

IX. Paperless Litigation and Discovery

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A. Federal Court ECF System Highlights

U.S. District Courts, such as the U.S. District Court of the Southern District of Indiana (<http://www.insd.uscourts.gov/e-filing-resources>, accessed 6/13/17) provide a wealth of information on how to use the Case Management/Electronic Case Filing System (CM/ECF). As stated on its website,

The Court's Case Management/Electronic Case Filing system, CM/ECF, permits attorneys appearing in all pending civil and criminal cases to file documents with the Court via the Internet using the ECF (Electronic Case Filing) portion of the system. In addition to the court's Local Rules, the *ECF Policies and Procedures Manual* governs electronic filing in all civil and criminal cases within the Southern District of Indiana. Attorneys, parties, and pro se litigants may view civil and criminal dockets as well as electronically filed documents via the Internet using the PACER (Public Access to Court Electronic Records) portion of the system.

For assistance with an electronic filing or an electronic notice from the court's CM/ECF system, please contact the Clerk's Office at [\(317\) 229-3700](tel:3172293700) or ECF_support@insd.uscourts.gov. Helpful materials on the website include:

- E-Filing Rules, Policy & Guidance – see <http://www.insd.uscourts.gov/e-filing-rules-policy-guidance>
- ECF Training, Instructions & References – see <http://www.insd.uscourts.gov/ecf-training>
- How to Open New Cases via the CM/ECF System: <http://www.insd.uscourts.gov/attorney-case-opening>
- A list of Frequently Asked Questions (FAQs) - <http://www.insd.uscourts.gov/e-filing/faq>

A number of PDFs and Word documents for various aspects of the CM/ECF system are also provided on the court's website:

- ECF Registration Form - For access to electronically file documents and receive electronic notice of case activity.

- Electronic Civil Case Opening Training Certification, for access to electronically file new civil and miscellaneous cases via CM/ECF.
- Technical Guide for Using Notice of Electronic Filings (NEFs).
- Procedures for Retrieving Sealed Documents from CM/ECF.
- CM/ECF Technical Requirements Exemption Questionnaire.

The court's website also explains the purpose and benefits of incorporating hyperlinks into documents:

In the Internet research world, hyperlinks are a standard way of “drilling down” for more detail or specific information. Just as all web pages contain links to other pages, cases downloaded from legal research services such as Westlaw or Lexis contain links to the cases, statutes, articles, or other sources cited within the opinion. The links allow immediate access by the reader to these referenced materials.

Attorneys can include links to cited law and previous CM/ECF filings in their documents to be filed in CM/ECF, adding another level of persuasion to their writing. Hyperlinks in briefs and other court filings provide quick, easy, and pinpoint access to particular sections of a case, or to specific filings in the court's record. The attorney can thereby highlight the precise issue presented, and the specific evidence and controlling or persuasive law the court should consider.

Hyperlinks in court filings are very beneficial for court chambers. Court submissions which include links to relevant case law and case filings are easy for chambers staff to review. The attorneys' arguments can be immediately verified in the context of the relevant law. The judge or judicial clerk is able to read the text of the cited case law on one screen while reading the attorney's brief on the other. And if a brief contains links to referenced exhibits, and even to specific pages within those exhibits, the judge or judicial clerk can access the relevant evidence without having to navigate through the CM/ECF record. Particularly when dealing with large and complex cases, links save chambers considerable time and effort. Links make it easy for the court to verify – and adopt – the positions taken by an advocate. (<http://www.insd.uscourts.gov/hyperlinking-information>, accessed 6/13/17).

The court's website provides two excellent guides are provided on how to use hyperlinks:

- Attorney Guide to Hyperlinking in the Federal Courts - Microsoft Word
- LinkBuilder Tool (MS Word Plug-in to Auto-Create CM/ECF Hyperlinks)

B. Tips for Complying with the Court's File Size Limits

One way to reduce the size of a file is to use as many hyperlinks as possible in a document. This saves the need for you to type full information about everything referred to in a brief or other document. There have been a number of excellent articles about how to polish one's legal writing to be as persuasive and succinct as possible and avoid some of the phrases and "legal-ese" that we may have become overly fond of and accustomed to using. This is especially important with the need to write for an audience that is likely going to be reading most of the material on a screen rather than in print. Another suggestion is to make sure that the "Proofing" feature of Word (under Options) that lets you see the grammatical errors in your document is turned on (which is usually the default setting). Although most legal (and academic writing) is in passive voice, this being able to see the amount of blue highlighted text may give you some opportunities to eliminate clauses and meaningless verbiage and to use active voice whenever possible. Among the many excellent articles available to help with fine-tuning your documents are:

