

Electronic Discovery Can Unearth Treasure Trove of Information Or Potential Land Mines

BY LESLEY FRIEDMAN ROSENTHAL

Attorneys confronting electronic discovery for the first time may feel like the protagonist Berenger in Ionesco's absurdist play *Rhinoceros*. All around him, Berenger's friends and loved ones develop "rhinocerotitis," a not-fatal disease in which people turn into rhinoceroses. Electronic discovery can be that way: it is in some ways an absurd world, but everybody seems to be in it these days.

Many lawyers and litigants perceive a treasure trove – or potential land mines – hidden among back-up, residual and replicate data. They may be right. Just ask Monica Lewinsky, Jack Grubman and Bill Gates. But one need not be handling headline matters to notice the broad impact of "e-discovery." Many cases may now require attorneys to search, analyze, produce, and manage electronic data, including deleted or archived files.

What is so unusual about electronic discovery?

- Clients – and adversaries – can be sanctioned for improper document retention practices under criteria that are rapidly evolving;
- For businesses involved in litigation, electronic discovery can increase discovery costs many times over – or help realize significant litigation efficiencies – or both;
- Courts have begun shifting the cost of producing electronic documents in accordance with new rules.

It is worth knowing what kinds of electronic data there are; how data is backed up, discarded and retained; and what happens if the client gets it wrong. It is also worth learning how enterprising lawyers in nearly every area of practice may do digital detective work; how much electronic discovery really costs; and who is likely to pay those costs.

E-mail and Other Electronic Files Are Ubiquitous

Employees exchanged about 2.8 billion e-mails every day in 2000.¹

As was widely reported in the *National Law Journal* and elsewhere, one of those e-mails, from a Merrill Lynch analyst, called the stock of a certain Internet company "a piece of junk" and "a powder keg."² At the same time, Merrill Lynch was giving the company – a

Merrill Lynch client – the firm's highest stock rating. That e-mail, and others like it, led Merrill Lynch to announce the \$100 million settlement of civil enforcement proceedings last year. The trail of e-mails uncovered by the Office of the New York State Attorney General has formed the basis for dozens of class action lawsuits, borrowing generously from the AG's court filings and the e-mails they quote.

What sets electronic data apart from other kinds of information is that it can be generated quickly and stored cheaply.³ On servers, hard drives and other electronic media worldwide, data mounts up by the nanosecond. By one measure, 99.997% of all information storage is now in electronic form; printed material of all kinds makes up less than .003 percent of all stored information.⁴

Nearly all critical business records, and much personal correspondence, are now generated and stored electronically.⁵ E-mails, word-processed documents, Excel spreadsheets, and PowerPoint presentations linger on servers worldwide. Many companies are finding out the hard way that they don't know what documents they hold in inventory, let alone which ones they have destroyed.

Most of the documents are probably innocuous, but it takes just one provocative e-mail to create a public relations disaster or a litigation liability – or a bonanza.



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Electronic data has a bad habit of hanging around, even after one thinks one has discarded it. There is a real disconnect between what electronic information people retain and what they want to retain. One reason electronic files are so permanent has to do with the way they are stored on the computer. Deleting a file does not actually erase the file itself. Deleting only removes the “pointer” that the computer uses to find the file’s data on the hard drive. The data itself still exists – at least until it gets overwritten by another file:

“Deleting” a file . . . simply finds the data’s entry in the disk directory and changes it to a “not used” status – thus permitting the computer to write over the “deleted” data. Until the computer writes over the “deleted” data, however, it may be recovered by searching the disk itself rather than the disk’s directory. Accordingly, many files are recoverable long after they have been deleted – even if neither the computer user nor the computer itself is aware of their existence. Such data is referred to as “residual data.”⁶

Deleting a file has been likened to scratching out part of a book’s table of contents in an attempt to erase a chapter – that may make it harder for the casual reader to find what he or she is looking for, but for the determined reader, the pages are still bound into the book.

