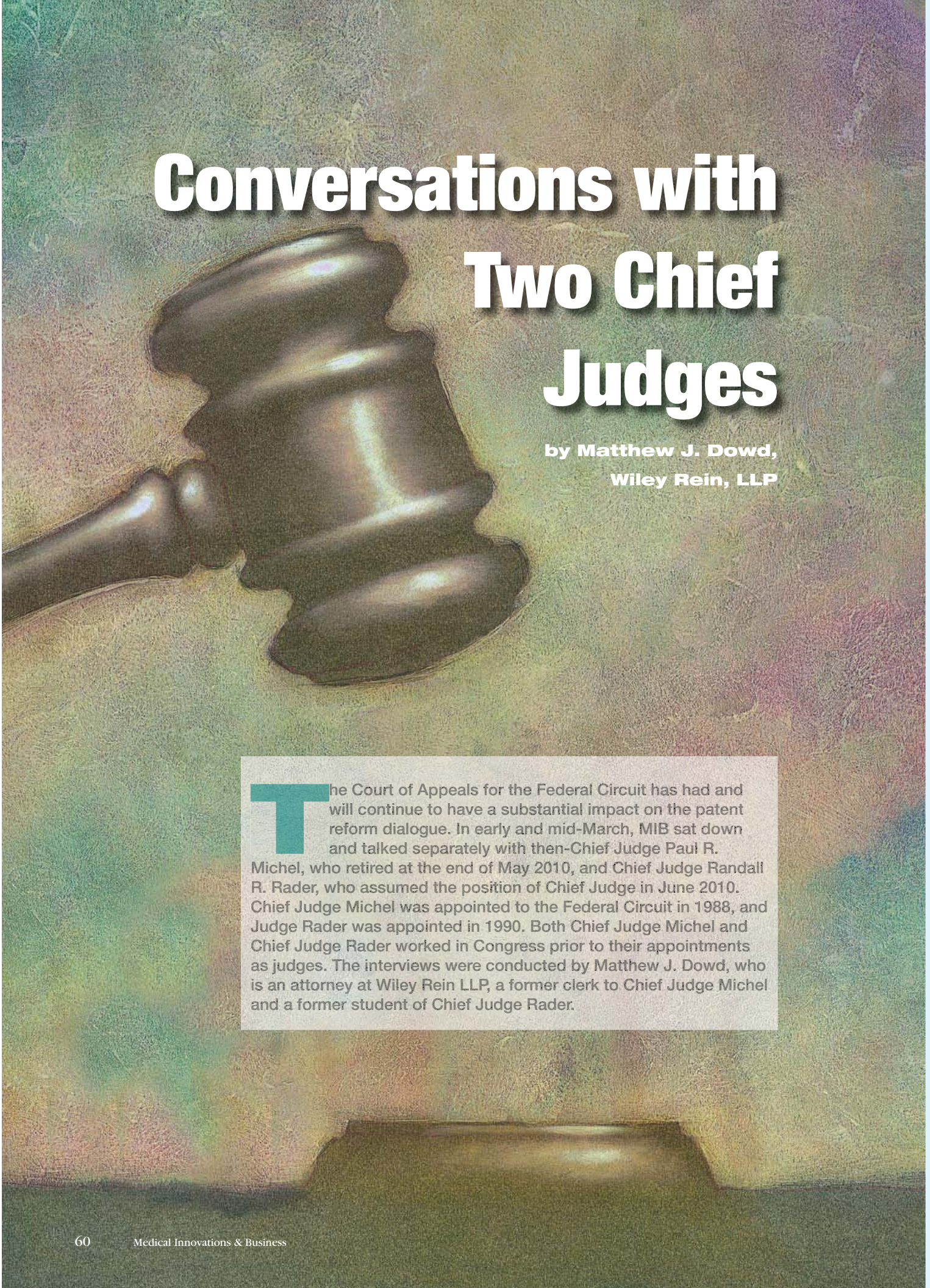

Conversations with Two Chief Judges

by Matthew J. Dowd,
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The Court of Appeals for the Federal Circuit has had and will continue to have a substantial impact on the patent reform dialogue. In early and mid-March, MIB sat down and talked separately with then-Chief Judge Paul R. Michel, who retired at the end of May 2010, and Chief Judge Randall R. Rader, who assumed the position of Chief Judge in June 2010. Chief Judge Michel was appointed to the Federal Circuit in 1988, and Judge Rader was appointed in 1990. Both Chief Judge Michel and Chief Judge Rader worked in Congress prior to their appointments as judges. The interviews were conducted by Matthew J. Dowd, who is an attorney at Wiley Rein LLP, a former clerk to Chief Judge Michel and a former student of Chief Judge Rader.

MIB: Let's start with the purpose of the patent system. Two goals or objectives of the patent system are to provide an incentive to innovate and an incentive to disclose new technologies. Based on your experiences, how well do the current laws further those two goals of the patent system?

MICHEL: Well, I think the substance of existing patent laws advances those two goals very efficiently, very effectively. It's actually hard for me to think of changes in the substantive of patent law that would increase the power of the patent system to incentivize innovation. In my view, we might even say that the purpose of the system is to incentivize investment because most innovation requires a lot of upfront investment to pay for people, to pay for laboratories, to pay for materials, pay for clinical trials and so forth. So I think the key thing to focus on is the incentive to invest. That's what creates good R&D and innovation. That's what creates medical advances and I think medical innovation is presently the single most important activity in the United States.

RADER: Yes, I agree, but I don't think the patent system is limited to those goals. Those goals are often cited as the two main ones, but you have to realize the patent system also gives a great incentive to convert the ideas of patent applications into useful technology. So often patents do their best work after they're issued by giving an inventor the capital and incentive to convert his ideas into something that the public can use, into products, into new cures and pharmaceutical inventions and into communication inventions—inventions of all kind. So it helps to convert those into useful technology.

MIB: For example, even if one patent does not lead to a commercial product, it may be the foundation for future patents and therefore future products.

RADER: That too. That's still another incentive built within the patent system, and that's an incentive for additional research and improvement upon patents that are already available to the public. So, the disclosures in one patent can lead to improvements that may even be more important than the original patent.

MIB: Are there aspects of the patent system's procedural regulations or rules that ought to be changed or improved?

