CD-ROM BRIEFS: ARE WE THERE YET?

Marilyn Devin*

Our courts must advance with the times. They must adjust to the setting in which they function. They must fashion new tools to repair the dislocations of a changing, burgeoning and increasingly complicated social order. The techniques of a more leisurely past are not adequate to the future or even to the present.\(^{\text{l}}\)

The CD-ROM brief is still in its infancy. The groundswell began in the spring of 1997. Murmurs of "hypertext," "hyperlinks," and of a coming revolution in trial and appellate briefing practices began to circulate in the legal community, especially in online neighborhoods.² Only a few pioneers had as yet lodged

The beauty of the technology lies in its space-saving qualities (all but the most voluminous trial records would easily fit on one disk), the ease of reading and accessing many documents, the fact that many individuals can work with the same record, exhibits, etc., at once, the multi-media potential, and its efficiency—being able to verify, search for terms, make comparisons, etc.

THE JOURNAL OF APPELLATE PRACTICE AND PROCESS Vol. 2, No. 2 (Summer 2000)

^{*} Marilyn Devin is a trial attorney for the federal government in Los Angeles. She has served as an advisor on a variety of computer-related panels and projects, and has lectured on the use of computers in the practice of law.

^{1.} Earl Warren, Chief Justice of the United States Supreme Court, Speech (American Law Institute, Washington D.C., May 1964) in Eugene C. Gerhart, *Quote It II, A Dictionary of Memorable Legal Quotations* 101 (William S. Hein Co. 1988).

^{2.} If word of the e-brief phenomenon has somehow escaped you, it is all about filing a post-trial or appellate brief in electronic format, along with the entire record, exhibits, appendices, and legal authorities, all on a compact disk. The text of the brief is meant to be read on a computer monitor, using a web browser, Adobe Acrobat, or other "reader" software. The essence of the technology is that the text contains "hot spots," or hyperlinks—when you click on those spots with the mouse, the display instantly jumps to a "target" document, that is, you instantly see the transcript, exhibit, citations, etc., to which the text refers. You then click again to go back to the last document. For subscribers to The Journal of Appellate Practice and Process, a sample CD-ROM brief is enclosed with this issue. The CD-ROM contains all the briefs, the joint appendix, the authorities, and the oral arguments in Harris Trust & Savings Bank v. Salomon Smith Barney Inc., 120 S. Ct. 2180 (2000).

their first court submissions on CD-ROM,³ yet already the writing was unmistakably on the wall: This technology was clearly the wave of the future.⁴ Even the rejection by the United States Court of Appeals for the Federal Circuit of two of the early filings (for predictable reasons—there had been no advance permission from the court, and no notice had been given to the opponent) was more of a threshold than a reverse.⁵

In Yukiyo, Inc. v. Watanabe, even while rejecting the CD-ROM brief that had been submitted, the Federal Circuit set out guidelines for future filings.⁶ In July 1997, it did accept a brief on CD-ROM, filed on behalf of the 3M Company in an appeal from a Patent and Trademark Office ruling.⁷ The same month, the ABA Journal published two short articles side by side. One, written by Francis X. Gindhart, the lawyer who had filed the brief in Yukiyo, wholeheartedly advocated electronic briefs; on the opposite page a piece by Carl R. Moy, professor at William Mitchell College of Law in St. Paul, Minnesota, urged caution before jumping headlong into acceptance of this new medium.8 Hypertext briefs, briefs on CD-ROM, or simply "e-briefs," appeared to be a tool whose time had come. There is no official roster of every case in which CD-ROM briefs have been accepted by courts across the country, but press releases about a few well-publicized cases, plus unofficial word of others here

^{3.} See Reno v. ACLU, 520 U.S. 1102 (1997); Yukiyo, Ltd. v. Watanabe, 111 F.3d 883 (Fed. Cir. 1997); Chinet Co. v. Fripp Fibre Forms, Inc., No. 95-CV-1072, (W.D. Wash.).

