsight further prompts a consideration of the inherent differences between paper-based ("traditional") forms of discovery and computer-based discovery. The permissiveness of the Rule presents difficulties in a computerized commercial setting that could not have been anticipated when the Federal Rules of Civil Procedure were drafted.

In a traditional environment, each paper document and each file cabinet is a separately accessible and discrete unit. Inspection of an individual document may be carried out independently of, and without compromising the confidentiality of, every other document in the party's possession. This is not so in a computerized environment, in which many files reside on a single medium (hard drive, tape, floppy disk). Absent some form of express protection, the examining party may view all files whether or not they fall within the permitted scope of discovery. Granting the requesting party unregulated inspection of an opponent's computer media is highly invasive and carries

48. Withers, *supra* note 37, at II.F.1.
49. FED. R. CIV. P. 34(a)(2).

potential for substantial abuse. Further, the requesting party's ability to access directly the computer of the producing party raises the possibility of intentional or accidental manipulation and corruption of important proprietary data.[50]

The case of *Gates Rubber Company v. Bando Chemical Industries,*[51] provides a paradigmatic example of the potential for abuse that inheres in on-site inspections. Gates alleged that several of its former employees left to join Bando, taking with them certain proprietary computer programs. This misappropriation was alleged to have caused irreparable harm, proximately resulting in damages amounting to "hundreds of millions of dollars."[52] A special master appointed by the trial judge was charged with supervising the discovery phase of litigation.

The court's site inspection order permitted Gates inordinately wide latitude to examine, dissect, copy and inspect almost every site, document, desk drawer and computer in Bando's custody and control. "Gates was presented with the unprecedented opportunity to copy at will any materials which the lawyers believed may be relevant to the purposes of their inquiry."[53] Gates' lawyers came to suspect during the course of this discovery that certain computerized information had been erased, which led to a series of motions and counter-motions seeking sanctions against each party. The hearing of the sanctions phase alone consumed six weeks of evidence and testimony and produced pleadings, exhibits, documents, and deposition excerpts filling fifty three-ring binders.

In the course of the proceedings, Gates' technical expert loaded Norton's "Unerase"[54] program onto Bando's computer and in the process of doing so, randomly erased seven to eight percent of the hard drive's contents. Cross-allegations of destruction of documents and software applications followed, but

50. *See* Withers, *supra* note 37, at II.G.1.

51. 167 F.R.D. 90 (D. Colo. 1996).

52. *Id.* at 99.

53. *Id.* at 100.

54. Norton's "Unerase" is a software application used to recover digital information previously deleted from a computer's hard drive directory. In order to function, the application must be installed on the drive from which the information is sought to be recovered, thereby displacing data occupying a similar amount of disk space.

ultimately, the court found no wrongdoing involving spoliation of data. The court did find, however, that sixty-five percent of the claims brought by Gates against Bando were unfounded, and accordingly it awarded costs (after offset) to Bando for defense of those claims.

If there is a moral to this story, it is that computer-based discovery can be highly disruptive and "massive,"[55] and that parties must employ the most highly qualified computer experts to aid in the prosecution or defense of their cases. The lessons learned from *Gates Rubber* have prompted federal courts to establish computer inspection protocols designed to avoid data destruction claims.[56] In each of the cases applying such protocols[57] the court has ordered a variant of the following procedures:

1. The parties must agree upon a neutral, third party expert who, as an officer of the court, will perform the inspection.
2. The parties, with expert assistance, must agree upon the scope of the inspection including target computers or servers, target individuals, departments, or data collections; data ranges; search terms; or other defining criteria. They must also agree upon the eventual form of production.
3. The expert will create a "mirror image"[58] of the computer data using accepted computer forensic procedures that preserve the integrity of the original evidence.

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55. *See Gates Rubber*, 167 F.R.D. at 117.

56. *See* Withers, *supra* note 37, at II.G.3.

57. *See, e.g.*, Northwest Airlines, Inc. v. Local 2000 Int'l Bhd. of Teamsters, Civil Action No. 00-08 (D. Minn. Feb. 2, 2000) (Order on Defendants' Motion for Protective Order and Plaintiff's Motion to Compel Discovery); Simon Prop. Group, L.P. v. mySimon, Inc., 194 F.R.D. 639 (S.D. Ind. 2000) (*cited in* Withers, *supra* note 37, at II.G.3); Playboy Enters., Inc. v. Welles, 60 F. Supp. 2d 1050 (S.D. Cal. 1999).

58. A mirror image is an exact copy of a computer medium, rather than a file-by-file copy of data contained in the medium. The difference between these two approaches is significant because a mirror image will contain meta-data and fragments of deleted files, both of which may be relevant in revealing evidence of attempted data destruction. A further benefit of creating a mirror image is that it captures the operations of a business frozen at a specific point in time. Thus, data inspection and manipulation can be performed on the mirror image without preventing continued operation of the producing party's business. It is most important to understand that this mirror image may contain non-relevant and privileged data that the requesting party has no legitimated interest in inspecting. For this reason, the mirror image must remain in the custody of a neutral third party such as a special master or court-appointed expert, as a substitute for redaction,

4. The expert will execute the search on the "mirror image" and will identify relevant data according to the agreed-upon criteria.
5. The expert will turn over the responsive data to the respondent's counsel who will review it for relevance and privilege.
6. Respondent's counsel will produce relevant, non-privileged data to the requesting party in the form agreed upon by the parties.[59]

Because this is a "managed" procedure, there is increased likelihood that disagreements arising between the parties will be substantive rather than procedural. Such protocols invite close supervision to ensure that the negotiations reach a satisfactory conclusion and that the resulting inspection agreement is subsequently observed. And because the negotiating process is time-consuming, it will receive more thoughtful consideration under the full attention of a master than through a hurried determination by an overburdened judge.

