

STATE OF NORTH CAROLINA

IN THE GENERAL COURT OF JUSTICE

SUPERIOR COURT DIVISION

COUNTY OF GUILFORD

01 CVS 10614

ANALOG DEVICES, INC.,

Plaintiff,

v.

CHRISTOPHER MICHALSKI, KIRAN
KARNIK AND MAXIM INTEGRATED
PRODUCTS, INC.,

Defendants.

ORDER AND OPINION

{1} This matter is before the Court on Defendants' Motion to Compel. Defendants have requested that Plaintiff produce e-mails from each of the originators of twenty-one trade secrets at issue for a two-year period surrounding the release dates of products implementing those trade secrets. Much of the information requested is contained in inaccessible form.

{2} The opinion in this case and the opinion in *Bank of America Corp. v. SR International, Inc.*, 2006 NCBC 15 (N.C. Super. Ct. Nov. 1, 2006), filed contemporaneously, discuss for the first time the extent to which inaccessible electronic data is discoverable and who should pay for its production under the North Carolina Rules of Civil Procedure. This case addresses the issues in the context of a party-to-party request for production of documents, and the *Bank of America* decision addresses those issues in the context of a subpoena to a nonparty. In some instances the considerations are the same, and in others they differ dramatically. In both contexts, trial judges should be guided by the language of the applicable Rules of Civil Procedure, supplemented by the Guidelines adopted by the Conference of Chief Justices. In this instance the Court has decided to require production and to split the cost of production between the parties subject to further revision on allocation of costs at the end of the litigation.

Womble Carlyle Sandridge & Rice, PLLC by Michael E. Ray, John J. Morrow, Jr., and Robert D. Mason; Wilmer Cutler Pickering Hale & Dorr LLP, by James C. Burling, Gregory P. Teran, and Clark W. Petschek for Plaintiff Analog Devices, Inc.

Smith Moore, LLP, by Jonathan A. Berkelhammer; Heller Ehrmann LLP, by Alan H. Blankenheimer, Laura E. Underwood, and Jo Dale Carothers, for Defendants Christopher Michalski, Kiran Karnik, and Maxim Integrated Products, Inc.

Tennille, Judge.

I.

FACTUAL & PROCEDURAL BACKGROUND

A.

THE PARTIES

{3} Plaintiff Analog Devices, Inc. (“Analog”) is a Massachusetts corporation maintaining its principal place of business at Norwood, Massachusetts. Analog is engaged in the business “of, among other things, designing, manufacturing, and marketing high-performance analog, mixed-signal, and digital signal procession integrated circuits used in signal processing applications.” (2d Am. Compl. ¶ 6.)

{4} Defendant Christopher Michalski (“Michalski”) is a former employee of Analog who resides in Belews Creek, North Carolina. Michalski was a staff engineer at Analog working in a unit that designed and developed high-speed analog-to-digital converters for use in a variety of communications applications from May 1996 until he resigned on September 19, 2001.

{5} Defendant Kiran Karnik (“Karnik”) is a former employee of Analog who resides in Kernersville, North Carolina. Karnik was a design engineer at Analog working on the same product line as Defendant Michalski from June 26, 2000 until he resigned on September 21, 2001.

{6} Defendant Maxim Integrated Products, Inc. (“Maxim”) is a Delaware corporation with its principal place of business in Sunnydale, California. Maxim is a competitor of Analog. After resigning from their positions at Analog, Defendants Michalski and Karnik went to work for Maxim.

B.

FACTUAL OVERVIEW

{7} This case, instituted on September 21, 2001, involves claims of misappropriation of trade secrets by Defendants. In May 1996, Michalski went to work as a design engineer on the Standard Products product line of Analog’s High Speed Converter Business Unit. In June 2000, Karnik began his employment at Analog as a design engineer, also working on the Standard Products product line. When both were hired, employment agreements were executed reciting that each would have access to valuable confidential or secret technical or nontechnical information that was vital to Analog’s success. Each agreed not to disclose to any third party, during the course of or after his employment, any proprietary data or information or to make use of that data or information outside of the performance of his job duties. Each also agreed to return any materials containing proprietary data or information to Analog promptly upon the termination of his employment. (*See* 2d Am. Compl. Ex. A.) Neither Michalski nor Karnik was bound by a restrictive covenant.

{8} During their periods of employment, both Michalski and Karnik had access to trade secrets and other confidential information relating to the design, development, implementation, analysis, fabrication, and marketing of analog-to-digital converters. During the late summer of 2001, Michalski and Karnik, prior to resigning from Analog, negotiated for employment with Maxim. Analog alleges that Maxim entered into those negotiations with the intent, in part, to utilize trade secret information to which Michalski and Karnik had access and about which the two had extensive knowledge, and to use that information to gain a competitive advantage over Analog in the analog-to-digital converter market.

{9} Analog alleges in its Complaint that on the night before Michalski resigned from Analog, he printed out a number of schematic drawings which contained trade secrets and which were related to the design of high-speed analog-to-digital converters. At his exit interview, Michalski was confronted about the printed schematics and asked to return them. He never did. Michalski and Karnik resigned from Analog on September 19 and September 21, 2001, respectively. Each signed an Employment Termination Proprietary Rights Statement that reaffirmed their agreements not to make use of proprietary information belonging to Analog.