E-mail messages are even harder to delete, because multiple copies of them often exist, not just on the sender’s computer but also on servers and the computers of the addressees, the cc’s and the bcc’s. Deleted e-mails may also exist because they were backed up – on any one or more of the above users’ systems – before they were deleted. Deleted computer files are discoverable.⁷

Understanding Backup Is Critical to Managing E-Discovery

A backup tape is a copy of information, generally made for the purpose of disaster recovery in the event of a system failure or natural disaster. Backup programs often compress data, to reduce the amount of physical space required on the backup media.

Backup tapes typically contain documents created by system users, such as e-mail messages, word-processing documents, spreadsheets, database entries and the like – but also often include copies of the system files required to make the computer’s operating systems function properly. Thus, a volume of information that may seem enormous at first glance may contain a manageable amount of usable information for purposes of discovery.

Sometimes, a large volume of information on backup tapes is a “red herring,” fooling judges (or even an uninformed adversary) into thinking that the amount of data to sift through is unmanageable. It is important to understand the differences between three kinds of backup:

- Full backup – a complete backup of all information contained on the system.
- Selective backup – specific files and directories are selected, for example to avoid backing up unnecessary program or system files or to focus on data files in known user directories.
- Incremental backup – only those files that have changed since the last backup are copied.

Most companies with a comprehensive policy use a mix of full and incremental backup.

A lawyer embarking on electronic discovery should understand a company’s backup protocol and backup schedule before determining a document production plan.

Object Lessons in Document Retention

Linnen v. A.H. Robins Co. One of the most frequently discussed cases in connection with spoliation of electronic evidence is *Linnen v. A.H. Robins Co.*⁸ This Fen-Phen case demonstrates the pitfalls of not knowing what backup the client has, and not automatically suspending a document management protocol upon notification of a claim.

Plaintiffs in this litigation requested e-mails sent or received by 15 named individuals that referenced specific topics relating to the drug and its associated risks. Wyeth produced only a small number of e-mails in hard copy form, claiming that it did not have a “mass storage” device or other backup tapes. However, Wyeth ultimately admitted to the existence of more than 1,000 backup tapes that had been held for a previous litigation. It then maintained that a search of the backup tapes was unnecessary because the company had instructed its employees to save relevant documents and had already produced them.

Plaintiffs moved to compel production of the backup tapes, claiming that the tapes might contain communications and documents that had been deleted from the computer system at some point in time and thus were only available on backup tapes. Wyeth characterized the motion as a “multimillion dollar fishing expedition.”

The court rejected Wyeth’s characterization, declaring that the cost involved was one of the risks taken on by companies that have made the decision to avail themselves of the computer technology now available to the business world.⁹ The court ordered the defendant to begin compliance by restoring a specified sample of backup tapes and producing responsive documents or communications, and reserved any decision to require additional tapes to be restored until the potential for relevant and responsive documents was more fully explored through review of the restored sample tapes. Wyeth was sanctioned by being required to bear all costs and fees associated with the e-mail discovery

What Is a Sensible Document Retention Policy?

There's nothing new about document retention policies – or spoliation of evidence, for that matter – but electronic discovery brings complexities all its own, and the stakes can be high.

Businesses and individuals are well within their rights to destroy old documents – electronic or otherwise – so long as they have well-thought-out policies that square with the laws and are consistently applied.

Courts tend to look with approval on document retention policies that:

- ✓ comply with applicable regulations – which may vary from industry to industry,
- ✓ comport with developing case law,
- ✓ are instituted in good faith, *i.e.*:
 - provide reasonably ready access to needed information
 - take account of the frequency and magnitude of complaints that might render destroyed documents relevant
 - make a reasonable space/cost calculus
- ✓ are consistently applied, and
- ✓ provide for suspension and preservation of evidence if a claim is anticipated or brought.

issue. The anticipated cost of restoring data from 17 months of e-mail backup tapes approached \$1.75 million.