Form of Production

In the pre-computer era, discovery data was provided in original written form or by means of photocopies, photographs, or transcriptions. Today, much of the value of requested information lies not only in the raw data, but in the format of this data, i.e., in the structure of spreadsheets, the links within a relational database, or the meta-data accompanying word processing documents. The drafters of the Federal Rules of Civil Procedure recognized this distinction by amending Rule 34 in 1970 to include data compilations.[60] Courts now are increasingly willing to order production of electronic files even when printed copies of the data have been previously supplied.[61] It is argued, however, that "Rule 34 makes an extremely awkward attempt to reach electronic information in its definition of documents; . . . the language is so awkward and convoluted as to be

which may be performed upon paper documents but which has no digital counterpart.

59. Withers, *supra* note 37, at II.G.3.

60. *See infra* note 63 and accompanying text.

61. *See* Withers, *supra* note 37, at II.H.1.

almost completely opaque."[62] The Note to the 1970 Amendment to Rule 34 explains that:

> The inclusive description of "documents" is revised to accord with changing technology. It makes clear that Rule 34 applies to electronic data compilations from which information can be obtained only with the use of detection devices, and that when that data can as a practical matter be made usable by the discovering party only through respondent's devices, respondent may be required to use its devices to translate the data into usable form . . . [T]he court may protect respondent with respect to preservation of [its] records, confidentiality of nondiscoverable matters, and costs.[63]

There still exists significant ambiguity as to whether the amended language of Rule 34 permits discovery of electronic information of a type that does not fit neatly under the rubric of "data compilations." Scheindlin and Rabkin ask, "is a cookie or cache file created by a Web site and automatically downloaded onto a user's computer, without her knowledge or consent, a 'document' within the scope of Rule 34(a)?"[64] They observe that this evidence constitutes "data" in a generic sense but not "compilations" in the ordinary sense of something composed out of materials taken from preexisting documents, as contemplated by the Rule 34 reference to "data compilations."[65]

Scheindlin and Rabkin identify two shortcomings of Rule 34 for which they propose solutions. The first is that the rule, in its present form, does not explicitly permit discovery of many forms of electronic evidence that are in widespread current use. The second shortcoming arises because easy discovery of electronic data is leading to ever-widening discovery requests, resulting in a change of traditional patterns of cost-absorption.[66] Accordingly, the master assigned the task of managing elec-

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62. *Hearings Before the Advisory Committee on Rules of Civil Procedure,* Baltimore, MD (Dec. 7, 1998) (testimony of Allen D. Black) (*quoted in* Hon. Shira A. Scheindlin & Jeffrey Rabkin, *Electronic Discovery in Federal Civil Litigation: Is Rule 34 up to the Task?*, 41 B.C. L. REV. 327, 330 (2000)).

63. FED. R. CIV. P. 34 advisory committee's note (1970) (*quoted in* Scheindlin & Rabkin, *supra* note 62, at 344-45).

64. Scheindlin & Rabkin, *supra* note 62, at 347.

65. *Id.* at 347.

66. *See id.* at 371-72. A more thorough treatment of Scheindlin and Rabkin's proposal is beyond the scope of this Note, but the reader is encouraged to refer to their article for a practical approach to adapting federal rules to the realities of evolving computer-based business practice.

tronic discovery must be aware of these potential pitfalls and must be prepared to take account of them in overseeing disputes as to the scope and cost of production.

Need for Expert Assistance

Before computerization, a party's attorney reviewed the opponent's discovery request, then referred it to the client's administrative staff to begin the process of retrieval and photocopying. In the electronic discovery process, however, it is the technical experts who are most qualified to assess how the discovery request will affect the client's EDP environment, and therefore it is they who should serve as counsel's most important strategic partner. It has been suggested that:

> [i]n many cases, one of the first witnesses to be deposed should be a member of the opposing party's information technology (IT) department. Such a witness can provide valuable insight into the topology and operation of the party's computer system and network, the methods used to insure security of data, sources of potential physical evidence . . . .[67]

As the *Gates Rubber* case demonstrates vividly, failure to employ qualified technical experts can seriously impair one's own case and can result in substantial damage to the opposing party's operations. Accordingly, computer technology experts must be well schooled in the requirements of discovery, and counsel must have the knowledge and skill to direct and assess the work of these experts. Once each party's expert has examined his client's computer system and that of the opposing party, he will be able to advise counsel in negotiating the technical issues relating to discovery, such as search protocols, privilege and relevance screening, and production.[68] And the special master possessing relevant technical knowledge will be suitably equipped to oversee this negotiation.

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67. MICHAEL R. OVERLY, OVERLY ON ELECTRONIC EVIDENCE IN CALIFORNIA, § 1.01, at 3-10 (1999) (*quoted in* Scheindlin & Rabkin, *supra* note 62, at 371).

68. *See* Withers, *supra* note 37, at II.I.1.

Simon Property Group, L.P. v. mySimon, Inc.: A Case Study

Simon Property Group, L.P. v. mySimon, Inc.[69] was a trademark infringement action in which the plaintiff moved, inter alia, to compel defendant's production of relevant documentary evidence *and to make its computers available for examination by plaintiff's experts*. The case is significant for illustrating the invasiveness and extreme costliness of electronic discovery to the producing party. The *Simon* court developed a set of criteria to be applied broadly in considering the propriety of electronic data discovery requests, including:

- The degree to which the respective parties should bear the economic burden of production;
- The extent to which electronically stored documents are discoverable under Federal Rule of Civil Procedure 34; and
- Factors to be considered in defining or limiting the scope of discovery.[70]

The court readily disposed of the question of discoverability of computer files and documents under Federal Rule of Civil Procedure 34.[71] It found that the addition by the July 1, 1970 amendment to Rule 34 of the words "and other data compilations from which information can be obtained, translated, if necessary, by the respondent through detection devices into reasonably usable form . . ." evinces legislative recognition of the need to include electronic data within the ambit of the rule.[72] This modification paved the way for the routine discovery of electronically produced and stored documents, with the result that today, discovery objections based solely upon the electronic format of requested material are seldom raised and are rarely successful.[73]

The *Simon* court noted that Federal Rule of Civil Procedure 26(b)(2)(iii) permits limitations on discovery "where the burden or expense of the proposed discovery outweighs its likely bene-

69. 194 F.R.D. 639 (S.D. Ind. 2000).