{10} Analog alleges that, since joining Maxim, Michalski and Karnik have been working on projects similar to those on which they worked at Analog involving high-speed analog-to-digital converters. In doing so, Analog alleges, they have improperly made use of and disclosed trade secret information belonging to Analog. Analog brought suit on September 21, 2001, asserting, in addition to a claim for misappropriation of trade secrets, claims for breach of contract, tort-conversion, unfair competition, and tortious interference with contract.

{11} Maxim, Michalski and Karnik deny the allegations of the Complaint and assert that the trade secrets claimed by Analog do not qualify as trade secrets. Whether the claimed trade secrets qualify for protection and whether or not Maxim is using them are central issues in the case. Thus, the development of the trade secrets by Analog is relevant and material.

C.

PROCEDURAL BACKGROUND

{12} The issues concerning the production of inaccessible data arise in the following context. Defendants filed their Motion to Compel on August 12, 2005, seeking documents requested in their Request for Production of Documents No. 25, which sought documents relating to the development and implementation of trade secrets by Analog. Specifically, Defendants requested, among other things, the production of e-mails of the originators of the trade secrets at issue relating to the development of those trade secrets and products initially implementing them. (Defs.' Br. Supp. Mot. to Compel 3.)

{13} After the motion was filed, the Court entered successive Consent Orders staying the litigation while the parties pursued settlement discussions for a total period of sixty days. After the parties were unsuccessful in their settlement efforts, a hearing on Plaintiff and Defendants' Motions to Compel was scheduled for December 9, 2005. At the hearing on the Motions to Compel, the Court ordered Analog to determine the search capability of the databases containing the e-mails requested and to conduct a word search, if possible, using agreed-upon terms, of e-mails sent by specific inventors over a two-year period surrounding the release dates of products implementing the alleged trade secrets.

{14} The Court entered an Order on January 5, 2006 reflecting the Court's instructions at the December 9, 2005 hearing. The Order stated:

Analog shall determine the search capability of the system(s) containing the requested e-mail. To the extent the Analog e-mail archives are searchable, Analog shall search for and produce the e-mails of the named originators of the trade secrets at issue that include the search terms agreed to by the parties. The search shall be for e-mails that precede by one year or succeed by one year the release date of the first product to incorporate each alleged trade secret at issue. Should these e-mails reveal that design work began more than one year before the release date, the Court will reconsider extending the time limitation to incorporate the entire design period. By December 29, 2005, the parties shall report to the Court regarding their efforts to implement this approach. If the requested e-mails or a portion of the requested e-mails are not searchable, the parties shall make a proposal regarding the production of the unsearchable e-mail.

(Order Mots. to Compel Disc. 2, Jan. 5, 2006.)

{15} In accordance with the Court's Order, counsel for Analog reported to the Court on December 29, 2005, regarding the searchability of the originators' e-mails. Analog reported that it would produce e-mails still existing on the hard drives of the personal computers used by the trade secret originators. As to e-mails no longer existing on personal computers but stored on its backup server, Analog argued that production would be expensive and time consuming and therefore unduly burdensome. E-mail from D.J.

Mason, Counsel for Analog, to the Court (Dec. 29, 2005, 15:37 EST).

{16} On January 19, 2006, the Court ordered Analog to submit an affidavit clearly stating the search capability, including the burden of time and expense, of all systems containing the e-mails requested, along with a supporting brief addressing the appropriate criteria for the Court to determine whether and how e-mails present on backup servers should be produced. Defendants were ordered to file a counter-affidavit and responsive brief. (Order, Jan. 19, 2006.)

{17} On February 2, 2006, Ginger Weavil, the person responsible for maintaining Analog's systems, including its tape backup units in Greensboro, North Carolina, executed an affidavit summarizing Analog's systems for backing up e-mails transmitted on Analog's systems from 1992 to 2005 and the time and expense of restoring e-mails contained on those systems. Backup tapes still existed for all years in the relevant time period except for the 1998 tapes for the Greensboro facility, which were unrestorable and had been recycled. (Weavil Aff. ¶ 6, Feb. 3, 2006.) Weavil estimated the cost of restoration to be about \$135 for each of the approximately 800 backup tapes—a total cost of at least \$108,000. (Weavil Aff. ¶ 10.)

{18} Further, Weavil noted that it was “likely that at least some, and probably many, of the backup tapes will require advanced data recovery to render them partially, if at all, recoverable and/or searchable” resulting in a “very substantial additional expense.” (Weavil Aff. ¶ 11.) Once the backup tapes were restored, producing responsive e-mails would require that a program be drafted to search the restored data. That would take, according to Weavil, at least five full work days for an information technology specialist to accomplish. Conducting the search itself would also amount to a significant burden of time and expense. (Weavil Aff. ¶ 12.)

{19} Defendants responded with a declaration detailing the significant costs associated with their own production of discovery thus far in the case, including \$63,630.00 in staff expense (Smith Decl. ¶ 3, Feb. 20, 2006), over sixty-nine bankers boxes of material at a copying cost of \$20,650.64 (Smith Decl. ¶ 4), and 6,200 e-mails of various employees and/or engineers of Maxim (Smith Decl. ¶ 5).

