ELECTRONIC EVIDENCE AND THE LARGE DOCUMENT CASE: COMMON EVIDENCE PROBLEMS

DISCOVERY FOR A NEW MILLENNIUM

Robert L. Levy
Patricia L. Casey

Haynes and Boone, LLP
One Houston Center
1221 McKinney Street, Suite 2100
Houston, Texas 77010

July 2006

TABLE OF CONTENTS

TABLE OF AUTHORITIES

CASES

STATUTES

MISCELLANEOUS

ELECTRONIC EVIDENCE AND THE LARGE DOCUMENT CASE: COMMON EVIDENCE PROBLEMS - DISCOVERY FOR A NEW MILLENNIUM

I. THE CHALLENGES OF ELECTRONIC EVIDENCE

Computer usage now pervades all elements of society. Most businesses and many individuals conduct a significant percentage of communications through electronic media. E-mail, facilitated by the Internet, has become the dominant form of inter-office and intra-office communication. Businesses are also managed in a wide variety of electronic formats, including spreadsheet programs, databases and computer aided design tools. The proliferation of computers and other electronic forms of communication (such as PDA devices and wireless two-way e-mail) exponentially increase the volume of electronic information.[1] Electronic mail exchanges have replaced telephone calls.

This increase in the use of computers creates a number of challenges for litigators, including the collection, management and introduction of electronic evidence. More than five years ago, the Manual for Complex Litigation reached this conclusion, noting that "[c]omputerized data have become commonplace in litigation."[2] A typical production of documents that 15 years ago might have involved less than 1,000 pages of documents can now involve 10,000 or more, and may include information contained in electronic formats that are not readily convertible to paper. More complicated cases can sometimes involve millions of pages of information.

This paper explores issues particular to electronic evidence and discusses related challenges pertaining to the large document case that is often the offspring of electronic dominated litigation, including production of electronic data and managing the data in litigation.

II. THE NEW AGE OF ELECTRONIC PRODUCTION

The world of electronic evidence has transformed the litigation landscape, creating new opportunities *and* potent dangers. A recent decision by a Magistrate-Judge in the Northern District of Ohio is illustrative of the challenge. In the combined case, *In Re Telxon Corporation Securities Litigation* and *Hayman v. PricewaterhouseCoopers, LLP*,[3] Magistrate-Judge Patricia Hemann recommended to the district court that it enter a default judgment in the case against PricewaterhouseCoopers that could result in actual damages in excess of $139,000.00.[4] The Magistrate-Judge, in a 73 page recommendation, found that PWC engaged in discovery abuse. This finding was largely based on PWC's failure to produce electronic records, including different copies of a database that had been produced in paper form. The Magistrate-Judge found that PWC had slightly different copies of the same database application used to manage audits. One copy was retained on the network and another copy came from a laptop. Metadata on the different versions varied. Although not the only basis for the proposed finding, the failure to completely produce all electronic records was a key element to the recommendation. The proposed ruling is currently pending before the District Court.

The proliferation and importance of electronic evidence requires consideration of the unique challenges raised by this medium. Electronic mail communications are often fertile grounds for case dispositive type evidence.[5] Cases can turn on a single e-mail or the ability to demonstrate how a mistake in a formula in a spreadsheet could result in an entirely different conclusion by an expert witness.[6]

E-mail is an efficient means of business communication, but it also involves risks and potential liability for any company. "Like ghosts from the past, these forgotten electronic

blips can come back to haunt a litigant, since computer data bases are subject to civil discovery requests."[7] E-mail is inordinately susceptible to revealing "smoking gun" evidence. Its salient characteristics, particularly ease of use and informality, lead to the "immortalizing" of information that normally would never be written down or distributed in an office memo. For example, an e-mail message in a sex discrimination case brought by a terminated employee cost one company $250,000 when the plaintiff discovered an e-mail message from the company president to the head of personnel stating, "[g]et rid of that tight-_____ _____."[8]

Employees' perceptions of internal e-mail as informal often results in casual comments to which others may attach unintended meanings. E-mails have been the focus of high profile litigation, most particular *United States v. Microsoft*[9], in which Bill Gates' testimony in depositions was contradicted by his e-mail exchanges.[10]

E-mail messages are just one example. A growing number of records, including insurance and accounting data, are available on computers. Multiple versions of word processing documents are available on computers. Individuals and companies routinely capture information in spreadsheets on computers. In other words, in addition to the discovery of paper documents, counsel must seek discovery of electronic data or risk missing crucial information.[11] A non-exhaustive list of documents that might be requested includes: customer lists, financial records, purchase and sales reports, personnel files, original documents such as letters, memoranda, invoices, and design specifications; drafts of original documents such as letters or memos; databases used by individuals or local area networks; computer programs evidencing a particular process, incorporating specific information, or demonstrating the use of proprietary methodologies; computer operation logs containing usage information; logs and text of electronic messages or e-mail, including 'trashed' or deleted messages, message drafts, or mailing lists; electronic messaging records for messages within a specific company's network or across a wider network, such as the Internet; manufacturer's specifications for the computer; source codes for computer programs; voice mail transcriptions; and scheduling systems.[12]

III. DISCOVERY OF ELECTRONIC INFORMATION - REQUESTS AND RESPONSES

The first common evidence problem an attorney faces is how to collect electronic evidence. In addition to the more common problems faced by attorneys combing through warehouses of stored records, counsel in a case turning on electronic data must become familiar with the forensics of the recovery and reconstruction of such data. This includes a basic understanding of the terminology used by computer forensics experts, some technical knowledge of data formats and signals, and familiarity with the methods used to recover and reconstruct electronic data. Many lawyers are unfamiliar with technological issues that may arise. Today's lawyer must be ready to address these issues. At a minimum, the practitioner can assist business clients by advising them to gain control of their computer information and to implement information retention and e-mail policies.

A helpful resource for managing electronic evidence has been developed by the Sedona Conference, a leading group of industry professionals (including attorneys, litigation support professionals and vendors) who meet regularly to explore issues in electronic discovery and recommend guidelines, rule changes, and methods to manage electronic information.[13] The Conference has developed a particularly helpful guide titled: THE SEDONA GUIDELINES: Best Practice Guidelines & Commentary for Managing Information & Records in the Electronic Age.[14]

A. The Right to Production of Computer Records

Discovery rules now address the production of electronic data, though the rules have yet to address many of the particular nuances involving electronic media. Under Texas Rule of Civil Procedure 196.4, for example, litigants are required to produce electronic data that is "reasonably available," if requested.[15] Where the responding party demonstrates that the data cannot be produced through reasonable efforts, Rule 196.4 requires the requesting party to reimburse the cost of production.[16] Where the court finds that the production of information without an accompanying computer analysis would result in undue hardship or burden on the requesting party, the court can require the producing party to make use of its computer system to generate the required information. Thus, cost can be a significant consideration.[17] In addition to the cost of production, a litigant must consider the cost of reviewing and evaluating electronic data and putting it into a format that will be useful and, in many cases, admissible at trial.

The basic rules of discovery apply to the computer generation or storage of data and information that may be offered in evidence at a civil trial. For the most part, issues concerning the scope of pretrial discovery of computer evidence have been left to the trial courts to resolve according to established rules of procedure and evidence.[18]

The Federal Rules of Civil Procedure permit the discovery of relevant computer-generated evidence. The 1993 revision to the Rules requires parties to disclose the description and location of relevant data compilations early in the litigation, before discovery requests are submitted.[19] Unlike the Texas Rules, however, the current version of the Federal Rules does not specifically address procedures and costs associated with the production of electronic evidence. As a result of a series of rulings in Federal Courts (including the *Zubulake* case mentioned below), the Committee on Rules of Practice and Procedure of the Judicial Conference of the United States has adopted amendments to Federal Rules 26 and 37 dealing with electronic discovery issues. (reviewed below)

The current Federal Rules authorize the production of "designated documents" including "data compilations," which clearly include electronic computer data.[20] According to the Advisory Committee Notes, the burden is on the responding party to produce the data in a readable form, which typically means a computer printout. The trial court also has discretion to compel the disclosure of the source codes when necessary to verify the authenticity and accuracy of the data.[21] At the same time, in some states, where no adequate index of documents exists except in an opposing party's litigation support system, the court will not compel that party to use its litigation support system for the benefit of an adverse party.[22] Therefore, a party can be compelled to produce relevant documents, but may not be required to sort or analyze the data[23]-- it is the nature of what is being produced that governs.[24] Production of electronic data will also be allowed where it forms the basis of an expert's testimony for effective cross-examination purposes. The court in *Cleveland v. Cleveland Electric Illuminating Co.*,[25] observed that any use of computerized data presents some obstacle to effective cross examination because of the difficulty of knowing the precise methods employed in programming the computer, as well as the effectiveness of the persons responsible for feeding data into the computer. In that case, Defendant compelled pretrial production of data and calculations from computer simulations underlying the conclusions contained in the report of certain plaintiff's experts. The court granted the motion to compel production of computerized data relied upon by the expert because that kind of evidence is essential for effective cross-examination.

On April 12, 2006, the United States Supreme Court approved, without comment or dissent, proposed amendments (attached as

Appendix A) to the Federal Rules of Civil Procedure.[26] The amendments have been transmitted to Congress and, unless Congress enacts legislation to reject, modify, or defer the amendments—a move unlikely to occur[27]—the amendments will take effect December 1, 2006.[28] The new federal Rules will specifically address officially incorporate electronic documents in the discovery process and better appreciate the special problems associated with managing massive volumes of electronic information.

Rules 16 and 26 will explicitly incorporate electronic discovery into pre-trial scheduling and planning: Rules 16(b)(5) and (6) will allow the court to include in scheduling orders provisions for disclosure or discovery of electronic information and agreements reached by the parties regarding the assertion of claims of privilege or protection of trial preparation materials after production;[29] Rules 26(f)(3) and (4) will require that parties discuss relevant electronic discovery issues when they confer pursuant to the Rule.[30] One commentator characterized the changes as relatively minor.[31] However, another commentator noted these amendments may complicate some cases: parties may waste time and money educating themselves about electronic discovery issues or may be forced to make significant discovery decisions early in the case.[32]

Amended Rule 26(a)(1)(B) requires that parties provide the other side with copies of all electronically stored information that such parties plan to use at trial.[33] As well, Rules 33(d), 34(a) and (b), and 45 will allow for interrogatories,[34] requests for production,[35] and subpoenas[36] of electronically stored information. The language of Rule 34 was updated somewhat, but the original "data compilations" language was maintained; notably, "electronically stored information" was added to the Rule's title alongside "documents."[37]

More significantly, however, the amendments impose limits on electronic discovery; the proposed amendments would limit access to electronic discovery that is not reasonably accessible and create a two step process for discovery. Specifically, amended Rule 26(b)(2)(B) states a responding party need not produce relevant, non-privileged electronic information if such party can show the information is not reasonably accessible because of undue burden or cost;[38] thus, the Rules would put the burden on the responding party to identify the category of documents that are alleged to be inaccessible (including backup tapes). If the responding party meets this burden, the court may nonetheless order such discovery if the requesting party shows good cause "considering the limitations under Rule 26(b)(2)(C)."[39]

One commentator has criticized new Rule 26 as creating two loopholes for responding parties.[40] First, responding parties could re-characterize their data by saving it in inaccessible forms; the parties would thereby eliminate their production duty yet preserve the data for their own use.[41] Second, the lofty, ambiguous "good faith" standard would allow responding parties to unilaterally decide what information they will produce.[42]

The new rules also include a safe harbor provision for companies that can show loss of data was the result of normal business practices.[43]

Not surprisingly, the new Rules have stimulated substantial disagreement among litigators.[44] For example, some commentators believe that federal courts are better-equipped to make decisions regarding electronic discovery issues than the Rules Committee, that amendments to the discovery rules specifically addressing electronic discovery are unnecessary, and that imposing hard and fast rules on the dynamic principles of discovery is improper.[45] Other commentators, however, see the new Rules as a "noble step forward" and believe the rules will reduce litigation costs, eliminate judicial confusion, and create much-needed electronic discovery production standards.[46]

1. Invasive Discovery of Electronic Evidence

Although the new rules will impact the scope of discovery, electronic data courts have long addressed what types of discovery will be allowed. Discovery of computer information can sometimes involve more invasive procedures. In *Playboy Enterprises v. Welles*,[47] plaintiff sued defendants alleging that defendants operated an Internet web site that infringed and diluted plaintiff's trademarks. In its motion for discovery, plaintiff sought access to defendants' computer hard drive to recover deleted electronic mail. The court held that the defendants' hard drive was discoverable because it was likely that relevant information was stored there, and its production would not be unduly burdensome.

In contrast, the court in *Simon Property Group L.P. v. MySimon, Inc.*,[48] refused plaintiff access to electronic data deleted from defendant's file because hard copy files were already produced. The plaintiff alleged that the defendant infringed upon its trademark by creating a name and mascot for defendant's Internet business that were similar to the plaintiff's registered trademarks. Thus, the plaintiff sought to compel production of the defendant's programming computer files and access to defendant's computer for inspection. The court refused plaintiff access to this evidence in a reversal of its previous ruling that the plaintiff was entitled to recover the deleted files.

In *Alexander v. FBI*,[49] production of the back-up and archived e-mails and deleted or archived computer files was denied because it could not lead to discovery of any information responsive to the request for production.