^{4.} M.A. Stapleton, First Brief on CD-ROM Finds Favor with U.S. Appeals Court, Chi. Law. 1 (July 30, 1997); Bill Pietrucha, U.S. Supreme Court Gets Its First Cyberbrief, Newsbytes News Network 1 (Feb. 21, 1997); Michael D. Fibison, CD-ROM Brief Foreshadows the Electronic Courtroom: The Visual Power of a Good Witness Can Sway a Judge's Decision, U.S. Bus. Litig. 17 (May 1997).

^{5.} Cindy Collins, Technology Advance... Rejection of HTML Brief Just Temporary Setback, Experts Say, 11 No. 6 Inside Litig. 17 (June 1997).

^{6.} Yukiyo, 111 F.3d at 886.

^{7.} In re Berg, 43 U.S.P.Q.2d 1703 (Fed. Cir. 1997). This brief was filed by the law firm of Oblon, Spivak, McClelland, Maier & Neustadt.

^{8.} Francis X. Gindhart & Carl R. Moy, High-Tech Appeals: Can Hypertext Briefs Aid Justice Without Changing the System?, 83 ABA J. 78, 78-79 (July 1997).

^{9. &}quot;My belief is that not only is this the wave of the future, but that the wave is looming over us. I think it's fair to predict that, if not all of our briefs, 90 percent of them will be filed on CD-ROM." Francis X. Gindhart, *Documents, Transcripts, Exhibits Are on Hand in Hypertext Briefs*, N.Y. L.J. 10 (Apr. 15, 1997) (quoting Charles L. Gholz, the attorney who filed the electronic brief in *In re Berg*).

and there, suggest their numbers have climbed to over a dozen—perhaps closer to two dozen.¹⁰

It has now been almost three years since the first hypertext briefs were filed. The crucial issues now are what the legal profession and the courts have done about adopting this new technology, what obstacles are being encountered, and how those obstacles are being dealt with. This essay looks at the forces working on both sides of the CD-ROM brief movement and examines the circumstances in which a CD-ROM brief is likely to be accepted favorably by a court.

I. GETTING THERE: FORCES PROPELLING THE DEVELOPMENT OF HYPERTEXT BRIEFS

A. Courts That Have Arrived: Court Rules Explicitly Allowing CD-ROM Briefs

Within the federal court system, recognition of the electronic brief technology has been slow but steady. Because the initial briefs had been refused in part for falling outside the courts' procedural rules, the first step was for courts to publish guidelines. *Yukiyo* set out a few basic suggestions, such as giving advance notice, securing leave of the court, and providing information as to the necessary hardware and software for

^{10.} Here is a partial list: Harris Trust & Savings Bank v. Salomon Smith Barney Inc., 120 S. Ct. 2180 (2000); Reno v. ACLU, 520 U.S. 1102 (1997); U.S. v Dakota, 197 F.3d 821 (6th Cir. 1999) (brief filed by Stuart Friedman, solo practitioner, Ann Arbor, Mich.); Digital Biometrics, Inc. v. Identix, Inc., No. 97-1208 (9th Cir.); Renishaw P.L.C. v. Marposs Societá Per Azioni, 158 F.3d 1243 (Fed. Cir. 1998) (brief for appellees filed by the law firm of Dickstein, Shapiro, Morin & Oshinsky); Rodime P.C. v. Seagate Tech., Inc., 45 U.S.P.Q.2d 2023 (Fed. Cir. 1998); In re Berg, 43 U.S.P.Q.2d 1703 (Fed. Cir. 1997) (brief filed by the law firm of Oblon, Spivak, McClelland, Maier & Neustadt); Glendale Fed. Bank, F.S.B. v. U.S., 43 Fed. Cl. 390 (1999) (defendant's post-trial brief); U.S. v. Rockwood, 52 M.J. 98 (Armed Forces App. 1999) (amicus brief); Alavarado v. H&R Block, Inc., No. WD 57230 (W.D. Mo.) (brief filed by Bryan Cave in Jan. 2000); Doe v. Church of the Holy Redeemer, Inc., No. 95,450 (Fla.) (brief filed by Robert Glazier's law firm, Miami, Fla.); Christian v. Christian, 985 S.W.2d 513 (Tex. App. 1998) (filed by Mark I. Unger, San Antonio, Tex.); Aluminum Co. of Am. v. Aetna Cas. & Sur. Co., 998 P.2d 856 (Wash. 2000); United Water Conservation Dist. v. County of Los Angeles, No. 239324-RDR (Cal. Super., Kern County).

