

NPR lobby, featuring the Magic Planet Video Globe.

The System

Transforming Litigation through Telepresence Technology

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Technological innovation in the practice of law usually happens at a snail's pace. Lawyers and their firms are generally very conservative when it comes to adapting to and adopting new technologies. The aversion towards adopting new technologies is not so surprising when one considers that a fundamental aspect of law practice involves looking to the past – namely, at prior case precedent and statutes. The emphasis on looking to the past, while perfectly acceptable with respect to researching legal authority, is a substantial barrier to adopting the latest techniques and technologies to the practice of law. While the world's leading high technology companies have lead the way in adapting to new technology and adopting them to improve how they conduct business, law firms have generally failed to "adapt and adopt" new techniques and strategies.

However, one law firm, Nix Patterson & Roach, LLP ("NPR") is breaking the mold and is determined to "adapt and adopt" and change the way that modern litigation is conducted. Based in Texas, NPR is a 25-lawyer litigation boutique that focuses primarily on representing plaintiffs in civil litigation. The firm, which put its stamp on the national legal landscape with its successful litigation against the tobacco industry in mid-1990s, has a thriving practice area in intellectual property (IP) litigation. NPR's representation of inventors and innovators in

IP litigation has, in turn, given the firm a significant impetus to innovate in its own law practice.

To that end, NPR has created a synergy of innovative trial techniques with telepresence and other leading technologies into what it has dubbed – "the System." It brings together innovative trial techniques with leading technologies such as real-time deposition text, video, audio streaming, instant messaging, proprietary research databases, video teleconferencing, and high definition video displays to produce a cohesive whole that achieves an effect that is far greater than the sum of its parts. And to maximize the potential of the System, NPR recently opened a state-of-the-art office in Dallas that is equipped with innovative technologies that are integrated in a way that is completely unique to a law firm and which rivals, if not exceeds, what one might find at a high-tech company in Silicon Valley.

"The Greek philosopher Plato said that 'Necessity, who is the mother of invention.' The System was invented out of necessity," explains Ed Hohn, a partner at NPR's Dallas office, who co-created the System and coined the name. "In 2003, we were in a major patent litigation against JPMorganChase, one of the largest banks in the country. It was a classic David

vs. Goliath situation. Our client, DataTreasury, was a small company that held fundamental patents to a technology that lies at the heart of the modern banking system and which we believed were being infringed upon by JPMorganChase. Our law firm was facing a major national law firm with over a 1,000 lawyers at its disposal. Given our formidable foes and their limitless resources, we needed a 21st century equivalent of David's slingshot, so we invented one." Rod Cooper, NPR's Intellectual Property partner in Dallas and the other co-creator of the System, adds, "Our clients are usually the underdogs who do not have the resources to fight against major corporations with comparatively unlimited resources. Our firm does everything we can to level the playing field for our clients and that requires constant innovation in how we practice law."

In civil litigation, the pre-trial testimony of fact and expert witnesses are taken in proceedings called depositions, which are essentially question-and-answer sessions taken under oath. The witness's testimony is recorded by a court reporter and occasionally by a videographer. Driven by the need to develop a better slingshot, NPR created the System, which integrates technology with trial techniques. First, NPR implemented real-time deposition transcript streaming at every deposition. With a real-time transcript feed, the witness's every word is transcribed and transmitted in real-time or streamed to the deposing lawyer's computer using LiveNote Corporation's LiveNote transcript software ("LiveNote"). The real-time transcript streaming allows the deposing lawyer to monitor not only each word spoken by the witness to ensure that the recorded testimony is the same as that which the lawyer heard, but also to monitor the lawyer's own wording of questions to the witness to ensure that questions are recorded as the lawyer intended. Any ambiguity about what was asked and answered can be resolved quickly by referring to the transcript.