In *Jones v. Goord*,[50] inmate plaintiffs sought access to various electronic databases maintained by the state correctional authorities in a suit that challenged the state's double-celling[51] program in its maximum-security prisons. During discovery, plaintiffs limited their requests to only four of the thirteen maximum-security prisons.[52] The state complied by providing the inmates with over 700,000 pages of documents.[53] After nearly six years of litigation, the plaintiffs requested the production of defendant's electronic records and databases.[54] The court analyzed whether the databases themselves were relevant and stated:

> [t]he databases in question, which relate to the location of prisoners, the incidence of medical problems and pharmaceutical use . . . are generally relevant to the plaintiffs inquiry. . . . At the same time, it is far from clear from the evidence presented that all of the information in the databases sought goes to these issues.[55]

The court further considered that discovery of the databases would not only disclose the data, but also "the organizational framework of the databases," the disclosure of which would effectively expose "a great deal about the way that [the defendant] maintains, stores, and classifies information."[56] The resulting issue is whether the way a party "maintains, stores, and classifies information" revealed through the discovery of a party's electronic database is relevant to the litigation for discovery purposes. The Southern District of New York expressed concern over whether the discovery of an electronic database is relevant, but assumed the database was relevant for discovery purposes and ultimately decided the discoverability issue on other grounds.[57]

Although database architecture may be discoverable when it is relevant to the litigation, it may not be relevant when it is only requested for the purpose of manipulating data contained in the database. Such discovery would provide the requesting party sensitive information about how the producing party organizes and stores data that is not relevant to the litigation.

In September 2005, a federal district court in Kansas held that a "party is ordered to produce electronic documents as they are maintained in the ordinary course of business, the producing party should produce the electronic documents

with their metadata intact," absent an appropriate objection, an agreement between the parties to do otherwise, or a protective order.[58] In this case, *Williams v. Sprint/United Management Co.*, the court ordered the defendant to produce responsive discovery, specifically Excel spreadsheets, with the metadata intact.[59] When the defendant pointed out to the court that no one had requested the inclusion of the metadata expressly,[60] the court wrote that "[d]efendant should reasonably have been aware that the spreadsheets' metadata was encompassed within the Court's directive that it produce the electronic [documents] as they were maintained in the regular course of business."[61]

Similarly, in an unpublished opinion, a California appellate court required a responding party to produce a CD-ROM version of hard copy documents so the requesting party would have access to the metadata.[62] The responding party argued it should not have been required to provide the CD-ROM at its expense because, in the ordinary course of business, its documents were not stored in CD-ROM format.[63] The court stated, however, a CD-ROM is no more than a copy, similar to photocopying a paper document.[64]

Another court went further, including alteration of metadata as actionable spoliation of evidence deserving of sanctions.[65] In such case, the court found the defendant had not only improperly deleted electronic evidence off of his laptop but had also wrongfully altered the undeleted files' metadata after the defendant had received notice of plaintiff's claim against him and, later, an order from the court to turn over the laptop to the plaintiff.[66] The court imposed sanctions because of both the deletion of files and the alteration of metadata.[67]

2. Pitfalls of Invasive Electronic Discovery

Invasive electronic discovery has its dangers, as the government discovered when it recently electronically filed an Opposition to a Motion to Quash a Grand Jury Subpoena in a San Francisco federal court; indeed, the government's apparent underestimation of metadata capabilities unveiled confidential details of a grand jury investigation.[68] About eight pages of confidential material regarding a grand jury investigation into steroid use in baseball were electronically blacked out in the government's brief.[69] However, the text could be viewed by simply pasting the document into a word processing program; in no time, nationwide news sources revealed the glitch and the entire document was available to the public.[70] Thus, courts allowing invasive electronic discovery must beware that it may reveal not only irrelevant but also confidential information.

3. The Burden Test Applied

Until the new Federal Rules are in play, courts will evaluate the burden of producing electronic evidence in determining whether and how to require production. In *Linnen v. A.H. Robins Co.*,[71] the plaintiff sought production of the defendant's backup tapes, and the defendant objected on the ground that restoring and searching through the back-up tapes would be extremely expensive. Rejecting defendant's argument, the Court stated that when a company makes the decision to avail itself of computer technology available to the business world, it takes the risk of the cost associated with production. Holding otherwise will lead to unfair results because litigants would be allowed to shield themselves from the expense while at same time reaping the business benefits of such technology.

In *Zubulake v. UBS Warburg LLC* (*Zubulake I*), the plaintiff sought discovery of key evidence allegedly contained in various emails exchanged among UBS employees.[72] UBS argued that restoring those emails would cost $175,000.00 exclusive of attorneys' fees for reviewing the emails.[73]

At the time of the alleged conduct, UBS recognized the volume of email demanded an extensive backup system and it implemented preservation protocols-- emails were preserved

on backup tapes and optical disks.[74] The court acknowledged that each backup tape would take approximately five days to restore and recover the information.[75] The optical disks were easier than the backup tapes to search using a program called Tumbleweed, which allowed the user to conduct a plain-language search and retrieve emails sent from a particular party or regarding a particular subject.[76]

The *Zubulake I* court went on to discuss the tension between the ability of a requesting party to discover any matter that is relevant and not privileged, versus the burden and expense placed on the producing party especially in discovery disputes involving the recovery of electronic data.[77] However, electronic documents are no different from paper documents in that both are subject to disclosure.[78] Therefore, the presumption that the responding party must bear the expense of complying with requests for discovery is applicable to electronic documents, just as it is to paper documents.[79]

The cost burden should only be shifted when electronic discovery imposes an "undue burden or expense" on the responding party.[80] The burden is undue when it "outweighs its likely benefit, taking into account the needs of the case, the amount in controversy, the parties' resources, the importance of the issues at stake in the litigation, and the importance of the proposed discovery in resolving the issues."[81] The analysis does not turn on whether the information sought is electronic, but primarily on whether the information is kept in an accessible or inaccessible format.[82] "[I]n the world of electronic data, thanks to search engines, any data that is retained in a machine readable format is typically *accessible*."[83]

According to the court in *Zubulake I*, a three step analysis is required when deciding disputes regarding the scope and cost of discovering electronic documents: (1) determine whether the electronic data is accessible or inaccessible given the nature of the responding party's computer system with respect to both active and stored data; (2) request that the responding party produce a small sample to determine what data may be found on inaccessible media; and (3) determine whether cost shifting is appropriate.[84]

The court in *Symantec Corporation v. McAfee Associates, Inc*,[85] refused production of the electronic data sought because production would be unduly burdensome in volume.

Similarly, in *Fennell v. First Step Designs*,[86] the court denied the plaintiff's request to examine voluminous electronic documents because it was cumbersome and expensive. The plaintiff in this case requested additional discovery of the defendant's computer files in hope of finding evidence that a memo concerning the defendant's decision to terminate the plaintiff was fabricated. The court stated that the plaintiff's proposal failed to accurately describe the methodology of obtaining the data and failed to protect against destruction or disclosure of privileged information. These factors, combined with costs and increased attorney fees, led the court to rule that the benefit of discovery did not outweigh the costs and risk of production.

Furthermore, courts will consider other factors when determining which side should pay for production. In *Rowe Entertainment, Inc. v. The William Morris Agency, Inc.*,[87] the court held that since there had been no showing that the defendants accessed either their back-up tapes or their deleted e-mails in the normal course of business, this factor tipped in favor of shifting the costs of discovery to the plaintiffs. In *McPeek v. Ashcroft*,[88] the court ordered limited efforts at recovery of deleted data in order to assess the recoverability of relevant information in light of the cost of such recovery and in order to determine the scope of further efforts.

Recently, in *Wiginton v. CB Richard Ellis, Inc.*, an employment discrimination case, a federal court in the northern district of Illinois applied the *Zubulake I* factors, adding one additional factor: "[T]he importance of the requested discovery in resolving the issues of the

litigation."[89] The plaintiff was seeking the costs it incurred in conducting discovery on defendant's e-mail backup tapes.[90] The "resolution" factor, by the court's analysis, tends to reiterate only that "[i]f relevance is in doubt, courts should err on the side of permissive discovery."[91] Inclusion of this factor in the balancing test nudged the scale "in favor of cost shifting."[92]

Another court, though stating it was inclined to follow the *Zubulake* decisions, set a different standard for cost shifting with litigation holds. In *Kemper Mortgage, Inc. v. Russell*,[93] the court stated in response to Kemper Mortgage's query regarding which party was to pay for the preservation of the company's documents:[94]

> One of the benefits but also burdens [of computers] is that it is easier to preserve a great deal of information than it was with paper systems. One of the unexpected costs of using the electronic tool is that it may become costly to abide by one's duty to preserve evidence, but that is not a cost which can be shifted to the opposing party, at least in the absence of a demand for a litigation hold which seeks court enforcement and/or requests for discovery which can limit the amount of information which needs to be preserved.[95]

4. Trade Secret Privilege

In *Jones v. Goord*, the court suggested that discovery of electronic databases may raise "issues of the protection of trade secrets."[96] Unlike New York, Texas has codified the trade secret privilege in Texas Rule of Evidence 507, which provides in full:

A person has a privilege, which may be claimed by the person or the person's agent or employee, to refuse to disclose and to prevent other persons from disclosing a trade secret owned by the person, if the allowance of the privilege will not tend to conceal fraud or otherwise work injustice. When disclosure is directed, the judge shall take such protective measure as the interests of the holder of the privilege and of the parties and the furtherance of justice may require.[97]

The rule "seeks to protect two competing interests: (1) trade secrets are an important property interest worthy of protection, and (2) all facts necessary for the fair adjudication of a lawsuit must be disclosed."[98] First, the party seeking protection must establish that the trade secret privilege applies under Rule 507.[99] The burden then shifts to the requesting party to establish that the information is necessary for a fair adjudication of its claims.[100] If the requesting party meets its burden, then the trial court should compel disclosure of the information subject to a protective order.[101] Discovery cannot be denied when a protective order would preserve the interest of the producing party, even if the requesting party is a direct competitor.[102]

Texas Rule of Evidence 507 is based upon the Supreme Court's proposed rule of evidence 508, which was never adopted by Congress.[103] However, "twenty states, including Texas, have adopted some version of [the trade secret privilege]."[104] Only three states have addressed the scope of the privilege: Texas, Florida and California.[105]

In *Bridgestone/Firestone*,[106] plaintiffs sought discovery of a chemical compound formula. Defendants asserted California Evidence Code section 1060, which provides that "[i]f he or his agent or employee claims the privilege, the owner of a trade secret has a privilege to refuse to disclose the secret, and to prevent another from disclosing it, if the allowance of the privilege will not tend to conceal fraud or otherwise work injustice."[107] The privilege exists to afford some measure of protection against unnecessary disclosure of "information that is essential to the continued operation of a business or industry."[108]

A party opposing discovery of a trade secret must show that the privilege exists, then the requesting party must show more than just

relevance; they must show the necessity of the information to the just adjudication of the action.[109]

In *Rare Coin-It*, the court looked to section 90.506, Florida Statutes (1991),[110] which provides that "[a] person has a privilege to refuse to disclose, and to prevent other persons from disclosing, a trade secret if the allowance of the privilege will not conceal fraud or otherwise work injustice."[111] If a party asserts the privilege, then the trial court must determine whether the privilege exists.[112] If such privilege exists, then the party seeking production must show "reasonable necessity for the requested materials."[113] "If production is then ordered, the court must set forth its findings."[114]

Alternatively, if the producing party has a proprietary interest in the architecture of the database, the database may be shielded from discovery by the trade secret privilege. Such a shield is not impenetrable; the database may be discovered despite a finding of privilege. However, in such cases the court may be required to issue a protective order to limit any potential harm to the producing party.

The Texas Supreme Court in December ruled on the related question of when a party is obligated to produce evidence that it has access to, but legally does not possess. *In re Kuntz*[115] involved a party in possession of trade secret information belonging to a third party. The court analyzed the question of the meaning "possession, custody, or control" and concluded that simply because a party to litigation has access to data (including materials in its files), that does not necessarily give the party possession, custody or control. In *Kuntz*, the party responding to discovery was subject to confidentiality agreements that restricted disclosure of the information. The divided court held that disclosing the information in response to the document subpoena would require the party to "illegally" take possession of the documents. *In re Kuntz* should encourage broader use of confidentiality agreements when sharing trade secret information.

5. <u>The Growing Role of Voicemail In E-Discovery</u>

Voicemail messages are emerging as a potentially powerful source of discovery.[116] "[T]here is nothing in theory and little in substance to distinguish [voicemail] from e-mail … for the purposes of discovery."[117] But sifting through voicemails, unlike searching emails, can be a manual process involving human listeners transcribing voicemail messages (a lengthy and expensive process).[118] Although voicemail transcription software exists, the technology is in its infancy.[119] Hurdles such as accents, regional dialects, elevated emotions (e.g., shouting, crying), foreign languages, proper names, and shorthand expressions still stand in the way of accurate software-based transcription.[120] Moreover, voicemails cannot be filtered until after manual transcription, so parties could expend significant resources on voicemail discovery only to end up empty-handed. Still, voicemails can be valuable, persuasive evidence.[121]

Recent improvements in technology will allow voicemails to one day be as searchable as text-based emails. This new technology capitalizes on the fact that voicemail systems no longer depend on simple tapes—voicemails are now stored electronically.[122] These digital voicemails are stored on hard drives and can be saved (like emails) for as long as a company is willing to maintain the data.[123] Some companies presently use voicemail systems that email employees' voicemails to them as .WAV attachments.[124] These voicemails-turned-emails can contain such information as: the incoming phone number, the date and time of the call, the length of the message, and an associated name (through a company's address book).[125] Also, several companies are attempting to eliminate the need for human transcription by continuing to develop software to automatically transcribe these digital voicemails.[126]

Courts have begun to address the preservation of voicemail for discovery purposes. Courts have held that that

discoverable, electronically-stored data includes voicemail.[127] Although there are currently no cases where a party is sanctioned for spoliation of voicemail evidence, courts are starting to grapple with the issue.[128]

B. Requesting Electronic Evidence

In requesting and producing electronic evidence, the key considerations in choosing available methods and tools include managing the gathering of the material, the privilege review and production of the material, and the analysis and coding of the material.