viewing the brief.¹¹ The Federal Circuit then followed up by publishing the first formal guidelines for submission of briefs on CD-ROM.¹² Among the other federal appeals courts, the First and Eleventh Circuits have since followed suit.¹³ The states lagged behind at first, but have now also begun to recognize the need for similar rules.¹⁴

Even in courts that have not officially accepted the CD-ROM brief, there are some judges who have not let the absence of local rules stand in their way. For example, when CD-ROM briefs were ordered in a recent administrative appeal in Kern County, California, the Superior Court simply directed the parties to rely on the Federal Circuit's Rule 32. In a 1999 Florida appeal, while the state supreme court officially "denied as unauthorized" an amicus's motion to file a hypertext brief, it nevertheless accepted the disk along with the conventional paper submission. 16

The United States Court of Appeals for the Sixth Circuit, despite the absence of specific guidelines, was persuaded to accept a CD-ROM brief in a criminal case.¹⁷ The defendant's creative attorney filed the motion itself on a CD-ROM, as a "cyber-sampler," hoping thereby to demonstrate for the court how easy and convenient the brief in that format would be.

In April 2000, hypertext briefs made the final breakthrough: They received the imprimatur of the United States Supreme Court. On the same day the Court heard oral arguments

^{11.} Yukiyo, 111 F.3d at 886.

^{12.} Fed. Cir. R. App. P. 32(e) (2000).

^{13. 1}st Cir. R. App. P. 32.1 (2000); 11th Cir. R. App. P. 31-5 (2000).

^{14.} The New York Court of Appeals now allows "companion" records, appendices and briefs on CD-ROM to be filed in addition to the currently required number of printed paper copies. N.Y. R. App. P. 500.1 & 510.1 (1999); see also New York State Unified Court System, Rules of the Court of Appeals 500.1 http://www.courts.state.ny.us/cdrules.htm (accessed July 9, 2000).

^{15.} United Water Conservation Dist. v. County of Los Angeles, No. 239324-RDR (Cal Super., Kern County).

^{16.} Doe v. Church of the Holy Redeemer, Inc., No. 95,450 (Fla.). For a free copy of the brief (for attorneys only), see Robert S. Glazier, *The Florida Lawyer* http://www.fla-law.com/> (accessed July 9, 2000).

^{17.} U.S. v. Dakota, 197 F.3d 821 (6th Cir. 1999). Only the defendant filed a CD-ROM brief. The opinion makes no mention of the hypertext format.

in Harris v. Salomon Smith Barney, 18 it announced it was accepting the parties' briefs in CD-ROM format. 19

B. Urging Other Courts to Get There: Pressure from Litigants and from Other Technological Advances

Thus far, the introduction of hypertext briefs has been spearheaded by a handful of techno-attorneys and judges. In some instances, the participants simply wanted to try out the methodology and felt that the content of the litigation would readily lend itself to electronic presentation. In several cases, the appeal was from a high profile, newsworthy trial, in which much of the record had already been preserved in digital format. The most fertile ground for the growth of CD-ROM briefs to date has been the Federal Circuit. With its abundance of patent and intellectual property disputes, it should not be surprising that its litigants have a greater degree of comfort with advanced technology.

Now that the pioneers have broken the ground, most insiders believe the impetus for the movement from this point forward must come from the courts. Although isolated use of

^{18. 120} S. Ct. 2180 (2000).

^{19.} In the earlier case where a CD-ROM brief was filed, *Reno v. ACLU*, 520 U.S. 1102 (1997), it was made by an amicus, and without the Court's official approval. Here, the briefs were approved and planned in advance.