{20} The Court convened a hearing on February, 28, 2006, prior to which the parties reached a compromise that reduced the number of backup tapes to be restored from 800 to 400. Following the hearing, the Court entered a preliminary order requiring Analog to search all readily accessible e-mails present on the originators' personal computers using the list of search terms supplied by Defendants and to produce responsive e-mails within fifteen days. The Court further ordered that the parties hire an independent service to restore e-mails contained on backup tapes over a four-year period, with the parties bearing the costs of the restoration equally. The Court reserved the right to shift the cost of restoration at a later date. Once each tape was restored, Analog was charged with conducting the search for the e-mails sought, at its expense, using search terms supplied by Defendants, within ten days of the tape's restoration.

{21} The February 28, 2006 Order stated that the Court would enter this more detailed order at a later date.

II.

DISCUSSION

A.

APPLICABLE STANDARDS

{22} Rule 26 of the North Carolina Rules of Civil Procedure provides the basic ground rules for pre-trial discovery in North Carolina. As a general rule,

Parties may obtain discovery regarding any matter, not privileged, which is relevant to the subject matter involved in the pending action, whether it relates to the claim or defense of the party seeking discovery or to the claim or defense of any other party, including the existence, description, nature, custody, condition and location of any books, documents, or other tangible things and the location of persons having knowledge of any discoverable matter.

N.C. R. Civ. P. 26(b)(1). The purpose of the discovery rules is to allow the parties access to and facilitate the disclosure of relevant, nonprivileged information “so as to permit the narrowing and sharpening of basic issues and facts to go to trial.” *Willoughby v. Wilkins*, 65 N.C. App. 626, 642, 310 S.E.2d 90, 100 (1983). The rules therefore allow for very broad discovery practices. Matters need not be admissible as evidence at trial to be discoverable; they need only be relevant for discovery, or “reasonably calculated” to lead to the discovery of admissible evidence. *Shellhorn v. Brad Ragan, Inc.*, 38 N.C. App. 310, 313, 248 S.E.2d 103, 106 (1978).

{23} Rule 26(b)(1) does, however, set forth three grounds for limiting discovery:

The frequency or extent of use of [available discovery methods] shall be limited by the court if it determines that: (i) the discovery sought is unreasonably cumulative or duplicative, or is obtainable from some other source that is more convenient, less burdensome, or less expensive; (ii) the party seeking discovery has had ample opportunity by discovery in the action to obtain the information sought; (iii) the discovery is unduly burdensome or expensive, taking into account the needs of the case, the amount in controversy, limitations on the parties’ resources, and the importance of the issues at stake in the litigation.

N.C. R. Civ. P. 26(b)(1). Analog has argued that it would be unduly burdened by the enormous expense involved in restoring and searching the contents of some 400 backup tapes existing at its Greensboro and Wilmington, North Carolina facilities.

B.

DISCOVERY OF ELECTRONIC DATA

1.

OVERVIEW

{24} The technological genesis of the discovery problems created by the storage of electronic information and the underlying tensions created by the adoption of liberal discovery rules warrant some brief exploration.

{25} It is an inescapable fact that ninety-nine percent of all information being generated today is created and stored electronically. See David K. Isom, *Electronic Discovery Primer for Judges*, 2005 Fed. Cts. L. Rev. 1, 1 & n.1 (2005). That fact may be shocking to judges who still find themselves buried in paper, but even our court systems are moving, albeit reluctantly, into the age of technology. This means that our discovery rules must accommodate discovery of “information generated by, stored in, retrieved from, and exchanged through, computers.” Comm. on Rules of Practice & Procedure, Judicial Conference of the U.S., Report of the Judicial Conference Committee on Rules of Practice and Procedure Rules App. C-18 (2005), <http://www.uscourts.gov/rules/Reports/ST09-2005.pdf> [hereinafter *Amended Rules Report*]. Discovery of such information differs substantially from historic discovery of paper documents. “The most salient of these differences are that electronically stored information is retained in exponentially

greater volume than hard-copy documents; electronically stored information is dynamic, rather than static; and electronically stored information may be incomprehensible when separated from the system that created it.” *Id.* These differences have been even further magnified by the extensive use of backup tapes after the catastrophic losses associated with 9/11 and Hurricane Katrina. As the Conference of Chief Justices has noted: “There are significant differences, however, between conventional and electronic documents—differences in degree, kind, and costs. Conference of Chief Justices, Guidelines for State Trial Courts Regarding Discovery of Electronically-Stored Information v (2006), [http://www.ncsconline.org/WC/Publications/CS_EIDisc CCJGuidelines.pdf](http://www.ncsconline.org/WC/Publications/CS_EIDisc_CCJGuidelines.pdf). [hereinafter *CCJ Guidelines*].

{26} These new problems bring old tensions in the Rules of Civil Procedure to the surface.

Before the civil rules became law in 1938, discovery in both law and equity cases had been extremely limited. When the committee deliberated on the liberal discovery rules that Professor Edson Sunderland drafted, they raised the concern that expanded discovery would force settlements for reasons and on terms that related more to the costs of discovery than to the merits of the case, a concern raised frequently in the context of electronic discovery.

Amended Rules Report, supra, at Rules App. C-19. It is indisputable that the decisions concerning the costs of e-discovery in some cases could be outcome-determinative. The *Zubulake* line of cases demonstrates that most clearly. See *Zubulake v. UBS Warburg L.L.C. (Zubulake I)*, 217 F.R.D. 309 (S.D.N.Y. 2003); *Zubulake v. UBS Warburg L.L.C. (Zubulake II)*, 230 F.R.D. 290 (S.D.N.Y. 2003); *Zubulake v. UBS Warburg L.L.C. (Zubulake III)*, 216 F.R.D. 280 (S.D.N.Y. 2003); *Zubulake v. UBS Warburg L.L.C. (Zubulake IV)*, 220 F.R.D. 212 (S.D.N.Y. 2003); *Zubulake v. UBS Warburg L.L.C. (Zubulake V)*, 229 F.R.D. 422 (S.D.N.Y. 2004).