1. Tools for Managing the Production of Electronic Data

A common method of addressing electronic evidence is to revert to the traditional form of document review and discovery: print out the information, review it for privilege and produce it to opposing counsel in paper form. Not only is this method ironic given the source of the original material, it is often far more expensive than using electronic search engines specifically designed to support the production of electronic evidence, including e-mails, databases and document servers.[129] Such software allows for the on-line systematic and organized gathering of electronic data as well as the privilege review and preparation of a privilege log. The produced data is then linked with a search engine and together they support evidence evaluation and analysis.

The discovery of electronic information presents challenges to the respondent, as well as to the proponent of a request for such discovery. For example, is the respondent obligated to take steps to produce all electronic records, including those that it had intended to delete? To what lengths must the respondent go to resurrect deleted documents? Will the respondent be forced to retain a technical expert to collect and/or recover electronic documents?[130]

2. Consider Requesting Data in Original Electronic Form

As previously noted, the use and manipulation of electronic data can be enhanced if the material is produced in electronic form. In some cases, the data is not useful unless provided in electronic versions. In one case, the trial court ordered the disclosure of records in computer tape format instead of as a hard copy. In that case, the agency maintained the requested files in computer format, the files could be reproduced on computer tapes quickly and at minimal cost, and the same information provided as printed copy would use more than 1,000,000 sheets of paper, cost more than $10,000 to print, require five to six weeks to produce and would cost the petitioner hundreds of thousands of dollars to reconvert to a computer-readable format.[131]

In another proceeding, a court granted a writ of mandamus requiring the police department to furnish the petitioner with copies of certain magnetic tapes and paper copies of record layout of information stored in tapes, where the petitioner presented legitimate reasons why paper copies of records on tape would be insufficient and impracticable. In that case, under the Illinois Public Records Act, the petitioner was entitled to either copy the computer tapes that she requested or have the agency loan her the tapes so that she could copy them.[132]

The new federal rules contemplate requesting data in native form.

3. Checklist for Requesting Electronic Data

The following checklist for discovery of electronic evidence and other computer-related documents can be tailored to meet the demands of the large document case:

A. Request that the electronic information be submitted in computer-readable form. This allows counsel to perform key word searches to locate relevant information and to reformat the

information in a preferred form, such as a table or list. A trial court may order a party to produce information in computer-readable form, on a disk or a CD, even though the precise information has already been supplied in a printout.[133]

B. Determine how the costs for obtaining and handling the electronic information will be borne. Discuss the sharing of costs with opposing counsel. Utilize new forms of technology for reviewing data. See, www.stratify.com or www.attenex.com as examples.

C. Identify potentially relevant electronic information and the format in which it might be stored, such as e-mail, graphics files, or word processing files.

D. Discuss technology issues such as the framing of discovery questions, the specific computer systems involved in the litigation, and the potential need for computer forensics assistance to recover electronic information with a computer expert. Determine if a computer expert may be needed to assist or testify at trial.

E. Consider obtaining a protective order for certain electronic information, such as information that contains trade secrets or is computer source code.

F. Use discovery to obtain information on the computer system used by the opposing party, including the type of hardware, operating systems, and applications used.

G. Decades of forensic data preservation is required. In some cases, parties should preserve electronic data using a forensically verifiable means that preserves the integrity of the data on hard drives. Copying data from one repository to another can impact metadata and other information that could, in certain cases, constitute relevant evidence to the case. (If there is an issue whether and when an employee created a document, metadata would provide some information pertinent to this issue.) Additionally, in many situations, data that is 'deleted' from a user's active computer can be restored through forensic means by analysis of hard drive data.

Certain applications facilitate a more forensically viable means of extracting and reviewing hard drive data, including applications that purport to copy, bit by bit, all the data on a hard drive. These applications, including the EnCase® application from Guidance Software, allow for a higher level of data verification to both reflect the actual information that was on each user's hard drive and to provide an expert the ability to potentially extract deleted files. Other options include extraction and analysis of the actual hard drives from user's systems. See, e.g. http://www.guidancesoftware.com/corporate/downloads/whitepapers/LegalJournalNovember2005.pdf

In any of these cases, a well trained professional experienced in data retrieval and use of these tools should be hired early in the discovery process. These experts should have experience testifying in documentation, application of chain of custody principles and data analysis techniques.

H. Determine how counsel will process and use the electronic information that is discovered. Processing may involve searching through the information. Use of the information may involve the production of trial exhibits.[134]

Other aspects of electronic information, which are not considered part of the body or content of a message or file but can be of immense importance, include date and time stamps reflecting the date of saving or transmission and the date of receipt, and a message's list of recipients. The computer-generated "history" of a document may be important in demonstrating a particular sequence of events in dispute. Automatically generated evidence of when a computer file was edited, when a utility was last used, or when an e-mail message was transmitted by the sender or

opened by the recipient may be useful tools to the litigant. The list of e-mail recipients, including those who were second and third generation recipients, can help prove motive, knowledge, malice, libel, or a waiver of a privilege, for example. In short, counsel should carefully check date and time stamps and the recipient lists, in addition to checking the body of the electronic information obtained through discovery.[135]

Indeed, substantial information on computer-readable media may be useful to litigants even though it does not appear on a printout. For example, information relating to the programs and coding used to input the data may provide valuable insight into business methods when analyzed by a qualified computer expert.[136] In one case, where a computer utilized in a particular business had been programmed with standards that promoted racial discrimination, its information was held to be fully discoverable.[137] One court has held that when statistical analyses have developed from more traditional records with the assistance of computer techniques, the underlying data used to compose the statistical computer input, the methods used to select, categorize, and evaluate the data for analysis, and the computer outputs are all proper subjects for discovery. Consequently, the discovery requests which seeks minute information about the defendants' computer capabilities, "including information about their computer equipment, raw data, programs and data management systems, in addition to the production of tapes which contain information about past and present policyholders . . . . [is] not per se irrelevant."[138] Conversely, discovery of compilations and information from an automated litigation support system (ALSS) should not be allowed in situations where the source documents from which the ALSS received information are available to the requesting party in their original form.[139]

4. Responding to the Request for Electronic Data

In responding to a request for electronic evidence in Texas state court proceedings, it is particularly important to follow the procedures outlined in the Texas Rules of Civil Procedure and to prove up the basis of any objections.

Texas Rule of Civil Procedure 196.4[140] outlines the basis for requesting and responding to requests for electronic evidence. If the responding party plans to assert that the requested electronic or magnetic data responsive to the request is not reasonably available to the responding party in its ordinary course of business, then the responding party must assert an objection to the request on this ground.

Further, in *In re CI Host, Inc.*,[141] the party responding to a request for electronic evidence objected on the grounds that the request was overbroad and that it violated the Electronic Communications Privacy Act. The Texas Supreme Court held that the objecting party failed to produce evidence supporting its objections, therefore the objections were overruled and the trial court did not abuse its discretion in ordering the production of the electronic data.

IV. USE OF ELECTRONIC EVIDENCE AT TRIAL

Electronic evidence presents unique challenges at trial, particularly with respect to admissibility.

A. Admissibility

Computer-generated evidence, of which simulations and models are the most common type, is also referred to as "computer-created" evidence. The computer generates the evidence in the same sense as a camera creates photographic evidence, however. The scene exists in the real world and the camera produces an accurate version of it, but in a different form.

With computer-generated evidence, much the same process is followed. The computer must have precise data from the field on which to run a reliable program and the output must be verifiable as accurate. In the field of computer technology as it applies to experimental and demonstrative evidence, objective verification can be a complex task. Questions as to what to verify and how to verify it are mere threshold inquiries. What happens to the verification if the program is changed? Can the operator test all possible permutations of statements in a program? Even defining "accurate" is a problem in some cases.[142]

Whenever the adverse party is expected to use computer-generated evidence at trial, counsel should be ready to respond with the weaknesses in the evidence.[143] Counsel can challenge the admissibility of evidence by questioning to determine who prepared the evidence, the structure and procedures of the data processing organization, the organizational and operational controls customarily used, and the controls used in the production of the evidence in question.[144] Admissibility may turn on the programs used to produce documents and the data from which the evidence was derived.

In order to challenge the admissibility of computer-generated evidence, counsel might ask for the source listing with explanatory documentation or obtain codes in order to perform tests on the computer program itself. In some cases, computer experts may be needed to test source codes, algorithms and "executable modules." Indeed, it may even be prudent to depose the programmers or systems analysts who developed the programs.

The fundamental rules for admitting computerized business records and computer-generated courtroom exhibits into evidence are n different just because the evidence was stored in or generated by a computer. The foundation for a computerized business record is the same as it is for a paper business record; and whether purely demonstrative or experimental, computer-generated evidence requires the same showing of accuracy of depiction or similarity of conditions as a prerequisite for admission.[145]

Computerized business records are, as the name suggests, the client's business information and data that have been stored in electronic databases. Computer-generated demonstrative evidence is a wider field, covering static illustrations of scenes, objects, or events involved in litigation, and animated graphic presentations principally used to illustrate the testimony of expert witnesses or demonstrate the output of experimental studies.[146]

To facilitate the admissibility of relevant electronic evidence, the court in *Burleson v. State*[147] stated that electronic evidence is admissible if the court, based on the preponderance of the evidence presented, determines that the technology behind the computer-generated display is trustworthy, reliable and standard within the computer industry. In this case, Burleson, a former employee, was charged with the offense of harmful access to his employer's computer when certain payroll data were deleted from his terminal two days after his termination. Burleson claimed on appeal of his conviction that the trial court erred in admitting the electronic documents printed from his computer into evidence. The court rejected his argument and held that computer generated documents were discoverable and admissible tangible evidence.

Similarly, in the Fifth Circuit in *United States v. Sanders*,[148] the defendant appealed his conviction for Medicaid fraud on the ground that the trial court erred in admitting into evidence computer printouts of medical claims received, processed and paid by the Texas Department of Human Resources (TDHR) as business records. The court held that the elements for admissibility of computer records are that the data was prepared pursuant to routine procedures and that the procedures were designed to assure accuracy of the records. The appellate court affirmed the decision of the trial court in admitting the printouts.

Electronic evidence was also admitted in the Southern District of Texas in the antitrust case of *Pearl Brewing Co. v. Jos. Schlitz Brewing Co*[149] The defendant in that case filed a motion to compel production of a computerized econometric model, imputed data and calculations constructed by the plaintiff's non-testifying expert, and production of all documents relating to the details of the plaintiff's computer program where the plaintiff's expert relied on such documents in his testimony. The court compelled production because the information sought was the basis of an expert's testimony.

1. Authentication

One objection to electronic document production may be authentication. As with any other evidence, to be admissible, electronic evidence must be accurate, trustworthy and reliable. Authentication of electronic data involves a showing that the process or system used produces accurate results.

The Fifth Circuit, in *Capital Marine Supply, Inc. v. M/V Roland Thomas II*,[150] noted that computer records are admissible business records if:

a. they are kept pursuant to a routine procedure designed to assure their accuracy;

b. they are created for motives that tend to assure accuracy; and

c. they are not mere accumulations of hearsay.

In the *Capital Marine* Supply case, Westinghouse filed a maritime action for judgment upon a defaulted note secured by a preferred ship mortgage. One of the defendants appealed the adverse judgment and contended that the trial court erred in allowing the balance due on the note to be proven through computerized summaries of Westinghouse's business records. Affirming the trial court's decision, the court stated that the evidence was properly authenticated where there was sufficient proof presented at trial to show the accuracy of the records based on routine procedure.

Authenticity can also be achieved by showing that the computer record was maintained in the ordinary course of business by a person with knowledge of the events recorded. In *Longoria v. Greyhound Lines, Inc*,[151] appellants challenged a trial court's decision denying their claims under an uninsured motorist policy issued by appellee. The ground for the objection was the admission of computer-produced insurance policy facsimiles produced by the appellee. The court held that the computerized record was admissible because it had been properly authenticated by the testimony of an employee who had knowledge of the procedures for collecting and maintaining electronic records, and that such knowledge was sufficient predicate for the admission of the data.