- Editorializing, Gratuitous Verbiage and Verbatim Tracking Don't Persuade – from *Michigan Bar Journal*
- Writing for Screen Readers in the Wake of Indiana's E-filing Initiative – from *Res Gestae*
- Legal-Writing Myths – from *Michigan Bar Journal*
- Good Facts, Good Law, and Good Writing All Persuade – from *Michigan Bar Journal*
- Editing for Concision – from *Michigan Bar Journal*
- Writing for Your Reader – from *Michigan Bar Journal*

Since I do not practice law, I always take the opportunity to attend any presentations at conferences and seminar where the judges are speakers. I recall a recent panel of appellate judges whose advice was that the lawyer should select his/her two or three best arguments and focus on those in his/her brief rather than including every possible legal theory imaginable. I have also attended seminars with Mr. Arend J. Abel as a presenter and his materials on appellate advocacy are very helpful

(<http://www.cohenandmalad.com/attorneys/arend-j-abel/>, accessed 6/13/17).

The following information about electronic filing and size limitations is taken from the *Electronic Case Filing Policies and Procedures Manual* (<http://www.insd.uscourts.gov/sites/insd/files/ECFAdminManual.pdf>, accessed 6/13/17),

Section 13. Format for Electronic Filings:

Electronically filed documents must meet the requirements of FED.R.CIV.P. 10 (Form of Pleadings), Local Rule 5-1 (Format of Papers Presented for Filing), and FED.R.CIV.P. 5.2 and FED.R.CRIM.P. 49.1 (Privacy Protection for Filings Made with the Court), as if they had been submitted on paper. Documents filed electronically are also subject to any page limitations set forth by Court Order, by Local Rule 7-1 (Motion Practice), or Local Rule 561 (Summary Judgment Practice), as applicable.

To facilitate document retrieval for users who are accessing the system, components may not exceed an electronic file size of 10 megabytes. (Local Rule 5-1). To electronically file a document or attachment that exceeds 10MB, the document must first be broken down into two or more smaller files. For example, if Exhibit A is a 12MB PDF file, it should be divided into 2 equal parts prior to electronic filing. Each component part of the exhibit would be filed as an attachment to the main document and described appropriately as “Exhibit A (part 1 of 2)” and “Exhibit A (part 2 of 2).”

All pleadings and other filings, including motions, briefs, and proposed orders must be converted to PDF format directly from a word processing program (e.g., Microsoft® Word), rather than created from the scanned image of a paper document. An exhibit may be scanned into PDF format, at a recommended 300 dpi resolution or higher, only if it does not already exist in electronic format. The filing attorney is responsible for reviewing all PDF documents for legibility before submitting them through the Court’s Electronic Case Filing system.

Where an individual component cannot be included in an electronic filing (e.g. the component cannot be converted to electronic format), the filer shall electronically file the prescribed Notice of Manual Filing in place of that component.

The following example illustrates the application of this section:

An attorney seeks to file a motion with three exhibits (A, B, and C), and a proposed order. The motion is a text document that was created with a word processing application and after conversion to PDF has a file size of 45kb. Exhibit A is a scanned image of a one-page document that after conversion to PDF has a size of 200kb. Exhibit B is a 100-page deposition transcript that exists on CD and after conversion to PDF it has a size of 5 MB. Exhibit C is an object that cannot

be converted to digital format, such as a videotape. The proposed order is a text document that after conversion to PDF has a file size of 5kb.

In order to facilitate easy retrieval of any individual component, each document must be kept as a separate component (PDF file) rather than being merged together as one file. Each of the components should be filed electronically in one submission by filing the motion as the main document, and attaching the exhibits and proposed order to the motion, through the Electronic Case Filing System.

Exhibit C is a videotape and exists in a format that cannot be filed electronically. During the electronic submission, when exhibit C would normally be attached to the motion, it should instead be replaced by a Notice of Manual Filing (Appendix C) clearly stating what the exhibit is and why it cannot be filed electronically. Exhibit C should then be filed and served as it would if a traditional paper filing system were being used. When Exhibit C is presented to the Clerk for manual filing, it should be accompanied by a paper copy of the Notice of Manual Filing that was electronically filed in its place. (*Id.*)