Next, NPR used LiveNote's software and related services to broadcast the real-time transcript feed via the Web to its trial team members, consisting of lawyers, paralegals, experts, and other staff. The web feed of the transcript can be transmitted to any authorized recipient who has Internet access and the LiveNote software. Thus, any trial team member can monitor the lawyer's questions and the witness's testimony in real-time, whether such team member is sitting at the deposition or any location thousands of miles away. "A key advantage to the web streaming is that we can send less people to each deposition, which reduces travel expenses considerably, while still being able to monitor the deposition as if a full team were present," explains Ed Hohn. NPR also uses a secure real-time web video feed in conjunction with the real-time transcript feed. The real-time web video feed of the video image of the witness as he is testifying is particularly helpful to the trial team members that are not physically present at



the deposition because they can better assess the credibility of the witness and the potential effectiveness of his testimony before a jury.

In civil litigation, the opposing parties often exchange many thousands or even millions of pages of documents that are relevant to the issues in the lawsuit. These documents are often used as exhibits in depositions when they are used to question the witness. Moving beyond traditional litigation practice, NPR's System abandons paper-based exhibits whenever possible and instead uses digitized searchable PDF versions. The digitized exhibits are presented to the witness and opposing counsel during the deposition via multiple LCD monitors – one each for the deposing lawyer, the witness, and the lawyer defending the witness. They are each able to scroll through an exhibit and, if necessary, annotate them via document viewing software such as Adobe Acrobat. Using digital exhibits permits

the deposing lawyer to reduce drastically, if not eliminate, the amount of paper-based documents that must be prepared for the deposition. Not only is this environmentally friendly, but the digital exhibits are individually and collectively searchable, which makes the deposing lawyer's preparation for the deposition much more efficient. The System also broadcasts the digital exhibits securely in real-time via the web to the trial team members that are monitoring the deposition remotely. The multiple secure real-time feeds of the witness's testimony, video image, and documents ensures that NPR's remote-based trial team maintains a "virtual presence" at the deposition.

Perhaps the most important element of the System is instant messaging. NPR uses LiveNote's built-in instant messaging function that allows trial team members to communicate privately with one another during the deposition. Other chat clients such as Skype and Yahoo! Messenger may be equally effective. Ed Hohn explains, "Our ability to send and receive instant messages or IMs to each other during the deposition is a force multiplier. The IMs are the rocks that arm our slingshot. With the IMs, we can implement our 'Reach Back, Push Forward' vision. The lawyer taking the deposition can send an IM to the remote trial team, which allows him to 'reach back' for more information instantaneously. And our remote team members can also instantaneously 'push' forward information to the lawyer taking the deposition."

Integrating IM in the deposition process puts considerable resources at the disposal of the deposing lawyer. The witness is facing not just the deposing lawyer, but the entire NPR trial team – any one of whom is able to respond to questions or requests from the deposing lawyer or send questions, answers, and comments to the deposing lawyer. Nearly every deposition taken by NPR's IP litigation team uses IM. And when IM is used to its full potential, it permits the deposing lawyer to request information or rapid research to the trial team without interrupting the questioning of the witness; ask questions of the witness that are suggested by the trial team; and communicate in real-time with an expert regarding the witness's testimony. IM also permits the remote trial team to suggest questions for the witness; provide facts for follow-up questions; inform the deposing lawyer whether the witness's testimony is accurate or misleading; suggest crucial documents to use in questioning the witness; and, when there are multiple concurrent depositions of a defendant's witnesses, provide each deposing lawyer with information learned from the other depositions to use in examining each witness.

Since 2003, the System has been in its first generation. In 2007, NPR put the finishing touches on the next generation – System 2.0, which supplements the existing technologies with a robust back-end infrastructure to leverage fully the System's technology. In System 2.0, NPR has extended the capabilities of its trial team and existing technologies by installing leading edge computer, video, and audio technologies in its new state-of-the-art office in Dallas, Texas. NPR's new office implements technologies never before seen in a law office.