To make matters worse, Wyeth did not suspend its document retention policy or begin saving new backup tapes until four months after the action was initiated, and three months after plaintiffs' first document production request. Accordingly, the court issued a jury instruction that an adverse inference may be drawn from the fact that documents were destroyed by Wyeth.

Boeing The Boeing case¹⁰ is an object lesson about how expensive litigation can be when a company doesn't keep track of what backups it has, and what information resides on what tapes.

In the fall of 1998, a Seattle plaintiff's attorney was preparing discovery requests to be sent to Boeing in a shareholder stock fraud suit. During a pre-discovery deposition, he learned that the company had 14,000 backup tapes of company e-mail stored in a warehouse. Boeing sought to narrow the scope of production, but the company could not determine whose e-mails were on which tapes without first resurrecting the tapes. The

judge ordered it to restore all 14,000 tapes. Not surprisingly, it chose to do so internally, at its own expense, rather than to avail itself of the "assistance" of plaintiff's counsel or a court-appointed special master. Once it did, several of the e-mails were suggestive enough to persuade the company to settle for \$92 million.

Arthur Andersen The Andersen story is, among other things, a lesson about consistent application of a document retention policy. It is also a prominent example of the need to suspend a document retention policy once the duty to preserve is triggered.

Andersen employees destroyed thousands of Enron-related documents, even though it knew of an informal inquiry into Enron by the SEC. Andersen maintained that the shredding was routine compliance with a policy designed to protect client confidentiality. In reality, the destruction was initiated by Andersen lawyers and managers with a newfound interest in the firm's theretofore-ignored document retention policy, only after the SEC inquiry had commenced. Andersen's inconsistently applied policy, and its failure to suspend it when required, was a major factor in the firm's obstruction of justice conviction and ultimate demise.

Doing Digital Detective Work

The 2.8 billion daily e-mails are only the tip of the electronic evidence iceberg. Electronic evidence may also reside in records of instant-message sessions, chat rooms, unified message systems that combine e-mail records with voice mail tapes, digital TV recorders, MP3 players and global positioning system satellite records that track vehicle locations.

Electronic evidence might be found – and will be sought, and must be searched for – at the office, on servers, mainframe computers, and desktop computers; in employees' homes, on PCs or laptops, or on Palm Pilots, BlackBerrys, or cell phones; and in a company's remote locations worldwide. Each of these sources and locations should be considered when framing or responding to document requests.

Moreover, electronic files contain more information than just the "content." Electronic files contain "metadata," which reveals when documents were created and by whom; whether, when, how, and by whom it was modified; and who received a blind copy. This can be valuable information for a party seeking to prove that a document was backdated, tampered with, or forged. It can also provide valuable information in a contract dispute about the origin of certain clauses or what was negotiated out of the document from a prior draft.

How is this mine of electronic data – and metadata – recovered, reviewed, and if appropriate, readied for production in litigation? Electronic data discovery (EDD) is now a \$1 billion a year industry and growing

exponentially. Several firms, including the Big Four accounting firms, as well as Applied Discovery Inc., Computer Forensics, Daticon, Kroll Ontrack, and others, have made a business out of “computer forensics”: recovering deleted files for companies that are embroiled in litigation, undergoing regulatory review, or attempting to document workplace misconduct.

Differences in Cost Structure Between Paper and Electronic Discovery

In general, the costs of electronic discovery are higher up front than paper discovery, but may present significant efficiency gains in the long term. In paper discovery, documents must be processed by making working copies, stamping Bates numbers, storing boxes in a central repository, and scanning and coding documents so images can be stored in a database. Paper discovery typically flows for many months, with perhaps \$10,000 or more for copying charges in one month and \$30,000 for scanning and coding charges in another month.