C. Inserting Video Clips Directly into Filed PDFs

The previous section discussed a videotape as an example of format that cannot be filed electronically. Fortunately, with modern technology, most video clips are now generated in digital format. It is important to request – from clients, opposing parties and third parties – any potentially relevant evidence in its native format so that any issues with material in non-digital formats can be avoided from the very beginning of a case. According to an article on [minimatters.com](http://www.minimatters.com), there are two methods for embedding a video in a PDF. (Embedding a Video in a PDF—Using Video to Improve Presentations, Part 3, <https://www.minimatters.com/embedding-a-video-in-a-pdf/>, accessed 6/19/17; *see also* E. Svenson, Ebriefing: Overview of lawyers Can Create Useful Hyperlinked PDF Briefs, Paperless Chase, <http://paperlesschase.com/ebriefing/>, accessed 6/19/17). Of course, the lawyer will want to check with the court rules for whether or not inserting video clips into PDFs that will be filed with the court is allowed and what the format and style should be. For example, the instructions for Hyperlinking: Electronic Submissions in the Federal Courts (dated 6/10/13), indicates the following information from the U.S. District Court, District of Kansas:

(c) . . . Hyperlinks to the electronic appendix may be added to the brief. If hyperlinks are used, the brief must also contain immediately preceding the hyperlink a reference to the paper appendix page. Hyperlinks to testimony must be to a transcript. A motion must be filed and granted seeking permission to hyperlink to an audio or video file before such links may be included in the brief or appendix. Hyperlinks may not be used to link to sealed or restricted documents.

Rule 30.1

(c) In addition to an electronic and paper appendix, hyperlinks to the appendix may be added to the brief. If hyperlinks are used, the brief must also contain immediately preceding the hyperlink a reference to the paper appendix page. Hyperlinks to testimony must be to a transcript. A motion must be filed and granted seeking permission to hyperlink to an audio or video file before such links may be included in the brief or appendix. Hyperlinks may not be used to link to sealed or restricted documents. . Rule 113.13

(a) Electronically filed documents may contain the following types of hyperlinks:

(1) Hyperlinks to other portions of the same document; and

(2) Hyperlinks to a location on the Internet or PACER, e.g. the appendix, that contains a source document for a citation. If hyperlinks are used in the brief, counsel must also include immediately preceding the hyperlink a reference to the paper appendix page. Hyperlinks to testimony must be to a transcript. A motion must be filed and granted seeking permission to hyperlink to an audio or video file before such links may be included in the brief or appendix. Hyperlinks may not be used to link to sealed or restricted documents. (p. 5.)

D. Digital Trial Notebooks

As indicated by Phillips and colleagues, “[a]fter all exhibit number have been assigned, and this information has been entered into both the review platform and trial presentation tool, trial notebooks are usually created in paper format.” (A. Phillips, R. Godfrey, C. Steuart and C. Brown, *E-Discovery: An Introduction to Digital Evidence*, p. 164.) However, the authors observe that using paper notebooks is optional because tech-savvy litigators can use trial presentation tools to set up a dual-screen presentation, with one screen viewed by the jury and one seen only by the lawyer. (*Id.*) They indicate that notebooks usually contain exhibits in numerical order and may have a separate tab with exhibits organized in chronological order. (*Id.*) Likewise, Goldman comments that there are as many different approaches to setting up case files and managing cases as there are

legal teams and that one of the more common approaches is the use of a case notebook or trial notebook (*Technology in the Law Office*, 4th ed., p. 291). As he describes, summaries of information about the case are maintained in a single notebook with tabs for each major activity, party, expert or element of proof needed. (*Id.*) However, the process may be simplified by using virtual trial notebooks, where all of the case file information is maintained on a single computer, network server or cloud-based server, including copies of the documents in electronic form. (*Id.*) One of the advantages of a virtual trial notebook is that each member of the legal team may be able to access the information, provided that he/she has proper access rights. (*Id.*) Note that the CaseMap case management system, described in Part E is able to generate information for a trial notebook and a privilege log.

E. CaseMap and Other Case Management Software Solutions

I teach a course each summer called Litigation Support Systems and Courtroom Presentations. On the advice of the members of my advisory committee for the legal informatics certificate, for the first time this summer I have included information, a tutorial and free 180-day access to CaseMap as part of my course. Students have been very excited to learn about CaseMap (and TimeMap) and to consider how it can be used in a law office.