^{20.} In their motion to submit a hypertext brief *In re Berg*, Oblon Spivak gave the following reasons: "(1) that it is abundantly obvious that we will all have to get used to working with hypertext briefs in the next few years, (2) that it would be a good idea to 'get our feet wet' on cases such as this one [since the case had a relatively short record], and (3) that it would be advantageous for the court to experiment with different versions of hypertext briefs before issuing a new rule governing hypertext briefs." Appellant's Mot. for Leave to Submit Hypertext Briefs in Addition to Conventional Briefs & Proposed Order 3 (Oct. 3, 1997).

^{21.} In the "Unabomber" case, U.S. v. Kaczynski, 154 F.3d 930 (E.D. Cal. 1998), the clerk of the court met the demands of the press by regularly publishing depositions, evidence, and other docketed material on the Federal Judiciary Homepage, where they could easily be accessed and downloaded. In the Timothy McVeigh trial, the court realized that media coverage would be greatly expedited if the parties' filings and each day's transcripts, rulings, and other events could instantly be made available in digital form over the Internet. See PubNETics, Oklahoma City Bombing Trial http://www.okcitytrial.com (accessed July 9, 2000). When the appeal went to the United States Court of Appeals for the Tenth Circuit, the court was aware the record already existed in electronic format, and it ordered the parties to submit their filings on CD-ROM, specifying that it wanted the briefs hyperlinked to the record.

CD-ROM briefs will undoubtedly continue, they can someday fully become the "norm" only as an integral part of a more general move toward "electronic courtrooms" and computerized judicial procedures overall. As those practices become more prevalent, briefing methods will inevitably follow suit.

As is happening everywhere, computers are changing the way courts do business. Judges and administrators may thus have to deal first with technological concerns more pressing than the choice of format for briefs. Top priority in most courts seems to be going to electronic filing, followed closely by the need to post schedules, rules, driving directions, and other information on the courts' web sites. Also commanding a great deal of the courts' attention are internal communications tools such as e-mail, online reference materials, and judges' networks, as well as the security problems these technologies pose. In trial courts, too, procedures are affected by electronic advances. In just the last few years, court staffs have had to learn to cope with remote court appearances, automated document management, video conferencing, translation of testimony, the "electronic courtroom," and a dozen other equally high-tech devices.

Behind the scenes, courthouse personnel are similarly learning to adapt to new ways of accomplishing all their daily tasks, from payroll to personnel to the assignment of parking places. For the moment, CD-ROM briefs will continue to be most welcome wherever automation already plays a substantial role—the massive, lengthy, highly complex, document-intensive litigation, much of which would simply be impossible without electronic document management. United States courts have been using imaging and document management in these cases since the 1980s,²² and in this sophisticated context it is only a short step to carry over the technology from the trial court to the appellate level. If they are not doing so already, practitioners in this field should be getting ready for a major shift toward the use of hypertext briefs.

When it comes to recognizing the potential of the CD-ROM briefing technology, no one has been quicker than the vendors already established in the business of offering litigation

^{22.} For background, see National Center for State Courts, *Briefing Papers* http://www.ncsc.dni.us/ncsc/briefing/image.htm (accessed July 9, 2000).

assistance to lawyers. There are already a great number of companies offering to convert a brief to CD format and package it for delivery to the appellate court: Record Press, Inc., RealLegal (formerly known as PubNETics), Counsel Press, LLC, and a host of others, both experienced companies and start-ups. Their enthusiasm in gearing up to provide this service demonstrates their faith that it is going to be a lucrative and burgeoning field.

Incidentally, the United States is far from alone in recognizing these advances in the administration of justice. The trend toward automated management of judicial processes has excited the interest of the legal profession around the world. The prevailing view in Australia and Canada, for example, foresees a wholly integrated trial system, from start to finish.²³ CD-ROM briefs have been filed in both countries.

There is no doubt that as the electronic re-invention of the court system continues over the next few years, most appellate lawyers will have occasion to explore the possibilities of CD-ROM briefs.

