

THE NEXT GENERATION OF ONLINE DISPUTE RESOLUTION: THE SIGNIFICANCE OF HOLOGRAPHY TO ENHANCE AND TRANSFORM DISPUTE RESOLUTION

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INTRODUCTION

Many scholars have written about the use of various technologies used to enhance or transform face-to-face alternative dispute resolution (ADR) processes. Whether termed online dispute resolution (ODR),¹ cybermediation, also known as online mediation,² cybercourt,³ electronic courthouse,⁴ virtual courtroom,⁵ virtual

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¹ ODR includes “forms of dispute resolution, such as negotiation, mediation, and arbitration, which are conducted through . . . written digital communications.” Orna Rabinovich-Einy, *Technology’s Impact: The Quest for a New Paradigm for Accountability in Mediation*, 11 HARV. NEGOT. L. REV. 253, 255 (2006).

² Lei Jin & Daniel Robey, *Explaining Cybermediation: An Organizational Analysis of Electronic Retailing*, 3 INT’L J. ELECTRONIC COMM. 47 (1999), available at <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.39.8889>. Cybermediation also is referred to as online mediation. See *infra* Part II.A.5.

³ See Susan Nauss Exon, *The Internet Meets Obi-Wan Kenobi in the Court of Next Resort*, 8 B.U. J. SCI. & TECH. L. 1 (2002) (introducing the creation of an international cybercourt to handle disputes). Other examples of cybercourts include, but are not limited to, Florida’s “CyberCourt” designed for educational purposes, the West Chester County, Pennsylvania Court Administrator’s educational cybercourt for middle and high school students, and courts set up with evidence presentation technology and/or the ability to accept electronic filings. *Id.* at footnotes 12–25 and accompanying text.

⁴ See Jay E. Greinig, 1 ALTERNATIVE DISP. RESOL. § 2:75 (3d ed. 2008) (describing an electronic process known as iCourthouse); see also <http://www.electroniccourthouse.com>. Both courthouses are described *infra* Part II.A.7.

⁵ Jeremy Barnett, *The Virtual Courtroom and Online Dispute Resolution*, available at <http://www.adr.info/unece2003> (last visited June 22, 2010); Fredric I. Lederer, *The Road to the Virtual Courtroom?: A Consideration of Today’s—and Tomorrow’s—High Technology Courtrooms*, available at http://www.courtroom21.net/About_US/Articles/virtualcourtsinglespace.htm (last visited Nov. 18, 2010). An example of virtual courtrooms includes the Chester County, Pennsylvania

ADR,⁶ video conferencing,⁷ or telepresence,⁸ each of these technological advances revolves around the use of the Internet or some form of technology to facilitate long-distance, virtual communication without the necessity of physical travel or face-to-face contact. Most scholars have ignored holography, which is the next generation of technology, or perhaps we can more aptly refer to it as a current, unsung means of technological communication.

Holography uses the transmission of light to beam a three-dimensional person into another room. It differs significantly from existing ODR and other forms of technological communication because it enables the traditional in-person, three-dimensional face-to-face qualities of ADR to exist.⁹ These traditional qualities allow parties to communicate to the fullest extent possible. The spoken word is heard, including voice inflection and intonation, which can strengthen or distort a message through sarcasm and emotion. The unspoken word can be quite powerful via silence, body language, a reddening face, perspiration, etc. The traditional face-to-face communication facilitates credibility and demeanor issues as parties attempt to resolve a dispute. Hence, holography enables traditional, physical qualities of ADR to exist in the spoken and unspoken contexts, and ensures the confidential nature of the dispute resolution process.¹⁰

It is important to build on new and different forms of communication because the millennial generation communicates much differently from the baby boomers of the 1950s and 1960s, and the Gen X generation of the 1980s. This article, therefore, seeks to explain a progressive method of communication that can be used to enhance dispute resolution. It expands on earlier research in which I proposed the creation of an international Cybercourt Central, relying on holography to manifest the physical presence of

Virtual Courtroom, available at <http://dsf.chesco.org/cybercourt/index.html> (last visited Nov. 18, 2010) (providing a wonderful explanation of the court system and jury service information).

⁶ See Virtual World Dispute Resolution, <http://www.virtuallifemediation.com/adr.html> (last visited Oct. 4, 2010).

⁷ See *infra* Part II.B.

⁸ See *infra* Part II.C.

⁹ Several videos on YouTube demonstrate the development of holography by Cisco Systems, Inc. See http://www.youtube.com/watch?v=RCfNC_x0VvE (last visited June 1, 2010); see also http://www.musion.co.uk/Cisco_TelePresence.html (last visited June 1, 2010).

¹⁰ Rabinovich-Einy, *supra* note 1, at 255 (“The in-person quality of ADR has been considered essential for two reasons: (1) it allows for rich communication that includes body language, tone of voice, and silence (all of which are absent from the written format), and (2) it ensures confidentiality (while written digital communications have permanence and hence the potential to be disseminated).”).

parties.¹¹ Holography enables parties to litigate an adversarial proceeding or choose an ADR process that relies heavily on party autonomy through personal interaction, without expensive and time-consuming travel.

This article focuses on the ADR component of Cybercourt Central. Part I summarizes essential characteristics of the most common forms of ADR—negotiation, mediation, and arbitration. Part II traces various forms of ODR and technological formats that are currently used. Part III describes holography. Part IV summarizes the concept of International Cybercourt Central that I previously proposed, including the technological advantages that my proposal has over the other ODR formats described in Part II.

It is my sincere desire that this article is the first of several to discuss the benefits that holography can provide for ADR. This first article can be used to bridge the gap from my research a decade ago and to serve as the cornerstone to engender a rich dialogue. Subsequent articles will focus on future empirical studies based on the use of telepresence, a currently available form of communications technology, and ultimately holographic dispute resolution.

I. COMMON FORMS OF ALTERNATIVE DISPUTE RESOLUTION

A. Negotiation

Negotiation is a voluntary process in which two or more participants communicate their differences and seek to reach some common resolution.¹² Negotiation can be as simple as deciding where to go out for dinner, or deciding the price of consumer goods or services, and as complicated as deciding the terms of a complex, multi-million dollar merger contract. Individuals may participate in the negotiation process themselves or engage the services of some agent, such as a lawyer or a fiduciary, to negotiate on their behalf.

There are different theories of negotiation that can be catalogued typically as adversarial or cooperative. Adversarial approaches, in which each party seeks to gain as much as he can, have

¹¹ See Exon, *supra* note 3, at 11.

¹² Christopher W. Moore, *Negotiation*, <http://www.au.af.mil/au/awc/awcgate/army/usace/negotiation.htm> (last visited Mar. 11, 2010).

been denoted by such names as distributive,¹³ rights-based,¹⁴ positional,¹⁵ win-lose,¹⁶ and Zone Definition & Surplus Allocation.¹⁷ Scholars refer to this type of negotiation as a zero-sum game because as one party receives more, the other party receives less. In other words, the parties are negotiating to divide up a fixed amount.

A cooperative approach to negotiation, by contrast, examines the underlying interests and motivations of the parties. Seeking to expand the pie, parties can both gain more. Hence, this approach is commonly referred to as win-win. Other common references include integrative,¹⁸ principled,¹⁹ problem-solving,²⁰ value creation,²¹ and interest-based.²²

All of the foregoing theories affect the negotiation outcome. So too do negotiation styles and tactics. Styles are what individuals do; “the character of one’s implantation”²³ One may negotiate in an adversarial, competitive, cooperative, collaborative, or problem-solving manner,²⁴ the so-called style with which parties communicate. Tactics are why we do things and are intended to further negotiation strategies.²⁵

¹³ DAVID A. LAX & JAMES K. SEBENIUS, *THE MANAGER AS NEGOTIATOR: BARGAINING FOR COOPERATION AND COMPETITIVE GAIN* 119 (The Free Press ed., 1986).

¹⁴ KIMBERLEE K. KOVACH, *MEDIATION: PRINCIPLES AND PRACTICE*, 196–97 (3d ed. 2004) (noting that a negotiator who uses the rights-based approach looks at the rights to which each party claims entitlement).

¹⁵ ROGER FISHER, WILLIAM URY & BRUCE PATTON, *GETTING TO YES: NEGOTIATING AGREEMENT WITHOUT GIVING IN* 6 (2d ed. 1991).

¹⁶ *Id.* at 81.

¹⁷ Russell Korobkin, *A Positive Theory of Legal Negotiation*, 88 *Geo. L.J.* 1789, 1791–92 (2000) (describing a negotiation theory in which negotiators attempt to define a bargaining zone, otherwise known as zone definition—the distance between both parties’ reservation points—and also attempt to agree on a deal within that bargaining zone, known as surplus allocation).

¹⁸ See LAX & SEBENIUS, *supra* note 13, at 116.

¹⁹ See FISHER, URY & PATTON, *supra* note 15, at 119.

²⁰ Bruce Patton, *Negotiation*, in *THE HANDBOOK OF DISPUTE RESOLUTION* 292–95 (Michael L. Moffitt and Robert C. Bordone, eds., 2005) (referring to problem-solving negotiation as the “circle of value” approach to negotiation.”).

²¹ Gerald B. Wetlauffer, *The Limits of Integrative Bargaining*, in *WHAT’S FAIR: ETHICS FOR NEGOTIATORS* 30 (Carrie Menkel-Meadow and Michael Wheeler eds., 2004).

²² Leib Leventhal, *Implementing Interest-Based Negotiation: Conditions for Success with Evidence from Kaiser Permanente*, 61 *J. DISP. RESOL.* 50, 53 (2006).

²³ ALAN SCOTT RAU ET AL., *PROCESSES OF DISPUTE RESOLUTION: THE ROLE OF LAWYERS* 167 (4th ed. 2006).

²⁴ See Carrie Menkel-Meadow, *Toward Another View of Legal Negotiation: The Structure of Problem Solving*, 31 *UCLA L. REV.* 754, 755–61, 795–801 (1984).

²⁵ LEONARD L. RISKIN ET AL., *DISPUTE RESOLUTION AND LAWYERS ABRIDGED EDITION* 125 (4th ed. 2009).