Chapter 10 in *Technology in the Law Office*, 4th edition, is devoted to case management systems. The author's vignette provides a good example of how a personal injury case involving a number of potential plaintiffs can mean handling, sharing and quickly retrieving a myriad of documents from many sources, including physicians, health care facilities and experts in vehicular design and accident reconstruction. As indicated on page 289, although computers have been a blessing in terms of increased productivity and access to information, they also mean that the sheer volume of potentially relevant documents and files has increased exponentially. The next time you use email, I invite you to consider how many emails you generate each day and who receives them as well as how many emails you receive. From this large set of emails,

how many might truly be important enough to be saved, analyzed and produced as part of a court case? Note that the author has provided an example of incriminating emails that might indicate a hostile work environment. As indicated on page 290, cases are made up of a number of items, including documents, depositions, transcripts from testimony, facts and issues. Among the software that can manage various activities within a case are Concordance, CaseMap, TextMap, TimeMap and Sanction. Note that case management software typically allows exporting and importing information between related software applications.

On page 291, the author introduces the strategy of using a trial notebook to organize and manage a case. The traditional paper-based process is described; however, we now have the opportunity to use virtual trial notebooks, wherein all of the information about a case, including copies of all evidence and other materials in electronic form, can be maintained on a single computer, network server or cloud-based server. Among the advantages of a virtual trial notebook is that each member of the legal team can access information about the case. It is exciting that office management and case management functions may be integrated. Among the benefits of such an integrated single platform are reduced time for inputting information, a single interface for users to learn and a single software vendor as a point of contact. On pages 291-292, the author contrasts the management of cases in a paper-based world versus the new software tools that are available. Among the most useful tools is an e-repository or online document repository, particularly as the amount of potentially relevant evidence continues to increase exponentially. Note that a typical litigation case file may contain, at a minimum, all of the items listed in the checklist at the top of page 292. The author continues to highlight how law was practiced in a paper-based world in pages 292-294. When I finished law school, I worked part-time for a lawyer and I remember his voluminous binders very similar to what is described on pages 292-293 and shown in Exhibits 10.1 and 10.2 of Chapter 10 in *Technology in the Law Office*, 4th edition. Fortunately, case management software can be used to organize all of the elements of a case into a single system and

present it in a readable manner. Note that those who are working on a case will have limitations in what they can access and do, based on their roles in the case.

A case may start with interviewing a client. Typically, this will involve preparing an interview sheet, for example, an Accident Fact Sheet or a Witness Interview Form. Although some law firms may still complete these as paper documents, information may be entered directly or scanned from forms and templates into a case management system such as CaseMap (LexisNexis). CaseMap forms are designed to be imported directly into the software's database. As members of the legal team obtain information, they can enter it into the case management system and update the case file as new information becomes available. Note that collaboration among members of the legal team is common, thus a case management system allows 24/7 access to case information. There may even be collaboration between law firms so that the necessary expertise is available. Each lawyer may provide his or her own written assessment of the issues in a case and can do this in CaseMap using the assessment form.

Confidentiality is paramount in the practice of law and lawyers are bound by this ethical duty through the Rules of Professional Conduct in the state or states where a lawyer is licensed to practice. Access to each case should be limited to only those legal team members who are working on that case. CaseMap includes administrator tools for adding or deleting someone from access to a case and for changing passwords for access to a case file.

As indicated on page 298, most case management programs provide a basic set of screens for entering different types of information. For example, AbacusLaw provides blank new contact forms. Some software allows users to create customized forms to reflect specific practice areas, such as a personal injury forms or an intake form for a real estate case. Some law firms may allow their clients to complete these forms using a word processor or Internet browser. Note the practice tip on page 299 which indicates that not only can a case management system be used to avoid potential conflicts of interest, it can also be a practice building and client relationship tool.

In terms of output from case management systems, a search or query screen may be used to identify the information desired for a report. A sample set of formats for reports is provided in CaseMap. Note that the CaseMap system is able to generate information for a trial notebook and a privilege log. Pages 300-301 describe the power of case management software such as CaseMap that helps the lawyer analyze a case and provides a central repository for critical case information. This information is often divided into categories, such as parties, witnesses, documents, case law, statutory law and reports. Once this information has been entered, it can be organized and accessed by members of the team working on the case. A sample screen from CaseMap is shown in Exhibit 10.14 (note that it is presented by object type) of Chapter 10 in *Technology in the Law Office*, 4th edition. Exhibit 10.15 illustrates the workflow in a typical case using CaseMap as the case management system.