The operational center of the office is the Command Information

Center ("CIC"), which is the heart of System 2.0. The Center has installed a 2-high by 4-wide high-definition video display wall, consisting of eight 70-inch high-definition projection displays (Clarity 70" 16:9, 1920x1080 DLP cubes controlled by a Jupiter Fusion 980 display wall processor). Each of the 70-inch monitors can show a separate video or computer feed. The NPR trial team can monitor up to eight different concurrent depositions occurring anywhere in the world. Each streaming video window can display real-time audio/video of a deposition, real-time transcript, case-specific database information, and instant messaging. Via the video wall, the NPR trial team can 'quarterback' any of the remote depositions. The 'quarterbacking' hardware is enabled via a Creston master touch-screen remote control. For example, live testimony from a deposition in New York can be shared immediately with the lawyers conducting depositions in Los Angeles, Seattle, and Miami – or any location where there is internet access. By adding the CIC to the System, the collaborative efficiency of the NPR trial team is greatly enhanced.



Nix, Patterson & Roach's Command Information Center (CIC)

The "quarterback" in the CIC can direct questioning in real time to any of the simultaneous depositions, using responses in one deposition to leverage responses in another deposition occurring simultaneously in a different city. Research assistants, who have access to case-specific, public, and proprietary databases are also available to push information instantly to the deposing lawyers. Also, web sites and live cable television also may be displayed on one or all displays so that questions inspired by late-breaking news may be directed to the deposition witnesses.

The CIC also has an adjoining Multimedia Editing Suite, which also houses the video and audio processing hardware that runs the CIC. The multimedia editing suite features an Apple Mac G5 2.5 GHz Quad Core Power PC; two 30" Cinema HD displays, Final Cut Studio 5.1 video editing and Adobe Photoshop software; DVD-R & S-VHS/VHS decks, DVD/MiniDV/Hard Disk

Drive Recorder; and 7 terabytes of hard disk storage that allows for hundreds of hours of depositions to be stored and edited.

<http://www.jdsupra.com/post/documentViewer.aspx?fid=932bc7a8-81f8-49ed-af6d-04d322666a8f>

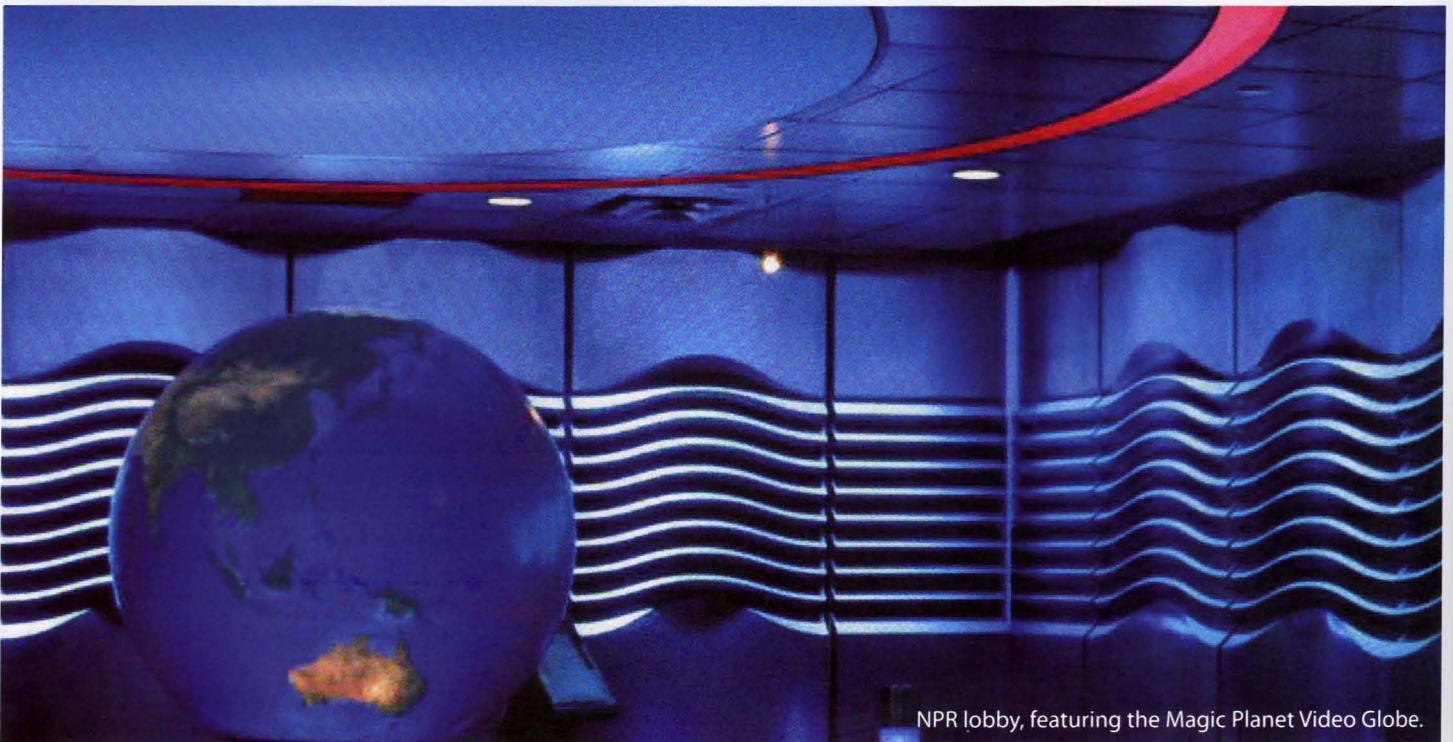
Although it is the heart of the System, the CIC is not the only part of NPR's newest office that integrates leading edge technology in ways that are completely unique. The primary conference room also incorporates a Blue Ocean 100" 16:9 high-definition widescreen display with high-definition video-teleconferencing capability. It is also a sophisticated video-teleconferencing facility, utilizing HD Tandberg equipment, which permits NPR to conduct teleconferences with clients, witnesses, experts, and other team members.