The Texas Rules of Civil Procedure assist in satisfying the authentication requirement. Under Rule 193.7, there is a presumption of authenticity of all produced documents absent an objection within ten days after notice that the document will be used at trial.[152]

2. The Business Records Exception

Computer printouts, like other written documents, are hearsay and cannot be admitted into evidence to prove the truth of the matters asserted unless they fit within a recognized exception to the hearsay rule. All jurisdictions, however, recognize some sort of exception for records maintained and relied upon in the regular course of business, on the rationale that (1) it would be impractical to summon as a witness every employee of the business necessary to establish the matters through personal knowledge and direct testimony, and (2) if the records were used in the ordinary course of business for purposes other than the litigation, there may be little reason to doubt their reliability.[153]

Under the Federal Rules, computer-generated records may be put into evidence as business records if evidence is introduced sufficient to support a finding that(i) the electronic computing equipment is recognized as standard, (ii) the entries were made in the regular course of a regularly conducted business activity at or reasonably near the happening of the event recorded by or for someone within the business possessing personal knowledge, (iii) the computer process produces an accurate result when correctly employed and properly operated, and (iv) the computer process was so employed and operated with respect to the matter at hand, unless the court determines that the sources of information, method, or time of preparation indicate lack of trustworthiness.[154]

The content of the term "standard" in reference to both the hardware and the software computer program is not clearly defined. Since commercial software programs may be modified to particular computer needs, the requirement of "standard" loses much of its utility in assuring trustworthiness. Data placed into a computer may be admitted when presented in a different form provided a sufficient foundation is laid with respect to the mechanical equipment, program, etc. When the underlying data itself does not comply with any hearsay exception, the results of computer analysis may nevertheless be presented to the trier of fact if reasonably relied upon by an expert witness.[155]

In practice, testimony concerning standard hardware and software, the capacity of the computer process to produce accurate results, and proper employment is only required when a genuine question is raised as to the trustworthiness of the computer record. Imposition of such foundation requirements in every case would require the testimony of a computer expert capable of giving such answers rather than the testimony of someone in the nature of a custodian whose knowledge is only sufficient to lay the foundation required for the admissibility of a business record.[156]

Under the statutory exceptions, business records may be admitted into evidence if (1) the records were made in the ordinary course of business, (2) it was the ordinary course of the business to make such records, and (3) the records were made at the time of the transaction or event or shortly thereafter. It is not necessary for the foundational witness to have made the actual recordation or to have personal knowledge of the transaction. Rather, "entries in business records must be based either on the personal knowledge of the entrant or on the information of others with personal knowledge who are under a business duty to transmit such information to the entrant."[157]

3. Admissibility of Software

Establishing the competence of computer evidence presents the greatest hurdle that must be overcome before it will be admitted. Evidence generated through the use of standard, generally available software is easier to admit than evidence generated with custom software. The difference lies in the fact that the capabilities of commercially marketed software packages are well known and cannot normally be manipulated to produce aberrant results. Custom software, on the other hand, must be carefully analyzed by an expert programmer to ensure that the evidence being generated by the computer is in reality what it appears to be. Nonstandard or custom software can be made to do a host of things that would be undetectable to anyone except a trained programmer who can break down the program using source codes and verify that the program operates as represented.[158]

B. Introduction of Computer Records through Records Affidavits

A key tool to utilize in introducing volumetric information is the business record affidavit rule, set out in Texas Rules of Evidence 902(10). This rule is an effective tool to facilitate the production of accounting and other detailed records that should not require live witnesses to be proven up at trial. The rule

requires the use of an affidavit, filed fourteen days prior to trial, stating the information sufficient to establish that the documents are business records under Rule of Evidence 803(6) or (7). Court cases have recognized the use of this procedure, notwithstanding objections that the affidavits contain hearsay.[159] With the admission of the underlying documents, the trial witness can offer a summary of the information contained within this large volume of data.

The broad, generic term "computer evidence" should be divided into two specific classifications: computerized business records and computer-generated evidence.[160] The first is based on the use of the computer to simply arrange or compile objective input data. The second is based on the use of the computer to analyze objective input data and generate conclusions based on assumptions contained within the program being run. The term "computerized business record" is used to refer to material, usually a printout, compiled by the computer in a preordained fashion from input data or from calculations performed by the computer based on input data. Where the litigant uses available computer tools to develop evidentiary material based on input data and assumptions contained within the program itself, the result is computer-generated evidence, such as computer graphics and simulations.[161]

"Computerized business records" should not be interpreted in a restrictive sense and limited to computer data that resides passively in an electronic database. Business records are part of a commercial process, and information put into a computer is used as well as stored. The fact that data is manipulated in some way during business operations does not disqualify it as a business record. Typically, business information is compiled, calculated, recalculated, merged, sorted, and revised during the regular course of a firm's operations. Hence, computerized business records also include business information used in spreadsheets, data sorts, mathematical computations, and list compilations.[162]

C. General Checklist for Admissibility

The following facts and circumstances, among others, tend to establish the proper record maintenance, authentication and procedures necessary to show the accuracy, reliability and freedom from tampering necessary for admitting computer-generated business records:

1. Qualification of witness;

2. Maintenance of plaintiff's records by outside service;

3. Procedures employed to assure accuracy, reliability, and freedom from tampering;

4. Authentication of exhibits; and

5. Offering of computer generated calculations.[163]

V. ELECTRONIC EVIDENCE AND DOCUMENT RETENTION POLICIES

A. The Standard

Document production also involves issues of record retention policies and destruction of evidence.[164] Federal and state courts recognize that electronic evidence is discoverable and thus can be produced in certain circumstances. A proper document retention and destruction policy will reduce the problems associated with disclosure of unnecessary documents and reduce legal exposure.[165]

It is certainly not wrongful to have a document retention policy in the ordinary course of business, and a legitimate consequence of a document retention policy is that some relevant information may be kept from opposing parties.[166] The United States Supreme Court has explained: "Under ordinary circumstances, it is not wrongful for a manager to instruct his employees to comply with a valid document retention policy, even though the policy, in part, is created to keep certain information from others, including the Government."[167] For example, a document retention policy which

involved annual, company-wide "shred days" and was implemented before litigation was reasonably foreseeable was proper.[168]

Following the issuance of the *Zubulake I* decision (page 5 infra), the trial court issued a series of additional opinions, including *Zubulake IV*[169] which enunciated a standard regarding the issue of records retention policies and standards associated with retention of data, including backup tapes, in litigation proceedings. In the ruling, Judge Sheindlin discussed the obligations of parties to retain information, stating that "[o]nce a party reasonably anticipates litigation, it must suspend its routine document retention/destruction policy and put in place a 'litigation hold.'"[170]

The court further noted that, in general, retention of backup tapes retained for disaster recovery is not required as an element of a litigation hold, unless the backup tapes are accessible and actively used for information retrieval. However, after setting forth the broad general rule, Judge Sheindlin appears to swallow the rule with the exception: "If a company can identify where particular employee documents are stored on backup tapes, then the tapes storing the documents of 'key players' to the existing or threatened litigation should be preserved if the information contained on those tapes is not otherwise available. This exception applies to *all* backup tapes."[171]

As well, the Sedona Conference has issued guidelines for litigation holds, the most recent version of which was released in September 2005.[172] In the event of actual or reasonably anticipated litigation, a government investigation or audit, preservation orders issued in litigation, and certain business-related scenarios, companies must suspend normal document retention practices and initiate litigation holds.[173] The Sedona Conference recommends establishing a hold process before-hand, including identifying "point people" with authority to initiate (as well as revoke) the hold and establishing hold procedures, such as what actions, if any, should be taken to suspend recycling of disaster recovery back-up tapes. As well, companies need a system for notifying records custodians of the holds. Despite having a pre-established process, however, holds should be tailored to the case; that is, not all electronic information must be preserved—just that which is relevant to the legal action.[174]

B. Companies Getting Caught

1.1 Loss of Evidence During Litigation – Sanctions Starting at $2,750,000; *United States v. Philip Morris*, 327 F. Supp. 2d 21 (D.D.C. 2004)

In the course of the litigation brought by the Department of Justice against the Philip Morris Company, the trial court heard numerous motions alleging that Philip Morris had lost or destroyed key evidence either intentionally or with disregard of the court's order.[175] In her ruling in July 2004, U.S. District Judge Gladys Kessler found that the defendant had failed to follow records retention obligations following the filing of the litigation and that key senior officials had failed to retain emails and other electronic documents relevant to the case.[176] As a consequence, although short of death penalty sanctions or an instruction that the jury should infer that the documents were damaging, the court sanctioned Philip Morris $2,750,000 for the violations and, more importantly, ruled that Philip Morris would be precluded from calling the key employees as witnesses in the case.[177]

1.2 Morgan Stanley's Lesson: $604 Million in Compensatories, $805 Million in Punitives, and a $15 Million Settlement with the SEC for Repeated Failures to Produce E-mails

Electronic discovery became national news when a jury recently awarded over $1.4 billon in damages to CPH for Morgan Stanley's intentional destruction of electronic evidence. CPH sued Morgan Stanley for fraud relating to the sale of CPH's stock in Coleman, Inc. and requested production of relevant emails. Morgan Stanley partly complied; however,

Morgan Stanley was found to have untruthfully certified that all available emails had been produced when Morgan Stanley had actually failed to search many backup tapes.[178] The court found that Morgan Stanley did not reveal the existence of the additional emails until more than six months after the production deadline.[179] As well, Morgan Stanley continued its normal business practice of overwriting emails when it not only had notice of the ensuing litigation but also had a duty to discontinue the practice pursuant to a Securities and Exchange Commission (SEC) regulation.[180]

For these discovery abuses, the court imposed an adverse inference instruction on Morgan Stanley, read a "conclusive" set of facts to the jury regarding Morgan Stanley's actions, allowed CPH to argue Morgan Stanley acted with malice, placed on Morgan Stanley the burden of *disproving* the plaintiff's fraud claim, and awarded CPH attorney's fees related to CPH's Motion to Compel Further Discovery. [181]

However, after the adverse inference order, the court discovered Morgan Stanley had intentionally hid electronic documents and coached witnesses to avoid disclosure of such conduct.[182] The court therefore entered a partial default judgment against Morgan Stanley,[183] chronicling in such Order the abundant evidence of Morgan Stanley's deceit.[184] As well, the judge revoked Morgan Stanley's trial counsel's pro hoc vice license two weeks before the trial was to begin.[185] Ultimately, the jury awarded $604 million in compensatory damages and $850 million in punitive damages to the plaintiff.[186]

More recently, Morgan Stanley settled a claim with the SEC for repeated e-mail production failures.[187] The SEC began an IPO and Research Analyst investigation of Morgan Stanley on December 1, 2000; however, the SEC alleged, Morgan Stanley did not diligently search for backup tapes containing responsive e-mails until 2005 and wrote over various backup tapes containing responsive e-mails.[188]

The SEC charged Morgan Stanley with violation of the federal securities laws requiring broker-dealers to timely produce records and documents to the SEC.[189] Morgan Stanley agreed to settlement without admitting or denying the allegations; the final settlement amount was $15 million, $5 million of which is to be paid to the NASD and the New York Stock Exchange.[190]

1.3 The *Zubulake* Cases

In the last *Zubulake* decision, Judge Scheindlin entered an order finding sanctions against the defendant UBS for its failure to retain evidence for trial. Throughout this case, she has explored in great detail the standards related to electronic discovery and in the *Zubulake V* decision she sets out a detailed review of the standards associated with records retention obligations in litigation.[191] Her decisions have been widely debated, and they are likely to be cited in other cases due to the in-depth nature of the review she offers.

In *Zubulake V*, the plaintiff argued that UBS failed to preserve emails and failed to timely produce emails from tape backups. Judge Sheindlin ruled that the emails were wrongfully deleted and further placed obligations on defense counsel to ensure that clients properly and timely enforcee document holds following litigation, to communicate with the client regarding retention requirements and to obtain electronic copies of files.[192] The sanctions included the costs of further backup recovery, the costs of redeposing witnesses and an inferential instruction to the jury that advised the jury to consider the missing emails as harmful to the defendant.[193]

In *Carlucci v. Piper Aircraft Corp*,[194] the complainant sought damages for the deaths of three men who perished in a crash of a Piper Cheyenne II aircraft at Shannon, Ireland on November 12, 1976. The court stated that good faith disposal of records pursuant to a bona fide consistent and reasonable document retention policy could justify a failure to produce

documents in discovery. However, the court entered default judgment against Piper because it intentionally destroyed evidence to prevent production and failed to show that it complied with its own document retention policy.

The courts have created a reasonableness standard to be used in evaluating record retention and destruction of electronic data. In *Lewy v. Remington Arms Co*,[195] three factors were considered in deciding whether a retention policy is adequate:

a) whether the record retention policy is reasonable considering the facts and circumstances surrounding the relevant documents;

b) whether the policy was adopted in bad faith; and

c) whether lawsuits have been filed or complaints made that would suggest that certain categories of communication should be retained.

The plaintiff in this case brought a products liability action when she was injured accidentally by her son's gun. She claimed that the defendant destroyed electronic data relevant to her claim and the defendant argued that the information was destroyed pursuant to a routine document destruction procedure. The appellate court remanded for a determination of whether the defendant's retention policy was reasonable considering the totality of the circumstances.

A good retention policy also avoids the issue of spoliation of evidence which occurs when a party or potential party negligently or intentionally destroys evidence and thereby prejudices an opposing party.

In *Lewy*, the court also stated that a corporation must be prepared to take all action necessary to avoid any inadvertent destruction of documents. A corporation cannot blindly destroy documents and expect to be shielded by a seemingly innocuous document retention policy.