Other factors affect negotiation outcomes such as: personalities;²⁶ social aspects like gender, race and ethnicity, culture,²⁷ and religion;²⁸ psychological factors like control issues, lack of knowledge of the negotiation process, failure to share information, inability to stay focused, and lack of responsibility for finding a resolution.²⁹ Cognitive barriers can have a profound effect on a negotiation. These include framing effects,³⁰ risk aversion,³¹ reactive devaluation,³² anchoring heuristics,³³ personal biases,³⁴ emotions,³⁵ and more.

Negotiation is all about communication and perceptions. What we say, how we say it, and when we say something. Tone, inflection, facial expression, and body language are as important, if not more important, than the spoken word. Some psychologists estimate that seventy to eighty percent of communication comes from nonverbal cues.³⁶ As a result, negotiation dynamics vary de-

²⁶ Eirini Flouri & Yiannis Fitsakis, *Minority Matters: 12 Angry Men as a Case Study of Successful Negotiation Against the Odds*, 23 NEGOT. J. 449–62 (2007) (demonstrating that personality combined with negotiation techniques help a minority negotiator persuade the majority during a group negotiation); Adam D. Galinsky et al., *Why It Pays to Get Inside the Head of Your Opponent: The Differential Effects of Perspective-Taking and Empathy in Negotiations*, 19 PSYCHOL. SCI. 4, 378–84 (2007) (demonstrating that perspective-taking negotiators have more successful outcomes than negotiators who use empathy).

²⁷ See LINDA C. BABCOCK & SARA LASCHEVER, *WOMEN DON'T ASK: NEGOTIATION AND THE GENDER DIVIDE* 1–3, 9–10, 165–66, 167–72 (2003); Christine Rack, *Negotiated Justice: Gender and Ethnic Minority Bargaining Patterns in the Metro Court Study*, 20 HAMLINE J. PUB. L. & POL'Y 211, 222–36 (1999) (noting that gender and cultural differences affect “fairness rules, power differences, and the positivity or negativity of relationships,” and that each of these variables has an effect on negotiation).

²⁸ F. Matthew-Giba, *Religious Dimensions of Mediation*, 27 FORDHAM URB. L.J. 1695, 1704–09 (1999).

²⁹ See KOVACH, *supra* note 14, at 200–01.

³⁰ Robert H. Mnookin, *Why Negotiations Fail: An Exploration of Barriers to the Resolution of Conflict*, 8 OHIO ST. J. ON DISP. RESOL. 235, 243 (1993).

³¹ G. NICHOLAS HERMAN ET AL., *LEGAL COUNSELING AND NEGOTIATING: A PRACTICAL APPROACH* 145 (2001) (describing the degree to which one is “psychologically disinclined to take risk”).

³² Mnookin, *supra* note 30, at 246 (describing reactive devaluation as a person’s way of compromising by diminishing the attractiveness or value of an offer because it was made by an adversary).

³³ Richard Birke & Craig R. Fox, *Psychological Principles in Negotiating Civil Settlements*, 4 HARV. NEGOT. L. REV. 1, 14 (1999).

³⁴ See Birke & Fox, *supra* note 33, at 15–16 (noting that individual biases tend to favor one’s own position).

³⁵ Daniel L. Shapiro, *Teaching Students How to Use Emotions as They Negotiate*, 22 NEGOT. J. 105, 107–09 (2006), available at http://www.beyond-reason.net/teaching/teaching_studnets.pdf.

³⁶ Howard S. Lichtman, *Telepresence, Effective Visual Collaboration and the Future of Global Business at the Speed of Light* 9 (2006), available at <http://www.ivci.com/pdf/whitepaper-telepresence-effective-visual-communication.pdf> (citing RAY BIRDWHISTELL, KINESICS AND

pending on many of the factors just discussed in conjunction with the form of the negotiation such as face-to-face, written, telephonic, or some technological form of ODR.

B. Mediation

From the earliest development of mediation, scholars, practicing mediators, regulators, and legislators have attempted to define the term “mediation.” Most onlookers agree that mediation involves a neutral and impartial third party who assists others in resolving a dispute. Simply put, mediation is “facilitated negotiation”³⁷ because the mediator has no decision-making authority. A more comprehensive definition of mediation includes: “A voluntary process in which an impartial mediator actively assists disputants in identifying and clarifying issues of concern and in designing and agreeing to solutions for those issues.”³⁸ Essential characteristics include a consensual and informal process that is voluntary, the mediator’s ability to be neutral and impartial, and party autonomy—their ability to negotiate a resolution of their own choosing. Also known as party self-determination, this latter characteristic is considered the “fundamental principle of mediation.”³⁹

Mediation practitioners and scholars acknowledge varying styles, techniques, and orientations of mediation. A mediator’s orientation or approach to mediation may dictate the style she uses. Style refers to the mediator’s activities—her inter-personal communications with, and behavior towards, all mediation participants.⁴⁰ A mediator may adopt one or a combination of several styles of mediation; indeed, most mediators mix their styles and techniques in individual mediations.⁴¹

CONTEXT: ESSAYS ON BODY MOTION COMMUNICATION 157–58 (Univ. of Pennsylvania Press, Phil. 1970)) [hereinafter Lichtman, Telepresence, Effective Visual Collaboration].

³⁷ STEPHEN J. WARE, *ALTERNATIVE DISPUTE RESOLUTION* 201 (2001).

³⁸ *DICTIONARY OF CONFLICT RESOLUTION* 278 (Douglas H. Yarn ed., 1999).

³⁹ *DISPUTE RESOLUTION ETHICS: A COMPREHENSIVE GUIDE* 73 (Phyllis Bernard & Bryant Garth eds., 2002).

⁴⁰ See Leonard L. Riskin, *Understanding Mediators’ Orientations, Strategies, and Techniques: A Grid for the Perplexed*, 1 HARV. NEGOT. L. REV. 7, 17 (1996) [hereinafter Riskin, *Grid for the Perplexed*] (explaining how the vertical continuum of Riskin’s mediation grid relates to a mediator’s activities, also known as her individual style).

⁴¹ See Dwight Golann, *Variations in Mediation: How—and Why—Legal Mediators Change Styles in the Course of a Case*, 2000 J. DISP. RESOL. 41, 61 (concluding that mediators employ more than one style during any single mediation and that part of the reason for the change may be due to the participants’ personalities and approaches); John Lande, *Toward More Sophisti-*

For example, a typical mediator will exhibit a facilitative style during some portion of the mediation. Using this style, the mediator seeks to emphasize party interests by focusing on their problem-solving, creativity, and personal evaluations.⁴² She facilitates communication by posing open-ended, thought-provoking questions that help disputing parties reveal their underlying motivations and interests, comes to understand others' needs and interests, and attempts to provide a comfortable environment in which parties may think creatively to solve a dispute.⁴³ Sometimes the facilitative mediator employs brainstorming to help participants generate a list of plausible solutions.⁴⁴

A second main mediator style or orientation is denoted as directive or evaluative, and this type of mediator may use many different behaviors. She may pose questions to challenge the strengths and weaknesses of a case, suggest procedural or substantive advice, offer information, predict possible outcomes by a formal adjudicative process, and recommend solutions to resolve a dispute.⁴⁵

Robert A. Baruch Bush and Joseph P. Folger coined the third main mediator style or orientation known as the transformative mediator,⁴⁶ who helps parties focus on an open communication style to understand how productive changes may affect the conflict.⁴⁷ By shifting emphasis away from problem-solving, a mediator helps parties focus on relationship issues. Emphasizing

cated Mediation Theory, 2000 J. DISP. RESOL. 321, 321 (noting that mediators appropriately and beneficially mix facilitative and evaluative techniques in the same mediation); Lela P. Love & Kimberlee K. Kovach, *ADR: An Eclectic Array of Processes, Rather Than One Eclectic Process*, 2000 J. DISP. RESOL. 295, 297 (noting that mediators constantly move between "facilitative-broad" and "evaluative-narrow" styles in one mediation session).

⁴² John Lande, *supra* note 41, at 325; Lela P. Love, *Symposium: The Top Ten Reasons Why Mediators Should Not Evaluate*, 24 FLA. ST. U. L. REV. 937, 944-45 (1997) [hereinafter Love, *The Top Ten Reasons*].

⁴³ Riskin, *A Grid for the Perplexed*, *supra* note 40, at 28-34; Lande, *supra* note 41, at 321, 322 ("Mediators using a facilitative style focus on eliciting the principals' opinions and refrain from pressing their own opinions about preferable settlement options.").

⁴⁴ Ethan Katsh & Leah Wing, *Ten Years of Online Dispute Resolution (ODR): Looking at the Past and Constructing the Future*, 38 U. TOL. L. REV. 19, 39 n.90 (2006).

⁴⁵ James H. Stark, *The Ethics of Mediation Evaluation: Some Troublesome Questions and Tentative Proposals, from an Evaluative Lawyer Mediator*, 38 S. TEX. L. REV. 769, 774 (1997) (citing to Margaret L. Shaw, *Evaluation Continuum*, Prepared for Meeting of CPR Ethics Commission, May 6-7, 1996).

⁴⁶ ROBERT A. BARUCH BUSH & JOSEPH P. FOLGER, *THE PROMISE OF MEDIATION: RESPONDING TO CONFLICT THROUGH EMPOWERMENT AND RECOGNITION* 2 (1994).

⁴⁷ Joseph P. Folger, *Mediation Research: Studying Transformative Effects*, 18 HOFSTRA LAB & EMP. L.J. 385, 393 (2001).

“empowerment and recognition” to achieve “moral growth,”⁴⁸ a transformative mediator helps parties shift their interactions “from relative weakness to greater strength (the empowerment dimension) and [move] from self-absorption to openness (the recognition dimension).”⁴⁹ The recognition component relates to a person’s ability to empathize and begin to understand the other party’s perspectives rather than receive recognition from another.⁵⁰ The parties’ relationship may transform as they grow, develop, and change their own perspectives to become better human beings.⁵¹ Ultimately, transformative mediation can transform the character of the individual disputants as well as society in general.⁵²

C. Arbitration

Arbitration is a voluntary process in which disputing parties engage the services of one or more neutral third parties. This dispute resolution process is most closely analogous to litigation because it is adjudicatory; the arbitrator renders a final decision much the same way a judge enters a final judgment in a litigated case.