MICHEL: Well, I think that one of the most important things about a patent as it works in our system is that it is supposed to embody a right to exclude. And therefore, in my view, the ability to get injunctions in appropriate cases is crucial. No matter how much damages for past infringement a patent owner might get, if a patent owner can't have a reasonable chance to literally exclude people from pirating the technology covered by the patent, then the system, in my opinion, is not adequate. The key barometer for me is not so much the size of damages awards or how long it takes to get them or what the interest rates are on pre- or post-judgment interest. The key is: can people who deserve an injunction get an injunction early enough? And I'm talking particularly about a permanent injunction. Preliminary injunction is a little different because you don't yet know enough about validity and infringement. Once in a while you do, but in a typical case, you don't know so much about infringement. So, I think some people might make the argument that it's too difficult to get a permanent injunction now. I haven't seen enough statistics to be sure where I come out on whether it's too difficult or just about right, but it is a concern, and I think it's the single best measure of the efficiency and effectiveness of the patent system.

MIB: Do you think that there are any groups, such as think tanks, industry groups or academic commentators, who might underestimate the goals of the patent system with respect to providing an incentive to innovate?

RADER: Clearly, clearly. We've seen far more detractors of our system than those who really recognize much of the power of the international market which is built on innovation. The protection of that innovation is what spurs market growth and productivity of our entire economy. Take the pharmaceutical industry, for example. Without the patent system, pharmaceutical companies would not have the incentive to pour the millions of dollars into R&D that is necessary to get their drug products approved by the FDA and bring them to the market. Companies need the protection of the patent system, the right to exclude, in order to develop new technologies that meet consumer demands. Otherwise, other companies could use the technology you developed without supplying the money necessary to back the R&D.

MICHEL: I think there are many, in particular, in the academic world, who seem to assume that nearly all useful innovation would occur anyway, in the absence of the patent system. Certainly some individual inventors don't need big labs, big staffs, big budgets and years and years of R&D effort. They might create a particular new invention without the incentive of a patent. And there may be individual scientists who likewise might invent without the incentive of a patent. But for most inventions, it seems clear that significant investment of money up front is needed, and it can only come from two sources—either from government grants or from private finance. And it seems clear that, in the current environment, our national budget is in disastrous shape. The deficits and total indebtedness of the country are enormous. So I don't see how we can look to public funds being invested in R&D to save the country's economy from steady decline that I think it otherwise will experience. It will have to be private money. And it seems absolutely clear that you often can't get significant private money to finance R&D, except by the

prospect of powerful patents. So I think the economic future of the country really is going to turn out to rest primarily on the strength of the patent system.

MIB: Based on your experience, do you think any alternatives to patent protection are feasible or would be beneficial? For example, could stronger trade secret laws or a government-sponsored prize system increase innovation?

RADER: No and no. We essentially have those systems. We have government grants of research, which are prizes for various ideas, but those are so inadequate to fund the kind of research we need to drive forward a cure for cancer or a cure for AIDS. The amount of money devoted to AIDS research by governments is a tiny fraction of all the research that goes on. And it would be totally inadequate to rely on government funding or government prizes to drive the kind of innovation that spurs our entire market across many disciplines. The government does not have the resources to fund the R&D required for the technological breakthroughs that the patent system supports. It is not a feasible alternative to patent protection.

As for trade secret laws, they effectively allow a perpetual monopoly in the invention. The whole point of the patent system is to support innovation and one of the most important aspects is to allow people and companies to build upon the inventions of others. Trade secret laws cannot serve as an alternative to the patent system because they do not serve the same purpose.

MICHEL: Well, if by government-sponsored prizes, you are talking about significant monetary awards to compensate R&D efforts, then yes, that would certainly help to create additional incentives. But, where is the money going to come from to fund these large government awards when the current budget is already in such bad shape to the point that the Patent Office can't hire any new people or can't buy the computers that it needs? Where will the money come from? What program will be reduced in order to generate money to fund significant prizes?

Now, if you're talking about symbolic prizes, such as a trophy, a plaque or some medal to hang around the neck of the inventor at a ceremony at the Kennedy Center, well yes, that would provide some psychological incentive. And it might help some, but I think it would be very minimal. I think you basically are talking about big money. That can either come from the government in a form of research grants or prizes or it can come from the private sector. I'm not an economist, but as far as I can see, it's not going to come from increased public spending because there is no source of increased public spending. So almost all of the innovation will come from private financing of expanded R&D. Now, as far as the trade secret system is concerned, I don't think the trade secret laws are weak. So when you're talking about stronger trade secret laws, I can't quite imagine how they could be strengthened.

On the other hand, if you talk about the patent laws, I think the patent laws quite readily could be either strengthened or weakened depending on which direction you think they should move in. My own view is, if anything, the patent laws should be strengthened, not weakened, precisely to create the confidence on the part of significant investors, such as venture capital funds. Financing of R&D is needed not just in large companies, but in start-up companies, in brand new embryonic companies and companies of every size and stage of growth in every technology. If you can't come up with the money to support the R&D, you won't get the invention and very few people are willing to invest significant money in R&D unless there is high confidence that they'll get it back later through the enforcement of patents. So I wouldn't worry about strengthening the trade secret laws. I'd worry about strengthening the patent laws.

MIB: You both have traveled the country and the world extensively, discussing the U.S. patent system and U.S. intellectual property laws in general. During that time, have you considered which features of the U.S. patent system are better or alternatively worse than features of non-U.S. systems?

MICHEL: Well, I think the U.S. patent system is, in general, the envy of the world and most countries seem to be moving as rapidly as they can toward adopting much of the American model. If you look around at the substantive patent law of any other country, I can't name one that I would say has better substantive patent law than we do. So I think many countries will continue to borrow various features, most features from the U.S. patent system. And we aren't likely to adopt substantive patent law features from other systems.

Now if you're talking about litigation, I think American civil litigation in general, commercial litigation of which patent enforcement is a part, could be improved by reforms in discovery and in motions practice. My impression is there's a lot of excess discovery—very costly, very time consuming, and very disruptive to the companies involved. Millions and millions of dollars in a patent case can be spent on just complying with discovery demands. I'm very impressed by the comments of magistrate judges, for example, who talk about how, after all the discovery and disputes are complete, 99.99% of the discovered material turns out not to be relevant to trial, and not used at trial. In a way, it was all a waste, looking at it in hindsight. So, if I could redesign the American litigation system to be more like the British high court in London, where most of the patent cases are tried much faster and cheaper than here, I'd favor that. So, to that extent, I'd favor imitating some other jurisdiction but not generally.