1.4 "Case Killer"[196] Sanctions: Legal Presumption and Adverse Inference Instruction

If a party's destruction of electronic evidence is reprehensible enough, a court may sanction such party with a legal presumption or an adverse inference instruction. In *Wal-Mart Stores, Inc. v. Johnson*,[197] the Texas Supreme Court defined the presumption created by the spoliation of evidence.[198] "A duty [to preserve evidence] arises only when a party knows or reasonably should know that there is a substantial chance that a claim will be filed and that evidence in its possession or control will be material and relevant to that claim."[199] Once the duty to preserve has been established, then "a party who has deliberately destroyed evidence is presumed to have done so because the evidence is unfavorable to its case."[200] Likewise, the presumption arises when "the party controlling the missing evidence cannot explain its failure to produce it."[201] The Johnsons brought a personal injury action against Wal-Mart after an employee knocked a reindeer decoration off of a shelf onto Mr. Johnson's head.[202] Mr. Johnson told the Wal-Mart supervisor who came to investigate the incident that he was not hurt.[203] He never threatened to sue nor indicated that he expected Wal-Mart to pay his medical costs.[204] Wal-Mart subsequently discarded the reindeer.[205] At trial, the Johnsons requested a spoliation instruction from the court.[206] However, because the Johnsons were unable to establish that Wal-Mart knew or should have known that there was a substantial chance that Johnson's injury would result in litigation and the store did not know that the reindeer would be material to the litigation when the store disposed of it, the spoliation instruction giving rise to a legal presumption was in error.[207]

Similarly, in *Vick v. Texas Employment Commission*,[208] the court held that documents destroyed pursuant to a regular records destruction policy could not support an adverse

inference unless it was done in bad faith. The plaintiff in this case alleged that the defendant violated Title VII when it refused her unemployment compensation benefits because she was in the third trimester of her pregnancy. The records on Vick were destroyed before trial and the plaintiff sought sanctions for this action. In holding that bad faith is a predicate for a finding that evidence was destroyed to prevent discovery, the court stated that bad faith includes implementing a retention policy with the intent to limit disclosure of damaging documents.

Indeed, despite realizing a need for repercussions for spoliation of electronic evidence, many courts are unwilling to go so far as to impose a legal presumption or adverse inference instruction. In *Phoenix Four, Inc. v. Strategic Res. Corp.,*[209] a court declined to impose the "severe sanction" of adverse inference instruction despite finding the defendant's indifference towards the preservation of evidence constituted gross negligence.[210] The court found that defendants negligently told their counsel "'there were no computers … to search,'" and that defendants' counsel negligently accepted such statement as true without further investigation in violation of counsel's duty under *Zubulake V* to become fully familiar with their client's document retention policies and procedures, thereby ensuring that all relevant information is discovered.[211] However, the *Phoenix Four, Inc.* court explained, an adverse inference instruction was too harsh a sanction on the facts, especially considering copies of the letters notifying defendants of the ensuing litigation were missing and the spoliation was largely due to defendants' discontinuation of their business and abandonment of their office.[212]

It should be noted, though, the *Phoenix Four, Inc.* court did impose relatively minor monetary sanctions on defendants and their counsel for the late production of other electronic documents.[213] Interestingly, the court noted that it was guided by not just *Zubulake V* but also by the proposed amendments to Rule 26 in reaching its decision.[214]

As well, in *Roberts v. Whitfill,*[215] a Texas court of appeals reversed a $750,000 verdict and remanded the case, instructing that a less severe spoliation instruction than the one given at trial[216] "would appear appropriate if the proper predicate is laid" because the relevance of the spoliated QuickBooks data to the plaintiff's case was questionable and because the defendant provided an explanation for the spoliation and offered to produce at least some of the data in paper form.[217]

Nonetheless, some courts more readily impose the adverse inference instruction. Explicitly rejecting the holding in *Vick*, the Supreme Court of Colorado held it was not an abuse of discretion for the lower court to impose an adverse inference instruction even though the plaintiffs did not show that the defendants destroyed evidence in bad faith.[218] The court stated that, on the facts, the adverse inference served punitive and remedial purposes because it deterred other parties from destroying evidence and because the plaintiffs suffered prejudice from the evidence's destruction.[219]

1.5 Sanctions under the New Federal Rules

Federal courts may sanction parties for the destruction of electronic evidence under Federal Rule of Civil Procedure 37 or pursuant to their inherent powers.[220] Harsh sanctions, including default judgments,[221] are likely to continue for intentional or reckless disregard of court orders to produce electronic documents.

However, the amended Rules will provide a safe-harbor for companies who destroy electronic documents as the result of routine, good faith operation of an electronic information system.[222] Specifically, under the newly-created Rule 37(f), courts cannot impose sanctions in such scenarios absent exigent circumstances.[223]

Courts traditionally look at culpability to determine the appropriateness of sanctions. Rule 37's safe-harbor is based on a similar notion:

sanctions for destruction of documents are appropriate only if the loss is due to gross negligence.[224] Indeed, amended Rule 37(f) stems from a fear that courts will sanction companies for situations beyond the companies' control.[225]

In this respect, Rule 37(f) is very different than both the current Federal Rules and much of the common law regarding sanctions for spoliation, which sanction destruction of documents once a party knows or should know the documents could be relevant to litigation regardless of whether the destruction is done pursuant to a document retention policy.[226] Under the new Rule 37(f), a company cannot be sanctioned for destroying electronic documents—including backup tapes for data recovery—under a routine, good-faith, often automatic document retention system. However, the Advisory Committee's Note to Rule 37(f) states the "good-faith" clause requires that parties not "exploit the routine operation of an information system to thwart discovery obligations by allowing that operation to continue in order to destroy specific stored information that it is required to preserve."[227] That is, intervention into the routine data deletion system after a party knows of its duty to preserve certain documents is an aspect of a litigation hold.[228]

The consequences of the "exigent circumstances" clause in Rule 37(f) are uncertain. While some commentators see the clause as an attempt to restore the factor of prejudice to the requesting party's case in the sanctioning process,[229] other commentators see the "exceptional circumstances" clause as a hurdle the requesting party must overcome.[230] In particular, the second camp believes the clause will allow companies to devise focused document destruction or re-characterization practices in order to elude discovery requests.[231]

VI. HANDLING THE LARGE INFORMATION CASE - THE CHALLENGE

Today's litigation environment exposes attorneys to many new challenges unheard of ten years ago and only visible on the distant horizon as recently as five years ago. In general, the volume of documents involved in large cases continues to expand in exponential proportions. In particular, the use of the computer as a tool to create paper documents and provide management of substantive information shifts the focus of production in larger cases to the electronic world.

The large document/data case presents unique challenges that impact many aspects of litigation, including the development of the case, project management and evidence admissibility. Attorneys must consider these issues in handling documents at the outset of the case to facilitate efficient and appropriate management of the production process. Clients must appreciate that significant investments in processes at the outset can save many thousands of dollars (in some cases hundreds of thousands) in time and expense at the end of a case. The lack of an effective plan for document management can also result in an adverse trial result due to the opposition's ability to better marshal the facts, the inability to properly prove key evidence and an appearance of disorganization in the eyes of the jury.

This section explores the issues involved in managing the large document case, including common evidence problems that arise in addressing voluminous documents and admissibility.

A. Case Evaluation - The Production Plan

At the outset of any significant litigation, the litigator should consider a variety of questions related to documents and managing documents. This inquiry should be part of the initial planning and budget consideration for any large litigation. Invariably, these issues will arise in

the course of the lawsuit; consideration at the outset will usually avoid wasted effort and give the client the tools to assess the long term litigation costs of pursuing or defending the action.

The following are some of the questions that should be considered in development of the production plan:

1. What is the scope of the project?

2. What is the ultimate goal? What evidence supports the case?

3. What are the trial issues (i.e., probable jury instructions)?

4. Should we image[232] and code documents into a database.[233]

5. Should we OCR[234] documents (or certain documents) to facilitate word searches and data analysis.

6. Should depositions be videotaped (or digitally videotaped) with corresponding electronic text and indexes?

7. How will privilege review be conducted?

8. Should cooperation be sought between co-defendants (or co-plaintiffs), including agreement on inadvertent disclosure?

9. Is sharing production costs/databases between plaintiff and defendant appropriate?

Depending on the case, the outcome of these inquiries will differ. Typically, however, even relatively small cases will benefit from the use of an electronic database system to manage documents. Imaging can also provide an important tool to assist counsel and make the evidence engine portable even if the volume of documents becomes significant.

Document production tracking is appropriate for larger document productions to assist counsel in managing teams of attorneys and paralegals in review, analysis and production of documents from multiple sites. The tracking system also provides a valuable tool to authenticate the sources of documents to later assist in establishing admissibility of documents. An additional tool is the use of the document identifier number as a tool to assist in tracking and organizing documents.

Privilege and privilege review is a critical element often left for later consideration. Many key pretrial battles focus on privilege and an effective strategy for handling privilege should be evaluated from the outset. Database systems and other tools should be employed to streamline and expedite this process.

B. The Concept of Mutually Assured Destruction

In any lawsuit, the litigator must consider the concept that in most cases, any document request served on an opposing party can be "flipped" and returned in the form of a mirror request. Objecting to a request that is in the same form as the one the attorney first served is difficult and hard to support to a trial court. Consequently, parties to litigation typically avoid pushing certain categories of production that most are unable to manage, such as production of electronic evidence. However, if counsel has developed tools and a strategy to handle production of electronic evidence, for example, he or she can push the opposing party to produce this type of evidence and withstand a similar request in return. This will afford a strategic advantage in the course of the litigation.

C. Know Your Documents Better Than the Opposition Does

Too often in larger document productions, the party requesting the documents gains a better understanding of the opponent's documents than the counsel producing the documents. With

larger productions, the requesting party typically designates portions of the documents for review, omitting documents or document categories that do not support the attorney's theory of the case. The producing party then focuses on the documents selected in a defensive mode rather than reviewing the universe of produced documents to prepare the opposing case. This is particularly true when one party has a significantly higher volume of documents to produce. Avoid allowing the opposing party to set the agenda for the documents.

VII. PRIVILEGE AND ETHICS IN LARGE PRODUCTIONS: INADVERTENT PRODUCTION, DISQUALIFICATION, AND THE CRIME-FRAUD EXCEPTION

A. Inadvertent Production and Waiver of Privilege

The production of substantial volumes of documents raises unique privilege and related ethics issues. One immediate implication is that the production of massive amounts of data, including both paper and electronic, increases the potential for inadvertent production of privileged information.

The problem with privilege lies not so much in what can be produced but in what may accidentally be produced in response to an electronic document production request. In *United States v. Keystone Sanitation Co*,[235] a defendant in a Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") action sought to compel production of electronic mail printouts from attorney's including attorney billing information from a co-defendant. The co-defendant objected to the request although it previously, but inadvertently, produced the document. Rejecting the co-defendant's position, the court found that it had waived the privilege when it produced the document.

The recently revised Texas Rules of Civil Procedure contemplate the potential for inadvertent production with a rule designed to protect against waiver of privilege in the event of inadvertent disclosure. Under Rule 193.3(d), if privileged documents are inadvertently produced without the intent to waive a claim of privilege, the privilege is not waived if the producing party requests return of the documents within ten days (or shorter time on court order) of the discovery of the inadvertent production.[236] If the producing party amends its response to the production request and asserts a privilege over the inadvertently produced documents and the court determines that the privilege exists, then there is an ethical requirement that the party receiving the information take affirmative steps to return all versions of the document, including any electronically reproduced copies or images.[237] However, if the producing party does not amend its response and fails to assert privilege over the inadvertently produced documents and the receiving party is not going to introduce such documents into evidence, then the receiving party has no affirmative duty to return the documents.[238]

The new Federal Rules will provide some protection for responding parties' privileged documents. Specifically, the amendments to Rules 26(b)(5)(B) and 45(d)(2)(B) provide for the return of privileged documents inadvertently produced in electronic discovery.[239]

B. Disqualification of Opposing Counsel

A related issue is whether an attorney who receives privileged materials of his or her opponent may be disqualified. The Texas Supreme Court addressed this issue in *In re Meador* in 1998.[240] The court announced the factors the trial court should consider in determining whether, in the interest of justice, counsel should be disqualified for the receipt of privileged information produced in the normal course of discovery:

1. Whether the attorney knew or should have known that the material was privileged;

2. The promptness with which the attorney notifies the opposing side that he or she has received its privileged information;

3. The extent to which the attorney reviews and digests the privileged information;

4. The significance of the privileged information; i.e. the extent to which its disclosure may prejudice the movant's claim or defense, and the extent to which return of the documents will mitigate that prejudice;

5. The extent to which movant may be at fault for the unauthorized disclosure;

6. The extent to which the nonmovant will suffer prejudice from the disqualification of his or her attorney.[241]

Under the standard announced in *Meador*, counsel receiving privileged documents has a significant burden to consider how to handle the receipt of privilege documents received outside a normal production. The knowing use of privileged documents could result in disqualification.