70. *Id.* at 640-42.

71. *Id.* at 640 (citing FED R. CIV. P. 34(a)).

72. *Simon Prop. Group*, 194 F.R.D. at 640-42.

73. *See* Symposium, *supra* note 2, at para. 5 (comments of David Byer).

fits,"[74] taking into consideration all relevant facts and circumstances, including but not limited to:

- The volume of documents subsumed by the discovery request;
- The difficulty and cost of retrieving and reviewing these documents;
- The difficulty of identifying, evaluating and segregating privileged information;
- The level of technological sophistication required to recover and convert archived computer files;
- The time required to make determinations of admissibility; and
- The means and methods necessary to protect the ongoing computing environment of the party against whom discovery is sought while extracting relevant evidentiary material.[75]

Additionally, when imposing limits upon discovery, courts should consider such factors as:

- The needs of the case;
- The amount in controversy;
- The financial resources of the parties;
- The importance of the issues at stake in the litigation; and
- The importance of the proposed discovery in resolving these issues.[76]

The interrelationship among these variables suggests that questions of scope and burden cannot be resolved independently of each other and that the scope of discovery should be determined, at least in part, by considering the producing party's size, sophistication and financial strength. These fact-based decisions must be made by individuals with a comprehensive understanding of the computerized business environment – an understanding often beyond that possessed by members of the present judiciary. Recognizing this fact, the *Simon* court ordered that "plaintiff shall select and pay an expert who will inspect the computers in question to create a 'mirror image' or 'snapshot' of the hard drives."[77] The *Simon* court's deployment

74. *Simon Prop. Group*, 194 F.R.D. at 640 (citing FED. R. CIV. P. 26(b)(2)(iii)).

75. *Id.* at 642.

76. *Id.* at 640.

77. *Id.* at 641 (citing Gates Rubber Co. v. Bando Chem. Indus., 167 F.R.D. 90, 111-13 (D. Colo. 1996)). The court recognized that problems might arise when one party's effort to preserve and recover files has the potential to seriously compromise the integrity of the other party's data. For example, the installation of a test program by a requesting party on the computer of the producing party may cause

of an expert to manage discovery exemplifies the role for the special master in electronic data discovery proposed by this Note.

By allowing the expert to employ sufficient manpower to carry out his assignment, the *Simon* court wisely converted an exercise in delay and frustration into a working model for electronic discovery. The discovery protocol ordered the expert to employ his special skill and knowledge to recover from defendant's hard drives "all available word-processing documents, electronic mail messages . . . spreadsheets, and similar files[;]"[78] to then make these available to defendant's counsel for review; and finally, to use this information to "supplement defendant's responses to discovery requests, as appropriate."[79] Because the expert was designated an officer of the court, and because *ex parte* communications were prohibited, the parties were able to communicate freely without waiving the attorney-client privilege,[80] thus facilitating timely production of the desired evidence. The *Simon* court's wisdom in recognizing the benefit of extrajudicial electronic discovery management provides a suitable point of departure for exploring the special master's role in this crucial pretrial function.

The Court's Authority to Refer a Special Master

The federal judiciary displays common bureaucratic characteristics in striving to achieve uniformity of action and predictability of results. Courts demonstrate this repeatedly by

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certain necessary data to be overwritten, resulting in a loss of data by the producing party. Accordingly, the court gave the producing party the opportunity to object to the selection of the expert, and further stated that the expert would carry out the inspection and copying as an officer of the court, thereby insuring confidentiality. *Id.*

78. *Simon Prop. Group*, 194 F.R.D. at 641.

79. *Id.* at 642. This wording demonstrates the court's willingness to allow the expert to determine, subject to review by defense counsel, what information beyond that volunteered by the producing party should be provided to the requesting party in response to its discovery request.

80. There is ample case law supporting the premise that voluntary disclosure of information protected by the attorney-client privilege results in loss of the privilege unless the disclosure is necessary in furtherance of a client's obtaining informed legal assistance. *See, e.g.*, Westinghouse Elec. Corp. v. Republic of the Philippines, 951 F.2d 1414, 1428 (3d Cir. 1991). By granting the expert status as an officer of the court, the *Simon* court facilitated communication among the parties and the expert without loss of the privilege.

their insistence upon issuing the narrowest possible ruling to effect resolution of a present controversy and by their reluctance to break new legal ground unless doing so is unavoidable. As any student of the case law knows, however, when unduly narrow construction of a rule impedes the dispensation of justice, creative judges can uncover an interpretation that is in harmony with their desired result.

Commentators have noted that:

> The current text of [Rule 53(b)], which courts and practitioners are likely to need to deal with for the foreseeable future, simply does not reflect how special masters are in fact used. In general, some courts, inspired by the Civil Reform Justice Act and the need for more active judicial case management, are creatively using special masters for a wide variety of pretrial and post-trial tasks beyond those contemplated by the drafters of Rule 53 . . . . [T]he use of Rule 53, especially in the pretrial area, seems to be one of bending it for the particular needs at hand.[81]

While docket congestion alone may be an insufficient basis for employing a master, technical and operational factors inhering in all electronic discovery often may provide a special, though not exceptional, condition justifying the reference. Acknowledgment by courts of this fact is more an evolutionary step in the development of juridical procedure than a dismantling of hallowed traditions. Nonetheless, it is a step that has faced considerable opposition.