In terms of the patent office itself, I'm told that the salaries of patent examiners in the European Patent Office are better than the salaries of examiners here in the United States. So in that way, I'd like to imitate some foreign Patent Office practices. I'm told they have vastly more experience and vastly better paid

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examiners. Not only the primary examiners but supervisory levels as well and I certainly would favor that amount of imitation of foreign practices. But in general, I think our system is very good. Not perfect. No system is perfect. But I certainly can't think of any country's patent law that I would say "Let's swap because country 'X' has better patent law than we do."

MIB: Judge Rader?

RADER: Absolutely, I have considered the issue. Some features of the U.S. system are better than non-U.S. systems and some are worse. Let's deal with some of the aspects of foreign law that are better. The first-to-file system is more efficient, faster, and less complicated than our first-to-invent system, which often entails interferences, which are expensive and usually unsuccessful. So that's one sense in which foreign systems are better. Another one is foreign systems have not developed some of our intricate, complicated, and counterproductive doctrines, such as inequitable conduct. Inequitable conduct was supposed to be the way we ensured adequate prior art. Every other system in the world seems to find the same prior art and do excellent examinations without the complications of inequitable conduct law.

Now, on the good side, our law has some aspects which are superior to anything else in the world. Our grace period of a year, for instance, gives inventors a chance to assess the value of their invention before they undertake the process—often an expensive process—of preparing and prosecuting their patent application. Another good thing in U.S. law is our obviousness standard, which incorporates secondary considerations as a primary feature. Secondary considerations may often be the strongest indication of non-obviousness because they balance the danger of hindsight with objective evidence. That is why secondary considerations can vastly inform a prima facie case of obviousness. They help a court factor into the obviousness analysis the value of the invention to the industry and the public in general. That's not used in other jurisdictions. And I think ours is superior in allowing that vast amount of additional evidence that can be very probative of the value of an invention and its contribution.

MIB: Is there anything else specifically with respect to intellectual property law that you think the U.S. could adopt from another country to improve our system or the rest of the world could take from our system to improve their systems?

MICHEL: Well, I think that there are areas where the application of U.S. patent law could be improved. I think our law could do a better job of discouraging weak claims of inequitable conduct or patent misuse. I think a huge amount of money and time are wasted and reputations are trashed inappropriately and unnecessarily. But those seem to be areas where the courts ought to modulate the way that the laws apply as opposed to areas that call for legislative intervention by the Congress here or the parliaments in other countries. So I think there are improvements to be made, but they don't so much come from imitating some other country's practice or their substantive law or their procedure law. They really are adjustments that we should make as the case law evolves here in the United States. And, in general, it seems to me the courts, not just the Federal Circuit but the district courts, are in a better position to make ongoing adjustments in the application of patent law compared to the ability of Congress, who comes swooping in with some broad and necessarily simplified and kind of rigid rule. I look at the new patent law proposal and there must be fifty places where it says "the court shall" and then it requires very specific action by the court in a certain generalized kind of circumstance. My experience as a judge has basically been, sometimes the court should, and sometimes it shouldn't. It all depends on the facts, the evidence and the circumstances. So I get a little bit nervous about major legislative interventions in how courts handle patent law.

MIB: Judge Rader, would you want there to be some consideration of these differences between U.S. and foreign systems—to examine what works here and what can be improved?

RADER: Yes, I think that's clearly the case. I think some of those things are a part of the current process that's underway. They're trying to move to a first-inventor-to-file system, which is pretty close to the rest of the world. As I said earlier, if the American grace period is not weakened in the process, this will be more efficient than our first-to-invent system with its expensive interferences. Our best mode is really something which has no place in the law of patents and I think that the current patent reform effort is trying to

bring U.S. law into harmony with the rest of the world on that front. This requirement is really a trap for the unwary that serves little purpose in patent law.

MIB: With respect to differences among countries in patent laws and patent systems, how much do you think cultural and historical attitudes and experiences impact those differences? And, you have done a lot of work in China and India, for example. Can you give us some insight in terms of where those countries stand now, and to what extent historical and cultural differences have led to differences in their patent systems and whether these differences can or should be completely harmonized?

RADER: Let me answer the last question. Clearly, there is an advantage to everyone in the world having a harmonized system. To the extent that India, for instance, does not acknowledge, and come up to the international standard for protecting intellectual property, it's harming its own economy and its own inventors. Those countries inhibit investment into their economies by intellectual property-driven industries and they're losing inventors and innovators to foreign jurisdictions who will go where their ideas can be protected.

That being said, China in particular is making great efforts to come up to the international standard. There are more IP suits in China than in any other nation. Now, most of those are still on the trademark and copyright side, but there's a growing patent jurisprudence in China. With time perhaps, there are government acknowledgments of the need for stronger protection of intellectual property; and with time, there is hope that they will achieve the international standard and reap all the benefits which accompany a well-functioning patent system. I think China and India will embrace just how important patent protection is for protecting their technology and the technology of foreign inventors and growing their economies and they will build upon our patent laws as a strong foundation in creating their own patent systems.

MICHEL: Well, I think in every country, the patent laws and how they're actually applied in practice are hugely influenced by cultural and historical forces, traditions, social mores and so forth. That's true here, it's true in China, it's true in just about any country you can name, and in many places, it's the dominant influence. But given that, it seems to me the general goal of harmonization, which is a good goal, can easily be overdone because you could say, "Alright, if, in Europe, no sort of business method, software program or financial engineering is eligible for patenting, we should therefore adopt the European approach." But I think that would be a big mistake. The same is true in biotech. Lots of things that are patentable or commonly patented here are, as I understand it, not patentable in Europe or elsewhere. So if harmonization means simply moving to the half-way mark between what we do now and what Europe does now, that could be a weakening of U.S. patent laws.

But if harmonization entails coming to areas where there is agreement and not simply meeting at the fifty-yard line, I'd be all for it. First-to-file might be an example of something where there is virtually unanimous practice by everybody else and where we might move in that direction. I think the current patent revision bill takes an important step in a good direction. But, if you're talking about harmonizing across the board in every detail, I think it would be very much a disadvantage to the United States in its innovation power if, for example, we simply adopted the EPO practice, the Japanese practice, the Korean practice or the Chinese practice. So to that extent, I'm not sure I'm in favor of harmonization.