In *Meador*, a former employee of the defendant in a lawsuit improperly copied privileged documents regarding the lawsuit and provided copies to counsel for the plaintiff. The Texas Supreme Court held that under the *Meador* standard, the trial court did not abuse its discretion in refusing to disqualify the plaintiff's counsel.[242]

Disqualification is a severe measure that "can result in immediate harm, because it deprives a party of its chosen counsel and can disrupt court proceedings."[243] A party that moves to disqualify opposing counsel after opposing counsel has received privileged documents from the court must show that: "(1) opposing counsel's reviewing the privileged documents caused actual harm to the moving party; and (2) disqualification is necessary, because the trial court lacks any lesser means to remedy the moving party's harm.[244]

C. Application of the Crime-Fraud Exception to Privilege

When a client's document destruction is criminal or fraudulent, an attorney has additional privilege concerns. For example, when a client is facing criminal charges, destruction of electronic documents may constitute obstruction of justice; in such cases, the government can compel attorneys to disclose otherwise privileged attorney-client conversations regarding document retention under the crime-fraud exception.[245]

Indeed, in *In Re Grand Jury Investigation*,[246] the Third Circuit allowed disclosure of such conversations under the crime fraud exception. Pursuant to an investigation of suspected federal criminal activity, the government subpoenaed the suspected organization's email; the attorney advised the organization of the subpoena's demand.[247] Thereafter, the organization attempted to destroy incriminating emails, instructing employees: "'[I]f a lawsuit is instituted, our normal … cleaning of files is prohibited. … We strongly suggest that before you leave for the holidays you should catch up on file cleanup.'"[248]

A second subpoena compelled the attorney to testify about the attorney's conversations with the client regarding the contents of the first subpoena. The court stated that, although there was no suggestion the attorney was aware of the client's wrongdoing,[249] the crime-fraud exception barred the attorney from claiming the conversations were privileged.[250]

ENDNOTES

[1] Authorities estimate that at least one-third of a business's data is in electronic format. *See* Gregory S. Johnson, *A Practitioner's Overview of Digital Discovery*, 33 GONZ. L. REV. 347, 348 (1997); *see also* Donald C. Massey, *Discovery of Electronic Data From Motor Carriers - Is Resistance Futile?*, 35 GONZ. L. REV. 145 (2000).

[2] MANUAL FOR COMPLEX LITIGATION (THIRD) § 21.446 (1995).

[3] *In Re Telxon Corp. Sec. Litig.*, Nos. 5:98CV2876, 1:01CV1078, 2004 WL 3192729 (N.D. Ohio July 16, 2004)

[4] Jonathan Glater, *Judge Finds Pricewaterhouse Withheld Data*, N.Y. TIMES, January 12, 2005.

[5] Michael J. Patrick, *E-Mail Data is a Ticking Time Bomb*, NAT'L L.J., Dec. 20, 1993, at 13.

[6] Some commentators note that in some cases the most important information in litigation is stored in computer form. *See* 8A CHARLES ALAN WRIGHT ET AL., FEDERAL PRACTICE AND PROCEDURE § 2218 (2d ed. 1994).

[7] Matthew Goldstein, *Electronic Mail: Computer Messages Present Knotty Issues of Discovery*, 211 N.Y. L.J. 1 (1994).

[8] Patrick, *supra* note 5, at 13.

[9] *United States v. Microsoft*, 97 F. Supp. 2d 59 (D.D.C. 2000), *rev'd in part and aff'd in part*, 253 F.3d 34 (D.C. Cir. 2001), *cert. denied*, 534 U.S. 952 (2001).

[10] *Id*. (citing Amy Harmon, *E-Mailers Tighten Up Loose Lips; Companies, Citing Legal Concerns, Curb Electronic Messages*, INT. HERALD TRIB., Nov. 12, 1998)).

[11] John H. Jessen & Kenneth R. Shear, *Plaintiffs Take Aim at Electronic Data in Trial Discovery*, LEGAL TIMES, June 20, 1994, at S25.

[12] Jean Marie R. Pechette, *Electronic Records Are Discoverable in Litigation: To Plan for Trial Companies Must Understand the Dangers that Lurk in Electronic Record Keeping*, NAT'L L.J., June 27, 1994, at C8.

[13] *See* The Sedona Conference, *at* www.thesedonaconference.org (last visited Oct. 11, 2005).

[14] The Sedona Conference, *The Sedona Guidelines: Best Practice Guidelines & Commentary for Managing Information & Records in the Electronic Age*, http://www.thesedonaconference.org/content/miscFiles/TSG9_05.pdf (last visited June 23, 2006).

[15] TEX. R. CIV. P. 196.4. Electronic or Magnetic Media.

> To obtain discovery of data or information that exists in electronic or magnetic form, the requesting party must specifically request production of electronic or magnetic

> data and specify the form in which the requesting party wants it produced. The responding party must produce the electronic or magnetic data that is responsive to the request and is reasonably available to the responding party in its ordinary course of business.

Id.

16 *Id.* Rule 196.4 requires the producing party to absorb the cost of production absent a finding of good cause. TEX. R. CIV. P. 196.4. Rule 194.4 does not require an explicit finding of good cause. TEX. R. CIV. P. 194.4.

17 41 AM. JUR. PROOF OF FACTS 3D 1 *Recovery and Reconstruction of Electronic Mail as Evidence* § 15 (2003).

18 71 AM. JUR. TRIALS 111 *Discovery of Computer Evidence* § 89 (2002).

19 FED. R. CIV. P. 26(a).

20 FED. R. CIV. P. 34(a).

21 *See* C.J. Poirier et al., *Computer-Based Litigation Support Systems: The Discoverability Issue*, 54 UMKC L. REV. 440 (1986); *see also* MANUAL FOR COMPLEX LITIGATION (THIRD) § 2.715 (1995).

22 *See, e.g.*, CAL. CIV. PROC. CODE § 2017 (2005).

23 *Sanders v. Levy*, 558 F.2d 636 (2d Cir. 1976), *rev'd on other grounds*, 437 U.S. 340 (1978).

24 *See, e.g., Fauteck v. Montgomery Ward & Co.*, 91 F.R.D. 393 (N.D. Ill. 1980) (concerning employee records in sex discrimination case); *Dunn v. Midwestern Indem.*, 88 F.R.D. 191 (S.D. Ohio 1980) (discussing civil rights case where details of defendant's computer system were ordered disclosed).

25 *Cleveland v. Cleveland Elec. Illuminating Co.*, 538 F. Supp. 1257 (N.D. Ohio 1980).

26 U.S. Courts, http://www.uscourts.gov/rules/#supreme0406 (last visited June 21, 2006).

27 *See* Maria Kantzavelos, *New Discovery Rules Tackle Paperless Information*, 29 CHI. LAW. 38 (June 2006) ("The proposed rules are widely expected to take effect on Dec. 1.").

28 U.S. Courts, *supra* note 26.

29 FED. R. CIV. P. 16(b)(5), (6) (effective Dec. 1, 2006).

30 FED. R. CIV. P. 26(f)(3), (4) (effective Dec. 1, 2006).

[31] Kenneth J. Withers, *Electronically Stored Information: The December 2006 Amendments to the Federal Rules of Civil Procedure*, 4 NW. J. TECH. & INTELL. PROP. 171, 196 (2006).

[32] Noyes, *supra* note 31, at 621.

[33] FED. R. CIV. P. 26(a)(1)(B) (effective Dec. 1, 2006).

[34] FED. R. CIV. P. 33(d) (effective Dec. 1, 2006).

[35] FED. R. CIV. P. 34(a), (b) (effective Dec. 1, 2006).

[36] FED. R. CIV. P. 45 (effective Dec. 1, 2006).

[37] Withers, *supra* note 32, at 195.

[38] FED. R. CIV. P. 26(b)(2)(B) (effective Dec. 1, 2006).

[39] *Id.*

[40] Daniel B. Garrie et al., Comment, *Hiding the Inaccessible Truth: Amending the Federal Rules to Accommodate Electronic Discovery*, 25 REV. LITIG. 115, 125 (2006).

[41] *Id.*

[42] *Id.* at 125–26.

[43] See infra notes 208–19 and accompanying text for a discussion about amended Rule 37's safe-harbor provision.

[44] *See, e.g.*, Pamela A. McClean, *Electronic Discovery in Flux—Lawyers Clash Over New Rule Proposals*, NAT'L L.J. (January 21, 2005), *available at* http://www.law.com/jsp/article.jsp?id=1105968938996.

[45] Noyes, *supra* note 31, at 613–17.

[46] Garrie, *supra* note 41, at 130.

[47] *Playboy Enters. v. Welles*, 60 F. Supp. 2d 1050 (S.D. Cal. 1999); *see also Zubulake v. UBS Warburg LLC*, 217 F.R.D. 309 (S.D.N.Y. 2003) (*Zubulake I*); *Antioch Co. v. Scrapbook Borders Inc.*, 210 F.R.D. 645, 652–54 (D. Minn. 2002); *In re Bristol Myers Squibb Sec. Litig.*, 205 F.R.D. 437, 441–42 (D.N.J. 2002).

[48] *Simon Prop. Group L.P. v. mySimon, Inc.*, 194 F.R.D. 639 (S.D. Ind. 2000).

[49] *Alexander v. FBI*, 188 F.R.D. 111, 117 (D.D.C. 1998).

[50] *Jones v. Goord*, No. 95 CIV. 8026(GEL), 2002 WL 1007614, at *1 (S.D.N.Y. May 16, 2002).

[51] *Id*. "Double-celling" occurs when two prisoners are housed in a cell originally designed for a single inmate. *Id*.

[52] *Id*. at *2.

[53] *Id*.

[54] *Id*.

[55] *Id*. at *7.

[56] *Id*. The court stated that even worse, "this disclosure would not be merely the passive result of providing the database. In order to enable any statistical use of the data, the State would have to affirmatively develop and provide to plaintiffs' experts the equivalent of a manual on how the data is encoded and organized." *Id*.

[57] *Id*. at *7–9. The court went on to discuss the application of the burden test and determined that the burden of the defendants outweighed the potential benefit to the plaintiffs considering that the defendants had already provided the requested documents in hard-copy, and would face an enormous amount of cost in providing plaintiffs' expert with the materials necessary to utilize the database in a meaningful way. *Id*. at *10–11.

[58] Williams v. Sprint/United Management Co., No. CIV.A.03-2200-JWLDJW, 2005 WL 2401626, at *11 (D. Kan. Sept. 29, 2005).

[59] *Id.* at 15. The defendant escaped sanctions for originally producing the responsive documents in a format other than how they maintained them in the ordinary course of business (with the metadata "scrubbed" out). *Id.* at 15–16.

[60] *Id.* at 13–14.

[61] *Id.* at 13.

[62] *Global Compliance, Inc. v. Am. Labor Law Co*., Nos. B171017, B172497, B173706, B174697, 2006 Cal. App. Unpub. LEXIS 4157, at *54–57 (Cal. Ct. App. May 15, 2006).

[63] *Id*. at *56.

[64] *Id*. at *56–57.

[65] *Krumwiede v. Brighton Assocs.*, No. 05-C-3003, 2006 WL 1308629, at *6–11 (N.D. Ill. May 8, 2006)

[66] *Id*. at *4–6.

[67] *Id*. at *9–11.

[68] Adam Liptak, *Technical Glitch Opens Window Into Leak Case*, N.Y. TIMES, June 22, 2006, *available at* http://www.nytimes.com/2006/06/22/washington/22cnd-leak.html?hp&ex=1151035200&en=41b33967490f65f9&ei=5094&partner=homepage#secondParagraph.

[69] *Id*.

[70] *Id*.

[71] *Linnen v. A.H. Robins Co.*, No. 97-2307, 1999 WL 462015, at *1 (Mass. Super. June 16, 1999).

[72] *Zubulake v. UBS Warburg LLC*, 217 F.R.D. 309, 311–12 (S.D.N.Y. 2003) (*Zubulake I*).

[73] *Id*. at 312.

[74] *Id*. at 314.

[75] *Id*. (recognizing that although the use of an outside vendor would significantly reduce the amount of time it takes to restore a back-up tape, the costs would be greatly enhanced).

[76] *Id*. at 315.

[77] *Id*. at 316. The *Zubulake I* court lists the eight factors established in *Rowe Entertainment* used to determine whether discovery costs should be shifted: (1) the specificity of the discovery requests; (2) the likelihood of discovering critical information; (3) the availability of such information from other sources; (4) the purposes for which the responding party maintains the requested data; (5) the relative benefits to the parties of obtaining the information; (6) the total cost associated with production; (7) the relative ability of each party to control costs and its incentive to do so; and (8) the resources available to each party. *Id.* (citing *Rowe Entm't, Inc. v. The William Morris Agency, Inc.*, 205 F.R.D. 421, 429 (S.D.N.Y. 2002)). The *Zubulake I* court eliminated two of the factors set forth in *Rowe*: "the specificity of the discovery request" and "the purposes for which the responding party maintains the requested data." *Id.* at 321–22. The court went on to establish a new seven factor test including: (1) the extent to which the request is specifically tailored to discover relevant information; (2) the availability of such information from other sources; (3) the total cost of production compared to the amount in controversy; (4) the total cost of 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 obtaining the information. *Id.* at 322. The first two factors are the most important of the seven factors and are weighted more heavily than the remaining five. *Id*. at 322–23.

[78] *Id.* at 316–17 (quoting *Rowe Entm't, Inc.*, 205 F.R.D. at 428).

[79] *Id*. (quoting *Oppenheimer Fund, Inc. v. Sanders*, 437 U.S. 340, 358 (1978)).

[80] *Id.* at 318.

[81] *Jones v. Goord*, No. 95 CIV. 8026(GEL), 2002 WL 1007614, at *5 (S.D.N.Y. May 16, 2002); FED.R.CIV.P. 26(c).

[82] *Zubulake I*, 217 F.R.D. at 318.

[83] *Id*. (emphasis added). The court in *Zubulake I* goes on to discuss five categories of electronic data and lists the categories from most accessible to least accessible: (1) active, online data; (2) near-line data; (3) offline storage/archives; (4) backup tapes; and (5) erased, fragmented or damaged data. *Id*. at 318–19. Typically, the first three categories will be accessible and the latter two categories will be inaccessible. *Id*. at 319–20. Accessible data does not need to be manipulated or restored to be "usable" whereas inaccessible data, is not readily usable. *Id*. at 320.