By contrast, an e-discovery bid typically includes all the anticipated costs up front. Those bids can run into the seven figures. Electronic discovery enables documents to be quickly processed with automated technology that displays all documents in a common file format, assigning unique ID numbers and storing the full text in a convenient repository. These costs are oftentimes added to the costs of traditional paper discovery.

Manual discovery processes are time consuming, labor intensive and error prone in the review stage. After an initial investment in electronic discovery tools, full-text searching may allow the review team to find key documents more reliably, in a shorter period of time. A joint prosecution or defense group may access the entire document collection, even at disparate locations worldwide, through secure sites on the Internet. The ability to redact privileged information once and for all, or apply annotations online, all from one shared repository, may further increase efficiencies and avoid waiver problems.

As with paper discovery, the ultimate goal of any discovery project is to identify and produce only those documents that are responsive and not privileged or otherwise objectionable. E-discovery may streamline this process by ensuring that only those documents designated as responsive are produced from the total collec-

tion, with redactions intact. E-discovery also allows attorneys to produce a responsive collection of documents in either paper or electronic format.

Once the documents have been mounted on an electronic system, both full text and metadata can be searched with e-discovery technology, accessing documents with new search terms at various points in the case.

Legacy Applications May Impose Hidden Costs

Many companies use a jumble of technology platforms, incompatible, outdated or unlinked systems, applications and servers that – individually or collectively – do not lend themselves to easy access. Tapes, the most common backup, are designed more for disaster recovery than archival purposes and are therefore difficult to index and search.

The data in legacy applications, such as old e-mail programs, may be difficult to restore and search. And the farther back a company has to go to retrieve records, the worse the legacy problem gets – partly because savvy lawyers may insist that corporations produce records in their native formats.

The requesting party should be aware, however, that the cost of restoring such “legacy systems” may fall to it, if it fails to persuade the court of the likelihood of unearthing relevant information compared with the expense of doing so. In one recent employment discrimination case from the Northern District of Illinois,¹¹ the

court held that plaintiff employees were entitled to defendant’s e-mails that referenced the employees, but plaintiffs had to pay the \$8,000/month to license the e-mail program (no longer in use by defendants) that was necessary to view the e-mails on the backup tapes.

Cost Shifting

Ordinarily, the American Rule gives us the presumption that each party will bear its own costs of production. However, courts are increasingly likely to shift some of the costs to the requesting party under certain circumstances.

In considering the issue of cost-shifting, a leading decision is *Rowe Entertainment, Inc. v. William Morris Agency, Inc.*¹² *Rowe* raised the question of whether and to

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what extent to shift the costs of electronic discovery of information that was stored on archival tapes originally created only for disaster recovery. *Rowe's* eight-part balancing test considered the following:

1. Is the discovery request an e-mail fishing expedition? Overly broad requests can lead to cost-shifting if not outright denial. Requests seeking "any and all" e-mail communications in a broad time span or among a large group of people are particularly vulnerable.

2. How likely is it that the search will be successful? Early depositions getting at the heart of who communicated on what subjects with whom via e-mail can be invaluable in this regard.

3. Will the e-mail provide any critical new information? Or can other avenues (correspondence files that include printouts of relevant e-mails, for example) fill the bill?

4. Is there a business purpose for retaining e-mail? If there is an ongoing business purpose, then the cost and burden will likely remain with the producing party. If the purpose of retaining is to protect against electronic disaster, then shifting costs to the requesting party may be more appropriate.

5. Who will benefit from the e-mail restoration? The party seeking electronic discovery is more likely to avoid cost-shifting if it can show some business or evidentiary value to the producing party as well.

6. Is the total cost of the proposed production substantial? This requires expert testimony and a sound understanding of the adversary's data systems, again gleaned through pre-discovery depositions or interrogatories if possible.