{27} It is also true that technology is not designed to respond to discovery. It is designed to be used in everyday business and personal communication. Companies have different policies with respect to how they protect data, how they store it, how they use it, when and how they destroy it, when they write over it, and how they preserve metadata. Each may be designed for specific business needs. Some programs even come embedded in software packages, and the user may not even know what is being kept and what is destroyed. The imposition of court rules altering normal business operations can be costly. Technology changes rapidly; computers have limited life spans, and business transactions such as mergers can result in complete overhauls of a company’s information storage practices. This mix of technological problems creates a setting in which courts are increasingly called upon to make rulings on discovery issues that can either be outcome-determinative or force settlements related to the costs of discovery rather than the merits. Both the volume and storage formats of electronically produced information create other problems such as the cost associated in reviewing material for purposes of protecting the attorney client or work

product privileges.^[1] The cost of discovery is high enough without the added expenditures involved in recapturing inaccessible data. Technology issues place increasing burdens on the courts to determine when parties have acted in good faith and when they have engaged in spoliation. Management issues become more critical at the outset of complex litigation.^[2]

{28} The North Carolina appellate courts have not specifically addressed the application of discovery rules to electronic discovery. Given the unique nature and growing importance of this type of discovery, it is helpful to the Court to consider approaches courts outside of this jurisdiction have taken, particularly in the federal courts. Not surprisingly, different courts have applied different guidelines when trying to

resolve the complex issues created by technology in the discovery process. The federal courts have acted to amend the Federal Rules of Civil Procedure to deal more directly with the new problems.^[3] Our state court rules have not been amended. It is important to note that even the amendments to the federal rules are a work in progress and further amendments may need to be made in the future. *See Amended Rules Report, supra*, at Rules App. C-22. As technology changes and new factual situations arise, the law in this area will develop and change.

2.

APPROACHES USED IN OTHER COURTS

{29} A review of the key approaches used in other courts is instructive. There are six primary approaches which have been used or recommended from various sources.

a.

FEDERAL RULES OF CIVIL PROCEDURE: A STRAIGHTFORWARD APPLICATION

{30} First, some courts have simply looked at the Rules of Civil Procedure, found the guidelines there to be adequate, and applied them, sometimes in innovative ways. After reviewing the efforts of many other judges, Magistrate Judge Paul W. Grimm wrote the following:

[I]t . . . can be argued with some force that the Rule 26(b)(2) balancing factors are all that is needed to allow a court to reach a fair result when considering the scope of discovery of electronic records. Rule 26(b)(2) requires a court, *sua sponte*, or upon receipt of a Rule 26(c) motion, to evaluate the costs and benefits associated with a potentially burdensome discovery request. The rule identifies the following factors to be considered: whether the discovery sought is unreasonably cumulative or duplicative; whether the information sought is obtainable from some other more convenient, less burdensome or inexpensive source; whether the party seeking the information already has had adequate opportunity to obtain the information; and whether the burden or expense of the proposed discovery outweighs its likely benefit, taking into consideration the following: the needs of the case, the amount in controversy, the resources of the parties, the importance of the issues at stake in the litigation and of the discovery sought to the resolution of the issues.

Thompson v. U.S. Dep't of Hous. & Urban Dev., 219 F.R.D. 93, 98 (D. Md. 2003).

{31} The primary benefit to Judge Grimm's approach is that it is rules-based. The rules are sufficiently flexible, Grimm reasoned, to allow the Court to consider the relative costs and benefits of the requested discovery, the probative value of the information likely to be discovered, and the burden on the producing party to produce the materials requested. This approach is attractive because it allows the Court to integrate a broad range of relevant factors while staying within the general analytical framework already in place.

b.

AN ECONOMIC APPROACH: THE MARGINAL UTILITY TEST

{32} The second approach used by some courts is to borrow from the economic principle of "marginal utility"—a test first employed by Magistrate Judge John M. Facciola in *McPeck v. Ashcroft*. 202 F.R.D. 31 (D.D.C. 2001). Judge Facciola weighed the likelihood that a request would unearth critical information against the cost of obtaining it on the premise that "[t]he more likely it is that the backup tape contains information that is relevant to a claim or defense, the fairer it is that the [responding party] search at its own expense." *Id.* at 34. The marginal utility test is fairly well encompassed in Judge Scheindlin's factors, discussed below, and the breadth of considerations which might come up in cases makes the single

focus of the marginal utility test limited in its usefulness.

{33} Marginal utility is arguably a factor that should be considered under the language of Rule 26. As Judge Facciola argued, “economic considerations have to be pertinent if the court is to remain faithful to its responsibility to prevent ‘undue burden or expense’” under Rule 26(b)(1). *Id.*

c.