Timelines are an especially powerful way to demonstrate what happened when to a judge and jury as well as to clarify questions that are being asked during a deposition. Timelines are frequently presented graphically, with some examples shown in Exhibit 10.16 of Chapter 10 in *Technology in the Law Office*, 4th edition, that were generated by the SmartDraw software. Exhibit 10.17 is a timeline created directly from the CaseMap file using TimeMap software, which is also a LexisNexis product. As indicated on page 302, when a lawyer is analyzing a new case, timelines offer the opportunity to clarify his/her thinking and make certain of the facts and elements in a case. A comparative timeline, which shows the sequence of events from the plaintiff's and defendant's perspective, can illuminate issues and inconsistencies in a case. Because of the recent amendments (December 2015) to the Federal Rules of Civil Procedure, the time periods for certain activities in the discovery process are significantly shortened, making an internal timeline for the legal team that reflects deadlines for each activity in the litigation especially useful. Note that as an integrated software application, CaseMap allows a seamless transfer of data between applications, including into TimeMap. LexisNexis provides extensive assistance for users of CaseMap, including webinars. Some additional information on creating a new case file and using templates in CaseMap is provided on

page 304. Commentary on the power and potential of timelines is provided on pages 304-305. LexisNexis has provided a number of webinars that demonstrate how to use CaseMap and its features at <http://www.casemap.com/webinar/CMfund.asp> and *Technology in the Law Office*, 4th edition also includes a tutorial for CaseMap.

F. Dealing with Opposing Counsel or Judge Who Prefers Paper

The beauty of an e-filing system with a consistent format and filing conventions for all case materials means that anyone who would prefer to use paper can easily print off what he or she needs. There are indeed times when a paper document, especially if it is extensive, may be easier to read and reflect upon in print than on the screen. The option to have a printed copy also means that the judge or opposing counsel is not required to have access to technology. Some courts and judges may have specific rules and conventions that they would like to have followed. For example, my colleagues reported that during a case management conference with an Allen County judge, there was a long discussion regarding changes that are coming soon by Allen County local rule:

1. For anything e-filed in Judge Boyer's court (EXCEPT designations on MOSJ- see below) she wants a courtesy copy emailed to her: nancyeboyer@gmail.com
2. On MOSJ's the judges in Allen County are not going to review MOSJs unless they now take the following format:

E-file separately:

- MOSJ (courtesy email copy to Judge Boyer if in her court)
- Memorandum of Law (courtesy email copy to Judge Boyer if in her court)
- Designation - The Designation is to be e-filed separately, not as an attachment. It should contain everything that is being designated- all affidavits, documents, etc. The first page should be a Table of Contents with the page number of each Designated item. Use a "group" pagination for the items designation after the table of contents so the judges can search (so if you have 50 pages of designated items that includes a 20-page affidavit and 30 pages of invoices, the invoices would start on page 21).

G. Discovery Production

Chapter 7 in *Electronically Stored Information: The Complete Guide to Management, Understanding, Acquisition, Storage, Search, and Retrieval*, 2nd ed. provides helpful recommendations for how to handle the production phase of an electronic discovery process. As the author indicates on page 255, in Chapter 7, he will discuss the reasons and methods for sharing the data that we have so carefully collected, preserved and managed. There may be different approaches and procedures that will be appropriate to the specific needs of the situation. These approaches and procedures will include the format in which the data are produced, the content, the timing of release, the actual physical media and the delivery of the electronic evidence (see Figure 7.1).

As indicated on page 255, “[o]ne of the first considerations in sharing the data you have collected will be in what format you want to produce the data.” The author contrasts the approach to delivering information to friends and relatives versus to the IRS or other taxing authority as part of an audit, wherein the taxing authority is likely to provide specific instructions about format and metadata. The information about how to produce data for litigation on pages 257-258 is of greatest interest. As anticipated in the FRCP, the “meet and confer” conference should have provided an opportunity for the lawyers to not only indicate the electronic and physical evidence they wanted to receive, but also the format for that evidence. In nearly every case, parties will want the electronic evidence in native format with metadata intact.

Special challenges may arise when we are working with older and obsolete media and with data that has been created and stored through a proprietary database. The author observes that it can be a daunting task to obtain relevant electronic evidence that will stand up to evidentiary requirements, so it is especially important to be aware of the issues at the beginning of the case. As the author suggests on page 258, it may be to everyone’s advantage to create different data formats in order to ensure that the evidence is consistent, not compromised in any way and can be used most effectively and easily by

all parties. Fortunately, as the e-discovery industry matures, there are more products from vendors that facilitate the production of electronic evidence.

As stated on page 259, “[t]he actual physical or logical medium used to transfer produced electronic data will depend on both the goals of the producing parties and any agreements made between them.” As shown in Figure 7.3, electronic evidence can be copied onto many types of physical media, such as DVDs, CDs or USB drives, as long as the copying is done in a forensically sound manner that ensures the integrity of the evidence. The author offers a process for ensuring forensically sound copying on page 259.