Historical accounts trace arbitration back for centuries. The Bible details Paul’s wishes that early Christians resolve disputes in arbitration rather than courts.⁵³ An Icelandic historical account, *Njal’s Saga*, records a dispute being settled by arbitration in about 980 A.D.⁵⁴ Arbitration was commonplace under Roman law,⁵⁵ among Greek states,⁵⁶ in ancient Babylon and early Islamic society,⁵⁷ and at the clan level in Confucian China.⁵⁸

⁴⁸ BUSH & FOLGER, *supra* note 46, at 2–12. The authors define “empowerment” as “the restoration to individuals of a sense of their own value and strength and their own capacity to handle life’s problems.” *Id.* at 2. “Recognition” is “the evocation in individuals of acknowledgment and empathy for the situation and problems of others.” *Id.*

⁴⁹ Folger, *supra* note 47, at 393.

⁵⁰ BUSH & FOLGER, *supra* note 46, at 96.

⁵¹ *Id.* at 2–12.

⁵² *Id.* at 20–21.

⁵³ 1 *Corinthians* 5.

⁵⁴ *NJAL’S SAGA* 114 (Wordsworth Editions Ltd. trans. 1998) (1955).

⁵⁵ BOAZ COHEN, 2 *JEWISH AND ROMAN LAW* 659 (1966).

⁵⁶ Clement Chigbo, *Resolving Disputes: Failure of Arbitration in Ancient Greece: Any Lessons for the 21st Century?—Part 1* (May 4, 2009), <http://www.jonesbahamas.com/news/135/article/19699/2009-05-04.html>.

⁵⁷ COHEN, *supra* note 55, at 707.

⁵⁸ Stanley Lubman, *Mao and Mediation: Politics and Dispute Resolution in Communist China*, 55 *CALIF. L. REV.* 1284, 1298 (1967).

In modern times, prior to the 1920s, judges were hostile toward arbitration because arbitrators were viewed as taking cases away from the courts. Because judges questioned whether arbitration was fair and equitable, they were not willing to compel party attendance, and on many occasions, were not willing to enforce arbitration awards.⁵⁹

The Federal Arbitration Act (FAA)⁶⁰ was enacted in 1925, revoking the common law rule of courts not enforcing agreements to arbitrate future disputes. Arbitration became a popular and useful process to resolve labor disputes, and the United States Supreme Court added legitimacy to the FAA when it approved the use of arbitration where significant statutory rights were at stake.⁶¹

Arbitration usually falls within two categories. The first is usually a contractual, pre-dispute situation. This type of arbitration occurs when parties enter into a contractual relationship and a provision in the contract requires that any resulting dispute be resolved in an arbitration setting. Seeking to streamline the dispute resolution process, the parties normally will provide that the arbitration proceeding is binding with no right of appeal to the court system. The parties may create a fairly informal process by specifying whether witnesses may testify in person or by affidavit, limiting the number of witnesses per party, stipulating to discoverable information, avoiding the use of evidentiary rules, articulating a specific issue to be decided by the arbitrator, omitting opening statements, and omitting a formal written decision and other court formalities. Additionally, the parties select their arbitrator.⁶²

Arbitrations, on the other hand, may be court-connected. For example, civil litigants in California have an opportunity to choose mediation or arbitration to resolve their litigated case. Rules of Court specify what cases are subject to arbitration.⁶³ The parties may select an arbitrator from an approved court panel of arbitrators,⁶⁴ and may engage in discovery.⁶⁵ Rules of evidence apply to a limited degree. Subpoenas may be issued to compel the attendance of witnesses.⁶⁶ The arbitrator's award is not binding; therefore, any party may request a trial within thirty days after the

⁵⁹ KATHERINE V.W. STONE, *ARBITRATION LAW* 3 (2003).

⁶⁰ 9 U.S.C. §§ 1–14 (2010).

⁶¹ *Gilmer v. Interstate/Johnson Lane Corp.*, 500 U.S. 20, 26 (1991).

⁶² *RAU ET AL.*, *supra* note 23, at 601.

⁶³ *See* CAL. R. CT. 3.811 & 3.812 (2010).

⁶⁴ *See* CAL. R. CT. 3.815 (2010).

⁶⁵ *See* CAL. R. CT. 3.822 (2010).

⁶⁶ *See* CAL. R. CT. 3.823(c) (2010).

arbitration award is filed with the court clerk.⁶⁷ As this short summary illustrates, court-connected arbitration can be more formal, more costly and more time-consuming than contractual arbitration.

Now that the traditional forms of dispute resolution have been explored, it is time to assess contemporary forms of dispute resolution that rely on some form of technology. These contemporary ADR processes, commonly referred to collectively as online dispute resolution (ODR), are discussed in Part II.

II. ONLINE DISPUTE RESOLUTION & OTHER FORMS OF TECHNOLOGICAL ADR

A. Online Dispute Resolution Generally

For the past two decades, an explosion of commercial ideas has surfaced on the Internet through the creation of countless websites, which connect people all over the world. Websites such as eBay, Amazon, monster, Expedia Travel, Sears, and Lands' End offer services and products for sale. Many of these websites allow a potential customer to browse page after page of product, click on photographs for inspection purposes, read customer endorsements, click on an item to add it to a shopping cart, and consummate a sales transaction by providing a credit card number and shipping address.

Within days, the product arrives on the customer's doorstep. What happens when that product does not live up to the advertisement or endorsements? What recourse does the consumer have against a web-based company that does not provide a physical address? Is any remedy economically feasible when the product in question is worth very little, for example, one hundred dollars or less? As more and more consumer complaints arise, new dispute resolution ideas emerge to enable some type of online resolution. Hence, the birth of ODR.

ODR is defined as "any method by which parties attempt to resolve disputes online."⁶⁸ Means of communication include email, chat rooms, bulletin boards, and virtual communications. When visual presence is necessary, online communications may be com-

⁶⁷ See CAL. R. CT. 3.826 (2010).

⁶⁸ Sarah Rudolph Cole & Kristen M. Blankley, *Online Mediation: Where We Have Been, Where We Are Now, and Where We Should Be*, 38 U. TOL. L. REV. 193, 193 (2006).

bined with video conferencing or telepresence. Studies also show that avatars can be used to enhance communication and ultimately dispute resolution.⁶⁹

This section summarizes a few types of ODR that have been, or currently are being, used.

1. SquareTrade

SquareTrade was an industry leader in online dispute resolution from its inception in 1999,⁷⁰ until it discontinued its ODR service in early 2008.⁷¹ It was eBay's preferred online dispute resolution service.⁷² SquareTrade's ODR service was particularly conducive to the online transactions conducted over eBay because the service normally related to one-time consumer transactions that did not involve ongoing relationships with emotional ties or reputations,⁷³ and could be conducted by the parties or by an online mediator from anywhere in the world.⁷⁴

Originally, SquareTrade's ODR program provided two services: a free web-based method for parties to negotiate their own resolution and use of a professional mediator.⁷⁵ Under the first method, which was a free automated service, a customer could file a complaint using an online form. The complainant could check an appropriate box to describe the problem or use an empty box to explain a specific problem. The automated complaint form included recommended solutions that the complainant could select or the complainant could formulate her own solution. SquareTrade would notify the other party by email, who could respond directly to the complainant.⁷⁶ This method was a "technological hybrid of negotiation and mediation" because technology could in-

⁶⁹ See David Allen Larson, *Technology Mediated Dispute Resolution (TMDR): A New Paradigm for ADR*, 21 OHIO ST. J. ON DISP. RESOL. 629, 668–77 (2006) (noting that because children and young adults are so attuned to, and adept at, technology from an early age, they feel comfortable interacting and communicating with avatars and verbots—avatars who communicate).

⁷⁰ *About Us*, SQUARETRADE.COM, <http://www.squaretrade.com/pages/about-us-overview> (last visited June 23, 2009).

⁷¹ *SquareTrade*, WIKIPEDIA.COM, <http://en.wikipedia.org/wiki/SquareTrade> (last visited June 23, 2009).

⁷² *Dispute Resolution Overview*, EBAY, <http://pages.ebay.com/services/buyandsell/disputeres.html> (last visited June 23, 2009) (noting that eBay is an online auction site in which viewers can post an online bid to purchase a particular item) [hereinafter *Dispute Resolution Overview*].

⁷³ Rabinovich-Einy, *supra* note 1, at 254.

⁷⁴ *Id.* at 259.

⁷⁵ *Dispute Resolution Overview*, *supra* note 72.

⁷⁶ Rabinovich-Einy, *supra* note 1, at 258.

tervene in the parties' negotiation to help them formulate and reformulate the problem and solutions.⁷⁷

In the second service, disputes were referred to an online mediator who assisted the parties to negotiate through the use of "asynchronous e-mail communications."⁷⁸ SquareTrade charged a nominal fee of thirty dollars for this service.⁷⁹

2. Cybersettle

Cybersettle provides an online forum to settle any kind of monetary dispute.⁸⁰ The complainant can access cybersettle.com, open an account and then provide basic information to initiate a claim. The complainant identifies the opposing party, briefly describes the claim, and then lists three acceptable settlement amounts for each of three rounds. Cybersettle contacts the opposing party by email, fax or telephone.⁸¹ The opposing party may access the claim on Cybersettle's website and respond with a blind settlement offer. If the offer is not equal to or less, the opposing party may submit up to two additional offers. If an additional offer is equal to or less than the complainant's offer, the case settles. Otherwise, the case is over and the complainant will have to initiate a new claim.⁸²

3. The Virtual Magistrate Project

The Virtual Magistrate Project (VMP) was an online arbitration project dedicated to disputes involving Internet-related activity such as domain name disputes, the electronic posting of messages, and related causes of action such as copyright and trademark infringement, fraud, misappropriation of trade secrets, defamation, and invasion of privacy.⁸³ VMP catered to disputes involving Internet service providers; examples of system operators included America Online and Compuserve.⁸⁴

VMP was a collaboration of The National Center for Automated Information Research, Cyberspace Law Institute, American

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.* at 259.

⁸⁰ *How Cybersettle Works*, CYBERSETTLE.COM, www.cybersettle.com/pub/home/demo.aspx (last visited July 27, 2010).