JUDGE SCHEINDLIN’S *ZUBULAKE* TEST

{34} Third, many federal courts have followed the seven factor approach taken by District Judge Shira Scheindlin in the *Zubulake* decisions. Judge Scheindlin was concerned primarily with the allocation of the costs of discovery of electronic data in less accessible formats, such as backup tapes. Her approach as described in *Zubulake I* was to order production of relevant data existing in accessible form and to apply a balancing test to shift the cost of production of inaccessible data. In determining whether and how costs should be shifted to the party requesting production, Judge Scheindlin articulated seven factors to be considered more or less in the following order of importance:

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 of obtaining the information.

Zubulake I, 217 F.R.D. at 324. Judge Scheindlin considered the first three of these factors—which comprise the marginal utility test discussed above—to be the most important and gave them greater weight.

{35} Other courts have endeavored to establish multi-factor tests to weigh the merits of cost-shifting in electronic discovery. Magistrate Judge James C. Francis IV of the Southern District of New York expanded the *McPeck* marginal utility analysis in *Rowe Entertainment, Inc. v. The Morris Agency for the Performing Arts, Inc.* 205 F.R.D. 421 (S.D.N.Y. 2002). Judge Francis’s balancing approach involved the following eight factors:

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 benefit 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. at 429. The seven *Zubulake* factors are in large part a modification of the *Rowe* factors. Both sets of factors have been widely cited by other courts and have been the subject of a great deal of commentary.

{36} The multi-factor balancing approach has the advantage of weighing all of the technical and practical considerations that impact both the probative value and the burden of production and shifting the costs of production accordingly. The central question that the *Zubulake* test was designed to answer was whether the request imposed an “undue burden or expense” on the responding party. “Put another way, ‘how important is the sought-after evidence in comparison to the cost of production?’ The seven-factor test . . . provide[s] some guidance in answering this question, but,” Scheindlin cautioned, “the test cannot

be mechanically applied at the risk of losing sight of its purpose.” *Zubulake I*, 217 F.R.D. at 321–22. Judge Scheindlin’s thoughtful analysis of the problem worked well in the case before her and would undoubtedly be useful in the majority of cases. It is, however, judge-made and not rule-based, and therefore the Court is reluctant to follow suit.

d.

ABA CIVIL DISCOVERY STANDARDS

{37} A fourth approach is found in the 2004 Amendments to the American Bar Association Civil Discovery Standards. Those Standards suggest a list of sixteen factors courts should consider in making the decision whether to allow discovery and the decision of cost allocation if it is allowed. The factors are:

- A. The burden and expense of the discovery, considering among other factors the total cost of production in absolute terms and as compared to the amount in controversy;
- B. The need for the discovery, including the benefit to the requesting party and the availability of the information from other sources;
- C. The complexity of the case and the importance of the issues;
- D. The need to protect the attorney-client privilege or attorney work product, including the burden and expense of a privilege review by the producing party and the risk of inadvertent disclosure or privileged or protected information despite reasonable diligence on the part of the producing party;
- E. The need to protect trade secrets, and proprietary or confidential information;
- F. Whether the information or the software needed to access it is proprietary or constitutes confidential business information;
- G. The breadth of the discovery request;
- H. Whether efforts have been made to confine initial production tranches or subsets of potentially responsive data;
- I. The extent to which production would disrupt the normal operations and processing routines of the responding party;
- J. Whether the requesting party has offered to pay some or all of the discovery expenses;
- K. The relative ability of each party to control costs and its incentive to do so;
- L. The resources of each party as compared to the total cost of production;
- M. Whether responding to the request would impose the burden or expense of acquiring or creating software to retrieve potentially responsive electronic data or otherwise require the responding party to render inaccessible electronic information accessible, where the responding party would not do so in the ordinary course of its day-to-day use of the information;
- N. Whether responding to the request would impose the burden or expense of converting electronic information into hard copies, or converting hard copies into electronic format;
- O. Whether the responding party stores electronic information in a manner that is designed to make discovery impracticable or needlessly costly or burdensome in pending or future litigation, and not justified by any legitimate personal, business, or other non-litigation related reason; and
- P. Whether the responding party has deleted, discarded or erased electronic information after litigation was commenced or after the responding party was aware that litigation was probable and, if so, the responding party’s state of mind in doing so.

Section of Litig., ABA, Civil Discovery Standards § 29(b)(iv) (2004), <http://www.abanet.org/litigation/discoverystandards/2004civildiscoverystandards.pdf> [hereinafter *ABA Standards*]. The ABA Standards relied in large part on factors articulated in the developing case law, including the decisions in *Zubulake*, *McPeck*, and *Rowe*, discussed above. Consideration of factors such

as these are likely to aid courts in determining whether a given request amounts to an “undue burden or expense” to the responding party.

e.

THE SEDONA PRINCIPLES

{38} The fifth approach of the problem can be found in the Sedona Principles for Electronic Document Production, which recommend that

[w]hen balancing the cost, burden, and need for electronic data and documents, courts and parties should apply the balancing standard embodied in Fed. R. Civ. P. 26(b)(2) and its state law equivalents, which requires considering the technological feasibility and realistic costs of preserving, retrieving, producing and reviewing electronic data, as well as the nature of the litigation and the amount in controversy.

Working Group on Best Practices for Elec. Document Retention & Prod., The Sedona Conference, The Sedona Principles: Best Practices Recommendations & Principles for Addressing Electronic Document Production 17 (2005). http://www.thesedonaconference.org/dltForm?did=7_05TSP.pdf [hereinafter *Sedona Principles*]. The Sedona Principles note that in balancing these concerns with electronic discovery requests, it is important to keep in mind the following considerations:

(1) large volumes of data, (2) data being stored in multiple repositories, (c) complex internal structures of collections of data and the relationships of one document to another, (d) data in different formats and coding schemes that may need to be converted into text to be understood by humans, and (e) frequent changes in information technology.