- Create and document at least two different hashes of the data before and after copying.
- Maintain a chain of custody, documenting where the data were originally, who was the custodian, who copied the data, when, and for what purpose.
- Document the tools used to copy the data including their version numbers.

Appendix II in *Electronically Stored Information: The Complete Guide to Management, Understanding, Acquisition, Storage, Search, and Retrieval*, 2nd ed. includes some sample logging and chain of custody documents. If data is transferred using email or an online service, the author suggests ensuring the integrity of the data by using hashes and maintaining good logging of all activities involved in copying the data. If email is chosen as the means of transferring data, the data should be classified and we should consider encrypting email and documents. Encrypting documents can be accomplished with common tools, such as those that are listed in Appendix III of *Electronically Stored Information: The Complete Guide to Management, Understanding, Acquisition, Storage, Search, and Retrieval*, 2nd ed. If you decide to use an online service, the author recommends that the provisions described on page 260 be included in the contract with the service provider. He asserts that these provisions are paramount to ensuring that the data is there when we need it and that the integrity of the data is assured. As he observes on page 260, the most important considerations will always to be ensure the integrity and availability of the data.

Chapter Eleven in *Electronic Discovery for Small Cases* describes a simple solution we can use for producing ESI, called dtSearch Publish (http://www.dtsearch.com/plf_publish_2.html, accessed 6/21/17). Likewise, the authors recommend Digital WarRoom Pro as a tool that can handle the processing, reviewing and production phases of an e-discovery process (<http://www.digitalwarroom.com/products/digital-warroom-pro/>, accessed 6/21/17).

H. Managing Incoming Paper Discovery

These materials can be easily scanned into PDF format using one of the readily available, full-featured scanners. They can be properly categorized, indexed and tagged using a case management system such as CaseMap. For example, Bour recommends the Fujitsu document scanner as an ideal tool for a small law office. (S. Bour, Technology Untangled: Fujitsu Document Scanner is Ideal Small Law Office Tool, *The Indiana Lawyer*, June 14-27, 2017, p. 16.) Svenson also provides advice for selecting a scanner and what to do with paper copies of documents once they have been scanned. (E. Svenson, Paper Puncher: Establishing a Paperless Law Practice May Be Right For You. *ABA Journal*, April 2-17, pp. 28-31.) He also explains the preference for PDF.

You will scan paper to a PDF, or portable document format. Why? Because you want a single format for all the paper you scan. Having scanned documents in more than one format leads to, yes, complexity, confusion and chaos.

Federal courts require you to file pleadings in PDF, and states that have switched to e-filing all use PDFs. The states that have not yet adopted e-filing will undoubtedly opt for these as the canonical format.

Think of PDF files as digital paper. If you ever want to print out a PDF that you've scanned, you'll be relieved to know that it will look exactly like the paper that got scanned in. If the paper was letter-size, it will print out as an 8½-by-11 document. If it was legal-size, it will come out as 8½-by-14. If the paper contained color, then you can print it out as a color document, assuming your scanner was set up properly.

While PDFs look and act exactly like the paper from which they were created, they have much greater utility than paper. For example, if you needed to find every piece of paper that had the word *HVAC* in it, you would have to flip through every sheet of paper, scanning for that word using your feeble eyesight.

If you make your PDFs text-searchable, using optical character recognition, then you'll be able to analyze one or many files at one time and jump right to the page and line where your search term is located.

Working with PDFs is much easier than working with paper. It takes time to get comfortable, but it's not hard. If you need to work from paper, you can easily print the file.

In other words, PDFs give you all the options of paper and more.

No one transitions to a paperless practice overnight, nor would that be desirable, even if you could. Be patient, and remember that the ultimate goal is to make your practice easier to manage.

Start learning to scan your papers and develop a reliable system that's comfortable for everyone in your office. Get better at working with PDF files. Start slow, and keep improving steadily. Soon you'll discover that you've made the transition, and your life will be easier. (*Id.* at 30-31.)

I. Notices to Parties

The following information discusses many of the benefits and features of the CM/ECF system (<http://www.insd.uscourts.gov/content/what-are-benefits-using-cmecf>, accessed 6/21/17):

- Registered attorneys may file documents 24 hours a day, 7 days a week.
- Reduction of paper, photocopy, postage and courier costs.
- Full case information is available immediately to attorneys, parties, and the general public through the Internet. This includes the ability to view electronically filed documents.
- Registered attorneys receive email notification of activity in CM/ECF cases. Email service is immediate and eliminates the costs of handling and mailing paper notices for both the court and attorneys.
- Multiple parties can view the same case files simultaneously.
- Since CM/ECF uses Internet standard software, the out-of-pocket cost of participation for attorneys is very low.