II. SPEEDBUMPS ON THE ROAD: OPPONENTS OF AND OBSTACLES TO CD-ROM BRIEFS

A. Resistance in the Profession Generally

It is unlikely that you'll find yourself filing a brief on CD-ROM anytime soon without just the right confluence of ingredients—subject matter, time, context, motivation, and personalities. Unless the litigation is already preserved as an electronic record, it is unlikely more than one of the participants in a case will have any interest in trying out the new format. Then that individual will have the task of persuading everyone else involved to cooperate—and "everyone" may need a lot of persuasion: the judge, his or her law clerk, opposing counsel, cocounsel, and of course, the clients. You may be absolutely right that this is just the occasion for a CD-ROM brief, but can you

^{23.} See e.g. Victorian Law Reform Committee, Technology and the Law Report 1999 http://www.parliament.vic.gov.au/lawreform/tech/default.htm (accessed July 9, 2000).

justify the extra cost, novelty, and—perhaps—risk? Some clients and courts will be easier to persuade than others.

Also, there is the inherent contrariness of lawyers. The suggestion of anything new and different is, unfortunately, met all too often with an arbitrary "no" from opposing counsel, on the theory that "if my opponent wants it, it must be bad for my side." Where once an opponent's veto would have been sufficient to deter any court from granting a motion to file briefs on CD-ROM, the dynamic in some forums has already shifted to one where a naysayer had better have a good reason. After Yukiyo, the Federal Circuit was so sold on the idea of a CD-ROM brief in In re Berg, that Oblon Spivak's motion was granted over its opponent's objection. It was the same for Seagate, and likewise in the Kern County case. But in most forums, these results would still be the exception: An opponent's objection would probably defeat the proposal.

In the event that one side is allowed to file their brief on CD-ROM, chances are the court will order both to do so. In fact, judges will probably ask that both briefs be on a single disk so that navigating between them and linking to the record and legal authorities will be as seamless as possible. If you have litigated in forums such as the Federal Circuit, where a joint appendix has traditionally been required, you are already accustomed to working with opposing counsel on that aspect of brief preparation. In that setting, it might not be a giant step to jointly prepare both briefs on a CD-ROM.

B. Judges' Concerns

Among judges, a very legitimate concern has been fairness. Will granting a motion allowing such filings prejudice one party, perhaps in some unforeseeable way? Could an unscrupulous party hide a program on the CD that would somehow insert undetectable errors in their opponent's work product? Could something on the CD compromise security on the court's computer network? Could it hack in to confidential files? Plant a virus to bring down the system and cause a mistrial? At the trial level parties have been known to be desperate enough to phone in bomb threats to the courthouse—why not "sabotage by CD?"

There are other, less invidious but equally alarming possibilities lurking in the vast capability of the new tool and in the fact that nobody can be sure what "they" will think of next. For instance, one of the more advanced of the techno-services companies plans to offer, as an added feature on its digitized videotaped depositions on CD, an automatic voice stress analyzer. So, while watching the multi-media close-up of a witness responding to questions, you can keep your eye on a little box down in one corner of the monitor screen, with something like a voltage meter, giving you an instant read-out of the likelihood the individual is telling the truth. Such devices ought not to replace juries in our system, but if that feature inadvertently happened to be available as a software "extra" on a CD submitted to the court, then the appellate court could certainly assess witnesses' performance.

There is a similar concern in some quarters that the inclusion of such vivid evidence as multi-media demonstrations, animations, video testimony, and depositions on the CD along with the brief could threaten the traditional isolation of the appellate courts. It might somehow bring the appellate judge down to earth, where he or she might be tempted to assess the credibility of witnesses. More subtle, but still among the unknowns of the new medium, are questions of style and sophistication in the preparation of the briefs, and to what extent these factors might unfairly or impermissibly influence the court.

As a counterbalance to the profession's understandable concerns about the possible pitfalls of CD-ROM briefs, it should be noted that the very nature of the technology gives it a built-in barrier against certain flaws that exist in the current system. The ability to verify assertions by instantaneous reference to the record, to search the record effortlessly, to compare different portions of the record—against each other and against the brief—all those tools allow for a far more critical reading of the arguments. Thus they not only free the court from the simple physical constraints that have in the past inevitably distracted from the analytical process, but they also are a powerful disincentive to inaccuracy, evasion, and half-truths which might otherwise go unchallenged.