⁸¹ *Id.*

⁸² *Id.*

⁸³ George H. Friedman, *Alternative Dispute Resolution and Emerging Online Technologies: Challenges and Opportunities*, 19 HASTINGS COMM. & ENT. L.J. 695, 711 (1997).

⁸⁴ Ethan Katsh, *Dispute Resolution in Cyberspace*, 28 CONN. L. REV. 956, 964 (1996).

Arbitration Association, and the Villanova Center for Information Law and Policy.⁸⁵ VMP heard only one case, which ended with an unenforceable default judgment.⁸⁶

4. Odrworld

Odrworld takes the position that Internet-related disputes are best resolved in the same environment, irregardless of the monetary value.⁸⁷ Odrworld's list of services includes assisted negotiation, mediation, and arbitration and ensures confidentiality by maintaining secure web-based communications.⁸⁸

The assisted negotiation allows a party to sign up for the service by providing contact information, filling out a form describing the dispute, and selecting a payment method. An email is sent to the second party who also must supply contact information and agree to participate. This party receives a "Second Party form," which includes the first party's issues, and a place for the second party to indicate what he wants to achieve. Payment may be made by the first party, second party or shared by both. The parties are provided with logins and passwords that are useable for fourteen days, enabling them to negotiate over the Internet using a Message Board or Online Chat.

Odrworld mediation and arbitration operate similarly. The difference is that when both parties agree to the process and either a mediator or arbitrator agrees to work on the dispute, these neutral third parties are involved, either facilitating the communication or making the decision for the respective process. Like assisted negotiation, both mediation and arbitration are conducted either by using the Message Board or Online Chat.⁸⁹

5. Online Mediation

Various forms of online mediation exist. One scholarly article describes three types of online mediation.

Some companies use computer communication to facilitate the administration of traditional mediation. These programs use the Internet to advertise mediation services, provide information, or

⁸⁵ Lan Q. Hang, Comment, *Online Dispute Resolution Systems: The Future of Cyberspace Law*, 41 SANTA CLARA L. REV. 837, 845 (2001).

⁸⁶ Cole & Blankley, *supra* note 68, at 199.

⁸⁷ See ODRWORLD, <http://odrworld.com> ¶¶ 1–2 (last visited Mar. 4, 2010).

⁸⁸ See ODRWORLD, <http://odrworld.com> ¶¶ 4–5 (last visited Mar. 4, 2010).

⁸⁹ See *Services: Mediation*, ODRWORLD, <http://odrworld.com/case3.php> (last visited Mar. 4, 2010); see also <http://odrworld.com/case4.php> (last visited Mar. 4, 2010).

complete administrative tasks. These programs, however, do not conduct mediation online. Other companies use computer communication as part of the traditional mediation process. In these programs, the mediator may use both online and in-person mediation to resolve the dispute. A third group of companies, known for virtual mediation, mediate disputes entirely online or use a computer program as the mediator.⁹⁰

The Family Law Mediation Project, sponsored by the University of Maryland, is one of the earliest forms of online mediation. Although the mediation takes place online, the disputes do not relate to Internet-related conflict. Rather, the disputes involve individuals from different communities.⁹¹

6. Online Ombuds Office

The University of Massachusetts Amherst established an online ombuds office in 1996. Ombuds can use the Internet to receive complaints, investigate the allegations, and make recommendations.⁹² Like mediators, an ombuds does not have decisionmaking authority. They are, however, professional ombuds whose online office—a website—can function in the same way that a physical office does. The ombuds can use a variety of communications, from e-mails to real time communications using a specially designed web-based chat room and video conferencing.⁹³

7. Internet Courthouse

Several websites describe their services in terms of an Internet courthouse. One example is iCourthouse. A plaintiff may register to join iCourthouse.⁹⁴ Plaintiff fills out a complaint form and it is served on defendant via e-mail. Defendant must then register at iCourthouse.⁹⁵ The parties must agree to be bound by a User Agreement⁹⁶ and by Rules of Procedure.⁹⁷ Both parties complete a written trial book, consisting of opening statements, evidence,

⁹⁰ Cole & Blankley, *supra* note 68, at 200 (internal citations omitted).

⁹¹ Ethan Katsh et al., *Lesson 80—Dispute Resolution in Cyberspace: Online Dispute Resolution*, available at <http://www.lessig.org/content/articles/works/cyberlessons/lessons/disput04.html> (last visited Nov. 18, 2010).

⁹² Ethan Katsh, *Symposium: Legal Regulation of the Internet: Dispute Resolution in Cyberspace* (1996), available at <http://www.mediate.com/articles/katsh.cfm>.

⁹³ *Id.*

⁹⁴ *File a Claim*, ICOURTHOUSE, http://www.i-courthouse.com/main.taf?area1_id=claims&re_dir=0 (last visited July 19, 2010).

⁹⁵ *Id.*

⁹⁶ *User Agreement*, ICOURTHOUSE, http://www.i-courthouse.com/main.taf?area1_id=front&area2_id=useragreement (last visited July 19, 2010).

and closing arguments.⁹⁸ Other iCourthouse members may sign up to serve as a juror, selecting the type of case to consider, reading the trial books, posing questions, and then rendering a verdict.⁹⁹ iCourthouse will display the median award given by jurors.¹⁰⁰

ElectronicCourthouse is another example of an Internet-based courthouse.¹⁰¹ It involves an eight-step methodology and is useful for all types of disputes.¹⁰² First, parties must consent to use the ElectronicCourthouse and second, they must register with the service. Third, the parties must agree to a retainer and rules of procedure that are posted on the website. Fourth, the parties enter a secure claims workroom whereby they may file papers electronically, manage documents, and communicate in a password protected environment.¹⁰³ The fifth step enables parties to complete their paperwork and file them in a “ResolutionRoom.” The sixth step is called “output” because it enables the parties to customize the dispute resolution process to meet their special needs. Available options include mediation, arbitration, stepped mediation-arbitration, and neutral evaluation.¹⁰⁴ Seventh, the parties engage in either mediation or arbitration to resolve their dispute. Finally, the parties may finalize a settlement or decision by memorializing it in writing.¹⁰⁵

B. Videoconferencing

Technology currently allows parties to use videoconferencing to interact with one another in an attempt to hold virtual meetings and resolve disputes. Videoconferencing is different from other

⁹⁷ *iCourthouse Rules of Procedure*, iCOURTHOUSE, http://www.i-courthouse.com/main.taf?area1_id=front&area2_id=rulesofproc (last visited July 19, 2010).

⁹⁸ *How to Use Trial Notebook*, iCOURTHOUSE, http://www.i-courthouse.com/main.taf?area1_id=front&area2_id=howtouse (last visited July 28, 2010).

⁹⁹ *Be a Juror*, iCOURTHOUSE, http://www.i-courthouse.com/main.taf?area1_id=jurors (last visited July 19, 2010).

¹⁰⁰ *FAQs*, iCOURTHOUSE, http://www.i-courthouse.com/main.taf?area1_id=about&area2_id=faqs (last visited July 28, 2010).

¹⁰¹ ELECTRONICCOURTHOUSE, <http://electroniccourthouse.com> (last visited June 22, 2010).

¹⁰² *The Electronic Courthouse 8 Step Methodology: How it Works*, ELECTRONICCOURTHOUSE, http://electroniccourthouse.com/how_it_works_page1.php (last visited July 19, 2010) [hereinafter *The Electronic Courthouse*].

¹⁰³ *Id.*

¹⁰⁴ *Model Dispute Resolution Clause*, ELECTRONICCOURTHOUSE, http://electroniccourthouse.com/model_dispute_resolution_clause.html (last visited July 19, 2010).

¹⁰⁵ *The Electronic Courthouse*, *supra* note 102.

forms of ODR because the former allows disputants to see and hear each other in real time video and audio without the need to travel to a single, physical location. Videoconferencing is a synchronous method of communication, so all parties must be present for communication to take place.¹⁰⁶ Initially, videoconferencing was made available through the use of analog technology, which required that cables be pulled between two fixed points; this could be costly for existing structures.¹⁰⁷ Now that digital technology is available using high speed audio and video feeds over telephone lines or other networks, cost is not as prohibitive.¹⁰⁸

At first glance, videoconferencing seems to foster the unique qualities inherent in face-to-face forms of dispute resolution because disputants can hear frustration or concern in a party's tone of voice and see the opposing party's face turn red, begin to sweat, or twitch as he stretches the truth a bit. Videoconferencing should, therefore, help authenticate a person's credibility in both mediations and arbitrations and enhance notions of party-self determination in mediation.

Practically speaking, however, videoconferencing is not as useful as one may think. Digital signals may be compressed, causing a delay or disconnect between the audio and video feeds,¹⁰⁹ but increased bandwidth may correct the problem.¹¹⁰ "Poor image transmission" may affect the visual component; it may be difficult to see an object about which comments are sought and difficult to see body language.¹¹¹ Another difficulty may be whether different digital video conferencing products can connect to one another; the creation of an international standard has aided connectivity within the international community.¹¹² Lack of familiarity with technology may create access hurdles as participants in a video conference meeting take ten or twenty minutes to adjust cameras and figure out how things work.¹¹³ As with any new technology, cost can be prohibitive. A study conducted for Waukesha County, Wisconsin

¹⁰⁶ Niki Panteli & Patrick Dawson, *Video Conferencing Meetings: Changing Patterns of Business Communication*, 16 *NEW TECH., WORK & EMP.* 2, 89 (2001).

¹⁰⁷ Michael G. Neimon, *Can Interactive Video Work in Waukesha County? An Analysis and Survey*, Part of the Institute for Court Management Court Executive Development Program, Phase III Project, at 5 (May 2001), available at http://207.242.75.69/cgi-bin/showfile.exe?CISO_ROOT=/Tech&CISOPTR=120.

¹⁰⁸ *Id.*

¹⁰⁹ *Id.* at 6.

¹¹⁰ *Id.*

¹¹¹ Panteli & Dawson, *supra* note 106, at 94.

¹¹² Neimon, *supra* note 107, at 7.