In addressing the right of the district judge to manage the affairs of his court, some commentators believe that, notwithstanding Rule 53 and the Magistrates Act, the court retains inherent power to enlist the resources necessary to facilitate dispensation of justice:

> The federal judges who have based pretrial references on their inherent power over judicial proceedings seem to be on much firmer ground than those who have relied on Rule 53. Even though the analytical route to this conclusion has some curves in it, I feel confident that at least in some situations a federal district court has inherent authority to delegate frontline responsibility for supervising discovery to a master . . . . The precedents that support this conclusion make it clear that there are limits on

81. MOORE ET AL., *supra* note 24, ¶ 53.03 (citation omitted).

> the scope of inherent power in this context. Unfortunately, the cases do not identify those limits with precision.[82]

Writing in 1983, the authors of this passage could not have foreseen the explosive growth in EDP operations that would occur during the ensuing two decades. Neither may they have foreseen the increased need for pretrial discovery assistance to decide not only *what* should be discoverable, but also *how* to effect that discovery without obstructing the ongoing operations of the producing party's business.

The Supreme Court considered Rule 53 restrictions on reference of a master in *LaBuy v. Howes Leather Co.*[83] In that case, it reaffirmed its prior holding in *Ex parte Peterson*[84] that "[t]he use of masters is 'to aid judges in the performance of specific judicial duties, as they may arise in the progress of a cause,' and not to displace the court."[85] The Court granted certiorari to the Court of Appeals for the Seventh Circuit to determine whether, under the All Writs Act,[86] a writ of mandamus was justified compelling Judge LaBuy to vacate his order of reference to a master. The holding was unequivocal: "[E]ven 'a little cloud may bring a flood's downpour' if we approve the practice here indulged, particularly in the face of presently congested dockets, increased filings," and techniques.[87] "[C]ongestion in itself is not such an exceptional circumstance as to warrant a reference to a master. If such were the test, present congestion would make references the rule rather than the exception."[88]

The Supreme Court in *LaBuy* identified as its principal concerns the dual issues of judicial abrogation of primary responsibility for case management (with its attendant Article III considerations) and litigants' due process rights. Revisiting its decision some twenty years later in *Mathews v. Weber*,[89] the Court declared "*LaBuy*, although nearly two decades past, is the most recent of our cases dealing with special masters, and

82. BRAZIL ET AL., *supra* note 1, at 306.
83. 352 U.S. 249 (1957).
84. 253 U.S. 300, 312 (1920).
85. *LaBuy*, 352 U.S. at 256.
86. 28 U.S.C. § 1651(a) (2003).
87. *LaBuy*, 352 U.S. at 258.
88. *Id.* at 259.
89. 423 U.S. 261 (1976).

our decision today does not erode it."[90] While the Supreme Court has adhered steadfastly to its formalistic reading of Rule 53(b), lower courts facing crowded dockets and increasingly voluminous and complex litigation have sought a more permissive reading of the rule. A long line of cases has unfolded seeking to induce a reversal of the holding in *LaBuy*, and while these cases may not strictly comply with the letter of Rule 53(b), when viewed expansively, they appear to comport fully with its spirit.[91]

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90. BRAZIL ET AL., *supra* note 1, at 319 n.75 (quoting *Mathews*, 423 U.S. at 274).

91. *See, e.g.*, Collins v. Foreman, 729 F.2d 108, 119 (2d Cir. 1984) (seeking to set aside the decision of a magistrate, claiming that the statute conferring jurisdiction was unconstitutional). While this case dealt with a magistrate rather than a master, the appellate court recognized close parallels, stating:

> [i]n essence, then, a trial judge who has appointed a special master in a nonjury civil case has transformed his role into that of an appellate court, at least with regard to the resolution of factual issues. In fact, Rule 53(e)(4) of the Federal Rules of Civil Procedure, which allows the parties to agree to make the master's factual findings final, involves more delegation of judicial power than that at issue under section 636(c).

Id. The Court of Appeals for the Second Circuit places great stock in the consensual reference of the master because first, "consent can, in certain cases, be a necessary condition for the exercise of jurisdiction." *Id.* "Second, consent can affect the limits of permissible delegation." *Id. See also In re* Pearson, 990 F.2d 653 (1st Cir. 1993) (denying petitioner inmates' request for a writ of mandamus probing the continuing need for, or the possible modification of consent decrees affecting the operation of the Massachusetts Treatment Center for Sexually Dangerous persons. "[P]etitioners contend[ed] that the order of reference [to a master] constitut[ed] an 'abdication of the judicial function' to a non-Article III adjudicator." *Id.* at 659. The appellate tribunal found that "[t]he order's scope, as the judge has delineated it, seems more akin to rendering 'mere assistance' to the court, a permissible use of a master in many sets of circumstances . . . . *Id.* "Hence, appointing a master to survey the legislative landscape, investigate the incidence of an impact of changed circumstances, assess the current relevance of the decrees, and report the results to the court did not constitute palpable error as a matter of law." *Id.* at 660. *See also* Reilly v. United States, 863 F.2d 149 (1st Cir. 1988) (in which the appellate court upheld appointment of a technical advisor, citing *Ex Parte* Peterson, 253 U.S. at 300, 312 (1920) for the premise that "trial judges in the federal system possessed 'inherent power to provide themselves with appropriate instruments required for the performance of their duties,' including the power to 'appoint persons unconnected with the court to aid judges in the performance of specific judicial duties . . . . '" *Id.* at 157.). *But see* Stauble v. Warrob, 977 F.2d 690, 691 (1st Cir. 1992) (reversing an order of reference under which a special master heard a trial on the merits. The court "conclude[d] that referring fundamental issues of liability to a master for adjudication, over objection, is impermissible." The court observed that