C. Time and Money

This brings us to another circumstantial consideration, which is the most practical and yet the most likely to be overcome first: time and money. True, converting a brief to the required format and burning it and the rest of the materials onto a CD cannot be done overnight—and as one attorney asked rhetorically: "Who ever had *surplus* time for a brief?"

But insufficient preparation time is not as much of a problem as it might at first appear. For one thing, CDs do not normally have to be filed simultaneously with the paper brief. Under almost all the court guidelines to date, the CD-ROM brief may be filed some time after the printed brief is filed. In some forums, this might be the same deferral period allowed for submission of the joint appendix, which can vary from a week to 30 days. That means a fair allotment of time for conversion and preparation of the electronic follow-up, even in a case where little or no advance work had been done with an eye toward this format.

In practice, it is far likelier that counsel will know before they began drafting the brief that they are going to produce an additional electronic version. That advance knowledge will enable them not only to cut the time needed afterward, but also to more fully take hyperlinking into account as a tool in laying out their arguments.²⁴

Another reason time pressures will not always be so great a problem is the increased use of automation throughout the trial process. If counsel have been relying on document management software since a case was filed, all the materials needed for the brief will probably already be organized and easily accessed for copying to the CD-ROM. Documentary evidence not already in digital format will have been scanned upon receipt and converted, as will the opponent's pleadings, motions, and other paperwork. This is one advantage of the move toward an overall electronic process. Some observers visualize a totally web-based proceeding, with content added at appropriate times by both parties, with everything linking to everything else. The hypertext

^{24.} For a discussion of "non-linear" thinking in the legal field, see Marilyn Devin, *Thinking Like a Lawyer—In Hypertext*, 32 Beverly Hills B. Assn. J. 65 (Winter/Spring 1998).

briefs would then simply be another layer added to existing material, not an occasion for starting from scratch.

On the subject of money, commentators on electronic briefs have expressed widely divergent opinions. There is a great deal of concern in some quarters, for instance, that if courts start to demand that briefs be filed in electronic format, less affluent litigants will be at a disadvantage. Other observers have looked at the same circumstances and concluded just the reverse: They see electronic briefs, along with the increased use of automation in the courtroom, as a move toward a more efficient, and ultimately more level, playing field.

The fact is that the technology is still too new to draw a definite conclusion about the cost of CD-ROM briefing. The field is still wide open, and you have your choice of several approaches. If you are with a law firm accustomed to paying thousands of dollars annually to have your paper briefs printed and bound for filing in the highest courts, then a few thousand more for the electronic adjunct to those briefs will not overwhelm you. At the other extreme, if you are a solo practitioner with a little computer savvy you can turn out a perfectly respectable CD-ROM brief on a shoestring budget. All you need is a writable CD-ROM drive installed on your computer, some patience, and a sense of adventure.

Of the briefs listed earlier in this article, ²⁵ a few were done in-house at law firms large enough to have their own information technology staff. Fish & Richardson, the firm that filed the *Yukiyo* brief, relied heavily on its own personnel. The attorneys on the case estimated that an additional thirty to forty hours were needed to convert the text and to package the entire submission on a CD. They say this included time spent working with opponent's counsel on their brief and on the joint appendix, which was formatted in HTML, all on one disk.

Another group of firms that have filed briefs on CD-ROM have turned to outside vendors for production of the disks. RealLegal, based in Denver, Colorado, has taken an early lead in this field. This is the company that published the Oklahoma City bombing trial on the Internet. They produced the disks in several

of the cases mentioned above,²⁶ including the brief accepted by the Supreme Court. They are just one of a good-sized field currently tooling up to offer this service.

D. Format

Another major issue that will have to be addressed before everyone can be fully comfortable with CD-ROM briefs is format. As yet, the outcome is impossible to predict. To date, the formatting methodologies in use have fallen into three general categories: HTML, Adobe Acrobat, and proprietary.