7. Which side is most able to control the costs of production?

8. Are both sides equally able to pay the costs of production?¹³

Some commentators have noted with concern, however, that the eight *Rowe* factors may tend to favor the responding party, shifting the costs of electronic discovery too readily.¹⁴

New Developments – *Zubulake I & II*

Responding to such concerns, U.S. District Judge Shira Scheindlin has recently issued a pair of decisions that somewhat modify the *Rowe* analysis. In *Zubulake v. UBS Warburg LLC*,¹⁵ an employment discrimination case, the plaintiff equities trader sought e-mails available from the backup tapes and archived media of her former employer. The company used an automated

backup process, and also saved e-mails from traders' desks in searchable format. UBS initially produced only 350 pages. It did not review any of the backup tapes or the e-mails, estimating that to do so would cost \$300,000 and \$175,000 respectively, exclusive of attorney time. Plaintiff moved to compel.

In a May 2003 ruling, the court performed a three-step analysis to ascertain the appropriate scope and burden of discovering electronic data.¹⁶

First, it examined the responding party's computer systems and the accessibility of the data. The court found three types of accessible data: active, online data; near-line data; and offline storage/

archives. Backup tapes or erased, fragmented or damaged data were considered inaccessible.¹⁷ The court would only entertain the possibility of shifting the cost of production where the data was relatively inaccessible. The court found that UBS's optical disks were easily accessible, and therefore that UBS should bear the expense of producing the requested information. However, the court decided that backup data on tapes was relatively inaccessible, and accordingly proceeded to the next step in the analysis.

Next, having determined that the backup data was relatively inaccessible, the court sought to ascertain what kind of data might be found on the inaccessible media. Because this was a fact-sensitive inquiry, the court ordered the responding party to restore and produce a small sample of the backup tapes, both to determine what kind of information the documents contained and to determine the actual cost involved.¹⁸

Step three determined whether the production costs should be shifted. The *Zubulake I* court announced a new seven-part test:

1. The extent to which the request is specially tailored to discover relevant information;
2. The availability of such information from other sources;
3. The total cost of the production, compared to the amount in controversy;
4. The total cost of the production, compared to the resources available to each party;
5. The relative ability of each party to control costs and its incentive to do so;
6. The importance of the issues at stake in the litigation; and
7. The relative benefits to the parties of obtaining the information.¹⁹

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Not all factors are weighted equally. The first two factors, which according to the court comprise a “marginal utility test,” weigh the most heavily. While certain factors pertain to the relative cost of a production, the absolute wealth of the parties is not a relevant factor. The cost of responding may not be unduly burdensome when considering the cost of the production compared to the amount in controversy, *i.e.*, a \$100,000 expense may be reasonable in a multi-million dollar case.²⁰

After UBS concluded the required sample restoration, Zubulake moved to compel production of all remaining backup e-mails at UBS’s expense. In July 2003, the court ruled in *Zubulake II* that UBS must perform the restoration and pay for 75% of the costs, but that Zubulake must shoulder the remaining 25%. UBS was also ordered to pay for any costs incurred in reviewing the restored documents for privilege.

Zubulake I and *Zubulake II* are noteworthy, for litigators, trade regulatory lawyers and anyone else responsible for counseling clients about document retention policies. Firms that routinely record and store e-mails and other electronic documents would be well advised to consider whether their existing policies meet all corporate interests in light of these new developments. Interestingly, because the *Zubulake* court would only entertain the possibility of shifting the cost of production where the data was relatively inaccessible, these decisions may incentivize corporations to limit or even eliminate search capabilities on data residing in legacy systems and on backup tapes. Such strategic restricting of “accessibility” could set the stage for a shifting of costs to prospective plaintiffs. At the same time, plaintiffs’ attorneys should study these decisions in order to apprise clients of the risk of having significant electronic discovery costs shifted to them.

Privilege Considerations

As with traditional discovery, courts have ways of making recalcitrant litigants cooperate with e-discovery.