Both the need for specialized technical expertise in electronic discovery management and the benefits conferred by employing an auxiliary officer to make evidentiary determinations are illustrated by the case of *Playboy Enterprises, Inc. v. Welles*.[92] In a discovery conference requested by the plaintiff before a magistrate judge, a ruling was sought, inter alia, to determine whether plaintiff could gain access to defendant's hard drive in order to recover information relevant to the action.[93]

The magistrate granted the request upon the following rationale:

1. Presuming Plaintiff can provide the court with sufficient evidence that . . . no damage will result to Defendant's computer, the Court will direct the parties to follow this outlined protocol.
2. The court will appoint a computer expert who specializes in the field of electronic discovery to create a "mirror image" of Defendant's hard drive . . . .
3. The court appointed computer specialist will serve as an Officer of the Court.[94]

While *Playboy* illustrates the use of both a magistrate and a court appointed expert, these functions easily could be consolidated in a special master possessing the requisite legal and technical knowledge to carry out discovery. Notwithstanding the attractiveness of vesting this responsibility in a sole individual it would be imprudent to ignore the Article III safeguards surrounding the judiciary function. Judge Irving R. Kaufman, a jurist with considerable complex litigation experience, was a strong advocate for permitting pretrial reference to a master.[95] He noted that "where both parties acquiesce in the reference to

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> [w]hile it is axiomatic that the 'judicial power of the United States must be exercised by courts having the attributes prescribed in Art. III,' federal judges handling civil calendars have long relied on assistants, such as magistrates, and special masters, who do not possess the distinct attributes of Article III status. This reliance has grown in direct proportion to the length of the federal court docket.

Id. at 693. The court observes, further, that "predicating access to auxiliary adjudicators on the incidence of such circumstances would likely trivialize Article III." *Id.* at 694.).

92. 60 F. Supp. 2d 1050 (S.D. Cal. 1999).

93. *Id.* at 1051.

94. *Id.* at 1054-55.

95. *See* BRAZIL ET AL., *supra* note 1, at 312-13.

a master the permissive scope of the reference is broadened, and, except in those limited instances where the public interest demands retention of the initial inquiry by the court, reference should be permitted."[96] Despite this view, Judge Kaufman was acutely aware that reference carries a risk proportionate to the nature of the duties delegated.[97] This risk depends upon "(1) the likelihood that the master's decisions will affect parties' substantive rights and (2) the likelihood that delegating the tasks in question will unjustifiably increase litigation costs or delays."[98] Thus, whether by the exercise of inherent judicial power, by consent of the parties, or by strict adherence to the requirements of Rule 53, reference of pretrial electronic discovery to a special master must not proceed without regard for the litigants' due process rights, or for judicial integrity guaranteed by Article III.

Qualifications of the Special Master

The foregoing review of the differences between electronic data discovery and the traditional discovery process illustrates the need for specialized discovery management and explains why the special master is best suited to carry out the task. In the *Introduction*, we questioned whether the current federal judiciary has the requisite understanding to properly manage electronic discovery. We may reasonably conclude that, during the early stages in the adoption of a new technology, those unfamiliar with the process will be unable to perceive the nuances of its application. This is not to imply that federal judges lack the ability to understand the EDP process. Rather, because the commercial application of computer science and technology requires specialized study for which most judges lack the time, they are at a disadvantage in making electronic discovery rulings, compared with a fully qualified special master. Further, the expanded scope of the EDP discovery process places significant temporal demands upon the court that it cannot possibly accommodate in an already crowded calendar.

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96. *Id.* at 312-13 (quoting Irving R. Kaufman, *Masters in the Federal Courts: Rule 53*, 58 COLUM. L. REV. 452, 459 (1958)).

97. *See id.* at 380 (quoting Kaufman, *supra* note 96, at 462).

98. *Id.* at 381.

Therefore, when a judge determines that he cannot devote sufficient time to overseeing and arbitrating the resolution of cost/need questions, he must turn to a neutral party for assistance in evaluating the reasonable extent of production and to prevent the imposition of undue burden. As one possible response to this situation, "[w]e are seeing an increased use of special masters to determine what is a reasonable production. An independent third party is often useful in placing limits on the amount of electronic data to be reviewed and in determining how and when data will be shared."[99] It is reasonable to believe that in time the judiciary will acquire greater facility in resolving EDP-related questions and that the need for a special master will depend more upon the complexity of an individual case than upon the format of the requested data.

The Rule 53 definition of a master offers less help in understanding the qualifications required for the job than does the practical definition of "an experienced private attorney, a retired judge, or a law professor to whom a federal court delegates frontline responsibility either for the entire discovery stage of an action or for specified, discrete tasks."[100] An experienced attorney, law professor, or judge will possess knowledge of litigation practice and of the rules of evidence, but these are only partial qualifications for managing electronic discovery. To manage electronic discovery effectively, the master should also possess an understanding of the mechanics of data processing; the practicalities of data storage, retention, and retrieval; and a practical acquaintance with corporate operations and governance.

Although the master need not know how to perform data recovery tasks or other forms of forensic investigation in order to effectively oversee the process, he should be aware of the various means and methods available to the recovery specialist. An effective master's broad but specialized skill set can "reduce the time the litigators commit to educating the person who resolves discovery disputes and sets the guidelines for case devel-

99. Symposium, *supra* note 2, at para. 67 (comments of John Jessen).

100. *Id.* at para. 5. For purposes of this discussion, it is unlikely at present that a retired judge would possess the requisite computer knowledge to serve as a master for electronic discovery.

opment."[101] Because of the master's knowledge of the substantive law and of the "tricks of the trade" practiced in lawsuits involving electronic discovery, he may succeed in imposing greater structure and discipline on the discovery process at an earlier stage than would otherwise be possible.[102] This sharpened focus will beget more timely and responsive production of requested discovery materials, will decrease the burden upon and the cost to the producing party and will shorten the pretrial discovery stage with commensurately foreshortened litigation.