The lawyer is advised to check the local rules for the court where the case has been filed to see if there are any particular requirements for notices and how is responsible for issuing these notices. For example, in bankruptcy court, motions to sell or abandon property require the lawyer to issue and serve these notices rather than having this done by the court.

J. Creative Solutions for Paperless Exhibits

Chapter 17 in *Technology in the Law Office*, 4th edition, discusses electronic trial presentation. Note the vignette in the gray box on page 513 which describes the concerns with having elaborate courtroom technology, including costs. As indicated on page 513, modern trial presentations frequently include videotaped depositions, photos, videos and computer simulations, which may be shown on projection screens, personal monitors or large-panel displays. On the other hand, the author indicates that managing what could be hundreds of individual multimedia elements in the courtroom can be a nightmare unless they are organized and easily accessible (even thousands, if you followed the Richmond Hill trials, you may have seen the prosecutor and her staff loading hundreds of boxes of evidence into a van to take them to South Bend). LexisNexis Sanction, TrialDirector by inData and similar trial presentation programs allow the legal team to organize and manage documents, depositions, photographs and other data and then display them when needed during depositions or trial. However, note the practice tip at the top of page 514 about supported formats, because not all native file formats can be used with all trial presentation programs.

As stated on page 514, “[t]he primary goal of every trial attorney is to make the best possible presentation of the case and obtain a favorable verdict.” Although a simple handwritten chart may be the best method for a case (given time, staff and budget constraints), more frequently an effective presentation will require the use of photographs, videos, computer simulations and other multimedia elements that will appeal to a jury of citizens who have been raised in the era of television, particularly with the number of law and crime shows that they have probably watched. Trial presentation software allows different types of media, including still photographs, text documents, video and sound clips and computer simulations, to be displayed using a single program. If we think about all of the different types of evidence we might have, it is easy to see why having software that can provide all of the necessary viewers in one package could be appealing. Multifaceted presentation programs, such as LexisNexis Sanction and

inData's TrialDirector, provide a single point of access for exhibits of different types. You can see an example of the file formats that are available in Sanction in Exhibit 17.1 on page 515. Selected files can then be previewed on the lawyer's personal computer monitor before projecting them onto the court's presentation system, as shown in Exhibit 17.2. Documents can be annotated using highlighting, arrows or underlining. The advantage of these advanced presentation software packages is their ability to work with a variety of file types, including video, which is especially appealing for showing the depositions of witnesses. A videotaped deposition of a witness can be presented with a written transcript displayed simultaneously in a split screen, as illustrated in Exhibit 17.3. The transcript can be highlighted to focus on specific questions and responses or it can be annotated.

As indicated on page 517, with everything stored electronically, it is not difficult to locate and display almost anything at a moment's notice when testimony or trial strategy changes. With coordination between the lawyer and the legal team, the presentation can be flawless. However, using trial presentation software requires training and practice. In addition to training through vendors and bar associations, it may be appropriate to bring in a trial support consultant to manage the presentation system, which then allows the lawyer and the legal team to concentrate on the case itself. Another advantage of trial presentation software is its flexibility. Note the practice tip on page 517 to be sure that all of the materials you want to incorporate are supported by the trial presentation software that you will be using. Another suggestion is to move all of the materials into a separate folder or group of folders for easy access.

Pages 517-520 demonstrate how to prepare a courtroom presentation. As indicated on page 517, this requires understanding a few basic Windows tools, such as creating new folders, copying and pasting files and "dragging and dropping" files and folders from one location to another. Note the difference between cutting and pasting versus the drag-and-drop method. Note the recommendation of using copy-and-paste as well as Save As to avoid overwriting or erasing the original files. When importing files

into Sanction, it establishes a link to the original location rather than actually removing the files. The information in the first practice tip on page 518 is especially important; making back-ups is critical for safety and security. Many lawyers will bring a complete back-up system to trial, including copies of electronic files and even extra computers. Back-up media can include removable media cards, thumb drives or relatively inexpensive portable hard drives.