Attorneys facing such an adversary may consider moving for these new types of relief: an order compelling a party to search its own servers and backup tapes at its own expense; appointment of a special master or referee to review information retrieved from the computer system by a court-appointed computer forensics specialist; an order permitting a movant access to its adversary’s computer system; and/or motions for sanctions for failing to preserve and produce data from backup tapes, possibly resulting in monetary penalties, adverse jury instructions, and even a judgment on the merits.

However, attorneys and judges should be sensitive to issues of privilege and confidentiality in considering motions to compel.

Such considerations featured prominently in the decision of the U.S. District Court for the Southern District of California in *Playboy Enterprises v. Welles*.²¹ There, the plaintiff moved to compel access to the defendant’s hard drive to uncover deleted e-mails. There was some suggestion that the defendant had intentionally deleted all her incoming and outgoing e-mails, without regard to the litigation, and there was a dispute about whether the deleted e-mails were even recoverable. Accordingly, the court appointed a computer expert to create a “mirror image” of the defendant’s hard drive in an effort to retrieve the deleted data, and directed the parties to meet and confer to designate such expert. The expert would serve as an officer of the court and be required to sign the protective order in the case. To the extent the computer specialist would have direct or indirect access to information protected by the attorney-client privilege, the court ordered that such “disclosure” would not result in a waiver of the attorney-client privilege. The mirror image was to be given to defendant’s counsel, who would print and review any recovered documents, produce to plaintiff any responsive communications, and record any documents withheld on the basis of privilege. Finally, although plaintiff’s counsel was paying for the expert, defendant’s counsel was entrusted with maintaining the mirror image for the duration of the litigation. Counsel and the expert also would be required to submit to the court a report on the success of retrieving all or part of the total data on the hard drive.

What’s Next

Some commentators have recommended amendments to federal²² and state²³ discovery rules to address electronic discovery issues. The Texas Rules of Civil Procedure have already been amended to address the unique nature of electronic discovery.²⁴ The Sedona Conference, a think tank dedicated to the advanced study of law and policy, recently issued a set of “Best Practices” for electronic discovery.²⁵

There are numerous ways for practitioners to keep up with fast-breaking developments in the sometimes bizarre, “rhinoceros” world of electronic discovery. The Bureau of National Affairs (BNA) publishes a monthly newsletter, *Digital Discovery and E-Evidence*. E-mail case summary alerts and a bimonthly publication on electronic discovery are available through Applied Discovery, a member of the LexisNexis Group. Lawyer Lounge, an Internet resource center focusing on law office technology, publishes an interactive page on electronic discovery at <http://lawyerlounge.com/ediscovery>.

Attorneys and judges are being called upon with increasing frequency to manage electronic discovery issues. Some of the areas with the most at stake for litigants – the viability of their document retention policies

Checklist for Electronic Discovery Planning and Management

The key to effective handling of electronic discovery issues is early planning and management:

□ **Understand** the nature of the evidence likely to be sought and its relevance to the claim or potential claim;

□ **Agree** – or obtain a ruling, if need be – on the breadth of evidence to be produced, including agreement on relevant search terms if appropriate;

□ **Identify** the point persons – including an IT manager, or even an outside computer expert, if necessary – responsible for overseeing the search, the identification, and review of information for producible material;

□ **Allocate** costs, giving due consideration to factors found controlling by the courts;

□ **Perform** a pre-production review of the electronic documents for privileged or confidential materials; and

□ **Determine** when, whether and to what extent the client should suspend recycling of backup tapes and other routine document destruction policies.

and cost shifting in discovery, for example – seem to be the ones most in flux. Attorneys counseling clients on such issues might be well advised to join the rampaging rhinos.