The master must be perceived as integral to the litigation. His mere introduction into the discovery process may induce the parties to be more cooperative because they are compelled to deal with an unbiased individual focused exclusively on the discovery process, rather than with a beleaguered judge who is too busy to take note of their dilatory maneuvering.[103] Accordingly, it is suggested that the selection of the master be a collaborative process so that the parties accept him as a neutral officer who will exercise fairness, impartial judgment, and discretion. Similarly, by devoting adequate time to reviewing the qualifications of the master, the court will view him as an effective adjunct to the judicial process.[104]

When disputes arise in discovery, a master with substantial prior technical and business experience will be more likely to reach a rapid resolution than will a judge who, lacking this experience, will tend to impose a resolution by fiat. "A master who enjoys the respect and confidence of counsel from the outset will be challenged less often and will be better able to encourage cooperation than will a comparably equipped master with whom the parties are initially unfamiliar."[105] Presumably, the same holds true with regard to judges.

The discovery of electronic data has caused a shift from a relatively unsophisticated but labor intensive process, to one requiring specialized technical knowledge. Computerization has made the protection of confidential data increasingly difficult, heightening the need for an impartial discovery manager to

101. BRAZIL ET AL., *supra* note 1, at 14.
102. *See* BRAZIL ET AL., *supra* note 1, at 13.
103. *See id.* at 6.
104. *See id.* at 42-43.
105. *Id.* at 42.

safeguard the due process rights of litigants, and to limit the imposition of undue economic burden. This development calls for discovery management similar to that normally required in complex litigation. Rule 53 is premised on a belief that discovery in complex litigation presents logistical demands beyond the managerial capacity of the trial judge. An analogous rationale supports the reference of pretrial electronic data discovery to a special master, although in such case, the demands are technical rather than tactical. Accordingly, electronic data discovery under the aegis of a special master should be viewed normatively, rather than as the illegitimate progeny of a contorted "exceptional condition" requirement. It is unlikely that we will see the "flood's downpour" of errant special master references feared by the *LaBuy* court[106] as long as the trial judge constructs his reference order with integrity and proper concern for the strictures imposed by Article III.

The Special Master as Discovery Manager

Regardless of the differences in format between electronic and traditional paper-based discovery, the underlying goal of the process remains the same: to bring to light all relevant evidentiary material that is likely to assist in resolving the litigated controversy. As the information economy continues to expand, computer-based discovery increasingly will be the norm rather than the exception. The discovery phase of litigation practice must inevitably evolve to keep pace with the changes wrought by computerization.

Because electronic discovery is still largely uncharted territory, once referred to a case the special master must consider and rule on a variety of factors absent in conventional document discovery.[107] These include:

- Preservation of data;

106. *See supra* text accompanying note 88.

107. Because the special master is not an Article III judge, he cannot issue dispositive rulings. Accordingly, to preserve evidentiary issues for appeal, the master's findings must be reviewed in detail by the trial court judge. Federal Judge Harold H. Greene expresses his opinion in the Introduction to *Managing Complex Litigation*, that impediments to direct preservation for appeal "could . . . be overcome . . . with some procedural ingenuity." BRAZIL ET AL., *supra* note 1, at x. *See* discussion *infra* relative to orders of reference and ongoing judicial supervision.

- Location and volume of data;
- E-mail as a unique phenomenon;
- Deleted documents;
- Backup tapes;
- Archives and legacy data;
- On-site inspection;
- Form of production; and
- Need for expert assistance.[108]

As early as possible in the discovery process, the special master must become satisfied that the parties recognize and understand the EDP implications relating to retention, backup, archiving and retrieval, and that a program is implemented to forestall later complications arising from negligent or unintentional spoliation. Because relevancy is a threshold determination governing admissibility of all evidence, the master must make this the central issue in considering *all* discovery questions.[109]

A critical task for the special master should be the review of litigants' existing data retention policies early in the pretrial discovery process. Based on the information gleaned from this review, the master should impose whatever controls are necessary to ensure that all potentially discoverable documents remain available and accessible pending judicial determination of their materiality and admissibility. Because it is often infeasible to halt EDP operations while awaiting a particularized discovery request, the special master quickly must proscribe the scope and manner of permitted discovery and must evaluate the means by which data can be preserved while permitting operations to continue undisturbed. Determinations of this sort require that the master have a thorough knowledge of EDP operations and forensic methods of data recovery.

To the extent that existing record retention policies are properly and consistently implemented, the job of the master is made simpler. "Good faith defendants should be able to rely on established records retention policies to avoid sanctions for de-

108. Withers, *supra* note 37, at II.A-II.I.

109. *See* Massey, *supra* note 35, at 156.

struction of documents . . . . Typically, the destruction must be routine and without intention to conceal, secrete or defraud."[110]

While it is true that the master must be concerned with the adequacy of the litigants' record retention policies, ultimately it is the responsibility of the parties and their respective counsel to ensure that an adequate data management system is in place upon commencement of litigation. By carefully and consistently adhering to an established regimen of record retention and destruction, litigants increase their chances of successfully defending against claims of willful or negligent destruction. Moreover, courts will be inclined to view this systematic and scheduled destruction with less suspicion.[111]

As seen in the *Simon* case, electronic discovery has the potential to impose significant costs upon the producing party.[112] The question of cost allocation is one that the special master is ideally suited to mediate because of his experience and presumptive knowledge of industry practice. Using the criteria set forth in *Simon*, and the guidance provided by Rule 26(b)(2)(iii), the special master must evaluate the requesting party's data requirements, and must be prepared either to limit the scope of discovery, or to fashion an equitable cost allocation for imposition by the court.