¹¹³ Panteli & Dawson, *supra* note 106, at 94.

courts points out that both the cost and size of cameras for videoconferencing have decreased appreciably.¹¹⁴

“[S]ocial costs”¹¹⁵ are another result of media choice. What this means is that participants may not be able to build interpersonal relationships effectively “due to restricted social cues in virtual meetings.”¹¹⁶ Keep in mind that a video meeting creates communication boundaries. One trainer of videoconferencing systems (VCS) explains:

Your communication skills need to change slightly when you are communicating using VCS because you are detached from the individuals at the other end. You see [the people on the other side] through a video picture. There are boundaries to that videopicture, things that happen outwith that picture, small bits of body language that you may miss¹¹⁷

For example, the video camera may not pick up someone twitching and playing nervously with a pen if the camera is focused on a person’s upper torso. It will be difficult for someone to get up and pace around the room as he is contemplating something because he will not be picked up by the camera.¹¹⁸ Participants in a virtual meeting must modify their behavior to fit within the video boundaries.

Likewise, it is difficult for participants to develop trust and rapport in a videoconferencing setting.¹¹⁹ Many people feel uncomfortable looking into a camera to speak; other people simply do not like the experience.¹²⁰ Indeed, the virtual environment inhibits communication because of poor transmission, slow motion, and unclear pictures.¹²¹

¹¹⁴ Neimon, *supra* note 107, at 13. The author noted that the price of videoconferencing equipment to outfit a courtroom dropped from \$80,000 in the late 1980’s to between \$5,000 and \$15,000 when the report was written in 2001. *Id.* at 9.

¹¹⁵ Panteli & Dawson, *supra* note 106, at 94.

¹¹⁶ *Id.*

¹¹⁷ *Id.* at 95.

¹¹⁸ *Id.*

¹¹⁹ *Id.* at 97.

¹²⁰ Lichtman, Telepresence, Effective Visual Collaboration, *supra* note 36, at 7.

¹²¹ Panteli & Dawson, *supra* note 106, at 96 (“Therefore, in a VCS environment, gestures and other signals that raise attention are not encouraged as they may send unclear messages and be misinterpreted. These findings suggest that VCS may provide more opportunities for formal communication and yet restrict less formal and non-verbal forms of communication. Maintaining constant eye-contact with the people at the other end (by looking at the screen) limits opportunities for side-conversations. However, it was also noted that some people seem more relaxed during a VCS meeting than in a face-to-face meeting. This might be because these people expect to talk only when they are asked! Interestingly therefore, VCS conversations appear as sequence slots.”).

Participants generally feel that videoconferencing serves as a good medium to share information in a structured business environment, but do not feel the medium enables rich dialogue or creative conversations because participants have to look into a camera and feel constrained to have sidebar conversations or look sideways toward a particular individual. It has been suggested that videoconferencing works well for presentations and one-to-one communications, and not so well for open dialogue and interactive communications where creativity is needed in an unstructured environment.¹²²

The foregoing reasons may account for the lack of dispute resolution services that use videoconferencing, although some do exist. As previously discussed, the ElectronicCourthouse includes a videoconference component.¹²³ Mediation Arbitration Resolution Services (MARS) was another example of online dispute resolution that used videoconferencing as an element of the overall dispute resolution process.¹²⁴ Disputants could file a complaint, upload documents for all parties to view, and set a time to communicate with a mediator or arbitrator via teleconferencing. The real time video and audio environment was limited to merchants and consumers involved in online disputes, but ceased operations in mid-2010.¹²⁵

C. Telepresence

Telepresence is the current, cutting edge technology. Some discussion exists about the exact definition of telepresence. One definition includes “visual collaboration solutions that address the human factors of participants and attempt to replicate, as closely as possible, an in-person experience.”¹²⁶ Another definition is “the science and art of creating visual conferencing environments that address the human factors of the participants and duplicate, as

¹²² Panteli & Dawson, *supra* note 106, at 96–97.

¹²³ See *supra* notes 101–05 and accompanying text.

¹²⁴ See Mediation Arbitration Resolution Services (MARS), available at http://www.youtube.com/watch?v=_4WVSvEFrMo (last visited Nov. 18, 2010).

¹²⁵ Q1 Labs, Stranded by Cisco? There’s An Alternative to MARS, http://q1labs.com/resource-center/webinars/details.aspx?id=40&_kk=cisco%20mars&_kt=1406aa5b-c006-4fe9-99c9-f4dc734a7f4c&gclid=CL3pwou7uqQCFRz4iAod_TAYKw (last visited Nov. 18, 2010).

¹²⁶ See Howard S. Lichtman, *Telepresence and Visual Collaboration @ InfoComm 2010 - The Telepresence Options Review & “Best of Show” Awards* (June 24, 2010), available at http://www.telepresenceoptions.com/2010/06/telepresence_and_visual_collab_1.

closely as possible, an in-person experience.”¹²⁷ Key components of telepresence conferencing include true-to-life-sized participants, fluid motion, precise skin tones, true eye contact, absence of visible technology, studio quality video, lighting and acoustics, and immersive and/or mirrored environments so participants can feel that they are in the same physical location.¹²⁸

Telepresence technology, therefore, enables parties in remote locations to feel as though they are meeting and communicating in the same room. This technology is different from videoconferencing, in that the latter involves two-dimensional communication in which participants can view each other on computer monitors; participants are not life-size and most of the other attributes of telepresence are absent. Moreover, telepresence has added cost incentives. For example, international law firm DLA Piper upgraded its videoconferencing equipment to telepresence and saved nearly one million dollars a year in reduced travel costs and soft costs, such as lost employee productivity.¹²⁹

Several companies are at the forefront of the telepresence technological explosion. Cisco Systems has used “high definition video and full spatial audio technologies” to transport a person from one location to another. This is known as the “Cisco TelePresence System.”¹³⁰ The system uses a boardroom like conference table that seats twelve people; up to six seats on one side of the table are made available through three 65-inch plasma screens with special lighting, microphones, integrated Ethernet and power, and “multiple ultra-high-definition codecs and cameras.”¹³¹

On June 7, 2010, Polycom, Inc. announced its new modular group telepresence system: The Open Telepresence Experience OTX 300, which provides full-life collaboration via three screens for six seats and requires up to fifty percent less bandwidth than competing telepresence and videoconferencing platforms. Polycom claims that less bandwidth translates into more economical pricing than its competitors can offer. Moreover, the Polycom equipment seems more flexible than Cisco System’s permanent

¹²⁷ Lichtman, Telepresence, Effective Visual Collaboration, *supra* note 36, at 7.

¹²⁸ *Id.*

¹²⁹ Tim Greene, *Cisco Telepresence Cuts Near \$1M in Travel Costs for Law Firm*, NETWORKWORLD (Oct. 7, 2009), <http://www.networkworld.com/news/2009/100709-cisco-telepresence-law-firm.html>.

¹³⁰ See statement of Cisco CEO John Chambers discussing the concept of TelePresence with Senior Vice President Martin De Beers, available at http://www.humanproductivitylab.com/archive_blogs/2007/11/15/cisco_experimenting_with_an_on_1.php.

¹³¹ Cisco TelePresence System 3000 Data Sheet (2010) (on file with author).

meeting place system because Polycom's system is a modular group telepresence system that is not limited to a specific room designation as is Cisco's.

The Cisco and Polycom systems are examples of continuous presence group systems. Other categories of telepresence conferencing systems also exist. A telepresence distance learning classroom can accommodate eighteen to more than thirty-six participants in a classroom setting;¹³² therefore, this system is especially conducive to distance learning. Small group telepresence systems work well for groups of one to four people.¹³³ A desktop or executive category involves a screen that can be placed on top of a table or desk, enabling eye contact through a twenty-two inch monitor.¹³⁴ Another monitor can be integrated as part of a lectern, enabling a life-size presenter to appear physically in front of an integrated backdrop.¹³⁵ Finally, a telepresence kiosk allows a three-dimensional life-size person to serve as a customer service representative.¹³⁶

Each of the telepresence systems portrays a three-dimensional, life-size image of an individual. All systems are made possible through screen projections. The next step for this technology is to visualize the three-dimensional person without the use of screens. That is the essence of holography, described in more detail in Part III.

III. HOLOGRAPHY BRINGS US BACK TO THE FUTURE

A. Overview of the Holographic Process

When I first proposed International Cybercourt Central back in 2002, most of the available research about holography was historical in nature—explaining the process, including its early development. Present research is strikingly different, showing great strides in research and projections for economical availability by 2020.¹³⁷

¹³² Lichtman, Telepresence, Effective Visual Collaboration, *supra* note 36, at 12.

¹³³ Lichtman, Telepresence, Effective Visual Collaboration, *supra* note 36.

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ See Mike Steere, *Scientist: Holographic Television to Become Reality*, CNN (Oct. 7, 2008), <http://edition.cnn.com/2008/TECH/science/10/06/holographic.television/index.html> (indicating

Holography is best understood by comparing it to photography, keeping in mind, however, that they are different processes. Photography records the intensity of light waves that reflect off of an object; holography records both the intensity and direction of light.¹³⁸

The process of creating holograms begins by using a laser light known as a “coherent light source.”¹³⁹ The laser light beam, also known as a “reference beam,” is used to create a hologram:

[It] passes through a lens and then through “the nearly clear holographic film” before reflecting back off an object as an object beam that exposes the film.¹⁴⁰ After passing through the film, the reference and object beams “interfere” with one another to form a holographic visual image, [which is then] . . . transmitted over the Internet to a receiving projection device in a distant location.¹⁴¹

The preceding description of holography is an oversimplified, unscientific description of the process used to provide a basic understanding for the scientific layperson.

B. Examples of Holographic Applications

In recent years, researchers have been developing and refining the use of holography, seeking to make it more practical for everyday use.¹⁴² MIT researchers are working on holographic video as a potential display for PCs and video game consoles.¹⁴³ USC researchers have created a three-dimensional holographic display “[u]sing a spinning mirror covered with a ‘holographic diffuser,’ a special DVI implementation, and a high-speed projector, the

that the Japanese aim is to have holographic televisions available by 2020); *see also Holographic Video and Holographic Television: The State of the Art*, http://www.holovisions.com/holographic_television.html (last visited Feb. 25, 2010) (noting that holographic video should be available by 2012 and holographic television by 2017).

¹³⁸ Exon, *supra* note 3, at 15.