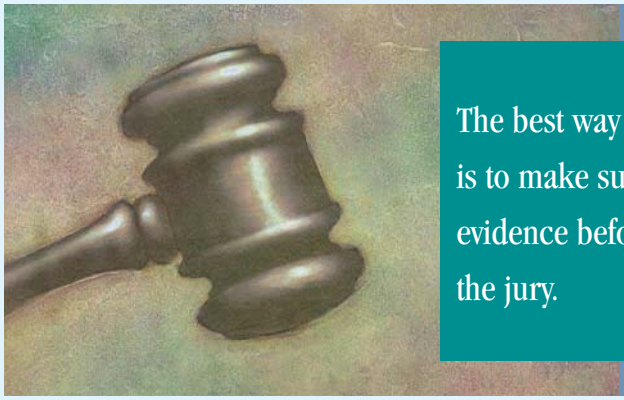
MIB: Turning to patent reform specifically, as you are aware, an amendment to the Senate patent reform bill was recently released. That bill and versions of it have been percolating since at least 2005. In that time, much has changed in the case law of the Federal Circuit and the Supreme Court. It seems to me that the natural common law process continues to address many concerns that industry groups or others have about the patent system. Is there a need for patent reform?

RADER: As you point out, the common law process seems to be quicker than the legislation, doesn't it? It's been five years, maybe more, since the patent reform effort has been underway, and during that period of time, we've seen *Seagate*, for instance, which has completely overhauled the law of willful infringement. And that's only one of many examples to be used to show that the courts do tend to respond to the needs of the system through the decisional process.

MICHEL: I struggle a little bit with the phraseology of "patent reform" because, if you call a legislative proposal "patent reform," the insinuation is that it's improving the patent law. But it may simply be changing it. It's even possible that a given legislative proposal could change the law in a very negative way. So, is that really something you should call reform or just revision?

Some cynics talk about the patent "deform" bill because in their opinion, it's a step in the wrong direction. I don't have that view myself. Even though I wouldn't say patent deform, I'm not so sure the glib phrase "patent reform" doesn't risk blinding us to the specifics of each provision. One by one, does a provision improve the law? Does it strengthen the law? Will it create more innovation, including in medical technology, the most important area, in my opinion, of research in the whole country, or not? And I think the answer may vary a lot, depending on which provision of any of the various versions of the so-called patent reform bill, including the most recent version one considers.

MIB: One thing that members of the bar may not fully appreciate is how infrequently certain issues are presented properly for the court to decide. Is that something that reformers should consider?



The best way for courts to fulfill their role as gatekeepers is to make sure the damages are based on sound economic evidence before the damages assessment is presented to the jury.

RADER: Of course that's always an issue. A court is required to decide the case before it, and that means we don't reach out to create issues where none exists. Therefore, we are dependent, to some degree, on our bar to bring us the cases. But again, it's not always their choice either. It's simply what issues arise. Often the issues which are of concern to the Congress also are going to arise before our court, but until they reach us in the form of adjudicated issues, we don't really have the option to reach out prospectively and solve problems.

MICHEL: And I also think it is very important for Congress and the courts both to be conscious of their respective roles and their strengths in the application and interpretation of the law. Management of individual cases is mainly the business of the courts and it's what the courts have vast experience and presumably considerable expertise at doing. On broad economic policies, the legislature has a level of experience and expertise, and political accountability to the citizenry that makes it the better actor. So it seems to me portions of the current S.515 are quite appropriately focused on the Patent Office, but I wish there were more of them and that they were stronger and included some funding. Regarding the parts of the bill focusing on what occurs in the courtrooms, I have much less confidence that some of those provisions will help. And I think legislators, judges, and everyone else should be mindful of a physician's starting principle, embodied in the Hippocratic Oath, of "above all else, do no harm." So, I hope that as the Congress continues to refine its proposals and ideas on patent law revisions, Congress will be mindful of the relative expertise of the legislature versus the courts.

MIB: That takes us to at least one of the more controversial issues in the patent bill, namely the damages provision. Some groups have complained about how the Federal Circuit's case law addresses damages calculations and how juries and judges assess reasonable royalty damages. Over the past half a year, the Federal Circuit has issued what many view as three significant damages cases—*Microsoft v. Lucent*, *ResQnet.com* and *i4i*. Do you think, with the recent cases, there is any need for significant overhaul in the damages area?

RADER: Well, I'm going to quibble with you a bit. I'm going to say that those three opinions are all important and significant, but I think they reflect only the court's long-standing jurisprudence and I would list a long line of cases. I'll start with *Rite-Hite*, and I'll go to *Grain Processing* and I'll follow with *Riles v. Shell* and *Crystal Semiconductor*. I could continue this list a bit longer than you might wish to listen, but I think the Federal Circuit has been sending for some time the message that damages are to be based on sound economic evidence. I think in *Crystal Semiconductor*, we actually said we wish to see the slope of the demand curve, which is, of course, the economic view of how sensitive a product actually is to price changes. Those price changes in turn can be linked to the claimed invention and we can then better judge how much that invention has contributed to the technology.

But back to your point. We have had those recent opinions. I think they are merely the most recent iterations of a long list of damages opinions from the Federal Circuit in which we emphasize that you confine the damages to the scope of the claimed invention and you prove it with sound economic evidence. The best way for courts to fulfill their role as gatekeepers is to make sure the damages are based on sound economic evidence before the damages assessment is presented to the jury. I think the Federal Circuit has made this clear in our recent decisions, but again, these decisions in no way move away from the court's long-standing jurisprudence. The most recent cases simply clarify the law; they do not create new law.

MICHEL: I don't see any strong evidence to support sharp changes in damages doctrine. I think the damages doctrine was actually quite good even before the landmark cases the Federal Circuit and the Supreme Court of the last five years or so. And I think it has improved and it will continue to improve. That's the genius of the common law system. Circumstances change, technology changes, business changes, litigation tactics and arguments change, and the courts can continue to adjust to those changes in a way that legislation can't. If Congress passes a bill, it will probably be another fifty years before they revisit the issue. Whatever they legislate will likely be locked in place for decades, which is why I think it's so important for legislators and courts to be cautious, to be careful, and to make sure they're not creating negative consequences.

It's certainly true that, in isolated cases, questions can be legitimately raised about the size of damage awards, but the question is: what happens in the normal case? All the discussion seems to be based on anecdotes focusing on a handful of cases out of the thousands litigated out of the last decade or two. I am very anxious about whether legislation by anecdote is a safe way to proceed. Also, with some of the cases people complain about, the dollar amount was large, but compared to the size of the market, a very large dollar amount seems entirely appropriate. In other cases, there are complaints that certain evidence was allowed to go to the jury. When you review the record, however, there was no objection to the evidence going to the jury. To later say that shouldn't have been allowed really raises questions about judgment calls of the litigators, not about what courts are doing or the substantive patent law.