HTML (hypertext markup language) is text-based, and it is displayed in an ordinary browser, usually Netscape or Microsoft Internet Explorer. HTML is the language of the World Wide Web. It starts with a plain text document and adds some formatting codes which are also in text; for example, "<CENTER>Main Title</CENTER>" would be displayed in the browser as the words, "Main Title," centered on the screen, in boldface type. Hyperlinks are also inserted into the document using simple HTML coding. Both Microsoft Word and Corel WordPerfect have functions to automatically convert a finished word processed document into HTML for viewing in a web browser."

The Adobe Acrobat system uses a completely different approach, called PDF format. Although to the uninitiated the result might appear almost the same, the two methods generate the page seen on the screen in very different ways. An HTML file transmits its content to the browser with *instructions* on how to display it, which the browser does—center this line, indent here, start a new paragraph there, use bigger or smaller typeface, etc. But PDF format is more like taking a snapshot of the page and sending the finished picture to be displayed in the Acrobat reader, exactly as is.

Proprietary methods are just what the name says, of course, and likely to be variations or combinations of the above.

^{26.} See supra n. 10.

^{27.} The word processing conversions rarely function perfectly, however. It would be more prudent to use an HTML editor, a software application designed for the purpose, such as Microsoft FrontPage, or better yet, retain the services of a web page designer or HTML programmer.

RealLegal uses a method it calls "structure pattern markup language." Proprietary methods can usually be viewed only by using the vendors' own software, which is of course installed on every CD they turn out.

Each of the approaches has its adherents, and no single method appears to be taking the lead thus far. The PDF format has the advantage of displaying documents precisely as they were prepared. It is almost always the best way of preserving documentary evidence, such as correspondence, business records, or affidavits. The brief itself, as well as pleadings, motions, and other court filings that need to be on the disk with the brief, is somewhat easier to create and save in HTML format, although all of these documents can be converted to PDF as a final step.

In general, HTML is slightly more flexible for hypertext purposes than PDF. On the other hand, the very lack of flexibility in PDF gives it a bit more security against accidental erasure, computer glitches, or manipulation. Moreover, each new version of Adobe Acrobat keeps adding elements of HTML flexibility, such as increased search capability and easier insertion of hyperlinks. Perhaps, as we have seen with other kinds of competing systems in the past, each will continue to grow to encompass the best qualities of the other, until they ultimately become compatible. At the moment it certainly appears that the market has room for all comers. It may well be that the ideal format for CD-ROM briefs will turn out to be something that has not yet been invented.

E. Copyright

A remaining mechanical question that must be answered is how to link to primary and secondary legal authorities. In most jurisdictions, to refer to the official reporter is to rely on West Publishing. In the early CD-ROM briefs, West readily gave permission to the law firms, upon request, to download the text of the cases they wanted to store on the CD for citation purposes. The company is currently in the process of amending its contract with Westlaw subscribers, expressly granting this permission, and at the same time limiting subscribers' use of downloaded materials. Subscribers will have the right to

download the text of opinions and save them on the CD-ROM, but may then share the downloaded texts only for purposes of that particular litigation.²⁸

The scope of the links' targets raises another question that will undoubtedly be a topic of debate as hypertext briefs come of age. Thus far, we have spoken of projects that are entirely self-contained: All the targets to which the links refer are stored on the same compact disk, along with the brief. There is, of course, no technological reason for this limitation. As everyone with Internet access has surely noticed, all it takes is a click on a desktop icon to automatically open a browser and get online. Anytime you type a web address (http://www.whatever.com) in your word processor, WordPerfect or Word will instantly convert it to a "live" link, which you can then click on for a virtually transparent interface with the Web.

So, the question regarding hypertext briefs thus becomes whether briefs should be barred from containing links to the web itself. A citation *could* link to Westlaw online, rather than to the text of the same opinion stored on the disk. For those who would prefer not to be limited to a subscription service, the link could in many cases jump to a free web site with the required opinion text. The last few years' federal courts of appeals' opinions and most state opinions are now available at no cost, as are some of the special purposes forums such as the United States Tax Court. Similarly, the brief could contain links to law review articles, statutes, regulations, and other government authorities.