Id. All of these considerations could, and when relevant should, come into play when considering the burden of production of electronic discovery under Rule 26.

f.

CONFERENCE OF CHIEF JUSTICES GUIDELINES FOR STATE TRIAL COURTS REGARDING DISCOVERY OF ELECTRONICALLY-STORED INFORMATION

{39} The sixth approach is that offered by the Conference of Chief Justices. It combines Judge Grimm’s approach of looking at the rules first and then provides the simplest, most practical guidelines for state trial judges. The CCJ Guidelines suggest consideration of thirteen factors in determining the scope of electronic discovery:

- A. The ease of accessing the requested information;
- B. The total cost of production compared to the amount in controversy;
- C. The materiality of the information to the requesting party;
- D. The availability of the information from other sources;
- E. The complexity of the case and the importance of the issues addressed;
- F. The need to protect privileged, proprietary, or confidential information, including trade secrets;
- G. Whether the information or software needed to access the requested information is proprietary or constitutes confidential business information;
- H. The breadth of the request, including whether a subset (e.g., by date, author, recipient, or through use of a key-term search or other selection criteria) or representative sample of the contested electronically stored information can be provided initially to determine whether production of additional such information is warranted;
- I. The relative ability of each party to control costs and its incentive to do so;
- J. The resources of each party compared to the total cost of production;

- K. Whether the requesting party has offered to pay some or all of the costs of identifying, reviewing, and producing the information;
- L. Whether the electronically-stored information is stored in a way that makes it more costly or burdensome to access than is reasonably warranted by legitimate personal, business, or other non-litigation-related reasons; and
- M. Whether the responding party has deleted, discarded, or erased electronic information after litigation was commenced or after the responding party was aware that litigation was probable.

CCJ Guidelines, supra, at 5.

The CCJ Guidelines also deal specifically with the reallocation of discovery costs, essentially adopting the *Zubulake* analysis. The Guidelines provide:

- A. The extent to which the request is specifically tailored to discover relevant information;
- B. The availability of such information from other sources;
- C. The total cost of production compared to the amount in controversy;
- D. The total cost of production compared to the resources available to each party;
- E. The relative ability of each party to control costs and its incentive to do so;
- F. The importance of the issues at stake in the litigation; and
- G. The relative benefits of obtaining the information.

Id. at 7.

3.

THE NORTH CAROLINA TEST

{40} This Court is convinced that Judge Grimm’s approach is the correct one and that the North Carolina courts will look to the North Carolina Rules of Civil Procedure for guidance in deciding e-discovery issues and amend those rules as necessary. In applying the Rules, the courts will most likely use the Guidelines created by the Conference of Chief Justices. An analysis of any problem then begins with the Rules. Rule 26(b)(1) makes clear that liberal discovery is permitted. It is equally clear under the Rules that North Carolina judges have the power to limit or condition discovery under certain circumstances. After a discovery conference, “the court shall enter an order tentatively identifying the issues for discovery purposes, establishing a plan and schedule for discovery, setting limitations on discovery, if any; and determining such other matters, including the allocation of expenses, as are necessary for the proper management of discovery in the action. An order may be altered or amended whenever justice so requires.” *See* N.C. R. Civ. P. 26(f). This Court held several case management conferences which included treatment of discovery schedules and issues.

{41} Similarly, Rule 26(b)(1) provides for judicial authority to limit or condition discovery. It provides:

The frequency or extent of use of the discovery methods set forth in section (a) shall be limited by the court if it determines that: (i) the discovery sought is unreasonably cumulative or duplicative, or is obtainable from some other source that is more convenient, less burdensome, or less expensive; (ii) the party seeking discovery has had ample opportunity by discovery in the action to obtain the information sought; or (iii) the discovery is unduly burdensome or expensive, taking into account the needs of the case, the amount in controversy, limitations on the parties' resources, and the importance of the issues at stake in the litigation. The court may act upon its own initiative after reasonable notice or pursuant to a motion under section (c).

{42} Finally, the Court's authority to issue protective orders is found in Rule 26(c):

Upon motion by a party or by the person from whom discovery is sought, and for good cause shown, the judge of the court in which the action is pending may make any order which justice requires to protect a party or person from unreasonable annoyance, embarrassment, oppression, or undue burden or expense, including one or more of the following: (i) that the discovery not be had; (ii) that the discovery may be had only on specified terms and conditions, including a designation of the time or place; (iii) that the discovery may be had only by a method of discovery other than that selected by the party seeking discovery; (iv) that certain matters not be inquired into, or that the scope of the discovery be limited to certain matters; (v) that discovery be conducted with no one present except persons designated by the court; (vi) that a deposition after being sealed be opened only by order of the court; (vii) that a trade secret or other confidential research, development, or commercial information not be disclosed or be disclosed only in a designated way; (viii) that the parties simultaneously file specified documents or information enclosed in sealed envelopes to be opened as directed by the court.

If the motion for a protective order is denied in whole or in part, the court may, on such terms and conditions as are just, order that any party or person provide or permit discovery. The provisions of Rule 37(a)(4) apply to the award of expenses incurred in relation to the motion.