My impression is that there are some challenges in damages law that courts are addressing quite actively, quite successfully. I don't see a case for saying the average award should be lower than it is or that the role of juries should be significantly changed. Some of the stuff that's in this bill is kind of window-dressing because it just tells judges, "You have the power to do what you already have the power to do." This probably doesn't cause any harm, but it's not clear how meaningful it is. The so-called "gatekeeper provision" in the bill seems to just state what is already within the power of every district judge. Same thing on venue. It's already the obligation of every district judge to send a case to another venue that's "clearly more convenient" to the parties, the witnesses and the location of documents.

Where the provisions actually make changes, there's a risk that they unduly restrict the flexibility that district judges need in order to accommodate enormous variations in fact patterns and proofs. Overall, I think damages is an area where Congress should be cautious, just as courts should be cautious.

MIB: Judge Rader, do you see any need for a major overhaul in damages law?

RADER: Well, I think you've seen already that Congress has cut back on some of its earlier proposals, and for good reason. As I've mentioned, you've got to key the scope of the damages to the scope of the invention. That's not something you can do by legislation. Some very important inventions have driven the demand for a product and there is then a justification for high damages. In other instances, a claimed invention is only a small contributing factor to a product's demand, which is driven by many inventions, many innovations and many design features. In that instance, again, the court has to have the flexibility to factor out these other causes and perhaps limit the damages significantly. That's not something you can do by legislation. You can't decide individual cases by legislation and I think the more recent version is suggesting that trial courts should step in and make the proper rulings to make sure that the damages law works.

MIB: Of course, many people agree that your opinions from the *Hewlett-Packard* case, in which you sat as the trial judge in New York, exemplify a proper approach.

RADER: Of course, that might get overturned! It will be fun to see if we get the headline "Federal Circuit Overturns Chief Judge." That would be a great headline. It may happen, I don't know. I'm sitting on five cases in the Eastern District of Texas right now. That's five more chances for the headline.

MIB: Do you think it's important or helpful for Congress to consider the judiciary's views on some of these reform issues? I assume that if Congress were ever to ask you your views you'd be willing to tell them, but do you think that is something they ought to consider?

MICHEL: Well when Congress is focusing on the Patent Office, they have ample means to be very well-informed and they have every right to make all the policy choices and all the administrative decisions that they want to make and they can do so very, very soundly. I have no doubt about it. All the parts of the bill that focus on the Patent Office probably don't need any help from courts or judges or litigators or legal experts.

But when you talk about the provisions in the bill that deal with what happens stage by stage in the typical patent infringement case, I would have thought that the Congress would be very eager to hear from litigators and district judges particularly. It's my impression from reading much of the testimony—not every single witness's testimony, but much of it—that there were hardly any patent litigators who were called to testify. There were no district judges called to testify, as I recall, no magistrate judges who handle discovery matters, no judges called to testify on general procedural matters from judicial conferences rules committee and the people who head it—the Civil Rules head is a judge named Mark Kravitz, he would have been an ideal witness—he wasn't called. And of course, last and maybe least (as opposed to the cliché "last but not least"), somebody from the Federal Circuit might have been called as a witness. But the witnesses actually called were nearly all chief patent counsel from individual companies that had an axe to grind on these issues in one direction or another. So Congress might not have received as full a picture as they could have if they had called more litigators and some judges at various levels.

If I had been asked—which I was not—of course I would have given views to the extent appropriate for a judge to do so. And I assume that nearly any patent-savvy district judge, if asked to testify, would have certainly agreed to testify. I would bet money that any patent litigator of broad experience representing both patentees and infringers would have been happy to testify, but they weren't called. And I think that that's kind of a shame. It provides some grounds to worry about the

In my opinion, the best thing Congress could do would be to give the PTO about a billion dollars on an emergency basis to completely upgrade their systems.

depth of understanding, particularly the Congressional staff. Of course, the members are so busy with a thousand other hugely important issues. Maybe they didn't get all the nuances and all the details quite straight and that creates potential problems.

As you know, I wrote to the leaders of the two judiciary committees in 2007, without request from them, about two provisions that I thought would have a great impact on the workload of the court. It is clearly established that judges, while they're not supposed to be opining to Congress about broad policy choices, are supposed to opine to Congress about direct impacts on the courts' workloads because that can delay the disposition of all cases and create big problems. So I did, in an appropriate and cautious way, talk about the impact of interlocutory appeals, for example. I thought it was interesting that I never got any response. I didn't get an acknowledgment letter. I didn't get any inquiries from staff. I wasn't told "We think you're right" or "We think you're wrong." On the other hand, I see in the most recent revision that the interlocutory appeal provision was removed. So I can't claim that Congress didn't listen, because apparently they did listen. They removed the provision.

It's interesting how little involvement judges at any level had, and how little involvement knowledgeable litigators had, and I think that's a little unfortunate. It also seems to me a little unusual that the committees didn't ask for the Judicial Conference's views. Congress normally does that with many pieces of proposed legislation. Usually, the Judicial Conference, through its various committees, will study and analyze the matter closely and provide extensive commentary to Congress. But in this case, the Conference wasn't even asked. So nothing was provided on behalf of the judiciary in general. So, the process here in a way short-circuited some of the methods that have been used in other circumstances, and I think that probably was risky and a little bit unfortunate.

RADER: I do think it's helpful for Congress to consider the views of the judiciary. Of course, that's Congress's prerogative. They can ask whomever and for whatever kind of feedback they would like. As you know, I worked on the Hill for over a decade, including as General Counsel and Chief of the Senate Committee on the Judiciary's Subcommittee on the Constitution from 1981 to 1986, among other positions. I always found great value in contacting judges, and, occasionally, I would even invite them to testify. It's a little difficult. They would tend to decline if it was a substantive issue, but a lot of these substantive issues overlap into the burdens that they will put on the court. And so, I think there is room for judges to be heard on significant legislative reforms.