[84] *Id*. at 324; *see supra* note 45 (discussing the analysis set forth by the court in *Zubulake I* regarding cost-shifting).

[85] *Symantec Corp. v. McAfee Assocs., Inc.*, No. C-97-20367-JF(EAI), 1998 WL 740807, at *3 (N.D. Cal. Aug. 14, 1998).

[86] *Fennel v. First Step Designs*, 83 F.3d 526 (1st Cir. 1996).

[87] *Rowe Entm't, Inc. v. The William Morris Agency, Inc*., 205 F.R.D. 421, 431 (S.D.N.Y. 2002).

[88] *McPeek v. Ashcroft*, 202 F.R.D. 31, 34 (D.D.C. 2001)

[89] *Wiginton v. CB Richard Ellis, Inc.*, 229 F.R.D. 568, 572–73 (N.D. Ill. 2004) (supporting inclusion of the additional factor through FED. R. CIV. PRO. 26(b)(2)(iii)).

[90] *Id.* at 569.

[91] *Id.* at 577.

[92] *Id.* at 577. This factor will almost always tip the scales in favor of cost-shifting.

[93] No. 3:06-cv-042, 2006 U.S. Dist. LEXIS 20729 (S.D. Ohio Apr. 18, 2006).

[94] Kemper Mortgage claimed it had retained a computer forensics expert to effect a litigation hold by "mirroring" the plaintiff's corporate server and laptops, and that the process would cost approximately $4,000. *Id.* at *1.

[95] *Id.* at *6.

[96] *Jones v. Goord*, No. 95 CIV. 8026(GEL), 2002 WL 1007614, at *12 (S.D.N.Y. May 16, 2002). New York courts essentially utilize the same rule that Texas has codified. *See* 44 N.Y. JUR. 2D DISCLOSURE § 180 (2003) (discussing a qualified evidentiary privilege for trade secrets and other confidential commercial information). *See also AIN Leasing Corp. v. Peat Marwick, Mitchell &*

Co., 636 N.Y.S.2d 584 (N.Y. Sup.Ct. 1995); *Cronin v. Pierce & Stevens Chem. Corp.*, 321 N.Y.S.2d 239 (N.Y. App. Div. 1971).

97 TEX. R. EVID. 507.

98 *John Paul Mitchell Sys. v. Randalls Food Market, Inc.*, 17 S.W.3d 721, 737 (Tex. App.—Austin 2000, pet. denied); *see In re Cont'l Gen. Tire, Inc.*, 979 S.W.2d 609, 612 (Tex. 1998); *see also In re Bridgestone/Firestone, Inc.*, 106 S.W.3rd 730, 731 (Tex. May 22, 2003) (discussing the application of the analysis set forth in *In Re Cont'l Gen. Tire*). In *Bridgestone/ Firestone*, plaintiffs failed to show how access to the skim stock formula, a stipulated trade secret, would be necessary for a fair adjudication of their claims. *Id*. at 731. The court declined to institute a bright-line rule regarding what would or would not be necessary for the fair adjudication of claims, and instead decided on a case-by-case analysis that depends on the circumstances presented by each individual case. *Id*. at 732. The test "cannot be satisfied merely by general assertions of unfairness;" both party's must submit detailed information to support either the claim of privilege or that of unfairness. *Id*.

99 *In re Cont'l Gen. Tire, Inc.*, 979 S.W.2d at 610. "A trade secret is any formula, pattern, device or compilation of information which is used in one's business and presents an opportunity to obtain an advantage over competitors who do not know or use it." *Computer Assocs. Int'l v. Altai, Inc.*, 918 S.W.2d 453, 455 (Tex. 1996) (citing *Hyde Corp. v. Huffines*, 158 Tex. 566, 314 S.W.2d 763, 776, *cert. denied*, 358 U.S. 898, 79 S.Ct. 223, 3 L.Ed.2d 148 (1958) (quoting Restatement of Torts § 757 (1939))). A party "must satisfy six factors to entitle them to trade secret protection: (1) the extent to which the information is known outside of the holder's business; (2) the extent to which it is known by employees and others involved in the holder's business; (3) the extent of the measures taken by the holder to guard the secrecy of the information; (4) the value of the information to the holder and its competitors; (5) the amount of effort or money expended by the holder in developing the information; and (6) the ease or difficulty with which the information could be properly acquired or duplicated by others. *Center for Econ. Justice v. Am. Ins. Ass'n*, 39 S.W.3d 337, 344-45 (Tex. App.—Austin 2001, no pet.).

100 *In Re Cont'l Gen. Tire, Inc.*, 979 S.W.2d at 610.

101 *Id*.

102 *Jampole v. Touchy*, 673 S.W.2d 569, 574-75 (Tex. 1984), *overruled on other grounds*, *Walker v. Packer*, 827 S.W.2d 833 (Tex. 1992).

103 *In Re Cont'l Gen. Tire, Inc.*, 979 S.W.2d at 610-11 (citing McLaughlin Weinstein's Federal Evidence § 508.01, at 508-5 (2d ed.1998); preliminary Draft of Proposed Rules of Evidence for the United States District Courts and Magistrates, 46 F.R.D. 161, 270 (1969)).

104 *Id.* at 611 (citing similar rules in twenty states including: Alabama, Alaska, Arkansas, California, Delaware, Florida, Hawaii, Kansas, Louisiana, Maine, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Dakota, Oklahoma, South Dakota, Texas and Wisconsin).

[105] *Id.* (citing *Bridgestone/Firestone, Inc. v. Superior Court*, 9 Cal. Rptr. 2d 709 (Cal. App. 1992) and *Rare Coin-It, Inc. v. I.J.E., Inc.*, 625 So. 2d 1277 (Fla. Dist. Ct. App. 1993)).

[106] *Bridgestone/Firestone, Inc. v. Superior Court*, 9 Cal. Rptr. 2d 709 (Cal. Ct. App. 1992).

[107] CAL. EVID. CODE § 1060 (2005).

[108] *Bridgestone/Firestone*, 9 Cal. Rptr. 2d at 711–712 (quoting the Law Revision Commission Comment to section 1060 of the California Evidence Code).

[109] *Id*. at 712.

[110] *Rare Coin-It, Inc. v. I.J.E., Inc.*, 625 So. 2d 1277, 1278 (Fla. Dist. Ct. App. 1993).

[111] FLA. STAT. ANN. § 90.506 (West 2005).

[112] *Rare Coin-It, Inc.*, 625 So. 2d at 1278.

[113] *Id*.

[114] *Id.* at 1279 (quoting *Arthur Finnieston, Inc. v. Pratt*, 673 So. 2d 560, 562 (Fla. Dist. Ct. App. 1996)).

[115] *In re Kuntz*, 124 S.W.3d 179 (Tex. 2003).

[116] *See* Paul D. Boynton, Voicemail Poised to Become the Next Target of E-Discovery, http://www.lexisone.com/news/nlibrary/lw070003z.html (last visited Jun. 28, 2006); *see also* Ron Madden et al., Caught on Tape: The Next Frontier in Electronic Discovery, Legal Tech Newsletter (May 2004), http://www.lawjournalnewsletters.com/pub/ljn_legaltech/22_2/news/142392-1.html

[117] Kenneth J. Withers, Is Digital Different? Electronic Disclosures and Discovery in Civil Litigation, http://www.kenwithers.com/articles/bileta/elecdisc.htm (last visited Jun. 28, 2006).

[118] Steven C. Bennett, Voicemail: The Latest Front in the E-Discovery Wars (November 21, 2002), http://www.law.com/jsp/article.jsp?id=1036630451049 ("[U]nlike e-mail, voicemail does not generally have immediately useful built-in search capabilities. One cannot simply review the "to" and "from" lines of an voicemail, or the "re" indication, to determine the general nature of the communication. Nor, unless voicemails are transcribed or otherwise converted into searchable text, is it currently possible to review voicemail easily for relevance and privilege. In essence, review of voicemail may require hours, days or even weeks of real-time listening to messages in an effort to determine what should be done with the messages from a discovery standpoint.")

[119] Conrad J. Jacoby, Assessing the Importance of Voice Mail In Discovery (May 20, 2006), http://www.llrx.com/columns/fios5.htm

[120] *Id*.

[121] *See United States v. Smith*, 15 F.3d 1051 (9th Cir. 1998) (convicting defendant of insider trading after, among other evidence of his guilt, a voicemail revealed defendant's awareness of insider information and stock trading intentions).

[122] Bennett, *supra* note 3.

[123] *Id*.
[124] Jacoby, *supra* note 4.
[125] *Id*.
[126] *Id*; Nexidia, Inc., http://www.nexidia.com/technology/esi.html (last visited Jun. 28, 2006).
[127] *See Thompson v. U.S. Dept. of Hous. & Urban Dev.*, 219 F.R.D. 93, 96 (D. Md. 2003) ("…the phrase 'electronic records' ... encompasses voicemail."); *Kleiner v. Burns*, 48 Fed. R. Serv. 3d (Callaghan) 644, 649 (D. Kan. 2000) (" '[C]omputerized data and other electronically-recorded information' includes, but is not limited to: voice mail messages and files, back-up voice mail files, e-mail messages and files, backup e-mail files, deleted e-mails, data files, program files, backup and archival tapes, temporary files, system history files, web site information stored in textual, graphical or audio format, web site log files, cache files, cookies, and other electronically-recorded information."); *Jicarilla Apache Nation v. United States*, 60 Fed. Cl. 413, 414 (2004) ("As used in this Order, 'record' means any … recording, report, spreadsheet, statement, summary, telephone message record or log, transcript, video, *voicemail*, voucher, webpage, work paper … or any other item or group of documentary material or information, regardless of physical or electronic format or characteristics, and any information therein, and copies, notes, and recordings thereof.") (emphasis added).
[128] *See Burrell v. Anderson*, 353 F. Supp. 2d 55 (D. Me. 2005) (denying motion for sanctions for spoliation of voicemail evidence, observing: "If [plaintiff] thought that it should have been so evident to the defendants that [plaintiff] would need a copy of [plaintiff's] one-sided message it should have been evident to [plaintiff] himself….[I]t is a wonder…that [plaintiff] did not record his messages on his own.").
[129] *See, e.g.*, Kiersted Systems Home Page, http://www.kiersted.com (last visited Oct. 11, 2005) (regarding electronic discovery software developed by Kiersted Systems, Inc. of Houston, Texas).
[130] Jean Marie R. Pechette, *Discovery Requests Should Include All Files Kept in Electronic Form*, N.Y. L.J., Aug. 2, 1994, at 5.
[131] *Brownstone Publishers, Inc. v. New York City Dep't of Bldgs.*, 560 N.Y.S.2d 642 (N.Y. App. Div. 1990).
[132] *State ex rel. Margolius v. Cleveland*, 584 N.E.2d 665 (Ohio 1992).
[133] *Nat'l Union Elec. Corp. v. Matsushita Elec. Indus. Co.*, 494 F. Supp. 1257 (E.D. Pa. 1980).
[134] 41 AM. JUR. PROOF OF FACTS 3D 1 *Recovery and Reconstruction of Electronic Mail as Evidence* § 24 (2003).
[135] 41 AM. JUR. PROOF OF FACTS 3D 1 *Recovery and Reconstruction of Electronic Mail as Evidence* § 2 (2003).
[136] 71 AM. JUR. TRIALS 111 *Methods of Production* § 94 (2002).
[137] *Dunn v. Midwestern Indem.*, 88 F.R.D. 191, 194 (S.D. Ohio 1980.
[138] *Id*. (citing MANUAL FOR COMPLEX LITIGATION (THIRD) § 2.715(1995)).

[139] 71 AM. JUR. TRIALS 111 *Methods of Production* § 94 (2002).

[140] TEX. R. CIV. P. 196.4

[141] *In re CI Host, Inc.*, 92 S.W.3d 514 (Tex. 2002).

[142] *Id*.

[143] *See* 41 AM. JUR. PROOF OF FACTS 3D 1 *Recovery and Admission of Computer Business Records* § 19 (2003) (discussing discovery techniques with respect to computerized business records).

[144] *Id*.

[145] 71 AM. JUR. TRIALS 111 *Discovery Plan* § 91 (2002).

[146] 71 AM. JUR. TRIALS 111 *Basic Definitions of Computer Evidence* § 116 (2002).

[147] *Burleson v. State*, 802 S.W. 2d 429, 441–42 (Tex. App.—Fort Worth 1991, writ ref'd).

[148] *United States v. Sanders*, 749 F.2d 195 (5th Cir. 1984).

[149] *Pearl Brewing Co. v. Jos. Schlitz Brewing Co.*, 415 F. Supp. 1122 (S.D. Tex. 1976).

[150] *Capital Marine Supply, Inc. v. M/V Roland Thomas III*, 719 F.2d 104, 106 (5th Cir. 1983).

[151] *Longoria v. Greyhound Lines, Inc.*, 699 S.W. 2d 298 (Tex.App.—San Antonio 1985, no writ).

[152] TEX. R. CIV. P. 193.7.

[153] *See, e.g., United States v. DeGeorgia*, 420 F.2d 889 (9th Cir. 1969).

[154] FED. R. EVID. 803(6), (8); 71 AM. JUR. TRIALS 111 *Computerized Business Records in General* § 119 (2002).