N.C. R. Civ. P. 26(c).

{43} The language of Rule 26 thus provides a broad framework in which to apply the concepts described by the above authorities. The overriding concern for judges applying those concepts should be whether or not they are making an outcome-determinative decision. An outcome-determinative situation can arise in at least two different contexts. If the party seeking production would be denied access to information which could have a material effect on a substantive issue in the case and where the cost of obtaining the information would be an insurmountable barrier to the requesting party, the denial of discovery or the allocation of costs to the requesting party could affect the final outcome. Discovery containment should not force such a result. If, on the other hand, the costs to the responding party of producing the information would be unreasonably related to the matter at issue or the amount in controversy, the responding party might be forced to settle without regard to the merits of its claims or defenses. The Sedona Principles were guided by these concerns. "Electronic discovery burdens must be proportional to the amount in controversy and nature of the case. Otherwise transaction costs due to electronic discovery will overwhelm the ability to resolve disputes fairly in litigation." *Sedona Principles*, *supra*, at 17.

{44} A straightforward application of the basic analytical framework found in Rule 26 should allow courts to properly address these concerns and reach decisions that safeguard both the interests of justice and the liberal discovery goals of the Rules of Civil Procedure. This is not to say that none of the various tests discussed above can be useful in weighing the relative burdens and benefits of production as contemplated by the balancing test of 26 (b)(1)(iii). Many of those tests' factors will be relevant and should be argued by the parties and considered by the Court in determining whether, to what extent, and in what form electronic discovery should be produced and whether any cost shifting is appropriate.

{45} In cases where, as here, the discovery is stored in a form that is particularly difficult or costly to retrieve, a more searching inquiry into the competing interests of preventing undue burden or expense to

the producing party and the importance of the discovery to the requesting party is warranted. In conducting the Rule 26 analysis, many of the various factors discussed in the cases and other authorities discussed above will be helpful in ensuring that production does not amount to an undue burden or expense. While the Court does recognize the value of considering the wide variety of factors discussed above, some of which may not be peculiar to all electronic discovery requests, it does not opt to construct a rigid test comprised of a list of specific factors to be considered in every case that exists apart from the Rules of Civil Procedure. Courts should determine, based on the specific request at issue and the factual and legal context in which that request is made, which factors will be appropriate in applying the general framework laid out by the Rules of Civil Procedure. The Court believes that the factors recommended by the CCJ Guidelines are the best place to start; however the Court is ever mindful of the potential outcome-determinative nature of the decision.

C.

APPLICATION

{46} At the outset, it is worth noting that the e-discovery issues arising under Rule 26 often present themselves in the wrong procedural posture. Here, the party seeking the protection of the Rule has the burden of obtaining protection through a motion for protective order. The burden also falls on the party seeking protection to justify the need for court intervention and protection. Following that process, rather than having the Court deal with a motion to compel, is more efficient. The party seeking the protective order can come forward in the first instance with the reasons—including excessive cost—the requested production is not warranted. The party seeking the discovery may then respond to a fact- and law-based motion. Forcing the controversy into the motion to compel posture merely adds delay and expense. The party seeking protection from the excessive costs of production of inaccessible digitally stored information should file a motion for protective order supported by documentation of the nature and costs of producing the discovery responses. The party seeking the discovery may then respond to the motion. Once the issues are in the open the parties may, as here, find ways to reduce the costs of proposed discovery without the need of court intervention.

{47} Plaintiff objects to Defendants' request for production of e-mails contained on backup tapes primarily on the ground that the cost and burden of production would be undue in light of the uncertain probative value of e-mails that a search of those backup tapes would yield. The Court will therefore confine its analysis to an inquiry into whether the requested discovery is "unduly burdensome or expensive, taking into account the needs of the case, the amount in controversy, limitations on the parties' resources, and the importance of the issues at stake in the litigation." N.C. R. Civ. P. 26(b)(1). The Court will therefore consider how the following factors impact the decision in this case to allow discovery of and allocate costs for the production of inaccessible electronic information: (1) the burden and expense of production; (2) the needs of the case; (3) the amount in controversy; (4) any limitations on the parties' resources; and (5) the importance of the issues at stake.

{48} The first factor is the potential burden and expense of production by Plaintiff. As discussed above, Plaintiff estimated that in order to comply with Defendants' request, it would have to restore over 400 backup tapes. The cost of restoration alone would be approximately \$135 for each tape, totaling over \$54,000. Additionally, significant costs would be incurred in the event that advanced data recovery were to be required due to magnetic tape degradation. Degradation to magnetic tape is common due to the sensitivity of magnetic media and can be caused by a variety of factors—such as environmental factors,

manufacturing flaws, or imperfect handling during the storage and retrieval processes. (Weavil Aff. ¶ 11.) After that, the recovered data would have to be restored in order to render the contents searchable. Additionally, a program would have to be drafted in order to actually search through the resulting data. Plaintiff estimates that it would take an information technology specialist five full work days to draft the program. (Weavil Aff. ¶ 12.) Neither party has been able to give an estimate of the cost of any advanced data recovery or of restoration. The total cost of production therefore remains largely unclear. What is clear is that the total cost of production would likely be substantial and has the potential to reach beyond the cost of restoration alone.