MIB: Turning to the U.S. Patent & Trademark Office, the conventional wisdom is that the PTO isn't living up to its potential. Some complain about so-called questionable patents. Others bemoan the long delays in getting patent applications examined and patents issued. In your view, what issues are more appropriately addressed by internal PTO reforms as opposed to judicial reforms? Which specific concerns of the patent reformers are more appropriately addressed by specific rulemaking, for example?

RADER: Well, there's a lot in that question. The Patent Office really doesn't have authority to do substantive rulemaking. They do have authority to do procedural rulemaking and try and improve the speed and efficiency and quality of the patent examination process. I've seen indications that the Patent Office has been trying to do that for the last several years.

MIB: I get the sense that you wouldn't be opposed to anything that would help facilitate the PTO's job.

RADER: No, absolutely not. As a matter of fact, this is another area where we can look at foreign systems and most foreign offices have a post-grant review process of some kind. For example, in Europe, the post-grant opposition procedure can be quite effective. But you need to study the issue carefully. To the extent that there is unlimited review, it would seem to cast a perpetual cloud over the value of the patent. You must also be concerned about detracting from the process by permitting multiple challenges beyond a set period of time. But I get the sense that Congress is aware of those downsides, and it is making an effort to address those concerns.

MICHEL: Well, I think all the improvements that need to be made in the Patent Office are squarely the responsibility of the legislature. It seems to me absolutely clear that the Patent Office is grossly

under-funded and can't possibly do its job well under current circumstances. It's well known that its computer systems are outmoded—to put it in the kindest, most minimal way—and that a vast improvement is needed in all of the computer equipment at the PTO. It will probably be very expensive and, in my opinion, the best thing Congress could do would be to give the PTO about a billion dollars on an emergency basis to completely upgrade their systems.

Secondly, Congress no longer funds the Patent Office; it's entirely funded by the user fees of patent applicants and owners, as you know. But the fee level has been controlled by Congress. So the fees, because of Congressional inaction, have not kept pace with the growing costs of doing the examinations, re-examinations and the rest. This has resulted in a chronic underfunding of the Patent Office. On top of that, for several years, Congress diverted some of the fee income to other uses. The rumor is some money indirectly funded earmarked projects designed to help individual Congressmen curry favor with local voter groups in order to enhance their reelection efforts. I think that the diversion of applicant fees outside the Patent Office is a disgraceful action. Even though it was discontinued in the last several years, it could happen again at any time because there is no prohibition against diverting fees.

So when you talk about the Patent Office not being up to its potential, I think you're being much too generous. I think the Patent Office is practically a disaster zone. They're losing examiners by the hundreds every year. They're in a situation where they need a couple thousand more examiners, but they're actually losing examiners every single month. They've been under a hiring freeze for the better part of the last two years or so until the very recent effort to recruit examiners. Also, the examiners' salaries have to increase sharply to retain examiners for more than about two years, which I'm told is the opt-out time for the majority of examiners. The PTO needs people who've been there five, ten, fifteen, twenty years, not two or three years. So they need much higher salaries, they need many more examiners, they need a completely new computer operation and they need fees to be set, both application fees and maintenance fees, at a realistic level—which they're not now because Congress keeps them at too low a level. All those things are within Congress's power to change if it wants.

But of course, if you're going to buy new computer systems for the PTO, you're talking about huge expenditures. I don't see a single dollar that's authorized to be spent in the Patent Office by this patent reform bill. That might be the greatest single need of all—an emergency transfusion of money to get the Patent Office back up and running decently, which in my opinion, it's not now.

The delays are horrible. Delays frequently run to five or six years in many important technologies, which is just disgraceful. Even the average of about 3½ years is way too slow. Plus you have the irony where the patent has to be published after eighteen months. So everybody worldwide can copy the technology and meanwhile the applicant can't even protect his invention because he has to wait for a patent several years after it's been shown to the world. It's just absolutely terrible. We've got to be able to issue patents within about a year, in my opinion, if we're going to be globally competitive and if we're going to revive the economy, which will depend more on innovation than on any other single source.

MIB: As you both know, David Kappos is the new Director of the PTO. I think most people agree he is taking a more open approach with the patent community and trying to create a functional dialog. Is there anything you would say to members of the patent community who might be frustrated or become impatient with Director Kappos's proposed reforms and changes?

RADER: We all have an interest in a strong patent system, and we all need to work together, so I would urge us all to work with Director Kappos and give him our input and our support as he does his best to make the process more efficient.

MICHEL: I think Director Kappos has been a breath of welcome fresh air in every way, and has done everything humanly possibly within the horrible constraints that he's working under, but he can't do anything more. He needs more people, better people, people to stay longer, vastly better computers and better fees, none of which he can give himself. They all have to come from the Congress. I think that Director Kappos is much too polite to complain, but I think when he took this job, he expected he would get heavy support from Congress of every sort, financial and otherwise. Instead what's happened is that they've cut his budget by using the early, too-low estimate of fee income to set the budget ceiling. It turns out the estimate of fees was wrong and the later estimate showed more fees coming in. But the way Congress set the ceiling, now there will be more PTO money dumped into the general treasury instead of supporting the horribly underfinanced Patent Office. If I were David Kappos—and I'm not saying what he thinks or feels because I don't know, he doesn't complain, I don't ask him, it's none of my business—I would feel very ill-treated by the Congress with this effective cut in his budget, which is already way too low, and now it's cut even further.

MIB: Some companies have complained about the excessive burden of having to search other parties' patents that might cover their products. In response, it's been suggested that some companies instruct their inventors, engineers, scientists, and employees not to search, in part to avoid willful infringement. This practice, whether warranted or not, seems to cut against the patent system's goal of disseminating information. Do you have thoughts on this issue?

MICHEL: I think any chief patent counsel who advises the scientists and engineers in his company that

they should never read patents is practically incompetent. There is no reason in my judgment why company researchers should have to ignore the patent literature. Hardly any damage awards are ever enhanced. In most cases, willfulness isn't even established, and even when it is, enhanced damages are not automatic. Everybody says, "Oh, then you get triple damages." No, you don't. You may get no enhancement of the damages. Judges are people of judgment. If the case was close, the judge won't enhance the damages, even if it's an exceptional case. The idea that treble damages are rampant is factually wrong. Again, analysis by anecdote is absolutely the worst way to analyze things. There are about 30,000 sizable companies in the United States today—that is companies with 100 or more employees. There are a vastly larger number of smaller companies, including many highly innovative start-up companies, in biotech, and many other technologies. Out of those 30,000 companies, how many have been shown to tell their scientists and engineers never to read any patents? I bet there aren't twenty out of the 30,000 that have told their engineers that.