As indicated on page 518, the first steps in creating a presentation are to create a new case and set up the location for saving the files and folders for the case, as shown in Exhibit 17.4. Items for each category can be imported from their original folder on the computer using the Sanction Import Wizard, illustrated in Exhibit 17.5. Note again that importing individual files into a Sanction case does not actually move them; it only creates a link to the location that the software will use when you want to retrieve and view those items. In the sample case, all of the desired items that will be used have been moved to one folder on a removable memory device. When the Sanction software is run, the memory media must be in the computer for the software to access the link to the files. When items have been entered into the software, they can be previewed by highlighting them in the Sanction Tree View, as in Exhibit 17.1. Of course, as indicated in the practice tip on page 519, it would be best to have the files stored on an internal hard drive rather than a flash drive.

When organizing files in Sanction, note that a number of different presentations can be set up in advance, such as for a specific witness, a particular legal theory or opening/closing statements. To create a presentation in Sanction, desired items from the exhibits listed in the Tree View may be selected and added to an existing presentation or a new presentation by a right click of the mouse and highlighting a specific file, as shown in Exhibit 17.6. Sanction has numerous other tools and features, including a set of tools for marking up and annotating items (Exhibit 17.7). Pages 524-535 of Chapter 17 in *Technology in the Law Office*, 4th edition, provide a more extensive tutorial of how to create a presentation using Sanction.

Here are some important things to keep in mind when creating courtroom presentation graphics.

- Contrast
 - Contrast helps people differentiate items in a presentation
 - Contrast is strong difference between items
- Light and dark
- Small and large
- Color/black and white
- Plain and patterned, etc.

Knowing what items to put into really high contrast can help the viewer understand the importance of something on the visual representation. For example, the title of a slide might be very important, whereas the indicator of the ordinal points (N, S, E, and W) is important, but not as important as other information. If your scene reconstruction is in black and white and the blood spatter is in red, the contrast between the colors will make the blood stand out more, which may appeal to the emotion of the viewer. Something that is too high in contrast can be difficult to look at and might actually detract from what you are trying to demonstrate. For example, if you add a black and white checkerboard floor to a floor plan, the high contrast will be interesting, but it will be difficult to see the other items on the floor, such as the location of a glove or some other key piece of evidence.

- Text
 - Text should be in high contrast to be easily read
 - Light text on a dark background is hard to read
 - Text should be large enough for the viewer to read
 - If your text is out of proportion to the other items in the presentation, it will lead to confusion in contrast
 - It is important to consider whether or not your presentation will be in print or projected
 - Text is handled differently between print and projection because of readability
 - Printed text should be a serif font (Times New Roman, for example) – books use serif fonts
 - Serif means it has tails on the letter forms
 - These tails help the eye progress from one letter to the next, aiding in reading

- Projected (or otherwise lighted) text should be sans serif (Arial, for example) – many websites use sans serif fonts
 - Sans serif means that the lines in the letter forms are straight, with no tails
 - On a computer screen, serif letters become blurry and instead of leading the eye from letter-to-letter, as in print, they actually detract from the readability of the text
- Often using sans serif fonts for headings and serif fonts for body copy is a good way to help lead the eye through a printed presentation
- Reversing this can often work on a projected image
- Contrast between serif and sans serif (as described above) can really help with information hierarchy and balance of an image

One company that prepares materials to show in court to explain complicated patent law cases is called Demonstratives: <http://www.demonstratives.com/>. This company prepared the animations for the *KSR v. Teleflex* case, which was heard by the U.S. Supreme Court. Be sure to click on Gallery at the top of the website to see some of their work.

One piece of software that is particularly helpful for creating courtroom presentations is SmartDraw. It is inexpensive, easy to use and now is available in a cloud-based version (so now Mac users can use it). Accident and crime scene reconstructions can be easily accomplished with SmartDraw, including both bird's-eye and cross-projection views. Maps, photos, images, symbols and annotations can be added. SmartDraw can also produce timelines, organizational charts, medical diagrams and other items that are common to court cases. SmartDraw files can then be exported into a PowerPoint presentation or saved as a PDF (for example, for preparing a settlement brochure). If you enjoy learning from YouTube videos, there are a number of videos available for SmartDraw, including how to use the software to prepare floor plans, visual presentations, use cases, flowcharts, maps and project management materials.

SmartDraw has its own YouTube channel at:

<https://www.youtube.com/user/smartdraw/videos>, accessed 6/22/17. The *SmartDraw*

User Guide: Fundamentals for New Users is available at:

<https://www.smartdraw.com/getting-started/smartdraw-getting-started.pdf>, accessed

6/22/17. There is a Video User Guide available at:

<https://www.smartdraw.com/training/how-to/getting-started.htm> if you prefer to learn by

watching videos (accessed 6/22/17).