Unfettered linking to the Web would cause some minor disruptions: URLs change, web servers go down, content is replaced. There is considerable irony in looking to so fluid an environment as the Web for anything so authoritative as a legal citation. If links to the Web became a common practice, the line between authority and "inadmissible hearsay" might become clouded, though how this might play out can only be imagined as of the present time. At any rate, these are just a few of the

^{28.} A new Westlaw feature, CiteLink, is a program that can go through your finished document and automatically insert a hypertext link to Westlaw or WestDocs for every case citation. While convenient, this might not be a good idea if you plan to submit the finished product to someone who is not a West subscriber. In that case, it would be better to keep the disk self-contained.

growing pains that may be encountered as the new technology comes of age.

III. WHEN A LITIGANT SHOULD GET THERE: THE RIGHT CIRCUMSTANCES IN WHICH TO FILE A CD-ROM BRIEF

A. Appropriate Cases

Hypertext briefs are going to catch on faster in some forums than in others, as well as in certain kinds of cases. Appeals involving disputes over software seem to be the first obvious candidates for a hypertext brief, because at strategic points the written argument can link directly to the key evidence that illustrates what the software in question does or does not do. Cases involving databases, copyright of online materials, "cybersquatting," and other unfair online business practices would also lend themselves to a CD-ROM brief presentation.

Good candidates for hypertext briefing need not exclusively be cases dealing with technology. Any litigation with a lengthy trial record and the need to pinpoint certain text references from voluminous exhibits can be made far less tedious to read if the appendices are digitized and incorporated on a CD-ROM, all linked together with the brief. Cases with strong visual components could also best be briefed on CD-ROM. Briefs with numerous references to maps, diagrams, charts, photographs, or blueprints can all obviously be handled far more efficiently and comfortably on a computer screen than by forcing the reader to struggle with unwieldy masses of paper.

While there is probably no particular type of appellate case that would not be suited to hypertext briefing, most observers seem to agree there will not be a great deal of this activity among criminal cases in the foreseeable future, mainly because

^{29. &}quot;Cybersquatting" is the bad faith registration of domain names similar to existing company names, trademarks, etc., with the intent of later profiting from selling the registered name to the "rightful owner." Cybersquatting was made illegal in the 1999 Trademark Act, Pub. L. No. 106-43, 113 Stat. 218 (1999) (amending scattered sections of title 15 of the United States Code).

of the extra expense. Thus, *United States v. Dakota*³⁰ may be the exception to the rule, at least for a while.

Thus it is not the subject matter so much as the setting—the course of the litigation prior to the appellate level and the receptivity of the appellate court—that will determine where the advantages of hypertext briefs will become established soonest. Essentially, the places hypertext briefs are least likely to catch on are whatever forums are the most "backward" in adapting to modern technologies.

B. Electronic Records

As suggested earlier, a CD-ROM brief should be considered in any case where the transcript or trial record has already been maintained digitally, or where the evidence already contains multi-media exhibits, such as videotape depositions or computer-generated animations. In *Caterpillar, Inc. v. Deere & Co.*, for example, the record included 105 minutes of affidavits on video. If the appellate judges had had to rely exclusively on paper briefs, this would have necessitated setting up a VCR and monitor for viewing the briefs' references to the affiants' testimony, an awkward arrangement at best. But with the entire package on a disk, a mouse click was all that was needed.

IV. CONCLUSION

The future of the judicial system will undoubtedly move toward increased use of technology in all areas, and CD-ROM briefs will be an integral part of that change. If it is still true that "the medium is the message," the physical shift from paper to compact disk will be the least of the transformation. At the present time, CD-ROM briefs are not welcome in most courts as a matter of course. Soon, however, appellate practitioners should be getting ready for a major shift toward the use of hypertext

^{30. 197} F.3d 821 (6th Cir. 1999).

^{31.} Caterpillar, Inc. v. Deere & Co., No. 99-1593 (Fed. Cir.).

briefs, and with them, new ways of writing, reading, and a new dimension in legal advocacy.