Yes, some chief patent counsel testified before the Congress, "We've told our engineers 'Don't read the patents.'" But if that's one company, ten companies, twenty companies out of 30,000, does that provide a foundation to change the patent law because questionable advice is being given by a tiny minority of companies? If it were 20,000 out of the 30,000, I'd be worried, but I've never seen any quantification of this. I've seen a few anecdotes from a few company patent counsel and then echoed by academics. The echo chamber is so huge that you get the impression it's the norm. As far as I can tell, it's not the norm. It would be idiotic for it to be the norm, because there's no point in reinventing the wheel. If a certain technology has already been perfected and patented, there's no point in having a company's scientist waste time "re-creating" that invention.

RADER: Well, I think these issues—and the very question—was raised during the *Seagate* case. I recall the question coming up during the oral argument for *Seagate*. I have myself confronted situations where foreign firms have said we avoid consulting patents for fear of willful infringement. But, I think that was changed by *Seagate*. I think *Seagate* addressed the issue, made the standard for willfulness objective recklessness, and by raising the standard to a recklessness standard, I think *Seagate* made it quite clear that companies should take advantage of the opportunity to learn from other patents as they do their own research and make an effort to advance their own technology.

MIB: I suppose one factor that goes into the calculus is: by not searching it might be a pennywise, pound foolish policy, in that you end up being ignorant of the patents and just open yourself up to more litigation, which becomes more expensive.

RADER: Well, you said that very well.

MIB: Do you think the law of inequitable conduct should consider this burden of searching as a factor of whether someone has?

RADER: No. I think I've earlier said that inequitable conduct is a doctrine which has perhaps evolved out of its original purpose. If you look back to the old Supreme Court cases that created the doctrine, those were instances where a patent applicant lied, cheated and stole in order to get a patent, which they could not have gotten otherwise. Now, we would all agree that is inappropriate. But I don't think when the Supreme Court issued those opinions, they foresaw this full-scale doctrine which infects all litigation strategy. And they certainly didn't understand that it would be used as a club against a patent applicant who didn't fully disclose their small business status or made some other technical miscalculation in their disclosure. They saw it only as something which affected the heart of whether a patent would be granted at all. So, I think this is an instance where the law has kind of forgotten its purpose.

MIB: In essence, inequitable conduct has drifted away from the original cases.

RADER: Yes, drifted away. Again, the Federal Circuit is making an effort to address that. If you look at *Star Scientific* and *Exergen*, they're imposing specific pleading requirements and other efforts to try and bring that doctrine back to its moorings.

MIB: Chief Judge Michel?

MICHEL: Yes, I think the purported search concern as it relates to inequitable conduct is overstated. Again it's a few people talking about an isolated case here and there that is not the norm. No statistical support has ever shown, to my knowledge, that it's a big problem. For example, the law has been well-settled for decades that cumulative prior art references need not be disclosed to the Patent Office. Most relevant prior art references are cumulative. So, what's your obligation? You've got to submit the closest prior art. Anything that's less close doesn't need to be put in. The idea that people are being forced to dump thousands of prior art references on the examiners seems artificial and practically phony. On the other hand, I think sometimes some killer prior art isn't disclosed. Where that occurs, of course, there should be careful consideration of inequitable conduct, which of course requires deceptive intent as well as significant materiality. But, I think the problem is very overstated. I do think the Federal Circuit could clarify its case law in a way that would be very helpful because we have too many different standards of materiality. I think that's a fair criticism of our court, and I would love to see the court go en banc to clarify the materiality standard.

MIB: Let's talk about the court itself. There is one open seat with Judge Schall's assumption of senior status. Chief Judge Michel, when you retire at the end of May, that will open another seat. On March 10, President Obama nominated District Judge Kathleen

O'Malley to fill the current Federal Circuit vacancy. Many lawyers who practice before the Federal Circuit have lobbied for the nomination of a district court judge. Is that something you think will benefit the Court?

MICHEL: Absolutely. Yes!

RADER: Well, remember Judge Mayer was a federal trial judge for the U.S. Claims Court. But I think an additional district court judge would be beneficial, particularly one who had experience with patent cases. It's always helpful to have a judge who understands the difficulties of building a record and narrowing the issues. It's also beneficial having people who are familiar with the complexities of a trial process—a process that often ends in the appeal based on one narrow issue that received less attention than the rest of the case. So, yes, I think the perspective we could get from a district court judge would be marvelous. [Ed. note: Recall also that Chief Judge Rader was a trial judge for the U.S. Court of Federal Claims.]

MIB: Are there any other skill sets or experiences that someone could bring to the court? For example, would someone with significant business experience be a good addition to the bench?

RADER: Absolutely. I could think of some excellent individuals who are chief counsels of pharmaceutical companies, or communication companies or software companies. All of these would be a marvelous addition to the court.

MICHEL: Well, I'm not sure what you mean by "business experience." I'd love to see future appointments consider people with areas of expertise different from patent law. No one on our court now has spent a career wrestling with government contract problems or international trade problems. And there are other areas, such as veterans and personnel law. At some point, maybe one of the upcoming vacancies should go to somebody with expertise in one of these areas.

Within the patent realm, I would love to see somebody added to this court who has spent their lifetime doing patent litigation, particularly if they were on both sides of the fence. Judge Linn is the only judge on our court now who has considerable patent trial experience and there are sixteen judges, so I'd love to see somebody with a lot of patent litigation experience. Maybe the ideal patent expert would be somebody who did say twenty years of litigation and spent the last ten years as a chief patent counsel in a major company. That person could bring huge insights and value to the court. Of course, we have judges who used to be chief patent counsel but they weren't litigators. So the combination of the litigator/chief patent counselor, we don't have.

I also think an important role exists for somebody who is just a superb appellate thinker and advocate to be added to the court. We have three appellate specialists on the court now—Senior Judge Friedman and Judges Bryson and Dyk—and they add a lot, but I think there may be a place for other types of appellate specialists.

I also think that if you focus on personal characteristics as opposed to expertise, it might be appropriate at some point for a person from a background such as African-American, Asian-American or some other group, including of course women who are in somewhat short supply on our court. I'm not suggesting there ought to be quota. I don't believe in quotas. But the case can be made that, as time goes by, more women should be added to the court. And I think the case for an African-American or an Asian-American is even stronger because we don't have any and we haven't had any (besides Judge Kashiwa (1982-1986)). There are some talented people who have those backgrounds. So I'd like to see more diversity, defined in every possible way, on the court.