1. Dana Hawkins, *Office Politics in the Electronic Age*, US News & World Report Online (Feb. 2000).
2. See, e.g., David Hechler, *New York's AG Takes on the Street*, Nat'l L.J., Dec. 23, 2002.
3. *Rowe Entm't, Inc. v. William Morris Agency, Inc.*, 205 F.R.D. 421, 429 (S.D.N.Y. 2002) (explaining that electronic data is so voluminous because, unlike paper documents, "the costs of storage are virtually nil. Information is retained not because it is expected to be used, but because there is no compelling reason to discard it"), *aff'd*, 2002 WL 975713 (S.D.N.Y. May 9, 2002).
4. Peter Lyman & Hal R. Varian, *How Much Information?* (2000), available at <<http://www.sims.berkeley.edu/how-much-info>>.
5. See Wendy R. Liebowitz, *Digital Discovery Starts to Work*, Nat'l L.J., Nov. 4, 2002, at 4 (reporting that in 1999, 93% of all information generated was in digital form).
6. Shira A. Scheindlin & Jeffrey Rabkin, *Electronic Discovery in Federal Civil Litigation: Is Rule 34 Up to the Task?*, 41 B.C. L. Rev. 327, 337 (2000) (footnotes omitted).
7. See, e.g., *Antioch Co. v. Scrapbook Borders, Inc.*, 210 F.R.D. 645, 652 (D. Minn. 2002) ("[I]t is a well accepted proposition that deleted computer files, whether they be e-mails or otherwise, are discoverable."); *Simon Prop. Group L.P. v. MySimon, Inc.*, 194 F.R.D. 639, 640 (S.D. Ind. 2000) ("First, computer records, including records that have been 'deleted,' are documents discoverable under Fed. R. Civ. P. 34.").
8. 1999 Mass. Super. LEXIS 240 (Mass. Super. June 16, 1999).
9. *But see McPeck v. Ashcroft*, 202 F.R.D. 31 (D.D.C. 2001) ("What alternative is there? Quill pens?").
10. See Julius Melnitzer, *Keeping Track of the Invisible Paper Trail: What Legal Departments Can Learn from Boeing's Experience*, Corporate Legal Times, Feb. 2003, available at <<http://www.cltmag.com/editorial/technology/feb03.cfm>>.
11. *Byers v. Illinois State Police*, 2002 U.S. Dist. LEXIS 9861 (N.D. Ill. 2002).
12. 205 F.R.D. 421 (S.D.N.Y. 2002).
13. *Id.* at 429.
14. See, e.g., Adam I. Cohen & David J. Lender, *Electronic Discovery: Law and Practice* § 5.04(c) (Aspen Law & Business, publication forthcoming 2003) ("If courts simply conduct an absolute comparison of the eight *Rowe* factors, the responding party will need to attain just one more factor to shift the costs to the requesting party. This is a dramatic shift from earlier cases, which were more inclined to follow the presumption in traditional document production, requiring the responding party to pay.").
15. 02 Civ. 1243, 2003 U.S. Dist. LEXIS 7939 (S.D.N.Y. May 13, 2003) ("*Zubulake I*"); *Zubulake v. UBS Warburg LLC*, 216 F.R.D. 280 (S.D.N.Y. 2003) ("*Zubulake II*").
16. *Zubulake I*, 2003 U.S. Dist. LEXIS 7939, at *36.
17. *Id.* at *24.
18. *Id.* at *37.
19. *Id.*
20. *Id.* at *28.
21. 60 F. Supp. 2d 1050 (S.D. Cal. 1999).
22. E.g., Scheindlin & Rabkin, *supra* note 6 (advocating amendments to Rule 34 to rectify issues identified).
23. Proposed Model Rule Regarding Production of Data or Information in Electronic Form; Cost-Shifting and Safe Harbor [Electronic Discovery; Provisions for], available at <<http://www.kenwithers.com/articles/index.html>>.
24. Tex. R. Civ. P. 196.4 (Electronic or Magnetic Data).
25. The Sedona Conference, *The Sedona Principles: Best Practices Recommendations & Principles for Addressing Electronic Document Production* (Mar. 2003), available at <http://www.thesedonaconference.org/publications_html>.