[155] FED. R. EVID. 703; Michael H. Graham, 31 FED. PRAC. & PROC. EVID. § 6830 (West Group 1997); 71 AM. JUR. TRIALS 111 *Computerized Business Records in General* § 119 (2002).

[156] FED. R. EVID. 803(6); Michael H. Graham, 31 FED. PRAC. & PROC. EVID. § 6830 (West Group 1997); 71 AM. JUR. TRIALS 111 *Computerized Business Records in General* § 119 (2002).

[157] 71 AM. JUR. TRIALS 111 *Computerized Business Records in General* § 119 (2002).

[158] 71 AM. JUR. TRIALS 111 *Software Considerations of Computer Evidence* § 118 (2002).

[159] *Fullick v. Baytown*, 820 S.W. 2d 943 (Tex.App.—Houston [1st Dist.] 1991, no writ).

[160] 71 AM. JUR. TRIALS 111 *Computer Evidence in General Considerations of Computer Evidence* § 115 (2002).

[161] *Id*.

[162] *Id*. § 116.

[163] 14 AM. JUR. PROOF OF FACTS 3D 173 *Admission of Computer Business Records* § 26 (2003).

[164] *See also* Matthew J. Bester, Comment, *A Wreck on the Info-Bahn: Electronic Mail and the Destruction of Evidence*, 6 COMMLAW CONSPECTUS 75 (Winter 1998).

[165] Almost all electronic transactions need to be taken into consideration when developing and implementing a viable records retention policy including email, instant messages and other forms of electronic communication. *Instant Messaging: Clarification for Members Regarding Supervisory Obligations and Recordkeeping Requirements for Instant Messaging*, No. 03-33, http://www.nasd.com/web/groups/rules_regs/documents/notice_to_members/nasdw_003249.pdf (last visited Oct. 11, 2005) (discussing the recordkeeping challenges posed by the increased use of instant messaging); Brooke A. Masters, *Firms Told to Save Instant Messages*, Washington Post, June 19, 2003, at E02; *see also Procter & Gamble Co. v. Haugen*, 179 F.R.D. 622, 631–32 (D. Utah 1998), *aff'd in part, rev'd in part on other grounds*, 222 F.3d 1262 (10th Cir. 2000) (suggesting that all corporate email communications for key employees should be preserved during the pendency of the lawsuit); *United States v. Koch Indus., Inc.*, 197 F.R.D. 463, 482–87 (N.D. Okla. 1998) (proposing that a corporation must present a coordinated approach to document retention, especially with regard to documents that are potentially relevant to litigation and such retention policy should be created and implemented by senior management); *In re Prudential Ins. Co. of Am. Sales Practices Litig.*, 169 F.R.D. 598 (D.N.J. 1997) (regarding implementation of document retention policy and responsibility of senior corporate officers).

[166] *Hynix Semiconductor, Inc. v. Rambus, Inc.*, No. C-00-20905 RMW, 2006 U.S. Dist. Lexis 30690, *54–55 (N.D. Cal. Jan. 5, 2006).

[167] *Arthur Anderson LLP v. United States*, 544 U.S. 696, 696 (2005).

[168] *Hynix Semiconductor, Inc.*, 2006 U.S. Dist. Lexis 30690, at *33–34, 55.

[169] *Zubulake v. UBS Warburg*, 220 F.R.D. 212 (S.D.N.Y. 2003) (*Zubulake IV*).

[170] *Id.* at 218.

[171] *Id.*

[172] The Sedona Conference, *supra* note 14.

[173] *Id.*

[174] *Id.*

[175] *United States v. Philip Morris*, 327 F. Supp. 2d 21, 24 (D.D.C. 2004).

[176] *Id.* at 24–25.

[177] *Id.* at 25–26.

[178] Amended Order Granting CPH's Motion for Adverse Inference Instruction in *Coleman (Parent) Holdings, Inc. v. Morgan Stanley & Co.*, No. 502003CA005045XXOCAI, 2005 Extra LEXIS 107, at * 1–5 (Fla. Cir. Ct. Mar. 1, 2005).

[179] *Id.* at *7.

[180] *Id.* at *1–2.

[181] *Id.* at *20–22.

[182] Order Granting in Part CPH's Renewed Motion for Entry of Default Judgment in *Coleman (Parent) Holdings, Inc. v. Morgan Stanley & Co.*, No. CA-03-5045-AI, 2005 Extra LEXIS 94, at *29–31 (Fla. Cir. Ct. Mar. 23, 2005).

[183] *Id.* at *31–35.

[184] *See generally id.*

[185] Withers, *supra* note 32, at 177.

[186] Landon Thomas, Jr., *Damage Award Hits Morgan Where It Hurts*, INT'L HERALD TRIB., May 20, 2005, at Finance3.

[187] *Morgan Stanley Sued for Repeated E-mail Production Failures; Morgan Stanley Agrees to Pay a $15 Million Penalty and Undertake Reforms In Settlement*, SEC NEWS DIGEST, 2006 SEC NEWS LEXIS 969, at *1 (May 10, 2006).

[188] *Id*.

[189] *Id*.

[190] *Id*. at *2.

[191] *Zubulake v. UBS Warburg*, 229 F.R.D. 422 (S.D.N.Y. 2004) (*Zubulake V*).

[192] *Id.* at 439.

[193] *Id.* at 439–440.

[194] *Carlucci v. Piper Aircraft Corp.*, 102 F.R.D. 472 (S.D. Fla. 1984).

[195] *Lewy v. Remington Arms Co.*, 836 F.2d 1104 (8th Cir. 1988).

[196] Withers, *supra* note 32, at 208. *See also Phoenix Four, Inc. v. Strategic Res. Corp.*, No. 05 CIV . 4837 (HB), 2006 U.S. Dist. LEXIS 32211, at *13 (S.D.N.Y. May 23, 2006) ("An adverse inference instruction is a severe sanction that often has the effect of ending litigation because 'it is too difficult a hurdle for the spoliator to overcome.'") (*citing Zubulake IV*, 220 F.R.D. at 219).

[197] *Wal-Mart Stores, Inc. v. Johnson*, 106 S.W.3rd. 718, 719 (Tex. 2003).

[198] *Id*. at 722.

[199] *Id*.

[200] *Id*. (citing *Williford Energy Co. v. Submergible Cable Servs. Inc.*, 895 S.W.2d 379, 389–90 (Tex.App.—Amarillo 1994, no writ) and *Brewer v. Dowling*, 862 S.W.2d 156, 159 (Tex.App.—Fort Worth 1993, writ denied)).

[201] *Id*. (citing *Watson v. Brazos Elec. Power Co-op., Inc*, 918 S.W.2d 639, 643 (Tex.App.—Waco 1996, writ denied)).

[202] *Id*. at 720.

[203] *Id*.

[204] *Id*.

[205] *Id*.

[206] *Id*. at 720–21. The spoliation instruction read as follows: "You are instructed that, when a party has possession of a piece of evidence at a time he knows or should have known it will be evidence in a controversy, and thereafter he disposes of it, makes it unavailable, or fails to product it, there is a presumption in law that the piece of evidence had it been produced, would have been unfavorable to the party who did not produce it. If you find by a preponderance of the evidence that Wal-Mart had possession of the reindeer at a time it know or should have known they would be evidence in this controversy, then there is a presumption that the reindeer, if produced, would be unfavorable to Wal-Mart." *Id*.

[207] *Id*. at 724.

[208] *Vick v. Texas Employment Comm'n*, 514 F.2d 734 (5th Cir. 1975).

[209] No. 05 CIV . 4837 (HB), 2006 U.S. Dist. LEXIS 32211 (S.D.N.Y. May 23, 2006).

[210] *Id.* at *14–16.

[211] *Id*. at *16–20.

[212] *Id*. at * 14–16.

[213] *Id*. at *27–29. The sanctions ultimately awarded were attorney's fees associated with bringing the motion for sanctions and $10,000 for the re-deposition of defendants limited to issues raised by the overdue discovery. *Id.*

[214] *See id.* at *19 ("Proposed Rule 26(a) requires parties to disclose 'a description by category and location of … electronically stored information.' Proposed Rule 26(b)(2) reinforces the concept that a party must identify even those sources that are 'not reasonably accessible,' but exempts the party from having to provide discovery from such sources unless its adversary moves to compel discovery. The proposed amendments essentially codify the teaching of *Zubulake IV & V*.") (citations omitted).

[215] No. 10-04-00030-CV, 2006 Tex. App. LEXIS 2203 (Tex. App.—Waco 2006, no pet. h.).

[216] The instruction given at trial read in part: "You are instructed that [defendant] has intentionally destroyed QuickBooks data. You are further instructed that you should presume that the QuickBooks data destroyed was unfavorable to [defendant]…. You are further instructed that [defendant] bears the burden to disprove these presumptions." *Id.* at *28.

[217] *Id.* at *30–33.

[218] *Aloi v. Union Pac. R.R. Corp.*, 129 P.3d 999, 1003 (Colo. 2006).

[219] *Id.*

[220] *Chambers v. NASCO, Inc*., 501 U.S.32, 44–45 (1991).

[221] *See, e.g.*, *Krumwiede v. Brighton Assocs.*, No. 05-C-3003, 2006 WL 1308629, at *3, 7–11 (N.D. Ill. May 8, 2006) (granting default judgment against defendant who "willfully and in bad faith … continued to alter, modify, and destroy" evidence on a laptop computer after both receiving notice of plaintiff's claim against him and, later, an order from the court to turn over the laptop to the plaintiff).

[222] At least one commentator has noted the ambiguity of the phrase "electronic information system," especially the question of whether the phrase includes the humans who run the system. *See* Withers, *supra* note 32, at 208 ("What is an electronic information system? Does it include the human beings who run it?").

[223] FED. R. CIV. P. 37(f) (effective Dec. 1, 2006). It should be noted, however, that courts have inherent authority or contempt powers to sanction outside of the Rules. Withers, *supra* note 32, at 208. As well, Rule 37(f) refers only to the sanctioning of parties to the litigation, thus explicitly excluding from the provision non-parties served with subpoenas for electronic documents under Rule 45. *Id.*

[224] *Id.* at 207–08.

[225] *Id.* at 207.

[226] Garrie, *supra* note 41, at 127.

[227] FED. R. CIV. P. 37(f) (effective Dec. 1, 2006) advisory committee's note.

[228] *Id.*

[229] *E.g.*, Withers, *supra* note 32, at 208.

[230] *E.g.*, Garrie, *supra* note 41, at 129–30.

[231] *Id.*

[232] Imaging typically refers to the creation of a static image of an original document in a computerized "picture" format, such as a TIFF image. This image is usually not text searchable and looks the same as the physical piece of paper that was the source.

[233] A computerized system that correlates and organizes information regarding documents to allow searching and tracking by author, date, subject, hot issues, exhibit status and admissibility (among other fields).

[234] OCR is a process by which a document is converted into a searchable format (such as a Microsoft Word or WordPerfect) through a program that recognizes images of text and converts the image into a text document. Photo copies of spreadsheets can also be OCR'd into a spreadsheet program such as MS Excel.

[235] *United States v. Keystone Sanitation Co.*, 885 F. Supp. 672 (M.D. Pa. 1994).

[236] TEX. R. CIV. P. 193.3(d). This rule effectively preserves the Texas Supreme Court's holding in *Granada Corp. v. First Court of Appeals*, 844 S.W.2d 223 (Tex. 1992, no writ), which held that inadvertent production waives the attorney client privilege if the documents are not diligently screened prior to production.

[237] *Morin-Spatz v. Spatz*, No. 05-00-01580-CV, 2002 WL 576513, at *9–10 (Tex. App.—Dallas Apr. 18, 2002, no pet.).

[238] *Id.* In *Spatz*, the receiving party waited ten days to review the privileged communications between the opposing party and counsel, did not disclose that she believed the documents had been inadvertently produced and used some of the material in the trial without submitting the inadvertently produced documents into evidence. *Id.* Although the court ruled against the producing party because none of the documents were offered into evidence and the receiving party did not have a duty to disclose the inadvertent production, the court stated that it "do[es] not condone [the receiving party's] use of apparently privileged materials." *Id*. at 10. Nor did they "approve an interpretation of rule 193.3(d) as waiving all privileges ten days after production of the documents." *Id*.

[239] FED. R. CIV. P. 26(b)(5)(B), 45(d)(2)(B) (effective Dec. 1, 2006).

[240] *In re Meador*, 968 S.W.2d 346 (Tex. 1998).

[241] *Id*. at 351–52.

[242] *Id*. at 354.

[243] *In re Nitla S.A. de C.V.*, 92 S.W.3d 419, 423 (Tex. 2002).

[244] *Id*. (citing *In re Users Sys. Servs., Inc.*, 22 S.W.3d 331, 336 (Tex. 1999), *Meador*, 968 S.W.2d at 350 and *Ayres v. Canales*, 790 S.W.2d 554, 558 (Tex. 1990)).

[245] Establishing applicability of the crime-fraud exception usually involves proving two elements: (1) that the client was committing or intended to commit a fraud or crime and (2) the attorney-client communications were used in furtherance of such crime or fraud. *In Re Grand Jury Investigation*, 445 F.3d 266, 274 (3d Cir. 2006).

[246] *Id*.

[247] *Id*. at 269.

[248] *Id*. at 277.

[249] *Id*. at 279.

[250] *Id*. at 268–69.