MIB: One impressive aspect of the court is the tremendous collegiality among the judges, the staff and everyone else. You are aware that S.515 proposes to abolish the so-called Baldwin Rule, which requires Federal Circuit judges to live within fifty miles of D.C. Do you have any thoughts you care to share on that issue?

MICHEL: Well, I have mixed views on this. I think that increasing the pool of talented lawyers, judges, practitioners in industry that might come from rescinding the residency requirement would be a good thing. On the other side of the scale, the danger of losing collegiality and consistency is also significant.

Look at it this way. If all twelve active judges of the Federal Circuit lived in twelve different states, I think it would severely harm the court's ability to provide adequate, consistent, coherent guidance for its wide array of jurisdictions. Imagine the Supreme Court with the justices living in and having chambers in nine different states. No one suggests that would be a great idea. So if you imagine that framework, I think it looks pretty bad. It looks like the risks and harms outweigh the benefits.

On the other hand, if one of our twelve active judges lived, worked and had chambers, let's say, in Iowa, and the other eleven were here, would that be a terrible problem? Probably not. So then, you have to guess—over time, how many would live and have chambers scattered all across the country? I don't know, but given the cost of living in Washington, compared to practically anywhere else, it would certainly be a strong incentive for people to not come to Washington. So, if the residency requirement were rescinded, I would expect more of our judges to have chambers elsewhere and to spend most of their days elsewhere.

Currently most Supreme Court justices are in the Supreme Court building most days. Most judges of the D.C. Circuit are in the D.C. Circuit courthouse most days. And most Federal Circuit judges are in the Federal Circuit complex most days. I think in all three cases that is highly appropriate. How to assess this

depends on what set of assumptions you make, but if I make the assumption that over time most of our judges would be living and working elsewhere, I think the net impact of that change would be negative, not positive.

RADER: Oh, I'm going to get in trouble here with members of my court. As you may know, the majority of the court seems to like the Baldwin Rule. It does provide us some marvelous advantages. We're all here in the same building, we live in the same neighborhoods and we know each other. That closeness we've developed helps us keep our jurisprudence noncontentious.

But the Baldwin Rule has a downside too. It tends to narrow the pool of potential candidates to those who can either live here or can easily leave their lives and re-establish a life here. That's a pretty narrow pool. So, I think there's an advantage to the Baldwin Rule. In the end, however, I may regret this because, as Chief Judge, I may have to deal with trying to maintain the court's continuity with judges who live outside of Washington. Nevertheless, I'm willing to try that for the potential benefits of a wider pool of very qualified individuals for upcoming openings on the court.

MIB: In one respect, the Federal Circuit is more similar to the Supreme Court than to other courts of appeals because the jurisdiction of the Federal Circuit is national. Related to that, the Court has sat by designation in various cities over the years. Is that something you hope continues?

RADER: Yes, we have an informal policy of trying to do that at least once a year. We sometimes do it twice a year. It's authorized by our statute, actually and so I do think it has the advantage of exemplifying our national court of appeals status. If we are a national court, there's great value in us sitting throughout the nation. We've tried to sit in nearly every circuit and I think we've achieved that.

MICHEL: Oh sure, when I arrived in 1988, the court for years had been sitting every single year in other cities around the country. It continued the whole twenty-two and a half years I've been on the court. I have every reason to expect it will continue, and I think it should. There's already planning underway to sit in Atlanta next fall. We sat recently in Houston, as you know, and also in Chicago, Palo Alto, Manhattan, and Los Angeles. If budgets permit, it would be advantageous to sit elsewhere twice a year and not just once a year, which has been our norm recently. We have a great chance to sit at local law schools and help educate people about our court. We have a great chance to mix it up with the local bar, which is very helpful. And we almost always have a long, informal, frank discussion over lunch with the district judges in the local areas, which is very beneficial, just as it's been beneficial to bring judges here for every argument week in the last three and a half years. We've had upwards of fifty district judges who sat with us here on our cases.

MIB: Would you care to share any thoughts on your favorite part of being a judge for over two decades?

MICHEL: Working with law clerks is very high on the list. You end up developing a relationship with most of your law clerks. It's almost like being family. They are sort of like nieces and nephews, and that is an absolute joy. The day-to-day work with the current law clerks is very invigorating and inspiring, and the young men and women who come to clerk are just fabulous people and also fabulous lawyers. That's a great pleasure.

I enjoy working with the other judges immensely. I like every stage of the process, although I wish briefs were shorter and more selective. The oral argument phase is fun; the opinion writing phase is fun. It is a fabulous job. I've enjoyed every single day of it. I always imagined I'd stay here until I was carried out of the courthouse at the age of 90 in a pine box. I changed my mind mainly because I want to be able to speak out more openly about public issues, political issues, the future of the patent system, and so forth. But I've absolutely loved being a judge. I like every part of the process. I tell young lawyers if the President calls you up and asks if you want to be appointed as federal judge, just tell him "YES!" You'll love it.

RADER: My favorite part—I guess just the opportunity I have to associate with so many intelligent and well-meaning people, both as colleagues and in our bar. There are a lot of talented people who are all seeking the best in the country through the legal system, and it's a great reward to be part of that.

MIB: From my perspective, when I worked here as a clerk, one thing I was impressed by was each judge's substantial workload and intense work ethic. Are those aspects something practitioners and the public don't fully appreciate or realize?

RADER: Now, you're starting to meddle into my private life. I was here until 11 o'clock last Monday night on one of those Texas district court cases. I suppose the attorneys are complaining more than I am, but we had a long session. But we owe it to them. We owe it to the public. This is our great opportunity to help resolve disputes, and I am proud of our court. The court as a whole does it very diligently.

MIB: Chief Judge Michel, regarding the hundreds of opinions you've written over the years and in view of your upcoming retirement, if someone wanted to summarize your jurisprudence, your approach to deciding cases, what would it be?

MICHEL: Balance, balance, balance. Trying to balance the competing, conflicting goals of each of the areas of law within the court's jurisdiction, including patent law. It's like golf. The right place to be is in the middle of the fairway—not at one extreme, the rough on the right, and not at the other extreme, in the rough on the left. I have always tried to optimize getting the balanced approach. I think the other judges have a similar view, but for me, that's sort of the guiding principle. That's the compass I try to navigate by. ■