The lobby of NPR's Dallas office integrates novel innovative technologies reflective of its clients' inventive and entrepreneurial spirit. The NPR lobby features the following: 1) a 4-screen high definition video wall (composed of 2 by 2 Clarity 70" 16:9 1920x1080 DLP cubes controlled by a Jupiter Fusion 980 display wall processor) that can also display simultaneous computer, video, and television feeds; 2) a Magic Planet digital globe, which is a 4-foot diameter spherical rear projection system from Global Imaginations, using a Barco R12 SXGA+ 12,000 ANSI lumen 3-chip DLP projector that can display computer and live satellite cable television feeds from around the world; and 3) a Megasphere--a special projection room equipped with a ceiling mounted NEC GT6000 projector--in which the sidewalls, floor and ceiling are covered with trapezoidal mirrors to create a visual effect akin to viewing a projected 250 feet diameter sphere. To integrate all the unique computer, audio, and video technologies that are a part of the System, NPR worked closely with the Dallas office of The Whitlock Group ("TWG"), a leading audio/visual systems integrator.

"From the inception of this firm by our founder Harold Nix, we have always found a way to document and litigate. We are efficient to represent the little people against usually larger opponents. We've had to be creative and inventive in our approach to litigation, and we are still innovating," says Ed Hohn. "The System will continue to evolve with the same pace that technology evolves. Our IP clients are inventors that come to us with innovative, patented technologies. Our firm will continue to look for ways to integrate those technologies into our law practice and improve the 'slingshot' that forms the System."

About the Authors:

Edward L. von Hohn is a partner, and Edward Chin is a senior associate at the Dallas office of the law firm of Nix, Patterson & Roach, LLP. They focus their practice on intellectual property litigation and commercial litigation. Nix, Patterson & Roach represents plaintiffs exclusively in various practice areas including intellectual property litigation, commercial litigation, toxic tort litigation, consumer and securities fraud class action litigation, personal injury litigation, antitrust litigation, products liability litigation, medical device litigation, wrongful death litigation, and general negligence litigation. The firm has offices in Texas (Daingerfield home office, Texarkana, Dallas), Louisiana (Shreveport), Tennessee (Jackson), and Mexico (Saltillo). URL: <http://www.nixlawfirm.com>.



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