Of particular concern to all those involved in electronic data discovery are the cost and the feasibility of gaining access to data that has long been in storage, often called "legacy data." Because data processing technology has undergone many changes since its first general commercial application in the

110. *Id.* at 167. In *Wright v. Illinois Central Railroad Co.*, 868 F. Supp. 183 (S.D. Miss. 1994), destruction of records needed for litigation after the commencement of suit did not result in an adverse spoliation inference because the destruction took place pursuant to both a federally mandated retention program and to the company's own established program for periodic destruction of old records. *See also* Turner v. Hudson Transit, 142 F.R.D. 68 (S.D.N.Y. 1991) (holding that a party on notice that documents in its possession are relevant to litigation or potential litigation is under a duty to retain such documents *only* if the party has such notice as to their relevance). *But see* Applied Telematics, Inc. v. Sprint Communications Co., L.P., 1996 U.S. Dist LEXIS 14053 (E.D. Pa. Sept. 17, 1996) (holding that an affirmative request was not required to place producing party on notice that it was required to retain documents subject to discovery despite a routine records destruction program that was part of normal computer backup protocols).

111. *See* Grady, *supra* note 39, at 542-43.

112. *See supra* text accompanying note 77.

1950s, archival media created several decades ago, although still intact, may no longer be readable by modern hardware. Accordingly, resort must be had to companies that specialize in reading legacy data. Even if it is possible to read and convert this data, doing so often can be very costly. Therefore, the special master must evaluate the feasibility of producing the requested legacy data. In addition, once a third party becomes involved in the process, questions of authentication such as chain of custody are implicated.

After conducting an analysis of the costs involved, the master must advise the court regarding allocation of retrieval costs and must articulate whether, in his opinion, the benefits of obtaining the requested data warrant the expense and the effort to be expended. The ability to make this determination requires comprehensive understanding of the technical aspects of data recovery, and of the economic and operational hurdles that must be cleared. A fair resolution must balance the requesting party's legitimate need for information against the producing party's cost of production. Finally, if the requested legacy data cannot be read or converted to readable form, the special master's findings of fact must so indicate, as required by Rule 53(e).

The trial judge's ultimate responsibility for case management is unaffected by his reference of a special master, and accordingly, in the interest of insuring efficiency, impartiality, effectiveness, and compliance with the strictures of Article III, the trial judge must supervise the master's activities. To this end, the court should require from the outset that the master submit regular, periodic progress reports. The reporting regimen should be tailored to the particular circumstances of the case, with a view toward avoiding added costs or delays.[113] Regular communication is particularly important in light of the master's limited power to sanction or to otherwise restrain the parties.

Those who criticize the use of masters argue that:

- A master has little power to formulate or limit the principal issues of a lawsuit;

113. *See* BRAZIL ET AL., *supra* note 1, at 39.

- Counsel may feel a greater temptation to test the mettle and sophistication of a master than of a judge;
- A master may be more concerned than a judge about retaining the goodwill of the parties and may thus be more accepting of sloppiness and excuses for nonperformance;
- Absent previous service as a judge, a master may lack adjudicative experience;
- A master steeped in the adversarial process may be unable to perceive behavior that offends the spirit of the discovery rules;
- A master may make premature or arbitrary rulings in reaction to aggressive behavior by the parties.[114]

We have already acknowledged that early involvement of the parties in the selection of the master may avert many of these difficulties. Moreover, active judicial supervision can decrease significantly the danger of a master's disappointing performance. Finally, a narrow and carefully tailored order of reference that identifies the nature and scope of the issues to be addressed will help the master to concentrate his activity effectively, thereby minimizing the opportunity for the parties to distract him with spurious digressions from the prescribed agenda.[115] By drafting an order of reference focused on the core issues required to survive a motion to dismiss, the judge provides the master with a road map for successful discovery management.[116]

Further, by entrusting this segment of the litigation to an individual who is able to devote sufficient time and resources to the discovery phase of the trial, the judge may achieve a more satisfactory result than were he to undertake discovery management himself. It has been asserted that:

> Some judges in complex litigation seem to substitute wishful thinking for informed judgment concerning timetables, trying to solve the problems of large, complex cases by pretending that they are not large or complex . . . . Some timetable pressure can enforce a useful and sometimes necessary discipline; too much such pressure applied in the wrong circumstances can wreck an entire pretrial process . . . . A special master devoting a substantial amount of attention to one case may be more successful at finding the

114. *Id.* at 40-41.
115. *See id.* at 43.
116. *See id.* at 44.

proper balance than a district judge with responsibility for many cases.[117]

Because a special master is an officer of the court he is bound by the code of judicial ethics. This assertion is supported by case law[118] and by the Code of Judicial Conduct for United States Judges (hereinafter "Code")[119] with respect to trial stage references. There is, however, no clear authority discussing the ethical constraints upon the master in pretrial discovery.[120] Both sound reasoning and an organic construction of the Code compel the conclusion that, to adequately preserve the due process rights of the litigants, it must apply at all stages of litigation.

Are Statutory Changes Required to Facilitate the Reference of Special Masters?

We have noted previously that the special master may be enlisted in the litigation process either under Rule 53(b) or through the inherent power of the court. In those circumstances where a magistrate is referred as a special master, the Magistrate's Act[121] dispenses with the requirement of an exceptional condition, thereby permitting the trial judge substantial latitude in making the reference. This limiting requirement of an "exceptional condition," however, has attracted considerable appellate attention, and has spawned substantial academic discourse where the special master is referred pursuant to Federal Rule of Civil Procedure 53.[122] For all its fury, however, much of this discourse may be moot. Unless the order referring the magistrate to serve as master specifically invokes Rule 53, he will be excluded from its restraints pursuant to subsection 53(f).[123]

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117. Robert D. McLean, *Pretrial Management in Complex Litigation: The Use of Special Masters in* United States v. AT&T, *in* BRAZIL ET AL., *supra* note 1, at 278.