¹³⁹ *Id.* (citing CHRISTOPHER OUTWATER & VAN HAMERSVELD, PRACTICAL HOLOGRAPHY CH. 1, ¶¶ 1–2 (on file with author)).

¹⁴⁰ *Id.* at 15–16 (citing Stephen A. Benton, *Holograms*, SCIENTIFIC AMERICAN ¶ 1 (Jan. 1998), <http://www.sciam.com/1998/0198working.html>) (last modified Oct. 21, 1999).

¹⁴¹ Exon, *supra* note 3, at 16 (citing Stephen A. Benton, *Holograms*, SCIENTIFIC AMERICAN ¶ 1 (Jan. 1998), <http://www.sciam.com/1998/0198working.html>) (last modified Oct. 21, 1999).

¹⁴² Donald Melanson, *MIT Researchers Tout “Practical” Holographic Video* (Apr. 24, 2007), <http://www.engadget.com/2007/04/24/mit-researchers-tout-practical-holographic-video>.

¹⁴³ *Id.*

team's device can project a three-dimensional image that can be viewed from 360 degrees. . . ."¹⁴⁴

As an initial step toward holographic television, researchers in 2008 at the University of Arizona developed the first updatable, three-dimensional display with memory,¹⁴⁵ which scholars claim is a major breakthrough in holographic technology.¹⁴⁶ An example of using holography to enhance two-dimensional television displays is to visualize "a pane of glass with a holographic coating [which] can be suspended in the air in a transparent frame and backlit by a projected video image. The result is a dramatic moving image that seems to float in mid-air," although the image is not truly three-dimensional; that involves "the creation of a true three-dimensional animated holographic image."¹⁴⁷ By using translucent volumes, researchers are beginning to create animated holograms.¹⁴⁸

Cisco Systems is at the forefront of holographic developments. Its Emerging Technology Group, headed by Senior Vice President Martin DeBeers, has combined holography with telepresence technology to deliver its "Onstage Telepresence Experience."¹⁴⁹

Other research concepts are emerging that seem so futuristic, although the current capability exists. Holotexting is one concept that is being developed for iPhone application and allows users to send 3D hologram text messages to each other.¹⁵⁰ Touchable ho-

¹⁴⁴ Nilay Patel, *Researchers Develop a 360-Degree Holographic Display* (Aug. 31, 2007), <http://www.engadget.com/2007/08/31/researchers-develop-a-360-degree-holographic-display>.

¹⁴⁵ Steere, *supra* note 137.

¹⁴⁶ *Id.*

¹⁴⁷ *Holographic Video and Holographic Television: The State of the Art*, *supra* note 137.

¹⁴⁸ *Id.* "One of the challenges for creating truly three-dimensional holographic video or holographic television is how to move laser beams so that their three-dimensional intersection changes. One way to do this is to divide the laser beam carrying the video data into many, tiny, moving laser beams through the use of an array of tiny mirrors whose movements can be controlled by computer. The intersections of these many, tiny laser beams become the equivalent of three-dimensional pixels for the creation of a three-dimensional moving image. When this work bears fruit in the years to come, then holographic television may project three-dimensional color images into your living room. Imagine seeing sports and other events in three-dimensions from different angles as you move around the room or rotate the image." *Id.*

¹⁴⁹ *Cisco Experimenting with an On-Stage Telepresence Experience*, HUMAN PRODUCTIVITY LAB (Nov. 15, 2007), http://www.humanproductivitylab.com/archive_blogs/2007/11/15/cisco_experimenting_with_an_on_1.php. For videos that demonstrate the development of holography by Cisco Systems, Inc., see, e.g., *Cisco Telepresence Magic*, YOUTUBE, http://www.youtube.com/watch?v=rcfNC_x0VvE (last visited June 1, 2010); *Cisco Telepresence—On-stage Holographic Video Conferencing*, MUSION.CO.UK, http://www.musion.co.uk/Cisco_TelePresence.html (last visited June 1, 2010).

¹⁵⁰ See Luke Yoo, *Mobile Trick: Holotext Messaging*, LUKE 77 (Feb. 25, 2010), <http://luke77.com/holotext-messaging/>.

lograms also are being developed, taking 3D holograms to the next level so that individuals can actually touch a hologram.¹⁵¹

Besides the aforementioned research efforts, we are beginning to see holography used in various contexts, including advertising¹⁵² and news reporting.¹⁵³ For example, on Election Day in November 2008, CNN used its technological prowess to teleport an image of one of its correspondents, Jessica Yellin, from Barack Obama's Chicago headquarters into the center of CNN's election headquarters in New York City, enabling Yellin to discuss election results with anchorman Wolf Blitzer. CNN was able to accomplish this feat by surrounding Yellin with 35 cameras that could capture and send her image to New York City.¹⁵⁴

With the impending explosion of three-dimensional holographic technology, we need to be proactive and consider additional beneficial uses of holography for the public at large. We need to consider how holography can enhance ODR, hence, the inspiration to create International Cybercourt Central.

IV. INTERNATIONAL CYBERCOURT CENTRAL

A. Overview of International Cybercourt Central

I envision Cybercourt Central as a separate international court established to resolve disputes involving individual parties and nation states; it would not be considered a federal or state court under United States standards. Any number of consenting countries could create Cybercourt Central pursuant to a treaty, convention or other agreement, similar to the creation of the International Court of Justice, the European Court of Human Rights, and the

¹⁵¹ See Lisa Zyga, *Touchable Hologram Becomes Reality*, PHYSORG.COM (Aug. 6, 2009), <http://www.physorg.com/news168797748.html>.

¹⁵² *Provision Interactive to Showcase Its 3D Holographic Display Technology at the 2010 Credit Suisse Global Media and Communications Convergence Conference*, MARKETWIRE, INC. (Feb. 8, 2010), <http://www.marketwire.com/press-release/Provision-Interactive-Showcase-Its-3D-Holographic-Display-Technology-2010-Credit-Suisse-1189369.htm> (last visited Feb. 8, 2010) (noting that Provision Interactive Technologies, Inc. is producing 3D technology for advertising; using a 40-inch HoloVision 3D holographic display, it can project "full color, high resolution videos into space detached from the screen . . .").

¹⁵³ See David Zurawik, *Anchors Struggle to Not Call it a Day for McCain*, THE BALTIMORE SUN, ¶¶ 15–16 (Nov. 5, 2008), <http://www.baltimoresun.com/news/nation-world/bal-te.tv05nov05,0,4007048.story>.

¹⁵⁴ See *id.* at ¶¶ 15–16.

European Court of Justice.¹⁵⁵ The participating countries also could develop the rules and regulations to govern Cybercourt Central.

Even though the intent is for Cybercourt Central to hear disputes derived from both Internet and non-Internet activities, the following proposal concentrates on Internet communications and transactions. Cybercourt Central would be tied to a voluntary registration system. To activate Cybercourt Central, a party, whether a company or an individual, would register with the court. A separate office could be established to handle the registration system. Once a party registers with Cybercourt Central, a special registration notice would be displayed on his or her website, blog or e-mail message, signifying that anyone who interacts with the website or other online communication portal agrees to abide by Cybercourt Central rules and regulations to resolve any potential dispute. If a party did not want to register and participate with the cybercourt, he or she would be subject to current jurisdictional analyses in selecting an appropriate forum for dispute resolution purposes.

Parties using Cybercourt Central could choose between two methods to resolve a dispute; both would appear on Cybercourt Central's home page. One method would be an Internet Dispute Resolution Center. The other method would be a Litigation Track based on traditional litigation principles.

B. The Look and Appearance of International Cybercourt Central

From a physical perspective, only one court in one geographic location would be needed, and its location could be anywhere in the world. The most appropriate locations might be within or near the United Nations building, or near the Peace Palace in The

¹⁵⁵ See Henry H. Perritt, Jr., *Will the Judgment-Proof Own Cyberspace?*, 32 INT'L LAW. 1121, 1147 (1998), available at www.ketnlaw.edu/perritt/publications/32INT%27L_LAW.1121.htm. The International Court of Justice, more commonly known as the world court, "only hears disputes between states." *Id.* "Regional tribunals for private disputes, such as the European Court of Justice, which has jurisdiction over claims by private parties who challenge decisions of European institutions, and the European Court of Human Rights, which has jurisdiction to hear private claims alleging human rights violations by European institutions, both require subsequent enforcement action before national courts." *Id.* The European Court of Human Rights is part of the Council of Europe, which involves 47 member States. See European Court of Human Rights in Brief, http://www.echr.coe.int/NR/rdonlyres/DF074FE4-96C2-4384-BFF6-404AAF5BC585/0/Brochure_EN_Portes_ouvertes.pdf (last visited Nov. 18, 2010).

Hague, Netherlands, the location of the International Court of Justice.

Cybercourt Central would look much like today's courts. It would include a courtroom,¹⁵⁶ judge's chamber, clerk's office, jury assembly room, jury deliberation room, and perhaps separate offices for the registration system and the Internet Dispute Resolution Center (IDR Center). The IDR Center would be comprised of conference rooms for joint mediation sessions, arbitration hearings, and individual caucus rooms for private party meetings.

Cybercourt Central would include all of the technology necessary to carry out its functions, including, but not limited to: Internet connections; data transmission lines; computers for counsel, judge and jury; evidence presentation equipment; facsimile machines; and laser cameras and projectors for use in holographic transmissions.¹⁵⁷

Cybercourt Central would have its own website to serve as the central hub for, and provide access to, both the court and the IDR Center. The website would post the governing document that created the court, the *Cybercourt Central Rules of Practice and Procedure (Cybercourt Central Rules)*,¹⁵⁸ and the *Cybercourt Central Terms of Agreement (Cybercourt Central Agreement)*.¹⁵⁹ The website could include an index of pending and completed matters. The website also could serve as a storage portal for each individual case—allowing pleadings, evidence, and all types of documents to be managed for respective cases.¹⁶⁰ It would allow parties to file pleadings and documents electronically with the court and pay filing fees. Through the use of special user IDs and passwords, parties could access the cybercase file for a particular case and view all pleadings, documents, evidence, etc. filed with Cybercourt Central.