{49} The second factor is the needs of the case. Defendants argue that production of the e-mails of the originators of the alleged trade secrets around the time of the release of products implementing those trade secrets will shed much light on the development of the alleged trade secrets and will be invaluable in determining whether Plaintiff is entitled to have those alleged secrets protected. Plaintiff, on the other hand, argues that Defendants' need for the e-mails is largely unknown because it cannot really be determined until after Plaintiff has gone through the tremendous burden and expense of recovering, restoring, and searching the data contained on its backup tapes. Defendants have made a strong showing that the information sought has the potential to be highly relevant and material. Much of the communication between engineers working on high-tech projects is done by e-mail. The e-mails created around the time of the development of the alleged trade secrets could bear on the issue of whether there was some discovery or invention that took place or simply the use of existing information.

{50} The third factor to be considered is the amount in controversy. The parties agree that their competitive positions in the highly lucrative market for conversion chips could be affected by the outcome, and therefore the amount in controversy does not weigh as a factor for or against production or cost shifting. Further, the Court notes that the cost of production is likely to be quite small relative to the amounts the parties have already spent on discovery and experts.

{51} The fourth consideration is whether there are any limitations on the parties' resources that might lead the ruling on this issue to be outcome determinative. The parties agree that both sides have the ability to handle the costs of production. Maxim's net annual revenues total nearly \$1.7 billion, and Analog's net annual income approaches \$3.5 billion. The parties also agree that both Maxim and Analog have the ability and the incentive to control the cost of production. Based upon their approach to this litigation, there appears to be no limit to the resources they will commit to the case.

{52} The final factor is the importance of the issues at stake in this litigation. The issues in this case involve the often competing public policies of preserving the ability of employees to move freely between companies in their chosen fields and the right of employers to protect trade secrets that often are the result of significant investments of time and resources. The public has an interest in promoting both invention and free competition. While these public policy issues are certainly important, neither weighs heavily either for or against production or cost shifting.

{53} Ultimately, the analysis comes down to a comparison of the relative costs of production by Plaintiff to Defendants' need for the information that may result. The cost of production has the potential to be high standing alone, but relatively small compared to the overall cost of discovery and the significant competitive issues at stake. At this point, it is difficult to precisely measure the extent of those costs. The cost is not likely to cause either side to settle on that basis alone. Likewise, the information ultimately produced has the potential to be of considerable value to the Defendants, but the contents of the e-mails

that would ultimately be produced are largely unknown. One of the two critical issues will be whether or not the claimed trade secrets are in fact “trade secrets” known only to Analog’s employees. The contemporaneous e-mails surrounding the product development could be critical to that issue. Defendant Maxim produced similar types of electronically stored data but did not incur the costs of producing information stored in inaccessible format because their products at issue are relatively new. Analog’s development of the alleged trade secrets occurred at an earlier date, making their older e-mails less accessible. Aside from the memories of the alleged originators, the e-mails may be the best or only source of information contemporaneously generated when the alleged trade secrets were developed. Lack of access to that information thus has the potential to be outcome-determinative. What is sought has a direct bearing on the key issues in this case. It is not otherwise available. It may even prove helpful to Plaintiff.

{54} The uncertainty of the cost combined with the potential probative value of the discovery is too great to deny Defendants’ motion. On the other hand, the potential cost of production combined with the great uncertainty as to the contents of the requested documents is too great to require Plaintiff to bear the full burden of production on its own. Neither party’s ability to pursue its litigation goals will be impacted by cost-sharing. The Court can retain the ability to assess the costs fully to one side or the other at the end of the case.

III. CONCLUSION

{55} For this reason, the Court granted Defendants’ motion to compel, as to originators’ e-mails contained on backup tapes, in its Preliminary Order of February 28, 2006, and determined that the costs of restoration and recovery should be borne by both parties equally. The order also stated that Plaintiff was responsible for searching the resulting data at its own expense using search terms supplied by Defendants. (Order, Feb. 28, 2006.)

{56} Such an outcome serves to advance the long established goal of promoting liberal discovery practices, while ensuring that the burden of discovery does not in any way prove to be outcome determinative. The Court reserves the right to consider the costs of production in assessing final costs once the relative costs and benefits of discovery are more clearly known. Since both sides are able to bear their share of the costs at this stage, an assessment of the final costs based on the outcome will be more just.

So ORDERED, this the 1st day of November 2006.

[1] Privilege review is made more difficult in e-discovery because of the added volume, the dynamic nature of the information, the complexities of locating the information, and the fact that some privileged information may be hidden in metadata. Here, for example, it appears the vast majority of the requested documents exist on backup tapes created at regular intervals, many of which are stored by a third-party vendor, are not searchable, and are in a form not usable without conducting an extensive and expensive restoration process to retrieve the data contained on the tapes.

[2] The new rules of the Business Court include directives to counsel to discuss, at the initial Case Management Meeting, such topics as the volume of electronic information likely to be subject to discovery, the form of electronic documents production (i.e. native format or paper), the need for retention of electronic documents and backup tapes, the need for cost-shifting with regard to the production of electronic data, and the need for security measures to protect electronic data. *See* Amended Local Rules of the North Carolina Business Court (2006), available at <http://www.ncbusinesscourt.net/New/localrules/2006%20Local%20Rules%20with%20Order.rtf>; *see also* CCJ Guidelines, *supra*, at 2–5.

[3] The most comprehensive discussion of the changes and the background for the amendments is found in the Amended Rules Report. *See supra* ¶ 25.