118. *See, e.g.*, *In re* Gilbert, 276 U.S. 6, 9 (1928) (cited in BRAZIL ET AL., *supra* note 1, at 16).

119. 69 F.R.D. 273 (1976).

120. *See* BRAZIL ET AL., *supra* note 1 (discussing in greater detail the source of ethical constraints upon the master at the pretrial stage); *see also supra* text accompanying note 96.

121. 28 U.S.C. §§ 631-639 (2003).

122. *See, e.g.*, BRAZIL ET AL., *supra* note 1.

123. FED. R. CIV. P. 53(f).

While it appears that courts thus far have been able to meet the challenges posed by electronic discovery within the existing statutory framework, it is likely that the growth of computerization and the expansion of the "information society" will prompt continued testing of the rationale underlying Rule 53. At the time of this writing, the foundations of the legal, accounting, and securities regulatory establishments have been shaken by the largest bankruptcies and corporate governance scandals in modern history. Of central importance in the Enron case, for example, is the alleged destruction of "a significant but undetermined"[124] number of computerized documents by the company and its accounting firm, Arthur Andersen & Company. It is likely that the prosecution of this and similar cases ultimately will turn largely on the discovery of electronic evidence and, given the dollar value of damages and the number of affected individuals, the volume of discovery promises to be enormous. In a case such as this, size alone could present an "exceptional condition" justifying the reference of a special master. It is likely that the prosecution of this and similar cases will turn largely on a small army of computer specialists. Consequently, more than one special master will be needed to deploy, manage, and oversee their efforts.

> Computer forensics is going to play an important role in recovering documents in the Enron case . . . . Not only can computer forensic techniques recover documents, but they can inform investigators when and how they were deleted . . . . It is often possible to determine if a deletion is an innocent act pursuant to a corporate policy or if there is an ulterior motive.[125]

At the time this Note was first contemplated, a change of the Federal Rules of Civil Procedure governing reference of special masters would have been thought unlikely, given the prevailing air of conservatism regarding such matters. However, in light of recent developments in corporate governance and the impetus toward increasing accountability, the need for a change in methods of electronic discovery management has become more readily apparent. Accordingly, a liberalization of rules

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124. John Markoff, *Data Very Hard to Hide From Computer Sleuths*, N.Y. TIMES, Jan. 14, 2002, at C2.

125. *Id.* (quoting John Patzakis, President and General Counsel of Guidance Software).

governing the reference of special masters may now be viewed more favorably. Even though the judiciary-at-large may in time acquire increased computer sophistication, exponential growth of electronic data generation will likely remain one step ahead. This compels a tacit realization that discovery management has changed permanently and that the role of the special master is central to its future success.

Conclusion

In the *Introduction* to this Note, we posed several questions intended to inform our conclusion as to relaxation of the Rule 53 restrictions governing reference of a special master in cases involving substantial discovery of electronic data.

Because computer technology and its application present a body of specialized knowledge not yet within the grasp of most federal judges, we have suggested that discovery tasks calling for such knowledge be managed by an individual with the requisite proficiency to make fully informed decisions. The special master has been proposed as an appropriate officer to shoulder this responsibility because the referring judge may choose an individual with the requisite combined legal and technical background and may closely control both his activities during discovery and the outcome of his work. This author believes that, as the judiciary gains competence in resolving EDP-related matters, the need for reference of a special master will be limited to those cases in which the complexities of the litigation, rather than the format of the data, prompt the presiding judge to enlist assistance.

The special master who understands EDP protocols and who has a practical appreciation of how businesses operate can play a significant role in the discovery phase of litigation. By evaluating the parties' data retention policies, establishing boundaries for permitted invasion of the producing party's EDP environment, and assessing the apportionment of costs attendant to discovery, the master can foreshorten litigation and reduce friction between the parties as well as the resulting costs. Moreover, the district court judge can minimize drawbacks attendant to the reference of a special master by carefully drafting and narrowly tailoring the order of reference.

This author further contends that Rule 53, as it stands, represents an unnecessary impediment to the reference of special masters in litigation involving substantial electronic data discovery. Appropriate modification of Federal Rule of Civil Procedure 53(b) would facilitate reference of a master to handle pretrial discovery without inviting abuse of the process. It is important to recognize that "complex litigation" is no longer characterized only by the volume of data, but also by the complexity of discovery, retrieval, and production of electronic data. In the computer age this is no longer an "exceptional condition," but the norm. Therefore, the following modification of Rule 53 is suggested [new text in brackets]:

Rule 53. Masters

* * *

(b) Reference. A reference to a master shall be the exception and not the rule. In actions to be tried by a jury, a reference shall be made only when the issues are complicated [, including the discovery, retrieval and production of electronically generated or stored data]; in actions to be tried without a jury, save in matters of account and of difficult computation of damages, a reference shall be made only upon a showing that some exceptional condition requires it. [Complex or difficult issues relating to the discovery, retrieval or production of electronically generated or stored data shall be deemed an exceptional condition.] Upon consent of the parties, a magistrate judge may be designated to serve as a special master without regard to the provisions of this subdivision.

* * *

Until the legal community gains expertise and confidence in addressing the technical underpinnings of electronic discovery, the need for extrajudicial assistance is likely to persist. By adopting an "Emperor's new clothes" approach to the utilization of the special master, the highest courts of the nation steadfastly adhere to the letter of a rule while disregarding considerations of practical case and calendar management. A less stringent and hide-bound interpretation of Rule 53 would significantly enhance the ability of the overburdened judge to manage his caseload, while arguably delivering swifter and more equitable justice.