¹⁵⁶ The courtroom itself would be very similar in appearance to what we have today with a bench for the judge; workstations for the court clerk, bailiff, and court reporter; counsel tables; a public viewing area toward the rear of the courtroom; and a jury box. Alternatively, the need for separate jury accommodations could be eliminated. Rather than travel to the physical location of Cybercourt Central, jurors could participate in a trial the same way attorneys and clients could through holographic processes. Holography could even be used to enhance juror deliberations.

¹⁵⁷ See *supra* Part III for a discussion regarding the use of holography.

¹⁵⁸ See *infra* Part IV.C.5 for a discussion regarding the *Cybercourt Central Rules of Practice and Procedure*.

¹⁵⁹ See *infra* Part IV.C.1 for a description of the *Cybercourt Central Terms of Agreement*.

¹⁶⁰ See *infra* Parts IV.C.3 & IV.C.4 regarding discussions of other pleadings and documents used in the Internet Dispute Resolution Center and the Litigation Track.

C. Operational Aspects of International Cybercourt Central

1. The Registration Process

To participate in Cybercourt Central, an Internet user would first register with the court. To do so, the user would enter Cybercourt Central's home page on the Internet and click on "How to Register." A new page would appear, explaining the purpose of Cybercourt Central, which is to provide a choice of forum that would mitigate the potential burden of being sued anywhere in the world, by agreeing to be bound by the *Cybercourt Central Agreement* and the *Cybercourt Central Rules*.

The *Cybercourt Central Agreement* would be posted prominently on the website and be easily accessible. The foundation of the *Cybercourt Central Agreement* would be party consent to Cybercourt Central's jurisdiction. The Agreement would provide that all disputants be bound by the *Cybercourt Central Rules*. With regard to controlling substantive law, however, several options could exist. One option would be to include a provision in the *Cybercourt Central Agreement* permitting the initiating user to select the governing choice of law.¹⁶¹ Under this option, the initiating user would have to show some connection to the chosen forum, such as legal residence, principal place of business, state of incorporation, or place where harmed. Alternatively, Cybercourt Central's governing document could provide that all legal disputes be decided according to international law, or provide some other choice of law provision. Under this last alternative, a simple reference to the choice of law provision could be included in the *Cybercourt Central Agreement*.

The *Cybercourt Central Agreement* would include other basic terms and provisions such as: 1) duties and responsibilities of the parties, 2) user conduct whereby the disputing parties would agree not to use Cybercourt Central to harass or defame others or for any unlawful purpose, 3) privacy provisions whereby Cybercourt Central would maintain the confidentiality of each cybercase file and allow access to it only by those who have a user ID and password, and 4) indemnification to the court for any technological malfunction during an electronic filing or loss of confidential material in the cybercase file. The *Cybercourt Central Agreement* also

¹⁶¹ Keep in mind that the *Cybercourt Central Rules of Practice and Procedure* would govern all procedural issues.

could include general contract terms such as modifications and separability provisions.¹⁶²

Next, the user would be required to read and accept the provisions of the *Cybercourt Central Rules*. These, too, would be posted on Cybercourt Central's website.

Once the user agrees to be bound by both the *Cybercourt Central Agreement* and the *Cybercourt Central Rules*, the user could officially register with the court. This registration process would include the following: completing a registration form to provide the user's name, address, and other contact information deemed appropriate; signing and dating the *Cybercourt Central Agreement*; and paying a nominal registration fee to Cybercourt Central. The executed documents and filing fee could be transmitted electronically to the court clerk.

The registration process would be complete once the Cybercourt Central clerk transmits a data packet to the user. The data packet would include a special Cybercourt Central logo to place on a website or other online communication portal. The logo would contain a notice of a click-wrap agreement, alerting the user to "read this before continuing."¹⁶³ Any visitor who accesses the website or online communication portal would have to click on the Cybercourt Central logo before communications could occur with the host user. Once the visitor clicked on the Cybercourt Central logo, he or she would be bound by the *Cybercourt Central Agreement* and the *Cybercourt Central Rules*. The visitor could then transact business or otherwise communicate with the host user.

2. Use of the International Cybercourt Central Once a Dispute Arises

As noted above, when a plaintiff/claimant accesses Cybercourt Central's website, he or she would have the opportunity to select the Internet Dispute Resolution Center Track or the Litigation Track. Unless both parties agree to participate in the IDR Center, the matter would be sent to the Litigation Track. In either track, the parties could enjoy a flexible and fair approach to resolve a

¹⁶² The iCourthouse uses a similar approach with its User Agreement. See *User Agreement*, ICOURTHOUSE.COM, <http://www.i-courthouse.com> (last visited June 1, 2010).

¹⁶³ Francis M. Buono and Jonathan A. Friedman, *Maximizing the Enforceability of Click-Wrap Agreements*, 4 J. TECH. L. & POL'Y ¶ 1 (1999), available at <http://grove.ufl.edu/~techlaw/vol4/issue3/friedman.html> (describing a "click-wrap agreement" as an agreement that establishes rights and duties between parties and is entered into entirely online. The reference to "click-wrap" is employed because a party uses a computer mouse to click on an icon, signaling acceptance of the terms and conditions of the agreement).

dispute conveniently, by avoiding the economic and time-consuming inconveniences of traveling long distances to meet an opposing party.

3. The Internet Dispute Resolution Center

The IDR Center could operate exclusively over the Internet. A potential claimant could enter Cybercourt Central's website and choose the IDR Center by clicking on that icon. The next page would allow the claimant to choose the desired method of dispute resolution: negotiation among disputants,¹⁶⁴ mediation,¹⁶⁵ arbitration,¹⁶⁶ or some variable process. Once the claimant chooses the dispute resolution process, he would have to complete two forms: 1) an "Internet Dispute Resolution Center Initiation Form," indicating the type of dispute resolution selected and biographical information such as the parties' legal names, addresses, and principal places of business; and 2) a "Claimant's Opening Statement," narrating the facts to show the nature of the dispute and the extent of the damages claimed. The claimant would submit the forms and a filing fee electronically to Cybercourt Central.

Upon receipt of the Internet Dispute Resolution Center Initiation Form, the Claimant's Opening Statement and the filing fee, the Cybercourt Central clerk would assign a user ID number and password to the claimant, granting access to the cybercase file. The claimant would then serve the respondent, via e-mail or regular mail, with an informational sheet regarding the use of ID numbers and passwords, both of claimant's forms, and a blank form entitled "Respondent's Opening Statement."

The Respondent's Opening Statement would contain two boxes at the top of the form, followed by corresponding statements: one indicating that the respondent consents to participate in the dispute resolution process and the other indicating lack of consent. If the respondent checks the box indicating lack of consent to the dispute resolution process, or fails to respond, the

¹⁶⁴ See *supra* Part I.A. for a discussion of negotiation.

¹⁶⁵ Mediation is the process in which a neutral third party assists others during negotiation, although the mediator has no decision-making power. See STEPHEN B. GOLDBERG ET AL., *DISPUTE RESOLUTION: NEGOTIATION, MEDIATION, AND OTHER PROCESSES* 123 (3d ed. 1999). See also *supra* Part I.B. for a discussion about mediation.

¹⁶⁶ Arbitration is a dispute resolution process that is similar to court adjudication, although it is less formal. See GOLDBERG, *supra* note 165, at 233–35. Rules of evidence do not necessarily apply and the arbitrator has discretion to control discovery. See *id.* An arbitrator, unlike a mediator, does render a decision. See *id.* See also *supra* Part I.C. for a discussion about arbitration.

Cybercourt Central clerk would reassign the cybercase to the Litigation Track. If the respondent checks the box indicating consent to the dispute resolution process, the respondent would have to complete the remainder of the Respondent's Opening Statement in a narrative style, providing the background facts to support her position. The respondent would have ten days to serve the Respondent's Opening Statement on the court and the claimant. This could be accomplished either electronically or by mail. Upon filing of the Respondent's Opening Statement, the clerk would issue a User ID and password to the respondent.

Once both parties agree to participate in the Internet Dispute Resolution Center, the Cybercourt Central clerk would notify them of their duty to select a mediator or arbitrator (if the parties had not elected to negotiate). The court clerk would submit a list of ten available candidates. The parties could click on a separate section of the Cybercourt Central website to view curriculum vitae to select a mutually agreeable person to serve as their mediator or arbitrator. If the parties could not agree within ten days, the clerk would assign the case to a particular mediator or arbitrator, who would conduct the dispute resolution process through an exchange of e-mails. Alternatively, the parties could agree to use holography to hold sessions in which everyone could participate in a virtual experience.¹⁶⁷

4. The Litigation Track of the International Cybercourt Central

The Litigation Track would operate much the same as a lawsuit winding its way through a present-day court, except the use of technology would relieve parties and their attorneys of the necessity of making personal appearances. Thus, returning to the home page of Cybercourt Central, the plaintiff, whether represented by counsel or pro se, would click on the Litigation Track icon. The next page would have icons that a party could click on to obtain a summons and a basic complaint form. Plaintiff would complete those forms and file them electronically with Cybercourt Central, along with the filing fee. Next, the court clerk would issue a User ID and password to plaintiff. Then, plaintiff would electronically serve the summons and complaint on all defendants. The summons would include a special notice explaining that, upon filing an answer or otherwise appearing in the case, the clerk would issue a User ID and password to defendant.

¹⁶⁷ See *supra* Part III for a discussion regarding holography.

Once the cybercase lawsuit commenced, all pleadings and court documents would be filed and served electronically. Hearings and other pretrial matters could be handled through e-mail, telephone, telefax, or mail. Indeed, many courts already employ e-filing as well as teleconferencing and videoconferencing.¹⁶⁸ The parties also could propound and respond to discovery by using e-mail, telefax, or mail. Depositions could be conducted in person, by videoconferencing, by visual collaboration technologies such as telepresence, or through the use of holography.

Cybercourt Central would maintain a cybercase file for each lawsuit. The file would essentially mirror the paper court files of present-day courts. By simply using a User ID and password, any party could access the cybercase file at any time.

If the lawsuit could not be settled, it would be assigned out for trial. At this stage of the lawsuit, Cybercourt Central could advance far beyond the confines of contemporary cybercourts.¹⁶⁹ The futuristic nature of the Litigation Track would be achieved through the use of holography to enhance the physical presence of individuals at trials.

5. Cybercourt Central Rules of Practice and Procedure for the Litigation Track

The *Cybercourt Central Rules* for the Litigation Track should accommodate the needs and constitutional guarantees of all participating countries. Therefore, a uniform set of rules, similar to those enacted by the International Court of Justice, would have to be enacted either through a treaty, convention, or agreement.¹⁷⁰ From the perspective of a United States citizen, a good starting point in devising these rules would be the Federal Rules of Civil Procedure.

¹⁶⁸ See *supra* Part II.B & C. Presently, the Ronald Reagan Federal Building and United States Courthouse is equipped so that the United States District Court for the Central District of California may use teleconferencing and video-conferencing for lawsuits. See *Stomp, Inc. v. NeatO, LLC*, 61 F. Supp. 2d 1074, 1080 n.10 (C.D. Cal. 1999). While practicing law, this author experienced the convenience of teleconferenced motion hearings in the North Desert District of the San Bernardino County Superior Court, located approximately 125 miles east of Los Angeles, California.

¹⁶⁹ See *Exon, supra* note 3, at 5–9 (describing what people represent as cybercourts).

¹⁷⁰ The International Court of Justice (ICJ) has established a statute, which “elaborates certain general principles laid down in Chapter XIV of the [United Nations] Charter” and its own Rules of Court that supplement this statute. See *INTERNATIONAL COURT OF JUSTICE, A GUIDE TO THE HISTORY, COMPOSITION, JURISDICTION, PROCEDURE AND DECISIONS OF THE COURT* ¶¶ 23–24, available at http://www.javvo.com/colerche/ICJ_000.htm.

Any modifications to the current Federal Rules of Civil Procedure could be minimal. One important modification regarding service of process would allow electronic methods of service. For example, e-mail service of a summons and a complaint could be used in addition to the current provisions regarding personal and substitute service.¹⁷¹ A separate requirement would apply to defendants who refuse or otherwise fail to accept service by e-mail; they would be liable for all expenses incurred in serving a summons by alternative means.¹⁷² E-mail and telefax service could apply to subsequent pleadings and court documents, including subpoenas.¹⁷³ No territorial limits for service would apply.¹⁷⁴

The remaining Federal Rules of Civil Procedure could remain virtually unchanged. In fact, Rule 43, which requires witnesses to testify in open court, already provides a technological component, permitting “testimony in open court by contemporaneous transmission from a different location.”¹⁷⁵ The use of holography to transmit a party’s three-dimensional image into the courtroom fits neatly within this provision.

¹⁷¹ Currently, the Federal Rules of Civil Procedure permit service upon a person, or substitute service upon “someone of suitable age” residing at the defendant’s “abode,” or upon an authorized agent. FED. R. CIV. P. 4(e)(2). Special rules of service apply to individual defendants served in a foreign country; however, these provisions do not yet permit electronic service of process. See FED. R. CIV. P. 4(f). The rules also allow service of documents other than a summons if effectuated within the state in which the federal district court sits. See FED. R. CIV. P. 4.1(a). Rules of service regarding pleadings and papers subsequent to the complaint, as well as subpoenas, would have to be modified to permit electronic service. See FED. R. CIV. P. 5(b), 45(b).

¹⁷² This requirement is similar to the current Federal Rules, which permit a plaintiff to mail a summons and complaint to defendant, who in turn may waive service of summons by signing and returning the waiver form to plaintiff. See FED. R. CIV. P. 4(d). California has a similar provision. See CAL. CIV. PROC. CODE § 415.30 (2001). California permits a summons to be served by mail as long as it is accompanied with two copies of a “notice and acknowledgment” and a return envelope with prepaid postage. *Id.* at § 415.30(a). The notice and acknowledgement form includes the following language: “Failure to complete this form and return it to the sender within 20 days may subject you (or the party on whose behalf you are being served) to liability for the payment of any expenses incurred in serving summons upon you in any other manner permitted by law.” *Id.* at § 415.30(b).

¹⁷³ See *supra* note 172 and accompanying text.

¹⁷⁴ Currently, the Federal Rules of Civil Procedure limit service of process to a place within 100 miles from the place where the summons issues only with respect to parties joined under Rule 14 or 19. See FED. R. CIV. P. 4(k)(1)(B).

¹⁷⁵ FED. R. CIV. P. 43(a).

D. Advantages and Disadvantages of International Cybercourt Central

There are many advantages to Cybercourt Central. Although this article concentrates on the use of Cybercourt Central with regard to Internet-based disputes, Cybercourt Central could handle non-Internet disputes as well. The most obvious benefit of Cybercourt Central would be its technological capabilities. Indeed, Cybercourt Central is technology. All parties to legal controversies could enjoy its advantages, including court personnel, jurors, witnesses, attorneys, ADR professionals, and disputing parties.

First, the use of technology would bring efficiency to the court system and the IDR Center. The management of court pleadings and other documents would be streamlined. With several clicks of a computer mouse, a court clerk could receive, file, and catalog documents into a cybercase file. A judge could then view the court pleadings and documents directly from his or her personal computer, alleviating the necessity for the court staff to manually look for and retrieve paper files. Boxes upon boxes of court files and the need for space to store them could be eliminated. Cybercase files for concluded cases could be stored in a secure location on the Internet or in the latest electronic storage medium. The same rationale would apply to the IDR Center so that a mediator or arbitrator could organize and maintain electronic case files and evidence, where appropriate.

Second, the use of technology would assist jurors in performing their duties. Evidence presentation equipment such as the DEPS^{TM176} could enable jurors to experience physical evidence in much the same manner as the disputing parties did at the time the dispute occurred. Courts already use computers and the Internet. Jurors could, therefore, visualize exactly what a party had seen on the Internet and how information had been downloaded from it. Through the use of holography, the jurors could perceive the appearances and reactions of all attorneys, parties, and witnesses, enabling the jurors to determine issues of credibility. The juror benefits would apply equally to judges, attorneys, and parties. Evidence presentation equipment already provides attorneys with an

¹⁷⁶ For an explanation of a mobile digital evidence presentation system, see *Mobile Digital Evidence Presentation System*, UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF ILLINOIS, <http://www.ilnd.uscourts.gov/home/courtroomtech/DigitalEvidence.aspx> (last visited July 1, 2010).

override switch to control what jurors may view.¹⁷⁷ Attorneys could streamline the time necessary to present evidence by using such equipment. Since time is money, clients would benefit from shortened trials.

Finally, the use of technology would assist attorneys, their respective clients, and trial witnesses. Cybercourt Central would be accessible twenty-four hours a day, enabling attorneys to review information in the cybercase file at any convenient time. Attorneys would not have to travel long distances to appear at motion hearings, other pretrial matters, and trials because the use of holography as a component of a Cybercourt Central trial would enable disputants to have their day in court without physically going to court.

Witnesses could testify without actually going to a physical courtroom. The relief from long-distance travel would eliminate enormous expenses and save valuable time. Parties, especially small companies, would benefit further from the ability to continue business operations without major interruption. When trial was not in session, a time period that could amount to several hours each day, parties could maintain a presence in the day-to-day operations of their businesses.

ADR proceedings also would benefit from holography, alleviating burdensome and time-consuming travel for all parties involved. It is anticipated that through the use of three-dimensional holograms, parties could communicate more fully in ADR proceedings, establish a rapport with the mediator or arbitrator, and have twenty-four-hour access to the cybercase file.

Opponents of Cybercourt Central might claim that the actual cost of laser cameras and projectors outweigh any of the realized benefits described above. As with any technology, however, once holography becomes more commonplace, the expense should become more reasonable. By way of analogy, an international law firm upgraded its technology from videoconferencing to Cisco System's TelePresence and anticipates saving nearly one million dollars in reduced travel costs and productivity.¹⁷⁸

Opponents also might claim that some judges and attorneys would be unable to function in such a highly technical environment. No one could dispute that judges would need to be profi-

¹⁷⁷ See *supra* note 176 and accompanying text.

¹⁷⁸ See Tim Greene, *Cisco Telepresence Cuts Near \$1M in Travel Costs for Law Firm*, NETWORKWORLD.COM (Oct. 7, 2009), <http://www.networkworld.com/news/2009/100709-cisco-telepresence-law-firm.html>.

cient in the use of technology since everything about Cybercourt Central *is* technology. Although strongly encouraged to use all aspects of the technological court, attorneys would be required only to engage in electronic filings. Attorneys who wished to appear personally, therefore, could travel to the physical location of Cybercourt Central and present evidence without the necessity of using high tech equipment.

Additionally, opponents might claim that Cybercourt Central would abrogate certain constitutional rights and other important concerns. I discussed the following rights and concerns in my 2002 law review article: jurisdictional concerns regarding forum selection clauses; choice of law concerns; important trial rights such as due process and the right of confrontation; and evidentiary matters, such as the ability to determine credibility, including demeanor.¹⁷⁹ My previous article analyzed and demonstrated that, in actuality, Cybercourt Central would constitute a forum that is just, fair, impartial, convenient, practical, and economical for all parties concerned.¹⁸⁰ Moreover, irrespective of any concerns opponents may have, the parties' agreement to be heard in Cybercourt Central is nothing more than a valid, enforceable contract.

CONCLUSION

The future has much to offer for people in conflict. Existing forms of ODR demonstrate the variety of tools and processes currently available to enhance or transform ADR processes. Indeed, the first decade of the twenty-first century has shown remarkable technological progress from online cites that tout a virtual experience to three-dimensional telepresence conferencing in which participants feel a face-to-face connection, despite their remote locations. Videoconferencing is falling by the wayside as people admit they feel uncomfortable and disengaged when speaking to a camera.

Although telepresence and visual collaboration technologies are being used in the business sector to optimize globalization needs, it is time to take a closer look at such technologies to test their reliability for use in ADR processes. We cannot, however, stop with this existing cutting edge technology.

¹⁷⁹ See Exon, *supra* note 3, at 19–36.

¹⁸⁰ *Id.*

We must continue to move farther into uncharted waters, and that is what I intend to do when three-dimensional holographic transmissions become available to the public. As ADR scholars and practitioners, we must continue to strive for new innovations to improve, and even alter the way we communicate to help those in dispute. See how a new communication technology can be integrated into an international cybercourt designed to handle online disputes. More importantly, catch a wave and join in the dialogue of an exciting new ride.

